(22,889.)

# SUPREME COURT OF THE UNITED STATES.

**OCTOBER TERM, 1911.**

## No. 813.

---

ROBERT P. ALLEN, GEORGE W. BELLAMY, AND WILLIAM F. McKNIGHT, RAILROAD COMMISSIONERS OF THE STATE OF ARKANSAS, APPELLANTS,

*vs.*

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

---

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE EASTERN DISTRICT OF ARKANSAS.

---

**INDEX.**

VOLUME I.


| | Original. | Print |
|---|---|---|
| Caption to transcript | 1 | 1 |
| Bill of complaint | 1 | 1 |
| Exhibit A—Commission tariff No. 3, June 15, 1908 (omitted in printing) | 35 | 21 |
| Order filing answer | 93 | 21 |
| Answer of defendants | 94 | 22 |
| Order continuing hearing on motion for temporary injunction | 122 | 37 |
| Order filing affidavits, etc. | 122 | 38 |
| Order granting temporary injunction, etc. | 123 | 38 |
| Opinion of court on temporary injunction | 125 | 39 |
| Complainant's affidavits on temporary injunction | 132 | 43 |


JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C., NOVEMBER 13, 1911.

| | Original | Print |
|---|---|---|
| Affidavit of S. B. Schuyler.....(omitted in printing).. | 133 | |
| Exhibit A—Statement No. 1.....( " " ).. | 137 | |
| B—Statement No. 2.....( " " ).. | 139 | |
| C—Statement No. 3.....( " " ).. | 140 | |
| D—Statement No. 4.....( " " ).. | 141 | |
| Affidavit of S. B. Schuyler .....( " " ).. | 143 | |
| Exhibit 1—Testimony of C. S. Ludlam (omitted in printing)..... | 153 | |
| 2—Statement of earnings..(omitted in printing).. | 157 | |
| 3—Statement of average revenue (omitted in printing)..... | 158 | |
| Affidavit of M. L. Byers.....(omitted in printing).. | 159 | |
| S. F. Pryor.....( " " ).. | 162 | |
| W. J. McKee.....( " " ).. | 164 | |
| M. M. Richey.....( " " ).. | 166 | |
| C. L. Stone.....( " " ).. | 170 | |
| C. J. McPherson.....( " " ).. | 177 | |
| C. J. McPherson (No. 2)...( " " ).. | 179 | |
| W. B. Doddridge.....( " " ).. | 186 | |
| B. M. Flippin.....( " " ).. | 193 | |
| B. M. Flippin (No. 2).....( " " ).. | 205 | |
| Exhibit 1—Recapitulation.....( " " ).. | 221 | |
| Defendants' affidavits on temporary injunction (omitted in printing)..... | 252 | |
| Definition of terms used in Burlington case (omitted in printing)..... | 253 | |
| Affidavit of T. F. Wharton .....(omitted in printing).. | 254 | |
| Affidavit of T. F. Wharton (No. 2).....( " " ).. | 288 | |
| Exhibit A—Statement.... . .....( " " ).. | 294 | |
| Affidavit of F. Bache.....( " " ).. | 297 | |
| J. B. Allen..... ( " " ).. | 301 | |
| R. T. Brook.....( " " ).. | 304 | |
| T. J. Gay .....( " " ).. | 307 | |
| T. B. Jacobs.....( " " ).. | 309 | |
| W. R. Duley .....( " " ).. | 312 | |
| J. E. Hampton.....( " " ).. | 314 | |
| Exhibit 1—Order No. 349.....( " " ).. | 334 | |
| Exhibit 2—Order No. 353.....( " " ).. | 337 | |
| Affidavit of Jas. L. Jones.....( " " ).. | 339 | |
| A. R. Bragg.....( " " ).. | 341 | |
| George R. Brown.....( " " ).. | 346 | |
| J. T. Jarrell.....( " " ).. | 350 | |
| Jas. J. Mandelbaum.....( " " ).. | 354 | |
| Exhibit A—Statement.....( " " ).. | 359 | |
| Exhibit B—Statement.....( " " ).. | 360 | |
| Affidavit of C. F. Edrington .....( " " ).. | 361 | |
| Exhibit A—Statement.....( " " ).. | 363 | |
| Affidavit of A. D. Allen.....( " " ).. | 364 | |
| W. W. Dickinson.....( " " ).. | 366 | |
| Fred L. La Grave.....( " " ).. | 368 | |
| A. V. Alexander.....( " " ).. | 372 | |
| G. W. Swaim.....( " " ).. | 374 | |

| | Original | Print |
|---|---|---|
| Exhibit 1—Order No. 349.....(omitted in printing).. | 413 | |
| 2—Order No. 353.....( " " ).. | 416 | |
| 3—Statement .....( " " ).. | 418 | |
| 4—Table.....( " " ).. | 420 | |
| 5—Order No. 305.....( " " ).. | 421 | |
| 6—Passenger tariff .....( " " ).. | 423 | |
| Table D—Statement.....( " " ).. | 429 | |
| E—Statement.....( " " ).. | 431 | |
| F—Statement.....( " " ).. | 432 | |
| G—Statement.....( " " ).. | 433 | |
| H—Statement.....( " " ).. | 434 | |
| Affidavit of F. W. Boltz.....( " " ).. | 435 | |
| Exhibit A—Tariff on petroleum....( " " ).. | 441 | |
| B—Tariff on petroleum....( " " ).. | 442 | |
| C—Kansas maximum rate law (omitted in printing)..... | 443 | |
| D—Missouri maximum rate law (omitted in printing)..... | 445 | |
| E—Oklahoma tariff on petroleum (omitted in printing)..... | 446 | |
| F—Texas tariff on petroleum (omitted in printing). | 447 | |
| G—Tariff on petroleum....(omitted in printing).. | 448 | |
| H—Tariff on petroleum....( " " ).. | 449 | |
| I—Statement.....( " " ).. | 450 | |
| J—Statistical abstract....( " " ).. | 451 | |
| Order approving injunction bond..... | 452 | 43 |
| Injunction bond ..... | 452 | 44 |
| Order filing stipulation ..... | 455 | 45 |
| Stipulation of counsel as to replication..... | 455 | 46 |
| Order to show cause on petition for contempt..... | 456 | 46 |
| Petition for rule on defendants for contempt..... | 457 | 47 |
| Order finding defendants guilty of contempt, etc..... | 461 | 49 |
| Separate response of defendants to petition for rule ..... | 461 | 50 |
| Separate response of R. D. Campbell to petition for rule..... | 466 | 52 |
| Order dismissing rule for contempt ..... | 467 | 53 |
| Order on petition of Morris M. Cohn *et al.*, solicitors, to withdraw.. | 468 | 53 |
| Petition for leave to withdraw appearance ..... | 468 | 54 |
| Order filing motion to dissolve injunction, etc..... | 469 | 54 |
| Motion to dissolve injunction ..... | 470 | 55 |
| Order: Hearing motion to dissolve injunction and continuance .... | 482 | 61 |
| Order: Hearing resumed and continued ..... | 483 | 62 |
| Order: Filing additional affidavits of defendants in support of motion to dissolve injunction..... | 485 | 63 |
| Order: Hearing motion to dissolve injunction and continuance .... | 486 | 63 |
| Order: Hearing motion to dissolve injunction and continuance .... | 486 | 64 |
| Order: Hearing motion to dissolve injunction and continuance .... | 487 | 64 |
| Decree on motion to dissolve injunction ..... | 488 | 65 |
| Exhibit A—Court tariff .....(omitted in printing).. | 490 | |
| Opinion of court on motion to modify..... | 521 | 66 |
| Order requiring complainant to file additional bond, &c ..... | 555 | 87 |
| Order permitting defendants to examine books, records, &c., of complainants ..... | 556 | 88 |
| Order appointing P. C. Dooley master to take testimony, &c..... | 557 | 88 |

| | Original | Print |
|---|---|---|
| Order filing replication to answer | 559 | 89 |
| Replication | 559 | 90 |
| Order filing and approving complainant's additional bond | 560 | 90 |
| Additional bond of complainant | 560 | 90 |
| Order filing report of master | 564 | 92 |
| Report of master | 565 | 92 |
| Order making allowance to master | 566 | 93 |
| Order extending time for taking testimony in rebuttal | 567 | 93 |
| Order appointing Chas. M. Rice special examiner to take proofs, &c | 568 | 94 |
| Order filing qualification of Chas. M. Rice | 569 | 95 |
| Order filing motion of defendants to modify order of court permitting complainant to charge three cents per mile for passenger traffic | 569 | 95 |
| Motion to modify injunction on three-cent passenger rate | 570 | 95 |
| Order filing response of complainant | 574 | 98 |
| Response of complainant to motion to modify injunction | 574 | 98 |
| Order: Hearing and continuance, January 2, 1911 | 577 | 99 |
| Order: Hearing and continuance, January 3, 1911 | 578 | 100 |
| Order: Hearing and continuance, January 4, 1911 | 578 | 100 |
| Order: Hearing and continuance, January 5, 1911 | 579 | 100 |
| Order: Hearing and continuance, January 6, 1911 | 579 | 101 |
| Order making allowance to Chas. M. Rice, special examiner | 580 | 101 |
| Order: Hearing and continuance, January 7, 1911 | 581 | 101 |
| Order: Hearing and continuance, January 9, 1911 | 581 | 102 |
| Order substituting parties defendant | 582 | 102 |
| Order: Hearing and continuance, January 16, 1911 | 582 | 102 |
| Order: Hearing and continuance, January 17, 1911 | 583 | 103 |
| Order: Hearing and continuance, January 18, 1911 | 583 | 103 |
| Order: Hearing and continuance, January 19, 1911 | 584 | 103 |
| Order: Hearing and continuance, January 20, 1911 | 584 | 104 |
| Order: Hearing and submission of cause | 585 | 104 |
| Final decree | 586 | 105 |
| Hearing before master and stipulation of counsel | 590 | 106 |
| Evidence for complainant | 591 | 107 |
| Testimony of Fred P. Johnson | 591 | 107 |
| Hubert Roth | 607 | 113 |
| Fred P. Johnson (recalled) | 609 | 114 |
| R. E. Kimbell | 679 | 151 |
| Fred P. Johnson (recalled) | 734 | 175 |
| R. E. Kimbell (recalled) | 801 | 208 |
| B. M. Flippin | 864 | 238 |
| C. L. Stone | 923 | 265 |
| Charlton Messick | 946 | 276 |
| Fred P. Johnson (recalled) | 948 | 277 |
| Hubert Roth (recalled) | 953 | 279 |
| C. J. McPherson | 955 | 280 |
| Fred P. Johnson (recalled) | 1132 | 362 |
| C. J. McPherson (recalled) | 1134 | 363 |
| W. B. Doddridge | 1321 | 451 |
| R. E. Kimbell (recalled) | 1478 | 525 |
| W. B. Doddridge (recalled) | 1485 | 527 |
| Fred P. Johnson (recalled) | 1535 | 551 |

| | Original | Print |
|---|---|---|
| Testimony of J. D. Watson | 1539 | 553 |
| C. E. Perkins | 1606 | 583 |
| Frank Nay | 1706 | 630 |
| J. D. Watson (recalled) | 1719 | 636 |
| C. E. Perkins (recalled) | 1734 | 642 |
| Stipulation of counsel as to value of property | 1760 | 653 |
| Testimony of Fred P. Johnson (recalled) | 1762 | 654 |
| Frank Nay (recalled) | 1763 | 654 |
| I. G. Rawn | 1801 | 672 |
| W. J. McKee | 1833 | 687 |
| Edmund D. Sewell | 1868 | 703 |
| Frank E. Ward | 1907 | 722 |
| F. O. Becker | 1941 | 738 |
| Fred P. Johnson (recalled) | 1959 | 746 |
| C. J. McPherson (recalled) | 1964 | 748 |
| Fred P. Johnson (recalled) | 1965 | 748 |
| W. M. Whitenton | 1967 | 749 |
| Evidence for defendants | 2010 | 769 |
| Testimony of R. E. Kimbell | 2010 | 769 |
| G. W. Swaim | 2017 | 772 |
| J. E. Hampton | 2068 | 798 |
| J. D. Watson | 2100 | 815 |
| A. R. Bragg | 2102 | 815 |
| Fred P. Johnson | 2183 | 857 |
| Henry Willmering | 2185 | 858 |
| J. G. Wallace | 2219 | 875 |
| W. E. Floyd | 2262 | 896 |
| J. G. Wallace (recalled) | 2263 | 896 |
| J. D. Watson (recalled) | 2270 | 899 |
| R. E. Kimbell (recalled) | 2279 | 904 |
| R. T. Brook | 2282 | 905 |
| C. W. Lewis | 2285 | 906 |
| A. C. Read | 2311 | 919 |
| A. R. Bragg (recalled) | 2314 | 921 |
| W. E. Floyd (recalled) | 2316 | 922 |
| J. W. Crockett | 2318 | 922 |
| J. D. Watson (recalled) | 2320 | 923 |
| H. C. Halverson | 2328 | 928 |
| Thomas McCutcheon | 2233 | 930 |
| Gordon N. Peay | 2352 | 940 |
| R. E. Kimbell (recalled) | 2353 | 940 |
| J. D. Watson (recalled) | 2374 | 950 |
| James C. Lincoln | 2398 | 961 |


## VOLUME II.


| | | |
|---|---|---|
| Testimony of R. E. Kimbell (recalled) | 2476 | 997 |
| T. F. Wharton | 2484 | 1000 |
| Herbert C. Whitehead | 2650 | 1075 |
| W. E. Fitz Gerald | 2660 | 1080 |
| Henry Willmering (recalled) | 2725 | 1111 |
| R. D. Parker | 2829 | 1161 |
| C. B. Bee | 2861 | 1176 |

| | Original | Print |
|---|---|---|
| Testimony of Charles S. Ludlam | 3145 | 1309 |
| Maurice Wright | 3310 | 1383 |
| T. F. Wharton (recalled) | 3345 | 1400 |
| T. A. Hamilton | 3352 | 1402 |
| Conway C. Hillman | 3524 | 1479 |
| T. A. Hamilton (recalled) | 3621 | 1524 |
| T. F. Wharton (recalled) | 3784 | 1599 |
| J. M. Johnson | 3793 | 1603 |
| Fred P. Johnson (recalled) | 3808 | 1611 |
| Stipulation of counsel as to monthly statements of Chicago, Rock Island & Pacific Railway Company | 3810 | 1611 |
| Testimony for complainant in rebuttal | 3811 | 1612 |
| Testimony of R. H. Laing | 3811 | 1612 |
| C. E. Perkins | 3827 | 1619 |
| J. D. Watson | 3938 | 1672 |
| M. L. Byers | 3987 | 1695 |
| W. H. V. Rosing | 4054 | 1726 |
| H. B. Aumocek | 4137 | 1769 |
| B. W. Moore | 4147 | 1773 |
| John Cannon | 4195 | 1795 |
| H. V. Brown | 4211 | 1803 |
| W. L. Seelig | 4224 | 1809 |
| Frank Nay | 4230 | 1812 |
| F. E. Ware | 4321 | 1853 |
| Carl R. Gray | 4406 | 1893 |
| Hubert Roth | 4567 | 1973 |
| Fred P. Johnson (recalled) | 4583 | 1981 |
| Frank Nay (recalled) | 4650 | 2012 |
| Hubert Roth (recalled) | 4778 | 2076 |
| R. E. Kimbell | 4780 | 2076 |


## VOLUME III.


| | | |
|---|---|---|
| Testimony of defendants in surrebuttal | 4793 | 2083 |
| Testimony of Walter Nash | 4793 | 2083 |
| D. L. McNew | 4825 | 2098 |
| Mord Roberts | 4843 | 2106 |
| K. P. Alexander | 4955 | 2158 |
| J. A. Simmons | 4976 | 2168 |
| Hubert F. Jernigan | 5024 | 2189 |
| D. Harston | 5038 | 2195 |
| A. Paulette | 5059 | 2204 |
| Carl R. Gray (recalled by complainant) | 5079 | 2213 |
| H. R. V. Rosing (recalled by complainant) | 5089 | 2218 |
| F. P. Johnson | 5091 | 2219 |
| Stipulation of counsel agreeing that complainant may revise Exhibit No. 56 | 5152 | 2249 |
| Testimony of T. A. Hamilton | 5154 | 2250 |
| Maurice Wright | 5180 | 2262 |
| Charles S. Ludlam | 5189 | 2267 |

| | Original | Print |
|---|---|---|
| Complainant's exhibits to testimony | 5235 | 2289 |
| Exhibit 1—Map of the Missouri Pacific system (omitted in printing) | 5235 | |
| 2—Statement of track mileage, St. L., I. M. & S. Ry., December 31, 1907 | 5237 | 2290 |
| 3—Statement of the earnings and expenses of the St. L., I. M. & S. Ry. Co. in the State of Ankansas for six months ending December 31, 1907 | 5239 | 2292 |
| 3*a*—Assessed value of property divided between freight and passenger traffic for six months ending December 31, 1907, and interest at various rates | 5256 | 2317 |
| 4—Bases for ascertaining the cost of State business | 5260 | 2320 |
| 5—Miscellaneous statistics relative to the business handled during six months ending Dec. 31, 1907 | 5266 | 2327 |
| 6—Comparison of averages based upon statistics published in the last annual report to the Interstate Commerce Commission (1907), with averages based upon the business handled by the St. L., I. M. & S. Ry. Co. on its entire line and in the State of Arkansas for six months ending December 31, 1907 | 5269 | 2329 |
| 7—Assessment of the State board of railroad commissioners for the year 1907 (omitted in printing) | 5271 | |
| 7*a*—Assessment of the Arkansas board of assessors for the years 1907-8-9 | 5273 | 2329 |
| 8—Statement of the earnings and expenses of the St. L., I. M. & S. Ry. Co. in the State of Arkansas for six months ending June 30, 1907 | 5275 | 2332 |
| 8*a*—Assessed value of the property divided between the freight and passenger traffic for six months ending June 30, 1907, and interest thereon at various rates | 5281 | 2340 |
| 8*b*—Assessed value of the property divided between freight and passenger traffic for the year ending December 31, 1907, and interest thereon at various rates | 5284 | 2343 |
| 9—Map of the St. Louis Southwestern Railway lines (omitted in printing) | 5287 | |
| 10—Statement of number of miles operated by St. Louis Southwestern Railway Co | 5289 | 2346 |
| 11—Statement of operating revenues, operating expenses, taxes, and rentals of the St. Louis Southwestern Ry. Co. for the year ending June 30, 1908 (omitted in printing) | 5291 | |
| 12—Statement of operating revenues, operating expenses, taxes, and rentals, showing results from handling State freight and passenger traffic after excluding revenues, expenses, taxes, and rentals for interstate freight and passenger traffic, and all of mail, express, and miscellaneous, for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5294 | 2348 |

| | Original | Print |
|---|---|---|
| Exhibit 12a—Statement of operating revenues, operating expenses, taxes, rentals, and outside operations, etc., for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5297 | 2353 |
| 13—Statement showing how the extra cost of handling State traffic in proportion to revenue is arrived at for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5299 | 2355 |
| 13a—Statement showing how the extra cost of handling State traffic in proportion to revenue is arrived at for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5302 | 2359 |
| 14—Miscellaneous traffic statistics for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5304 | 236 |
| 15—Statement of assessed valuation of property in the State of Arkansas for year 1908, and proportion assignable to State freight and passenger traffic on basis of the revenue for the year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5306 | 2362 |
| 16—Statement of assessed valuation of property in the State of Arkansas for the year 1909, and proportion assignable to State freight and passenger traffic on basis of the revenue for the year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5308 | 2364 |
| 17—Bases used in dividing operating revenues between freight and passenger and between States—St. Louis Southwestern Ry. Co | 5310 | 2366 |
| 18—Supplement A to circular 360—St. Louis Southwestern Ry. Co | 5312 | 2367 |
| 19—Statement of ton-miles of commercial freight handled on all through and local trains in the State of Arkansas, etc., during month of October, 1908—St. Louis Southwestern Ry. Co | 5320 | 2375 |
| 20—Miscellaneous train statistics, State of Arkansas, month of October, 1908—St. Louis Southwestern Ry. Co | 5322 | 2377 |
| 21—Statement of gross revenue for year ending June 30, 1908, showing proportion accruing to Arkansas and percentage thereof to the total; also miscellaneous statistics—St. Louis Southwestern Ry. Co | 5324 | 2380 |
| 22—Statement of operating expenses, taxes, rentals, and outside operations for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5326 | 2382 |
| 23—Answer to Judge Hill's example | 5330 | 2389 |
| 24—(Also marked Exhibit 1)—Map of U. S. (omitted in printing) | 5333 | |
| 25—Employees' time-table, St. Louis Southwestern Ry. Co., in effect August 16, 1908 (omitted in printing) | 5335 | |
| 26—Statement of trans-state, interstate, and State freight handled during the month of October, 1907—St. Louis, Iron Mountain & Southern Ry. Co | 5350 | 2391 |

| | Original | Print |
|---|---|---|
| Exhibit 27—Average rate of pay per hundred miles in freight service and per day passenger and switching service, as per schedule—Missouri Pacific Ry. Co... | 5352 | 2392 |
| 28—Average price paid for various commodities in the year 1909 compared with the year 1898 and per cent. of increase—St. Louis, Iron Mountain & Southern Ry. Co..... | 5354 | 2393 |
| 29—Average yearly actual and relative prices of commodities, report Bureau of Commerce and Labor, bulletin 75, March, 1908—St. Louis, Iron Mountain & Southern Ry. Co..... | 5356 | 2395 |
| 30—Graphic chart showing taxes and comparative prices of cross-ties and 29 other materials, ten classes of railway labor, and rate of railway freight transportation—St. L., I. M. & S. Ry. system .....(omitted in printing).. | 5358 | |
| 31—Comparison of averages based upon statistics published by the Interstate Commerce Commission's bulletin No. 1, showing revenue and expenses of steam roads in the United States for six months ending December 31, 1907, with similar averages based on the operation of the St. L., I. M. & S. Ry. Co. for the same period..... ..... | 5360 | 2396 |
| 32—Statement of operating revenues, operating expenses, taxes, and outside operations for six months ending December 31, 1907—St. Louis Southwestern Ry. Co..... ..... | 5362 | 2397 |
| 33—Statement of operating revenues, operating expenses, taxes, rentals, and outside operations, showing results from handling State freight and passenger traffic, etc., for six months ending Dec. 31, 1907—St. Louis Southwestern Ry. Co ..... | 5364 | 2399 |
| 34—Statement showing how extra cost of handling State traffic in proportion to revenue is arrived at for six months ending Dec. 31, 1907—St. Louis Southwestern Ry. Co..... ..... | 5366 | 2401 |
| 35—Miscellaneous traffic statistics for six months ending Dec. 31, 1907—St. Louis Southwestern Ry. Co. | 5368 | 2403 |
| 36—Contract between Missouri Pacific Ry. Co. and Pacific Express Co., May 1, 1886..... | 5370 | 2404 |
| 37—Intrastate mileage rates in effect in 1907 in States mentioned, on commodities as listed..... | 5376 | 2406 |
| 37*a*—Intrastate mileage rates in effect in 1907, in the States mentioned, on commodities as listed ..... | 5378 | 2407 |
| 38—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing)..... | 5380 | |
| 39—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing)..... ..... | 5382 | |
| 40—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing)..... | 5384 | |

| | Original | Print |
|---|---|---|
| Exhibit 41—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing) | 5386 | |
| 42—Map of the Wabash system (omitted in printing) | 5388 | |
| 43—Map of the St. Louis Southwestern Railway Line (omitted in printing) | 5390 | |
| 44—Analysis, mail earnings in Arkansas, six months ending Dec. 31, 1907—St. Louis, Iron Mountain & Southern Ry. Co | 5392 | 2410 |
| 45—Statement of gross earnings per mile of road—St. L., I. M. & S. Ry. Co | 5394 | 2411 |
| 46—Statement of relative stocks of passenger trains in Arkansas, time-table of May 12, 1907 | 5396 | 2412 |
| 47—Statement of capital stock and dividends, fiscal years ending June 30, from 1904 to 1909, inclusive—St. L., I. M. & S. Ry. Co | 5412 | 2421 |
| 48—Fixed and obligatory charges, fiscal years ending June 30, 1906 and 1907—St. L., I. M. & S. Ry. Co. | 5414 | 2432 |
| 49—Western classification No. 47, effective November 1, 1909, page 5416 (omitted in printing) | 5416 | |
| 50—Class rates to Little Rock and Pine Bluff | 5679 | 2432 |
| 51—Statement of rates from Memphis, Tenn., to towns named | 5681 | 2433 |
| 52—Terminal handling of loaded cars on through trains, October, 1907—St. L., I. M. & S. Ry. Co | 5683 | 2434 |
| 53—Statement of inbound train 55, etc. (omitted in printing) | 5690 | |
| 54—Statement of intrastate freight traffic—St. L., I. M. & S. Ry. Co | 5722 | 2447 |
| 55—Results of operation in intrastate traffic in Arkansas for six months ending December 31, 1907—St. L., I. M. & S. Ry. Co | 5724 | 2449 |
| 56—Statement showing the results of operation on the St. L., I. M. & S. Ry. Co. in the State of Arkansas for the period of six months ending December 31, 1907, etc | 5726 | 2451 |
| 56a—Statement showing the results of operation on the St. L., I. M. & S. Ry. Co., as reported in Exhibit 56, after certain changes had been made in the passenger miles carried in Pullman cars | 5737 | 2471 |
| 57—Statement of passenger traffic, St. L., I. M. & S. Ry. Co., State of Arkansas | 5740 | 2474 |
| 58—Statement showing revenue from State freight and passenger traffic under both current and inhibited rates for fourteen months ending December 31, 1909 | 5742 | 2476 |
| 59—Statement of all loaded trans-state cars moved through the State of Arkansas for fifteen days, first to fifteenth, in October, 1908, showing actual time consumed and miles made within the State, compared with the schedule—St. L. S. W. Ry. Co | 5744 | 2479 |

| | Original | Print |
|---|---|---|
| Exhibit 60—Statement showing results of operating freight service in the State of Arkansas for the period of six months ending December 31, 1907, etc.—St. L. S. W. Ry. Co. | 5746 | 2481 |
| Defendants' exhibits to testimony | 5760 | 2489 |
| Exhibit A—Statement of trans-state, interstate, and State freight handled during the month of January, 1909—St. L. S. W. Ry. Co. | 5760 | 2489 |
| B—Changes in the Commission's tariff since July, 1903, to April 15, 1908 | 5762 | 2500 |
| C—Statement | 5770 | 2506 |
| D—Statement | 5772 | 2508 |
| E—Answer to Judge Hill's queries on April 19, 1910 | 5778 | 2511 |
| F—Comparative rates from Memphis to points on White River Branch of the St. L., I. M. & S. Ry. against rates for equal distance, Commission tariff No. 3 and court tariff | 5781 | 2513 |
| G—Statement covering six months ending December 31, 1907, prepared in answer to request of Judge Hill, showing assumed revenues, etc. | 5783 | 2514 |
| H—Statement supplementary to Exhibit No. 33, prepared in answer to request of Judge Hill, showing operating expenses, taxes, rentals, etc., for six months ending December 31, 1907—St. L. S. W. Ry. Co. | 5785 | 2515 |
| I—Freight statistics, October, 1907—St. L., I. M. & S. Ry. Co. | 5787 | 2516 |
| J—Statement of freight operating expenses in Arkansas for the six months ending December 31, 1907, divided between local and through train service and between intrastate and interstate business—St. L., I. M. & S. Ry. Co. | 5790 | 2519 |
| K—Bases used in arriving at cost of local and through service and intrastate and interstate freight business in Arkansas for the six months ending December 31, 1907—St. L., I. M. & S. Ry. Co. | 5792 | 2521 |
| L—Statement of passenger operating expenses in Arkansas for the six months ending December 31, 1907, divided between train and other costs and between intrastate, interstate, mail, and express business—St. L., I. M. & S. Ry. Co. | 5801 | 2532 |
| M—Bases used in arriving at cost of intrastate and interstate passenger, mail, and express business in Arkansas for the six months ending December 31, 1907—St. L., I. M. & S. Ry. Co. | 5803 | 2533 |
| N—Statement of revenue, expenses, and net earnings in Arkansas for the six months ending December 31, 1907, etc.—St. L., I. M. & S. Ry. Co. | 5809 | 2540 |
| O—Summary of revenue, net earnings, and expenses in Arkansas for six months ending December 31, 1907, divided between intrastate, interstate, mail, and express business—St. L., I. M. & S. Ry. Co. | 5811 | 2540 |

| | Original | Print |
|---|---|---|
| Exhibit P—Freight statistics, October, 1908—St. L. S. W. Ry. Co. | 5813 | 2541 |
| Q—Statement of freight operating expenses in Arkansas for six months ending December 31, 1907, divided between local and through train service and between intrastate and interstate business—St. L. S. W. Ry Co. | 5815 | 2544 |
| R—Bases used in arriving at costs of local and through freight service and intrastate and interstate freight business in Arkansas for six months ending December 31, 1907—St. L. S. W. Ry. Co. | 5817 | 2546 |
| S—Statement of passenger operating expenses in Arkansas for six months ending December 31, 1907, divided between train and other costs and between intrastate, interstate, mail, and express business—St. L. S. W. Ry. Co. | 5826 | 2557 |
| T—Bases used in arriving at costs of intrastate and interstate passenger and mail and express business in Arkansas for the six months ending December 31, 1907—St. L. S. W. Ry. Co. | 5827 | 2558 |
| U—Statement of revenue, expenses, and net earnings in Arkansas for six months ending December 31, 1907, with miscellaneous earnings, etc.—St. L. S. W. Ry. Co. | 5832 | 2562 |
| V—Summary of revenue, expenses, and net earnings in Arkansas for the six months ending December 31, 1907, divided between intrastate, interstate, mail, and express business—St. L. S. W. Ry. Co. | 5834 | 2562 |
| W—Tonnage capacity of engines in freight service as shown by official time cards, etc.—St. L., I. M. & S. Ry. Co. | 5836 | 2563 |
| X—Statement of station expenses—St. L. S. W. Ry. Co. | 5840 | 2565 |
| Y—Statement of station expenses—St. L., I. M. & S. Ry. Co. | 5843 | 2567 |
| Z—Comparison of revenue and expenses per train mile from the years ending June 30, 1897 and 1908, as shown by the Interstate Commerce Commission reports for those years | 5846 | 2569 |
| A[1]—Freight conductors' wheel report—M. P. Ry. Co. (omitted in printing) | 5848 | |
| B[1]—Form of way bill—St. L., I. M. & S. Ry. Co. (omitted in printing) | 5851 | |
| C[1]—Graphic chart showing class rates from Memphis, Tennessee; St. L., I. M. & S. Ry. tariff compared with class rates from Memphis Bridge Junction, Arkansas; standard distance tariff No. 3 (omitted in printing) | 5853 | |
| D[1]—Graphic chart showing rates from St. Louis, Mo.—St. L., I. M. & S. tariff No. 5179a (omitted in printing) | 5855 | |

| | Original | Print |
|---|---|---|
| Exhibit E[1]—Statement showing the ton miles and percentages of freight taken up on the company's books and records during the month of October, 1908, and the ton miles and percentages of freight actually transported during that month, as shown by Exhibits 19 and 20—St. L. S. W. Ry. Co. | 5857 | 2570 |
| F[1]—Freight and passenger statistics compiled from the reports of the Interstate Commerce Commission for the entire United States, group 8, St. L., I. M. & S. and St. L. S. W. Ry. Co. for the period of ten years ending June 30, 1907 | 5859 | 2571 |
| G[1]—Cost and net earnings of intrastate freight business in Arkansas for the six months ending December 31, 1907, etc.—St. L., I. M. & S. Ry. Co. | 5861 | 2573 |
| H[1]—Cost and net earnings of intrastate freight business in Arkansas for the six months ending December 31, 1907, etc.—St. L. S. W. Ry. Co. | 5863 | 2574 |
| I[1]—Affidavit of E. K. Voorhees (part omitted in printing) | 5865 | 2576 |
| J[1]—Sketch showing main track in city limits of Fort Smith, Arkansas—St. L., I. M. & S. Ry. Co, etc. (omitted in printing) | 5880 | |
| K[1]—General instructions No. 16*a* of the Missouri Pacific Ry. Co. (omitted in printing) | 5885 | |
| L[1]—Graphic charts ( " " ) | 5886 | |
| M[1]—Graphic charts ( " " ) | 5897 | |
| N[1]—Railroad Commission standard freight distance tariff No. 3, in effect June 15, 1908 (omitted in printing) | 5899 | |
| Opinion of Judge Trieber, May 3, 1911 | 5957 | 2580 |
| Stipulation to use testimony in both cases, etc | 6077 | 2648 |
| Order that court tariff remain in force pending appeal | 6078 | 2648 |
| Order of severance as to Henry Leigh and George L. McLean | 6078 | 2649 |
| Order allowing appeal, etc | 6079 | 2649 |
| Assignment of errors | 6081 | 2650 |
| Prayer for appeal and allowance of same | 6088 | 2656 |
| Bond on appeal | 6090 | 2657 |
| Order filing citation | 6091 | 2658 |
| Citation and acceptance of service | 6092 | 2658 |
| Order extending time to file record | 6093 | 2659 |
| Clerk's certificate | 6094 | 2659 |
| Original citation | 6095 | 2659 |
| Stipulation as to printing record | 6096 | 2660 |

1 In the United States Circuit Court for the Western Division of the Eastern District of Arkansas. In Chancery.

Be it remembered, That on the 18th day of July, A. D., 1908, came into the office of the Clerk of the Circuit Court of the United States, for the Western Division of the Eastern District of Arkansas, the St. Louis, Iron Mountain & Southern Railway Company, by Moore, Smith & Moore, Esqs., its solicitors and filed therein, on the Chancery side of said Court, its Bill of Complaint against Robert P. Allen, John W. Crockett and John E. Hampton, Railroad Commissioners of the State of Arkansas, Henry Leigh and George L. McLean—which Bill of Complaint is as follows:—

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, Plaintiff.

v.

ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas; Henry Leigh and George L. McLean, Defendants.

To the Honorable Judges of the Circuit Court of the United States for said District:

Your orator, St. Louis, Iron Mountain & Southern Railway Company, brings its bill of complaint against Robert P. Allen, John W. Crockett, and John E. Hampton, as members of and constituting the Railroad Commissioners of the State of Arkansas.

First. Your orator is a corporation organized under the laws of the State of Arkansas with its domicile at the City of Little
2 Rock, Pulaski County, in said State.

Second. The said Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, are citizens and residents of the State of Arkansas, and constitute the Railroad Commission of said State. Said John W. Crockett and John E. Hampton reside in said district, said Robert P. Allen resides at Van Buren, in Crawford County, in the Western Judicial District of said State. The Act of the Legislature of said State under which said Commission was created, fixes and establishes the domicile of the Commission at the City of Little Rock, in the County of Pulaski, in said State and in the Western Division of the Eastern Judicial District thereof. The Defendants Henry Leigh and George McLean are citizens of the State of Arkansas and reside at the City of Little Rock, in said district.

Third. Your orator further avers that the Act creating said Railroad Commission heretofore referred to, approved March 11, 1899, entitled, "An Act to provide for the regulation of railroad, freight and passenger tariffs, in this State, to prevent unjust discrimination by extortion in the rates charged for transportation of passengers and freights, and to prohibit railroad companies, cor-

porations and lessees in this State from charging other than just and reasonable rates, and to punish the same, and to prescribe the mode of procedure and rules of evidence in relation thereto, and to appoint commissioners and to prescribe rules for their government, and define their powers and duties in relation to the same," and Acts supplemental to and amendatory thereof, invest in said Railroad Commission the power and impose upon it the duty to make and put in effect reasonable and just rates of freight, express and passenger tariffs, to be observed by all persons and corpora-
3 tions operating any railroad or engaged in transporting persons or property in said State, and to make just and reasonable rates of freight, express and passenger traffic on connecting railroads operated by different and independent companies or corporations between stations within said State, to be observed by all persons, companies or corporations operating connecting railroads within the State, and if two or more connecting lines of railorad in said State shall fail to agree upon the division of charges arising from transportation of freight, passengers or cars over their lines, said Commission is authorized to make the division and fix the prorata part of such charges to be received by each of said connecting lines. Said Act further provides that in case any person or corporation engaged in operating a railroad in the State shall not do, or permit to be done, any act, matter or thing in said Act required to be done, or shall be guilty of the violation of any of the provisions of the Act, such person or corporation shall be held to pay to the person, firm or corporation thereby injured double the amount of the damage by him sustained, and all costs to be recovered by such person, firm or corporation; and in all actions between private parties and railroad companies brought under said Act, the rates, charges, orders, rules, regulations and classifications prescribed by said Commission prior to the institution of such action shall be held to be reasonable, fair and just, and shall not be controverted therein. It is also provided by said Act that if any person or corporation operating a railroad in said State, or any lessee of such person or corporation, shall violate any of the provisions of the Act, or aid or abet therein, or shall violate any tariff of charges as fixed by said Commission, or any rules regarding railroads or express companies as made by said Commission, such person, corporation or lessee shall be liable to a penalty of not less than $500.00 nor more than $3000.00 for each violation of said Act, in an action brought in the name of the State, and in the County of
4 which such violation shall occur, and the said Commission shall institute such actions as may be necessary for the recovery of the penalties prescribed therein through the Prosecuting Attorney of the proper district, or through Counsel specially employed by said Commission.

And your orator avers that the effect of the aforesaid provisions of said Act is to deny your orator and all persons and corporations operating railroads in said State of the right to a judicial investigation of the validity and reasonableness of the rates, rules, regulations and classifications prescribed by said Commission, and to

deprive your orator and all others in like condition of due process of law, contrary to the provisions of Section 1 of the Fourteenth Amendment to the Constitution of the United States.

Fourth. Your orator further alleges that on the 15th day of July, 1904, the predecessors of the Defendants, the then acting Railroad Commissioners of said State, assuming to act under the authority of the aforesaid provisions of the statute of said State, promulgated Standard Freight Distance Tariff No. 2, prescribing freight rates and charges applicable to classes and commodities between all stations in said State, on all railroads operated therein subject to western classifications as adjusted to traffic in said State. The rates therein prescribed were continued in force, with certain amendments thereof made and promulgated by said Commission from time to time until June 4, 1908, when said Defendants, acting in their official capacity, adopted Standard Freight Distance Tariff No. 3, applying on classes and commodities between all railroad stations in said State, subject to western classifications as adjusted to traffic therein, cancelling Standard Freight Distance Tariff No. 2 aforesaid, and ordered that the same take effect June 15, 1908.

Said tariff contains many of the rates and regulations that were contained in Standard Freight Distance Tariff No. 2, as aforesaid, and the changes and amendments made therein by said Commission since said Tariff No. 2 was promulgated, and other changes in rates on classes and commodities made in the order of said Commission adopted on June 4, 1908. A copy of said Standard Freight Distance Tariff No. 3 is herewith filed as Exhibit "A" and made a part hereof.

Fifth. Your orator avers that each and all of the charges and rates prescribed in said Tariff No. 3 aforesaid, as well as in the preceding Tariff No. 2, applying on all classes and commodities as aforesaid are unreasonable, unjust, oppressive, discriminative, confiscatory and void, both in respect to said order as a whole and in respect to each and every rate, charge, tariff, schedule, classification, rule and regulation separately:

(1) The railroad equipment, property and franchises owned and used by your orator in operating its said road in said State represents an investment of $40,906,572.00, according to the last assessment of said property for taxation by the State of Arkansas through the State Board of Railroad Assessors, which assessment is now in force. Orator has exercised as great a degree of economy in the use and operation of said property as was compatible with the interest of the public and with safe and efficient service to the public, only employing such officers, agents and employees, and expending such amounts in the maintenance and repair of its road bed, tracks and stations and new equipment of engines, cars and other appliances necessary to the operation of its road and the maintenance of said property, as was necessary and essential to the due and proper operation of its trains, and to the maintenance of said property with due regard to its preservation, and the safety of the public. That no unreasonable salaries or wages have been, or are now being paid to any of its officers or employees. But notwithstanding that orator

has practised all reasonable and proper economy in operation
6 and maintenance as aforesaid, it has been unable and will be unable to operate said road at a profit at the rates prescribed in said tariff. On the contrary, said rates do not and will not yield a just and reasonable return upon the value of orator's property used in said service, either in respect to the money invested in said property or the service rendered. And in that behalf your orator alleges that the total earnings from its intra-state business in the transportations of freight in the State of Arkansas, during the year 1907 did not exceed the sum of $640,284.17; that the expense of operation solely incident to said business, and the fixed charges solely incident and chargeable to intra-state transportation of freights was $784,602.14. That the total earnings of said property from the transportation of freight, wholly within the State of Arkansas is not and will not be sufficient under the rates on classes and commodities prescribed as aforesaid as a whole, after paying operating expenses, charges for maintenance, taxes and other necessary fixed charges appertaining to said business, to yield any return by way of compensation for the service rendered by your orator, and the effect of such rates is and will be to prevent your orator from receiving any return or profit for the service rendered by it to the public, and will deprive orator of its property without due process of law, and will deny to it the equal protection of the laws.

(2) Your orator represents that among the principal commodities transported on the lines of railroad in the State of Arkansas are coal and coal slack; that the principal, in fact, the only, coal fields now or heretofore operated in said State are situated in the counties of Pope, Johnson, Franklin, Sebastian and Logan; that the coal mined in said counties is shipped from the following stations: that in Johnson County from Spadra, Coal Hill, Clarksville, Cabin
7 Creek; that in Franklin County from Denning; that in Sebastian County from Jenny Lind, Huntington, Burma, Montreal, Hackett, Jensen, Bonanza, Dallas, Dennison, Excelsior, Greenwood, Gunther, Harp, Hartford, Hoffmann, Hoye, Fidelity, Midland, Patterson and Prairie Creek and that in Logan County from Knoxville, Piney and Paris.

That under the commodity rates prescribed in the aforesaid tariff, the rate on coal for a distance of 110 to 120 miles is $1.00 per ton; 120 to 140 miles, $1.05 per ton; 140 to 160 miles, $1.10 per ton; 160 to 170 miles, $1.25 per ton; 170 to 180 miles, $1.30 per ton; 180 to 190 miles, $1.35 per ton; 190 to 200 miles, $1.40 per ton; 200 to 210 miles, $1.45 per ton; 210 to 220 miles, $1.50 per ton. That the principal market in said Shate for coal and coal slack is the City of Little Rock and points north, south and east of said City; that the City of Little Rock is 114 miles from Coal Hill, from 141 to 156 miles from the aforesaid coal stations in Sebastian County and 165 miles from the station of Paris, in Logan County, by the lines of road connecting said points with said City, and over which the product of the said coal mines is shipped to said markets. All coal shipped to said markets and each of them is routed through the

City of Little Rock, and the same difference in length of haul from the stations at which said shipments of coal originate exists as to all of them. That the coal shipped to points north, south and east of said City is there transferred to different lines of road, and in most cases is subject to the joint through rates prescribed by said Commission. That the coal mine situated at Jenny Lind in Sebastian County is on your orator's line of road, other mines situated in said county are on the line of the St. Louis and San Francisco and the Midland Valley Railroads, which connect with the main line of your orator. All of said lines of railroad connect with your orator's
8 line at the City of Little Rock either directly or through connecting lines. The mines at Paris in Logan County are on the Arkansas Central Railroad which connects with your orator's line at Ft. Smith. That under the regulations adopted by said Commission in regard to rates on commodities Coal Hill rates apply from all points in Logan, Franklin and Sebastian Counties, and all points in Johnson County west of Coal Hill to the City of Little Rock and points north, south and east of said City, thus fixing the maximum rate from any of said points to the City of Little Rock at $1.00 per ton. That said rate does not pay the cost, including the terminal service, of handling said product and is unreasonable, unjust and confiscatory. A large part of the coal shipped from the aforesaid stations is transported over connecting lines of railroad, and the rate prescribed as aforesaid applies whether said commodities are shipped over one or more than one railroad, under the regulations adopted by the said Commission as aforesaid in connection with joint rates on commodities established by said Board. That the distance by rail from the aforesaid stations to Little Rock is from 143 to 165 miles; that the rate from the aforesaid stations to the City of Little Rock as prescribed by said Commission on the several connecting road- being $1.60 per ton, and yet your orator and its connecting lines are compelled under the aforesaid regulations to transport said products from said stations to all stations on your orator's road on a basis of $1.00 per ton, and it avers that the aforesaid rates are not only confiscatory, but they are descriminative, and do not afford to the said lines, or either of them a fair, reasonable or just compensation for the service rendered in transporting said products.

(3) Your orator alleges that a large proportion of the entire tonnage transported over its lines of railroad originating in Arkansas consists of timber and timber products; that at least
9 90 per cent of said tonnage is shipped from points in said State to points in other States and is inter-state commerce. Under the universal practice prevailing among shippers and railroad companies in said State, where the timber is situated at a distance from the mills, it is transported by rail and concentrated at milling points for the purpose of being converted into lumber and other products, and takes the prevailing rate under inter-state shipments from the point at which the shipment of the rough material originated in said State to the destination of the mill product in other States; that said milling privilege in transit does not affect the inter-state character of said shipments, but is an incident only in the

inter-state movement. The practice of all the railroads in the State engaged in the transportation of that commodity was, prior to April 1, 1907, to collect from the shipper the local rate from the place at which the shipment originated to the milling or concentration point. After the product had been milled and shipped to market the regular inter-state rate from the point of origin to the point of destination was applied, allowing the shipper the difference between the local and through rate between the stations at which the rough material was received and the point of concentration. All shipments of rough material and the several products thereof, viz., lumber, staves, bolts, spokes, handles, hoops, clubs, boat oars, furniture, etc., took that course. On April 1, 1907 said Commission, recognizing the aforesaid practice and for the purpose of regulating the same made an order that the following rates should apply on the shipment of rough lumber, staves, flitches, bolts and logs, in car loads, between all points in Arkansas, viz: for a distance of from—

1 to 50 miles, inclusive, 2 cents per cwt.
51 to 100 miles, inclusive, 2½ cents per cwt.
101 to 150 miles, inclusive, 3½ cents per cwt.
151 to 250 miles, inclusive, 5 cents per cwt.
250 miles and over 8 cents per cwt.

10 Said rates are made upon condition expressed in said order that the manufactured product shall be re-shipped over the same line bringing in the rough material. Said order further provided that carriers would be allowed to require consignees desiring to avail themselves of the benefit of said rates to enter into contract with reference to the re-shipment of the finished product under the rules prescribed by said Commission, and your orator avers that said order of the Commission was made with the direct intent and purpose of establishing rates applicable between the point of origin of the rough material and the point of concentration for milling purposes, and intending and requiring that such rates should be applied to all shipments of such material from the point of origin in said State to the points of destination in other states; and orator avers that such order is a direct interference with inter-state commerce over which said board has no jurisdiction, and is, for that reason, unlawful and void. Orator further avers that the aforesaid rates are unreasonable and oppressive, because they do not afford the carriers any compensation whatever for the service rendered in connection with the transportation of said commodities, and are therefore confiscatory, and take the property of orator and other carriers in said State without compensation, and are in violation of Section 1 of the Fourteenth Amendment of the Constitution of the United States, prohibiting the taking of property without due process of law and without compensation, and guaranteeing to all persons the equal protection of the laws.

(4) Your orator alleges that cotton is the principal agricultural product of the State of Arkansas; that practically the entire crop raised in the State each year is shipped to markets in other States and foreign markets. That on account of economy in transporting said products it has come to be a universal practice to compress

11 the same in small bales or packages, whereby a large number of bales can be loaded on a car; that it is impracticable to

establish and operate plants and machinery for the purpose of compressing cotton except at a few central points in the State, and for that reason all cotton destined to markets outside of said State are shipped in the original bales or packages as prepared at the local ginneries throughout the country and concentrated at points on the lines of railroad where compresses are operated, for compression. Under the universal practice and rulings of the Inter State Commerce Commission, all cotton raised in said State and shipped to points in other States and foreign markets is subjected to a process of compression for the purposes aforesaid, the shipper being required in the first instance to pay the local rate to the point of concentration; but upon re-shipment to points of destination, the through, or inter-state rate, is applied to the entire shipment from the point of origin (that is to say, the station from which the same was consigned to the point of concentration), to the point of ultimate destination, the difference in the local rate between the point of origin and the place of concentration being allowed the shipper and adjusted in the charge applied to the inter-state shipment. Said privilege of compression in transit does not affect the inter-state character of said shipments, but is an incident only in the inter-state movement. On September 16, 1907, said Commission made and promulgated an order prescribing the following rates on un-compressed cotton in bales between all stations in said State on the following lines of railroad, viz: Chicago, Rock Island and Pacific Railway and branches, Kansas City Southern Railway, Louisiana and Arkansas Railroad, St. Louis and San Francisco Railroad and branches, St. Louis, Southwestern Railway and branches, St. Louis, Iron Mountain & Southern Railway, leased, independent and operated lines—

12 For a distance of 30 miles and under 10 cents per cwt.

For a distance of 45 miles and over 30 miles, 11 cents per cwt.

For a distance of 50 miles and over 45 miles, 12 cents per cwt.

For a distance of 75 miles and over 50 miles, 14 cents per cwt.

For a distance of 100 miles and over 75 miles, 15 cents per cwt.

For a distance of 125 miles and over 100 miles, 20 cents per cwt.

For a distance of 150 miles and over 125 miles, 30 cents per cwt.

For a distance of over 150 miles 40 cents per cwt.

And further provided, for the purpose of applying said rates to your orator, that if lines of railway should include the following group and continuous mileage should apply between any two or more roads embraced in said group, viz: Your orator, Arkansas and Louisiana Railroad, Arkansas Central Railroad, Arkansas Midland Railroad, Arkansas Southwestern Railway, Brinkley, Helena and Indian Bay Railroad, El Dorado and Bastrop Railroad, Little Rock and Monroe Railway, Little Rock and Hot Springs Western Railroad, Mississippi River, Hamburg and Western Railroad, Pine Bluff and Western Railroad.

Said order further provides that—

"In so far as the jurisdiction of the Commission is involved, the railroad companies operating in this State may continue in effect the present rates, rules and regulations in respect to the concentration

of cotton at compress points, or the railroad companies may make such reasonable modifications of same as they may desire, provided, that before any such change or modification, desired to be made by any railroad company, shall become operative, the same shall be first submitted to and approved by the Commission.

"All rates, rules and regulations in effect in this respect with reference to the shipment of cotton, which is not expressly disturbed or affected by the provisions of this order, shall remain in ef-
13 fect to the same extent as if this order had not been issued."

Referring therein to the practice hereinbefore alleged in regard to the concentration and shipment of cotton from said State into other States and to markets in foreign countries.

Orator avers that the movement of cotton as aforesaid, and each and all of the parts thereof, as hereinbefore alleged, have been treated and recognized by the public and by the Inter-State Commerce Commission of the United States as inter-state commerce, and the direct intent and effect of the aforesaid rules, rates and orders made and promulgated by the Railroad Commission of the State of Arkansas, in regard to the transportation of cotton is a direct and intentional interference with inter-state commerce, both as regards the rates and the regulations in reference to the transportation thereof. Wherefore, it avers that the same is unlawful and void. And orator further avers that said rates are so unreasonable, unjust and oppressive as not to afford any profit to the carriers handling the same and are confiscatory and in violation of the aforesaid provisions of the Fourteenth Amendment to the Constitution of the United States.

(5) Your orator alleges that its main line of railroad extends from St. Louis, in Missouri, to Texarkana, in Arkansas, with branches from Knobel to Helena, Bald Knob to Memphis, Diaz to Crest, Camden to Eldorado, that it likewise owns and operates lines of railroad extending from Little Rock to Greenwood via Ft. Smith, Little Rock to Cypress on the Louisiana State Line, from Arkansas City, Ark., to Warren, in Bradley County, and from New Latour to Arkla, via McGehee. That all of said lines, owned and controlled by your orator as aforesaid, are operated as a unit; that a very large amount of inter-state traffic passes over them and each of them between the States in and through which the same are oper-
14 ated and into and through other States with which said lines form connections at their several termini. That the local rates in the several States into and through — said lines pass, enter to a very large extent, and have a controlling influence, on the through rates charged on inter-state shipments which are made on a combination, or percentage of the combination, of the immediate local rates, by adding the local rates within the several States into and through which such shipments pass. Said through rates are thus constructed, and from necessity and under the rulings of the Inter-state Commerce Commission of the United States and the orders of said Railroad Commission of the State of Arkansas, affects and controls rates on inter-state shipments passing from, into or through said State by its effect in reducing inter-state rates to the sum of

the combination or percentage of the combination of the local rates on such shipments. Orator avers that many of the rates established by said defendants were made with reference to the local rates in adjoining States, and for the purpose of compelling the reduction of through rates on the basis of local rates in the States into and through which shipments pass.

And so your orator avers that many of the rates established by the said Railroad Commission of the State of Arkansas, as aforesaid, were made with the intention and for the purpose, and each and all of said rates so established as aforesaid, will have the effect of regulating and fixing inter-state rates on all such classes and commodities, and is therefore an attempt to regulate inter-state rates and effect inter-state commerce, and is in violation of the Constitution and Laws of the United States and an invasion by the defendants of the powers, rights and duties vested exclusively by the Act of Congress in officials of the United States.

(6) Your orator further alleges that it is provided by an Act of the Legislature of said State, approved April 8, 1903, that all
15 persons, companies, or corporations operating any railroad in said State that forms part of a continuous line of railway communication, between points in the State, shall issue through passenger tickets and check baggage through to and from all points on such continuous line of communication at through rates and fares; that all freight and traffic carried wholly within this State to and from stations on lines of continuous carriage shall be way-billed through at through rates and tolls from points of departure to the point of arrival, without being re-billed at junction points; and in the case of car load freights the forwarding carrier shall receive and forward the same in the car or cars in which the freight is tendered and without breaking bulk of packages; that in all cases where there is by physical connection of railroads, a continuous line of railway communication, between stations within this State, whether such stations be on railroads operated by one and the same company or corporation, or on railroads operated by different and independent companies or corporations, it shall be the duty of said Commission to make just and reasonable rates of freight, express and passenger traffic to and from such stations, to be observed by all persons, companies, or corporations operating any railroad or engaged in transporting persons or property as express or freight in this State. That if any two or more connecting lines of railroad in this State shall fail to agree upon a fair and just division of the charges arising from the transportation of freights, passengers or cars over such lines, the Commission shall make the division and shall fix the pro rata part of such charges to be received by each of said connecting lines.

That said Commission, assuming to act under and by virtue of the authority of the provision of the aforesaid statute, by the order
16 adopted by it on June 4, 1908, as aforesaid, attempted to make and put in force through joint rates for the transportation of shipments of merchandise by classes and commod-

ities over two or more lines of railroad, which are not under the same management or control, by adding to the rates prescribed in the schedules prescribed by said Commission for single line or continuous mileage certain differentials, and by fixing a maximum of through joint rates on classes and commodities to be charged by all railroads on shipments between stations in this State. The differentials prescribed on merchandise by classes is as follows:

Less than carloads:

| | |
|---|---|
| First class | 10c. |
| Second class | 8c. |
| Third class | 7c. |
| Fourth class | 6c. |
| Fifth class | 5c. |

Carload:

| | |
|---|---|
| Class A | 5c. |
| Classes B and C | 4c. |
| Classes D and E | 3c. |

Provided, that when the sum of the rates prescribed for local application is less than the through joint rate ascertained as aforesaid, such sum of rates shall be used as a joint rate, and, further, that the through joint rate shall not in any case exceed the following figures:

Less than carload:

| | |
|---|---|
| First class | 82c. |
| Second class | 79c. |
| Third class | 65c. |
| Fourth class | 74c. |
| Fifth class | 37c. |

17 Carloads:

| | |
|---|---|
| Class A | 41c. |
| Class B | 31c. |
| Class C | 27c. |
| Class D | 23c. |
| Class E | 21c. |

The joint rates on commodities on two lines of railroad are determined in the same manner, with the proviso that the total through joint rate shall not exceed that charged for a single line haul on such commodities.

The through joint rates for the transportation of shipments of merchandise by classes over three or more lines of railroad are determined by adding the charges on the several railroads or parts of railroads, as prescribed for the respective distances such class merchandise is carried over each line, and deducting from the sum ten

per cent, provided that the through joint rates shall in no case exceed the following:

Less than carload:

| | |
|---|---|
| First class | 92c. |
| Second class | 84c. |
| Third class | 72c. |
| Fourth class | 53c. |
| Fifth class | 42c. |

Carloads:

| | |
|---|---|
| Class A | 46c. |
| Class B | 35c. |
| Class C | 31c. |
| Class D | 26c. |
| Class E | 24c. |

18 The joint through rates for the transportation of commodities over three or more lines of railroad are determined in the same manner as in the case of merchandise by classes, provided that said rates shall not exceed the commodity rates for 300 miles plus the differential applied to through commodity rates for two lines of railroad and shall not be less than the rates applying for 75 miles. Orator here refers to Sheets 19, 20 and 21 of Exhibit "A" hereto, for a full statement in detail of the through joint rates attempted to be established by and through the aforesaid order of said Commissioners.

Your orator avers that neither the State of Arkansas nor the defendants, acting as the State Railroad Commission of said State, has the power or authority to make contracts for joint through rates, or joint through routing, over different and independent lines of railroad, or to compel separate and independent lines of railroad to enter into contracts for joint rating or routing of freight over separate lines of railroad, or to accomplish the same result by prescribing arbitrary rules for the creation and division of through joint rates on separate lines of railroad; or to make and enforce joint rates between your orator and other connecting lines of railway in said State that the effect of the aforesaid order is to create and establish traffic arrangement between separate and independent lines of railroads in relation to the transportation of merchandise between points on lines of each of said roads, and to compel said railway companies to enter into contract relations with each other without their consent, although the same may be hurtful to their interests. Orator further alleges that the joint through rates prescribed in said order are insufficient to afford any return whatever for the service rendered by the several railroads engaged in the transportation of through freights; that said order is unjust, oppressive, confiscatory, and its effect is to deprive your orator and all
19 other railroad companies operating in said State of their property without due process of law, and will deprive them

of the equal protection of the law in violation of the provisions of the Fourteenth Amendment of the Constitution of the United States.

Sixth. Your orator further represents that by an Act of the Legislature of the State of Arkansas, approved the ninth day of February, 1907, entitled, "An Act to Amend Section 6611 of Kirby's Digest of the Statutes of the State of Arkansas, by Fixing Passenger Rates in this State, and for Other Purposes," it is provided that the maximum sum which any corporation or person operating a line of railroad in this State shall be authorized to charge for carrying each first class passenger over such line within the State shall be fixed at five cents per mile on lines of railroad fifteen miles or less in length, three cents per mile on lines of railroad over fifteen and less than eighty five miles in length, and two cents per mile on all lines of railroad over eighty five miles in length; and for carrying children between the ages of five and twelve years in charge of adults, one half the rates above named, and for such children as are under the age of five years, that no charge whatever shall be made beyond what is collected from the adults having them in charge. It was further provided that said Act should take effect and be in force sixty days after its passage. Said Act was passed for the purpose of amending, and is an amendment to Section 6611 of Kirby's Digest of the Statutes of said State.

Section 6620 of said Digest provides that if any person or corporation mentioned in Section 6611 aforesaid shall charge, demand, take or receive from any person or corporation any greater compensation for transportation of passengers than is therein prescribed, such person or corporation shall forfeit and pay for every such offense a sum not less than $50.00 nor more than $300.00 and costs of suit, including a reasonable attorney's fee to be taxed by the Court, to be recovered in a suit at law in any Court of competent jurisdiction. That any officer, agent or employee of any such person or corporation, who shall knowingly and willfully violate the provisions of the Statute by charging a greater rate than is therein prescribed, shall be liable to the same penalties, to be recovered in the same manner.

That on May 15, 1907, the Defendants, acting as Railroad Commissioners for said State, made and promulgated an order providing that—

"The maximum sum which any corporation, person or association of persons operating a line of railroad in this State shall be authorized to charge and collect for carrying each passenger over such line within the State is fixed at the following rates:

"On lines of railroad fifteen miles or less in length, 5c. per mile.

"On lines of railroad fifteen miles in length and not over eighty five miles in length, 3c. per mile.

"On lines over eighty five miles in length, 2c. per mile.

"And for carrying children in charge of an adult, there may be charged and collected one half the above named rates for such of said children as may be under the age of twelve years and over the age of five years, and for such of said children as may be under the

age of five years, no charge whatever shall be made beyond what is collected for the adults who shall have them in charge."

Prior to the passage of the aforesaid Statute and promulgation of the aforesaid order by the Defendants, your orator and all other railroads in said State operating lines over seventy five miles
21 in length charged three cents per mile for the transportation of adults between all stations on its and their lines of railroad. That notwithstanding it at all times operated its trains in said State with as great a degree of economy as was compatible with the comfort of passengers, safe and efficient service to the public, and the maintenance and preservation of its property as herein before alleged, the gross receipts from carrying passengers within the limits of said State at the rate of three cents per mile aforesaid, after deducting therefrom the cost of conducting such business in the State, including operating expenses and maintenance and fixed charged properly appertaining to said business, were not sufficient to leave any adequate or reasonable profit or return upon the value of the property used in and about said business, or for the service rendered the public.

Orator alleges that the rates fixed and established by the late Act of the Legislature and by the order of said Commission as now in force in said State has caused a large reduction in the rates theretofore prevailing on the transportation of passengers and excess baggage. That it felt constrained, on account of the large number of actions for double damages to which it would become subject under the provisions of the Statutes of said State, and the provisions of said Statutes making the rates, charges, orders, rules, regulations and classifications prescribed by said Commission in actions between private parties and railroad companies conclusive, and denying such companies the right to question or investigate the fairness, reasonableness and legality of such rates, charges, orders, rules, regulations and classifications, in such actions, as well as of the harsh and severe penalties prescribed for the failure and refusal to put in force tariffs of charges and rules regulating railroads prescribed and put
22 in force by said Commissioners, as well as by the penalties specially prescribed for the failure to comply with the provisions of the Act of the Legislature, reducing passenger rates as aforesaid, to reduce its rates in compliance with the provisions of said Statute and the aforesaid order; that said rates have been in force on its lines of railroad in said State since the aforesaid Statute and order took effect, and orator avers that all its earnings from intrastate transportation of freight and passengers in said State during said period have not been sufficient to pay operating expenses and cost of maintenance and fixed charges properly chargeable to said business, and it has been compelled to operate its passenger and freight trains at a loss of revenue. Your orator alleges that the total earnings from the transportation of passengers between stations in the State of Arkansas, during the last half of the year 1907, did not exceed $836,542.20, that the total expense of operation solely incident to said business, including all fixed charges,

was $878,269.84 for the same time; that said period represents the average passenger earnings throughout the entire year.

Seventh. Your orator alleges that the State of Arkansas contains no large cities and very few commercial centers; that a great deal of the jobbing and wholesale trade of said State is inter-state business; that the population is sparce and very small as compared with the mileage of railroads operated in said State; that both freight and passenger business of your orator and of all other railroads operated in said State is light; that the rate of two cents per mile for the carriage of passengers and the freight rates prescribed in the aforesaid orders of the Railroad Commission of said State are unreasonably low, and neither your orator, nor, it is informed, any other line of railroad operating in said State, is able to earn a reasonable compensation for the services rendered either in the car-
23 riage of passengers or freight within said State, after paying the necessary expenses of operating and other expenses necessary and incident to the intra-state business of said State. That while the rates of passenger fare as well as freight rates have been reduced by the Acts of the Legislature of said State, as well as by the orders promulgated by said Commission, the expense of operating and maintaining the railroads, and properties used in connection therewith, in said State has been materially increased by reason of the legislation of said State and the rules, regulations and orders of said Commission. That during the session of the Legislature of 1907, at which the Statute requiring the reduction of one third in the passenger rates was enacted, many statutes imposing burdens and increasing the expense of operating and maintaining railroads were passed. Among such enactments was a law requiring railroads exceeding fifty miles in length to employ three brakemen on freight trains consisting of more than twenty five cars, whereas, previous to that time two brakemen had been employed and were sufficient for the efficient management of freight trains; requiring railroads to drain road beds, to construct foot walks to passenger depots, to equip all locomotives with electric headlights, limiting the hours of service of employees, making the railroads liable for injuries caused by fellow-servants and absolutely liable for damages caused by fire, and numerous special Acts affecting and increasing the expense of operating passenger trains and maintaining depots and station houses. That many of the requirements contained in said Acts were not necessary to the safe and efficient operation of trains. That a large amount of expense has been incurred and will be necessary in making and maintaining the changes provided for in said legislation, without any increase in the revenues by reason thereof. The result of all of which legislation has
24 been greatly to increase the cost of conducting the business of your orator and other persons and corporations engaged in like business in said State. And orator alleges that all the earnings of all its lines of railroad within said State on the business transacted by it in the State are not sufficient to pay the expense of operating properly applicable to said business and afford any adequate or reasonable return on the money invested in said property.

Eighth. Your orator alleges that the lines of road operated by it were constructed under grants of the State of Arkansas, which confer the right to collect reasonable rates of toll, and fare for the transportation of freight and passengers over and upon said railroads, and such as would enable your orator to operate said road profitably. That there grew out of said grants and was necessarily implied therefrom an agreement or contract on the part of the State that your orator should have the right to impose reasonable charges and tolls for the transportation of persons and property.

That the General Assembly of the State of Arkansas, by an Act approved July 23, 1868, passed a general law for the creation and organization of railroad corporations, for the purpose of owning, maintaining and operating railroads in said State, under which Act your orator was incorporated. That said Act among other things provided that—

"The Legislature may when any such railroad (meaning any railroad organized under the provisions of said Act) shall be open for use from time to time alter or reduce rates of toll, fare, freights or other profits upon such road; but the same shall not, without the consent of the corporation, be so reduced as to produce with said profits less than 15 per cent per annum on the capital actually paid in, nor unless an examination of the amounts received and expended, to be made by the Secretary of state, he shall ascertain that the net income derived by the company from all sources for the year then last passed shall have exceeded an annual income of 15 per cent upon the capital of the corporation actually paid in."

Said provision of the Statute is now in force, never having been repealed, and is contained in Kirby's Digest of the Statutes of Arkansas as Section 6590.

Said lines were constructed by your orator and those from whom it acquired and under whom it holds the same, on the faith that the State would in good faith carry out and perform its aforesaid agreement in regard to rates to be charged by railroads in said State as aforesaid, as well as with reference to the annual profits, and that it would not, by direct legislation, or through any agency created by it, impose on the persons and corporations owning and operating said railroad such rules, regulations and tariffs as would deprive them of the right to establish and charge such rates as would be reasonable, just and fair and as would enable it to earn a profit of 15 per centum per annum on the capital actually paid in. Your orator alleges that while it has voluntarily reduced its rates from time to time as the developement of the business upon its lines and the condition of the country would warrant, it has never consented to such reduction of its rates by the State as would reduce its profits annually below the rate provided for in the aforesaid Statute.

Your orator avers that, disregarding its contract and obligation in the premises, the State of Arkansas by and through the aforesaid Act of the Legislature of said State, approved the 9th day of February, 1907, aforesaid, and the orders of the State Railroad Commission, established rates of passenger fare and freight charges,

which do not enable your orator to earn 15 per centum per annum on the capital actually paid in, or in fact sufficient to pay
26 the expense of operating, maintaining and keeping down the fixed charges pertaining to the business of carrying passengers and freight in said State, or on its entire lines of railroad and business conducted therein. That the action of said State in fixing said unreasonable and confiscatory rates, and in depriving your orator by the aforesaid legislation and Acts and orders of said Railroad Commission, of the power to earn a profit of not less than 15 per cent per annum on its capital actually paid in, impairs the obligation of the contract of the State contained in said Statute, as hereinbefore set out, in violation of the provisions of Section 10, of Article 1, of the Constitution of the United States, prohibiting the State from passing any law impairing the obligation of its contract.

Ninth. Your orator represents that by the provisions of the aforesaid Acts of the Legislature of the State of Arkansas, any railroad failing or refusing to put in force any tariff ordered by said Board of Railroad Commissioners, or any of the rules and regulations prescribed by said Commission, is not only liable to a penalty of not less than $500.00 nor more than $3000.00 for each violation, but is also made liable to pay to any person, firm or corporation injured by such violation double the amount of damages sustained by him and all costs, and as a cumulative penalty, any railroad that shall charge, take or receive any greater compensation for the transportation of passengers than the rate prescribed by law shall forfeit and pay for every such offense not less than $50.00 nor more than $300.00, and the cost of suit, including a reasonable attorney's fee to be taxed by the Court; and it is further provided that any officer, agent or employee of any railroad, who shall knowingly and willfully demand, take or receive a greater compensation for the transportation of passengers than the amount allowed by law, shall likewise forfeit not less than $50.00 nor more than $300.00 and cost of suit, including attorney's fee, to be taxed by the
27 Court for each offense. Orator alleges that the penalty and liability imposed by the aforesaid provisions of the statutes are so severe as to constrain persons and corporations subject to the provisions of said allegation to submit thereto, however illegal, rather than take the risk of incurring such enormous liability and penalties, the effect of which would be to utterly bankrupt and destroy them, and cause the persons whose money is invested in such property to forfeit their entire investment. That no prudent officer, agent or employee of any such railroad could afford to take the risk of the penalties and forfeitures imposed on him personally by said statutes. Wherefore your orator and all other persons and corporations operating railroads in said State and subject to the provisions of the aforesaid Statutes, have been coerced into compliance with the aforesaid illegal and confiscatory legislation by said State, and orders made and promulgated by said Railroad Commission, rather than to subject said properties, and the officers, agents and employees employed in and about the operation of the

same, to the great multitude of suits and prosecutions that would have followed the failure or refusal to put said rates in force. But your orator avers that said rates, both as to freight and passengers, can not be continued in effect without irreparable loss to it, and serious and irreparable injury to and destruction of the property, rights and interest of your orator, and of all persons interested in said property as creditors or stockholders of your orator.

Tenth. Your orator further alleges that the penalties prescribed by the Statutes of the State of Arkansas for a violation of the rules and regulations of said Commission, and the rates of freight and passenger fare put in force by said Commission are unreasonable and excessive in amount. That the penalties that would accrue against your orator each day for the violation of the rates pre-

28 scribed by the aforesaid orders of said Commission for the carriage of freight between stations in said State on the basis of the minimum fine prescribed by law, would amount to $— and for the violation of the rates prescribed as aforesaid for carrying passengers within said State on the basis of the minimum fine imposed by the aforesaid Statutes would amount to $—. That said penalties are immoderate and out of proportion to the acts designed to be punished; they are absurd and unreasonable in that they apply without discrimination to a great variety of acts and omissions that are wholly unlike and dissimilar both in regard to the nature of the act done or omitted and its effect upon the rights of the public and of individuals, and said provisions are manifestly designed to operate as a menace to compel unquestioning obedience on the part of railroad companies, their officers, agents and employees to all orders, rules and regulations promulgated by said Commission without regard to their lawfulness, by exposing said companies to such ruinous fines and penalties, and the officers agents and employees of said companies likewise to such severe and ruinous penalties as to deter the said companies and the officers, agents and employees thereof, from resisting on any ground, however harsh or unreasonable the action of said Commission may be or seem, and by deterring all parties from resorting to the Courts for the purpose of contesting the legality of such rules, regulations and rates, for fear of being harassed and oppressed by a multitude of prosecutions and suits during the pendency of such proceeding and of the consequences to them in case they should fail to maintain the ground of contest, notwithstanding that the same may have been instituted in the utmost good faith and for the purpose of testing and judicially determining the validity and legality of such order, rule or regulation. Wherefore, your orator avers that said provisions are discriminative, and deprive your

29 orator and all others in like condiaion, of their property without due process of law, and of the equal protection of the law, and are therefore in violation of Section 1 of the Fourteenth Amendment of the Constitution of the United States.

Said provisions are likewise in violation of Section 9 of Article II of the Constitution of the State of Arkansas, which provides that

no person shall be subject to excessive fines, and that no unusual punishment shall be inflicted.

Eleventh. Your orator further alleges that the defendants, Henry Leigh and George McLean are shippers on your orator's lines of railroad and make frequent shipments of freight between stations situated wholly within said State. Said defendants are also in the habit of traveling on your orator's passenger trains between stations in said State and it alleges and shows that many thousand other citizens and residents of said State are engaged in business in said State, and are large shippers of freight over your orator's lines of railroad between stations in said State, and that large numbers of persons residing in said State are in the habit of traveling on your orator's passenger trains between stations in said State. Orator further alleges that if it shall disregard, violate or refuse to put in force the aforesaid rates prescribed by said Commission for the transportation of freight and passengers, or any or either of said rates, or shall violate or fail to carry into effect any of the rates, charges, orders, rules, regulations and classifications prescribed by said Commission, on the ground that the same is unjust, unfair, unreasonable, confiscatory, and in violation of the Constitution and Laws of the United States, as hereinbefore alleged, said Commission will cause penalty suits to be instituted against it, as authorized by the provisions of the aforesaid statute, through the prose-
30 cuting attorneys of the various judicial districts in said State, through which your orator's lines of railroad extend; that a great number of suits at law for *for* recovery of the penalties for the violation of the numerous rates contained in the schedule shown as the Commission's Standard Freight Distance Tariff No. 3 will be brought; that said suits will be brought against your orator for the violation of each of the rates for the transportation of passengers as well as freight between the many stations on its lines of railroads; that a large number of suits for penalties and double damages will be brought against your orator by the aforesaid defendants who are shippers and patrons of your orator, and others of the same class, involving a very large number of suits in many Counties in said State; that your orator will be required to produce its books and papers in the defense of each of the numerous cases brought by and under the direction of said Commission, and by private shippers and patrons for the purpose of showing that the rates established by said Commission are unreasonable and would be greatly harassed by being compelled to defend such a multitude of suits.

Orator further alleges that the expense involved in the defense of such suits as will be instituted against it in case it refuses to comply with the illegal, unjust and confiscatory rates, rules and regulations of said Commission would be very great, and would involve great and serious loss to your orator without regard to the result of such litigation; that under the provisions of the Statutes hereinbefore referred to, your orator would be precluded from pleading or proving the unreasonableness of said rates in proceedings instituted by private shippers, and judgments would doubtless be recovered in many of said actions, and orator would be com-

pelled, in order to protect its property from levy and sale thereunder, to file numerous supersedeas bonds, by which it would
31 be put to considerable expense and inconvenience; that the question as to whether the rates prescribed by the Commission as aforesaid are unreasonable or could not be properly determined in suits of that character, and that the loss would be sustained by your orator in an attempt to defend such suits would be so serious as to be irreparable. Wherefore, your orator prays leave to sue the aforesaid Defendants as representatives of all of said classes of persons, whether as shippers of freight or as passengers.

Twelfth. Your orator alleges that this cause arises under the Constitution and Laws of the United States, and that the matter in dispute and controversy exceeds, exclusive of interest and costs, the sum and value of two thousand dollars.

Premises considered, for as much as your orator is remediless at law and can only obtain relief in a Court of Equity, where matters of this kind are cognizable, your orator prays:

(1) That the orders of the Railroad Commission of the State of Arkansas, fixing rates and charges for freight transported by your orator within said State, and fixing and establishing joint through freight tariffs on different and independent lines of railroad, and all such rules and regulations affecting and concerning the same and each and every part thereof and each schedule in said orders contained, be set aside and held for naught; that the order of said Commission, made on June 4, 1908, to take effect June 15, 1908, fixing and establishing tariffs and charges on freights transported over your orator's line of railroad between stations situated within said State on classes and commodities, and fixing and establishing joint through rates on independent connecting lines of rail-
32 road, and all rules and regulations affecting and concerning the same, and contained in said order of June 4, 1908, be set aside and held for naught.

(2) That said Act of the Legislature of the State of Arkansas, approved the 9th day of February, 1907, and the orders of the Railroad Commission of said State, establishing and fixing a rate of two cents per mile for the transportation of passengers between stations in said State on your orator's railroad and over lines leased and operated by it in the State, be set aside and held for naught, and that so much of the order made by said Commissioners on June 4, 1908 to take effect June 15, 1908, as relates to the aforesaid passenger rates, and fixes and establishes the same on the basis of two cents per mile, be set aside and held for naught.

(3) That the Defendants, as Railroad Commissioners of the State of Arkansas be restrained and enjoined from putting into force, or taking any step or action whatsoever looking to the putting into force and effect, the aforesaid tariff of charges for the transportation of freight and passengers on your orator's railroad within the State of Arkansas, adopted by it on June 4, 1908, as aforesaid, and that said tariffs, and all rules, regulations and orders made and promulgated by said defendants for the purpose of putting the same into effect be set aside and held for naught.

(4) That the provisions of the aforesaid statutes of the State of Arkansas prescribing penalties against your orator and others in like condition for the failure or refusal to put into force any tariff ordered by the Railroad Commission of said State, or any of the rules and regulations prescribed by said Commission or for charging, taking or receiving any greater compensation for the transportation of passengers than the rate prescribed by law, be declared
33 void and of no force or effect whatsoever, and that said Commissioners and each and every one of them, their successors in office, agents, servants, and employees, be temporarily and permanently restrained, from enforcing or attempting to enforce, the rates, charges, rules and regulations fixed by the orders of said Commission aforesaid respecting the carriage of freight and passengers within the State of Arkansas, or from enforcing or attempting to enforce, through any agency provided in the Statutes of the State of Arkansas, or otherwise, any of the penalties prescribed by the Statutes of said State for failure on the part of your orator to observe any of the aforesaid orders made by said Commission; and that said Commissioners be temporarily and perpetually enjoined and restrained from prosecuting any suit or action, or causing the same to be prosecuted, by any officer or agent of said Commission, or by any officer of the State of Arkansas, or any other person, for the failure to put or keep in effect and to observe the rates of freight and passenger fare and the rules and regulations of said Commission so fixed and established as aforesaid, or from taking any action with the intent and for the purpose of enforcing the provisions of the order made by said Board on May 15, 1907, fixing the rates for the carriage of passengers and freight as aforesaid, or from doing or attempting to do, any act or thing, by way of compliance with, or for the purpose of carrying out, said order, rules and regulations or any part thereof.

(5) That the defendants, Henry Leigh and George McLean and all other persons belonging to the same class, including all patrons of your orator's railroad, either in the shipment of freights between stations on your orator's lines of railrad in said State, or as passengers on said lines between stations in said State, be en-
34 joined and restrained during the pendency of this proceeding, from instituting any suit or suits, action or actions, against your orator for the recovery of any penalties under and by virtue of the provisions of any of the aforesaid Acts of the Legislature of the State of Arkansas, or for the recovery of double damages under and by virtue of the provisions of any of the aforesaid Acts of the Legislature of said State, and upon the final hearing that said Defendants and all other persons belonging to the classes aforesaid, and who are engaged or may be engaged in intrastate shipments of freight on or over your orator's lines of railroad, or may become intrastate passengers thereon, be perpetually enjoined and restrained from instituting any such suits or actions against your orator.

And your orator prays for such other and further relief as may seem meet, and as it may be entitled to.

And may it please your honor to grant unto your orator a writ of subpœna of the United States of America, issuing out of and under

the seal of this Honorable court, directed to the said Robert P. Allen, John W. Crockett and John E. Hampton, constituting the Railroad Commission of the State of Arkansas, Henry Leigh and George McLean, thereby commanding them and each of them on a day certain therein to be named, under certain penalty, to be and appear before this honorable court, and then and there full, true, direct and perfect answer to make to all and singular the premises, but not under oath—answer under oath being expressly waived—and to perform and abide by such order, direction and decree as may be made in the premises. And your orator will ever pray.

MOORE, SMITH & MOORE,
*Solicitors for Complainant.*

35–91 STATE OF MISSOURI,
*City of St. Louis, ss:*

J. M. Johnson, being duly sworn, says: He is Vice-President in charge of Traffic, of the St. Louis, Iron Mountain & Southern Railway Company, he has read the foregoing bill of complaint and knows the contents thereof. He further states that all facts alleged in said bill on his personal knowledge are true, and such as are stated upon information he believes to be true.

J. M. JOHNSON.

Subscribed and sworn to before me this the 14th day of July, 1908.

GEORGE C. DONOVAN.
*Notary Public.*

My Commission expires the 9th day of November, 1911.

Endorsed on back thereof: "Filed and writ issued, July 18, 1908. W. P. Feild, Clerk."

Which Exhibit "A" to Complainant's Bill of Complaint is as follows:

(Omitted in printing per stipulation.)

92 Endorsed: Filed July 18th, 1908. W. P. Feild, Clerk. By W. Presley Feild, D. C.

93 UNITED STATES OF AMERICA,
*Western Division of the Eastern District of Arkansas:*

Be it remembered that a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the Sixth day of April, Anno Domini, One Thousand Nine Hundred and Eight, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Trieber, Judge presiding and holding said Court, the following proceedings were had, to-wit, on July 25th:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
vs.
ROBERT P. ALLEN et al.

Comes Robert P. Allen, John W. Crockett and John E. Hampton, Railroad Commissioners for the State of Arkansas, by Morris M. Cohn, Esq., their Solicitor, and file herein their Answer.
94 Which Answer is as follows:

In the United States Circuit Court for the Western Division of the Eastern District of Arkansas. In Chancery.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
vs.
ROBERT P. ALLEN, JOHN W. CROCKETT, and J. E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al.

To the Honorable Judges of the Circuit Court of the United States for said District:

The Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, as members of and constituting the Railroad Commission of Arkansas, saving and reserving to themselves all manner of objection and exception which they may be entitled to save to the many imperfections and insufficiencies in the bill of complaint, for answer thereto, say:

(1) The Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, admit that they are members of and constitute the Railroad Commission of Arkansas.

Answering the first paragraph of the bill of complaint, they say that it is true that the complainant is a corporation, organized under the laws of the State of Arkansas, with its domicile at the City of Little Rock, in Pulaski County, in said State.

(2) Answering the second paragraph of the bill of complaint, they say that it is true that they reside in the districts there mentioned, and that the Legislature of the State of Arkansas has fixed and established the domicile of said Railroad Commission at the City of Little Rock, in the County of Pulaski in said State; and the Defendants, Henry Leigh and George McLean, therein
95 mentioned, are citizens of the State of Arkansas, and reside in the City of Little Rock, in said District.

(3) Further answering the bill of complaint, the defendants say that, as shown by the report of the complainant filed in the office of said Railroad Commission pursuant to the laws of the State of Arkansas, the St. Louis, Iron Mountain & Southern Railway Company was organized under a special Act of the Legislature of the State of Missouri, approved March 3, 1851: that amendments by

special Acts of the Legislature of the said State were made to the said Act of Incorporation on February 17, 1853, and March 3, 1857. By special Act of the Legislature of Kentucky, approved January 16, 1871, the St. Louis, Iron Mountain & Southern Railway Company was authorized to extend its railroad to the City of Columbus, in the said State. That subsequently, on July 21, 1867, by authority of a general Act of the Legislature of the State of Missouri, approved March 20, 1866, Thomas Allen and associates entered into articles of association for the reorganization of said railroad, under the name of the St. Louis & Iron Mountain Railroad Company, and said articles were filed in the office of the Secretary of State of the said State of Missouri on July 29, 1867. That subsequently, on March 17, 1868, the Legislature of the said State of Missouri authorized the construction of the Arkansas branch of the St. Louis & Iron Mountain Railroad. That the Cairo & Fulton Railroad Co., of Missouri, was organized under the general railroad law of the State of Missouri, by articles of association, September 12, 1853. That this railroad was afterwards sold under foreclosure proceedings. That on April 23, 1872, Thomas Allen and associates reorganized this railroad under the name of the Cairo, Arkansas & Texas Railroad Company, and filed articles of association in the office of the
96 Secretary of State of the State of Missouri, May 21, 1872. That by articles of association dated March 11, 1874, which were filed in the office of the Secretary of State, of the State of Missouri, April 30, 1874, the Cairo, Arkansas & Texas Railroad Company, and the St. Louis & Iron Mountain Railroad Company were consolidated under the name of the St. Louis & Iron Mountain Railroad Company.

That the Cairo & Fulton Railroad Company, of Arkansas, was organized under an Act of the Legislature of the State of Arkansas, approved January 12, 1853; that the consolidated St. Louis & Iron Mountain Railroad Company and the Cairo & Fulton Railroad Company, of Arkansas, were consolidated under the laws of the States of Missouri and Arkansas by articles of association bearing date March 1, 1874, and filed in the office of the Secretary of State of the States of Missouri and Arkansas, respectively, on May 16, and June 2, 1874, the corporate name of said consolidated railroad company being the St. Louis, Iron Mountain & Southern Railway Company; that subsequently the said St. Louis, Iron Mountain & Southern Railway Company became merged with a number of other railroad companies and railroads in the State of Missouri and the said State of Arkansas; that on February 1, 1887, Jay Gould, who had previously purchased the Little Rock, Mississippi River & Texas Railway at foreclosure sale, executed a deed of conveyance thereof to the said St. Louis, Iron Mountain & Southern Railway Company, the said Little Rock, Mississippi River & Texas Railway Company having been formed by the reorganization of the Little Rock, Pine Bluff & New Orleans Railroad Company, and by purchase of the road and franchises of the Mississippi, Ouachita & Red River Railroad Company; and the said com-
plainant reported to the said Railroad Commission that the
97 said Little Rock, Mississippi River & Texas Railway Company had been consolidated by purchase with the said St.

Louis, Iron Mountain & Southern Railway Company under the railroad law of the State of Arkansas as contained in Mansfield's Digest of 1884, and particularly Section 5516 and following Sections.

That the said complainant also reported that by deed dated December 13, 1893, a conveyance was made to it of the railroad, property and franchises owned by the Houston, Central Arkansas & Northern Railway Company, (a company organized under the general railroad law of the State of Arkansas, June 1, 1890), the constructed road so acquired extending from McGehee Junction, in the County of Desha, State of Arkansas, in a southwesterly direction through the Counties of Desha, Chicot, Drew and Ashley, in the State of Arkansas and beyond.

A conveyance to the St. Louis, Iron Mountain & Southern Railway Company was also reported by the said complainant as aforesaid to have been made to it by deed dated April 13, 1906, of the railroad property and franchises of the Little Rock & Fort Smith Railroad, a railway running from Argenta, Arkansas, to Fort Smith, Arkansas, through the said State of Arkansas. And, in the said report, the said complainant stated that consolidation of the said Little Rock & Fort Smith Railroad Company had been had with it under the provision of said Mansfield's Digest of the laws of the State of Arkansas, and particularly said Section 5516 and following Sections.

(4) Answering paragraph marked 3d in the complaint, the Defendants say that it is true that the said Railroad Commission was created by the Act of March 11, 1899, as set forth in said paragraph, but that said paragraph has omitted to state that suits for damages and costs sustained by any person, firm or corporation under
98 the provisions of the Act referred to had to be instituted within a year from the accrual of the right, or same became barred.

But the Defendants deny that the effect of the provisions of said Act of March 11, 1899, was to deny to the complainant and to all other persons and corporations operating railroads in said State the right to a judicial investigation of the validity and reasonableness of the rates, rules, regulations and classifications prescribed by said Commission; or that it deprived complainant and all others in like condition due process of law, contrary to the provisions of Section 1, of the Fourteenth Amendment to the Constitution of the United States. For, they say that by the terms of Sections 6813 and 6814, of Kirby's Digest of the laws of the State of Arkansas, as construed by the Supreme Court of Arkansas, the rates, rules, regulations and classifications referred to have only prima facie effect, and they aver that this did not amount to a deprivation of due process of law within the meaning of Section 1, of the Fourteenth Amendment to the Constitution of the United States.

(5) Answering paragraph marked 4th of the complaint, Defendants say that it is true that Standard Freight Distance Tariff No. 3 was adopted in lieu of all preceding tariffs on June 15, 1908, but they aver that said Standard Freight Distance Tariff No. 3 was substantially similar to Standard Freight Distance Tariff No. 2, adopted by said Railroad Commission on the 15th day of July, 1904; and they also aver that the Standard Freight Distance Tariff No. 2 was a repe-

tition in substance of the first Standard Freight Distance Tariff adopted by the said Railroad Commission on April 10, 1900. Defendants say at different times during the history of said Railroad Commission technical questions were raised as to whether cer-
99 tain items were faithfully adjusted, and it was necessary to dispose of such matters by rulings or construction. This being found unsatisfactory, when Standard Freight Distance Tariff No. 3 was issued, the said Railroad Commission gave notice that it would take up, at the meeting of June 4, 1908, the question of adopting it as a whole. It was formally adopted and thus disposed of any inadvertent discrepancies which had crept into the compilations previously. And the defendants aver that there is no substantial difference between the freight rates adopted by the said Standard Freight Distance Tariff No. 3 and those first put into effect on April 10, 1900.

(6) Defendants, answering the paragraph marked 5th, of the bill of complaint, deny that the charges and rates prescribed in the said Standard Freight Distance Tariff No. 3, as well as the preceding Tariff No. 2, applying on commodities and classes, or otherwise, were, or are, in any respect unreasonable, unjust, oppressive, discriminatory, confiscatory or void, either in respect to said order as a whole or in respect to each and every rate, charge, tariff, schedule, classification, rule or regulation separately considered. And they say they don't know how much the railroad equipment, property and franchises owned and used by complainant in operating its said road in said State represents, but they deny that the sum of $21,353,210.00 correctly represents the said investment. They deny that complainant has exercised as great a degree of economy in the use and operation of said property as was compatible with the interests of the public and with safe and efficient service to the public, or, that it only employed such officers, agents or employees, or expended only such amounts in the maintenance and repair of its road-bed, tracks and stations, or for new equipment of engines, cars or other ap-
100 pliances necessary to the operation of its road and the maintenance of said property, as was necessary and essential to a due and proper operation of its trains, or to the maintenance of said property with due regard to its preservation and the safety of the public.

They deny that no unreasonable salaries or wages have been or are now being paid to any of its officers or employees. They deny that complainant has practiced all reasonable and proper economy in the operation and maintenance of its railroad, and they deny that the operation of said road, if properly and economically conducted, would not yield a profit exceeding fifteen per cent at the rates prescribed in said Tariff. They deny that said rates do not and will not yield a just and reasonable return upon the value of complainant's property used in said service, whether in respect to the money invested in said property, or the service rendered. They deny that the total earnings of the complainant from its intrastate business in the transportation of freight in the State of Arkansas, during the year 1907, did not exceed the sum of $640,284.17. They aver that the condition of affairs in the United States in the year of 1907, finan-

cially and commercially, should form no criterion for other years, because they say that conditions were very much depressed in the concluding and busy months of said year by reason of a panic which stopped a great many industries and curtailed business of all kinds, including transportation by railroad. They deny that the expense of operation solely incident to intrastate business, and the fixed charges solely incident and chargeable to the intrastate transportation of freight was $784,602.14. They deny that the total earnings of the complainant's property from the transportation of freight
101 wholly within the State of Arkansas is not and will not be sufficient, under the rates on classes and commodities prescribed in the said tariff, — pay operating expenses, charges for maintenance, taxes and other necessary fixed charges appertaining to said business, and yield any return by way of compensation for the service rendered by complainant. And they deny that the effect of such rates is and will be to prevent complainant from receiving any returns or profit for the service rendered by it to the public, or will deprive it of its property without due process of law, or will deny it the equal protection of the law.

(7) Defendants, answering the second part of the paragraph marked 5th of the complaint, admit that coal fields are situated as stated therein, and that coal mined in said counties is shipped from the stations mentioned therein, and that commodity rates on coal are as stated therein, but they deny that the said rates, either as a whole or otherwise, do not pay the cost of service, including the terminal service, or, are in any respect unreasonable, unjust or confiscatory. They admit that some of the coal shipped from the aforesaid stations is transported over connecting lines of railroad, but they deny that a large part is. They say on information and belief that a very small part of said coal was transported over connecting lines of railroad. And, they further aver that if the rates prescribed, applied, whether said commodity was shipped over one or more than one railroad, under the regulations adopted by them, there was nothing unusual or unjust about it; that such rates were fair and remunerative, and that complainant never heretofore complained to the Commission by any specific method of complaint wherein it set forth that the rates were confiscatory, or asked the said
102 Railroad Commission to increase said rates, whether applicable to hauls that required the services of more than one carrier, or otherwise. They deny the allegations in said part of said complaint that any one of said rates was discriminatory or did not afford to the said lines, or either of them, a fair, reasonable, or just compensation for the service rendered in transporting said products.

(8) Answering the part numbered 3 of said paragraph marked 5th, Defendants say that they do not know how large a proportion of the entire tonnage transported over complainant's lines of railway originating in Arkansas consist- of timber and timber products, but they deny that at least 90 per cent of said tonnage was shipped from points in said State to points in other States, or was interstate commerce. They are advised that it is not material for them to reply to that part of the said complaint which states the custom

vailing between shippers and the railroad companies in the State of concentrating rough lumber at milling points. But they deny that on April 1, 1907, or at any other time, they recognized the said practice and for the purpose of regulating the same made an order that the following rates should apply on the shipment of rough lumber, staves, flitches, bolts and logs in car loads between all points in Arkansas set forth in said complaint. They admit that said rates were made upon the condition expressed in the order that the manufactured product should be reshipped over the same line bringing in the rough material, but they deny that such shipment contemplated an interstate shipment or a shipment beyond the limits of the State, or that it was an attempt in any manner to control shipments beyond the State. They deny that at any time any rate established by them was published or had the effect of operating as a
103 rate applicable to interstate commerce. And they deny that any order made by them in relation to the rate of transportation for lumber in the rough or otherwise was made with the intent and purpose of establishing, regulating or fixing interstate rates on such material or commodities by any device, though they admit that the rates established from the point of origin of rough material, to the point of concentration for milling purposes was based upon the custom of railroad companies to recognize the somewhat cheaper rates from the point of origin to the place of concentration, in consideration of their obtaining the whole haul. But the defendants deny that there is any universal practice prevailing among shippers and railroad companies in said State, where the timber is situated at a distance from the mills, to have it transported by rail and concentrated at milling points for the purpose of being converted into lumber and other products, and take the prevailing rate under interstate shipments from the point at which the shipment of rough material originated in said State to the destination of the milled product in other States. They deny that there is any milling privilege in transit recognized or countenanced by them, which is an incident of interstate movement, or affects the interstate character of shipments of lumber. They deny that the aforesaid rates are unreasonable or oppressive, or that they do not afford the carrier any compensation whatever for the service rendered in connection with the transportation of said commodities, or are confiscatory, or take the property of complainant or other carriers in said State without compensation, or are in violation of Section 1 of the Fourteenth Amend-
ment to the Constitution of the United States prohibiting the
104 taking of property without due process of law and without compensation, or denying to any person the equal protection of the law.

(9) Answering the part numbered 4 of the paragraph marked 5th in the complaint, defendants say that the rates set out therein are correctly stated, but that the rates are flat or local rates, and have no reference to any interstate shipments whatever; that the said defendants, as such Railroad Commission, have not at any time adopted any custom of concentrating cotton at compression points

for the purpose of having the same compressed and transported outside of the State of Arkansas; that they have not made any regutions in reference to any such custom, but have confined themselves to making flat rates for delivery of cotton at points in the said State of Arkansas. They are advised that it is not necessary for them to answer that part of said complaint that describes the manner in which cotton is concentrated at compression points. And they deny that the order copied by the complainant in said part of its complaint, in any way, attempts to regulate interstate commerce; that no attempt was made by the said Railroad Commission, by anything recited in the said order, nor has it ever taken any action which could be construed as intending to affect the transportation of cotton from a point in the State of Arkansas to a point without the State of Arkansas, which during the transportation, was unloaded at a compress and put into compressed form instead of an uncompressed form. And they deny that the flat rates so made in any manner conflict with the jurisdiction of the Interstate Commerce Commission of the United States, or with the movement of cotton, or any part thereof,
105 which has been treated and recognized by the Interstate Commerce Commission as interstate commerce. They deny that there was any direct or intentional interference with interstate commerce, either as regards the rates or regulations in reference to the transportation of said cotton. They deny, therefore, that the said rates were unlawful and void, and they also deny that they were unreasonable, unjust or oppressive, or did not afford any profit to the carriers handling the same, or are confiscatory, or are in violation of the aforesaid provisions of the Fourteenth Amendment to the Constitution of the United States.

(10) Answering that part of paragraph marked 5th, which is numbered 5, Defendants admit that the complainant owns and controls the lines of railroad mentioned in said part of its complaint but they deny that the said roads are operated as a unit. They admit that a very large amount of interstate traffic passes over the said roads and each of them. They deny that the local rates in the several states in which and through which said lines pass enter to a very large extent and have a controlling influence on the through rates charged on interstate commerce. They aver that all local rates established by the said Railroad Commission are within the province of the said Commission, and have reference solely to intrastate commerce; that the said Railroad Commission of the said State of Arkansas has had nothing to do with through rates applying to interstate commerce on the lines of the said complainant or any other railroad company. They deny that the matters alleged in said part of said complaint, as far as they seek to show that the local rates made by defendants enter into through rates made by the complainant in interstate traffic, are material. They deny that, by reason of any of
106 the matters set forth in said part of said complaint, the rates established by said Railroad Commission were made with the intention and for the purpose, or that each and all of said rates so established will have the effect of regulating and fixing in-

terstate rates on all such classes and commodities, or that the same amount to an attempt to regulate interstate rates or affect interstate commerce, or are in violation of the Constitution of the United States, or are an invasion by the Defendants of the powers, rights or duties vested exclusively by the Acts of Congress in officials of the United States.

(11) Answering that part of paragraph 5th, which is numbered 6, Defendants say that by the Act of April 8th, 1903, passed by the General Assembly of the State of Arkansas, the said Railroad Commission was invested with the power to establish joint rates and to provide for continuous carriage; that they do not know whether the terms of the said Act are correctly copied in the said part of said complaint or not. They admit that they have assumed to act under the terms of the Act, and that they have put in force joint rates, and that the rates are correctly stated in said part of said complaint. They aver that prior to the enactment of the said Act of the Legislature, the said Commission did not have the power to deal with continuous transportation and joint rates, and that the said Act was passed for the purpose of enabling the said Commission to deal with the matter, which was necessary to the protection of the shippers of the State of Arkansas; that prior to the enactment of the said Act, there were great evils growing out of the practice of the railroad companies in said State, including that of the complainant, whereby a haul that was really continuous was split up into fragments over the
107 different lines which were formally described as independent lines, though all under one management and different local rates over each of the lines was applied to the great damage of numerous shippers in the said State; that it was deemed to be just and proper by the Legislature of the State of Arkansas, to correct this practice by passing and to provide a method of joint rates and joint routes that should be just to the railroads of said State as well as to the shippers. So, the said Act was passed by the Legislature of Arkansas, at the time stated. That the rates so established by Defendants were established after careful inquiry and proper hearing of the railroad companies and other parties concerned; that the said complainant has never filed any petition before the said Railroad Commission, complaining of the said joint rates so established, or any other orders relating to joint traffic established by the said Railroad Commission. They say, as they are advised, that the said law was within the proper province of the Legislature of the said State of Arkansas, and they deny that the said joint rates are insufficient to afford any return whatever for the service rendered by the several railroads engaged in the transportation of through freight, or that said order is unjust, oppressive or confiscatory, or that its effect would be to deprive complainant or any other railroad company, operating in said State of their property without due process of law, or will deprive them of the equal protection of the laws in violation of any provision of the Fourteenth Amendment to the Constitution of the United States.

(12) Answering paragraph marked 6th, Defendants admit the

passage of the Act of February 9, 1907, referred to in said paragraph, and admit the provisions of Section 6620 of Kirby's Digest
108 of the Laws of the State of Arkansas. They admit that the said Railroad Commission on May 15, 1907, made the order mentioned in the said paragraph, but they deny that there was any necessity for the order or that it worked any damage or detriment to the said complainant. They say, upon information and belief, that the railroad companies were in the habit of charging three cents a mile on lines seventy five miles in length prior to the enactment of said laws, but they deny that the said three cents per mile, after deducting therefrom the cost of conducting said business in said State, the actual operating expenses and maintenance and fixed charged principally appertaining to said business, were not sufficient to yield adequate and reasonable profits or returns upon the value of the property used in and about said business, or for the service rendered the public.

They aver that the traffic in the said State of Arkansas, as they are informed and believe, by reason of the reduction in the rate from three to two cents has increased to such an extent that the said complainant was not in any manner injured thereby, and that it yielded a large enough revenue to leave a considerable profit to the said complainant, unless it was unreasonable and extravagant in the management and operation of its road, or demanded profits upon fictitious values. Defendants deny that the complainant felt constrained to abide by the provisions of the Statutes of said State of Arkansas by reason of any of the matters alleged by it in said part of its complaint. They deny that any Statutes of said State made any rates, charges, orders, rules, regulations or classifications prescribed
109 by said Commission in actions between private parties and railroad companies conclusive. They deny that such companies were denied the right by any Statute of the State of Arkansas to question or investigate the fairness or reasonableness or legality of any rates, charges, orders, rules, regulations or classifications. They deny that there were any harsh or severe penalties prescribed for the failure or refusal to put in force tariffs of charges or rules regulating railroads prescribed and put in force by said Commission. They deny that there was anything unusual about the penalties prescribed for the failure to comply with the provisions of the Act reducing passenger fares. They admit that said two cent rate has been in force on complainant's lines of railroad in said State since the aforesaid Statute and order took effect, and they say that the said complainant never heretofore made any complaint on account thereof. And they deny that the earnings from intrastate transportation of freight and passengers in said State during any period have not been sufficient to pay operating expenses and the cost of maintenance and fixed charges properly chargeable to said business, or that it has been compelled to operate its freight and passenger trains at a loss of revenue. They deny that the total earnings from the transportation of passengers between stations in the State of Arkansas, during the last half of the year 1907 did not exceed $836,542.20, or that the total expense of operation solely incident to said business, including all fixed charges except interest charges, was $878,269.84 for the same

period, or that said period represents the average earnings through the entire year. They aver that during the latter part of the year 1907
110 a monetary and commercial panic prostrated all industries in the United States, including the State of Arkansas, and that by reason of this fact the business of transporting passengers and freight was very much reduced on all lines of railroad throughout the United States and in the State of Arkansas, and that by reason of this fact the earnings from that source in the said part of the year 1907 could not be taken as a criterion.

(13) Answering the paragraph marked 7th of the complaint, said Defendants say that they are unable to understand what is meant by the allegation that the State of Arkansas contains no large cities and very few commercial centers. They admit that a great deal of the jobbing and wholesale trade of said State is interstate business, and they say that the interstate feature of the business is for the most part confined to shipments from the eastern seaboard from the north and from the south to the whole-sale jobbers of the State. They deny that the population is sparse and very small as compared with the mileage of railroads operating in the State, or that either the freight or passenger business of complainant and of all other railroads operating in said State is light, or that the rate of two cents per mile for the carriage of passengers and the freight rates prescribed in any orders of the Railroad Commission of said State are unreasonably low. They deny that neither complaint nor any other line of railway operated in said State is able to earn a reasonable compensation for the service rendered in the carriage of passengers or freight within said State, after paying the necessary expenses of operating and other expenses necessary and incident to the intrastate business in said State.

They deny that the expense of operating and maintaining the railroads and properties of the complainant in said State has
111 been materially increased by reason of the legislation of said State or the rules, regulations or orders of said Railroad Commission. They deny that during the session of the Legislature, at which the Statute requiring the reduction of one third in the passenger rate was enacted, many statutes imposing burdens and increasing the expense of operating and maintaining the railroads were passed, and they say that whatever laws were passed were rendered necessary by evils and necessities which grew up with the increased population in the said State and the indifference of the complainant and other railroad companies for the lives of brakemen. They deny that many of the requirements contained in the said Acts were not necessary to the safe and efficient operation of trains, or that a large amount of expense has been incurred or will be necessary in making and maintaining the changes provided for in such legislation without any increase in the revenue by reason thereof. They deny that the said legislation, as construed by the Supreme Court of the said State, will greatly increase the cost of conducting the business of complainant or other persons or corporations engaged in like business in said State. They deny that all the earnings of all its lines of railroad within said State on the

business transacted by it in the State are not sufficient to pay the expense of operating principally applicable to said business, or that they do not afford any adequate or reasonable returns on the money invested in said property.

(14) Answering the paragraph marked 8th of the complaint, they admit that the lines of railroad operated by complainant were constructed under grants of the State of Arkansas, but deny that the said complainant had any other right to collect tolls than
112 was implied in the organization of said railroad company. They admit that the said complainant was entitled to a return upon the fair value of its investment over and above the expense of operating and maintaining it, but they deny that the complainant can include in the yearly expense of operation and maintenance expenditures made for permanent improvements or those matters that are in the nature of permanent improvements. They deny that there grew out of said grants, and was necessarily implied therefrom, any other agreement or contract than has just been stated. They admit that the General Assembly of the State of Arkansas on July 23, 1868, passed a general law for the creation and organization of railroad corporations, and that the section which is still written in Kirby's Digest of the Statutes of Arkansas, and known as Section 6590, was contained therein. But they allege that at the time the said Act was passed, there was a provision in the then existing Constitution of the State of Arkansas, Art. V, Sec. 48, Constitution of 1868 of said State, which provided:

"That the General Assembly shall pass no special Act conferring corporate powers. Corporations may be formed under general laws; but all such laws may, from time to time, be altered or repealed," said Section applying to railroad corporations. But subsequently to-wit: on the 30th of October, 1874, a new Constitution was adopted by Art. XII, Sec. 6, of which it was provided:

"That corporations may be formed under general laws, which laws may, from time to time, be altered or repealed. The General Assembly shall have the power to alter, revoke, or annul any charter of incorporation now existing and revokable at the adoption of this Constitution, or any that may hereafter be created, when-
113 ever, in their opinion, it may be injurious to the citizens of this State, in such manner, however, that no injustice shall be done to the incorporators."

That whatever rights accrued to any railroad companies organized under either of said Acts were taken subject to the right of the General Assembly of the State of Arkansas to alter or repeal the same; and that subsequently, by the provisions of the Act of March 11, 1899, and Acts supplementary thereto, of the General Assembly of the State of Arkansas, the Railroad Commission was invested with power to fix the reasonable rates for all railroad companies, and that it adopted the rates which have been heretofore mentioned, pursuant to the authority vested in said Commission by the Acts of the General Assembly aforesaid. And these Defendants deny that the said Section 6590 of Kirby's Digest is in force and effect. They deny that the complainant's lines of railroad, or any of those

which it acquired and under whom it holds, were constructed on the faith that the State would in good faith carry out and perform any agreement in regard to rates to be charged by railroads in said State, either with reference to annual profits or otherwise. They deny that upon the pretended faith of said provision of Kirby's Digest, or any other provision of the laws of the State of Arkansas, the General Assembly agreed with the complainant or otherwise that it would not, by direct legislation, or through any agency created by it, impose on the persons and corporations owning and operating said railroads, rules, regulations or tariffs as would deprive them of a profit of fifteen per cent per annum on the capital actually paid in. They deny that complainant has voluntarily reduced its rates from time to time as the development of the business
114 of the lines and the condition of the country would warrant and demand; they say that when the rates were made which it now complains of, it made no complaint thereof to the Railroad Commission of Arkansas, in order to have the matter inquired of and corrected, if any complaint it had, which they deny. They deny that the complainant is not able to earn fifteen per cent per annum on the capital actually paid in by reason of the Act of February 9, 1907, or any orders of the Railroad Commission of said State. They deny that the action of said State in fixing said rates was unreasonable or confiscatory, or that it deprived complainant by any legislation or Acts, or orders of said Railroad Commission of the power to earn a profit of not less than fifteen per cent per annum on capital paid in. They deny that there was any impairment of any obligation of any contract which the State entered into with said complainant in conflict with any provision of the Constitution of the United States.

(15) For answer to the paragraph marked 9th of the complaint, said Defendants say that no penalty imposed by any provision of any legislation of the Legislature of the State of Arkansas applies, except where the act of wrong-doing is done by the complainant. And they aver that the occasions on which the provisions of said Statutes of the State of Arkansas were disregarded by the said complainant and the occasions when its action was oppressive and harmful to shippers and other persons in the said State of Arkansas were so numerous and repeated and became so intolerable and unbearable that the Genehal Assembly found it necessary to attach pen-
115 alties of greater or lesser size to enactments and requirements of the laws of said State in order to obtain an observance thereof by the said complainant and other railroad companies in said State of Arkansas; and if the said complainant and other railroad companies had shown a disposition to act fairly with the shippers and other persons in the State of Arkansas, such enactments would not have been passed; that there is no way that they know, nor of which they have been advised, by which a railroad company can be induced to carry out its obligations except by the infliction of penalties and that if some times these penalties are severe it is because in the wisdom of the Legislature of the State a small penalty would be disregarded. They deny that the penalties and liabilities imposed

by any provision of any Statute are so severe as to constrain persons and corporations subject to the provisions of said legislation to submit thereto, however illegal, rather than take the risk of incurring such pretended enormous liabilities and penalties. They deny that the effect of these would be to utterly bankrupt and destroy said complainant or any other railroad company, or cause the persons whose money is invested in such property to forfeit their entire investment. They say that the complainant has not hesitated to disregard the law whenever it saw fit to do so and contest its rights before the Courts of the State of Arkansas, and whenever it was in the right the Courts of Arkansas have protected it as disclosed by decisions under the Statutes enacted by the last General Assembly of the State of Arkansas. They deny that no private officer, agent or employee of any such railroad could afford to take the risk of the penalties and forfeitures imposed upon him personally by said Statutes. They deny that the complainant and all other persons and corporations operating railroads in said State subject to
116 the provisions of the aforesaid Statutes have been coerced into compliance with any illegal or confiscatory legislation by said State or orders made or promulgated by said Railroad Commission, rather than to subject said property or the officers, agents or employees employed in and about the operation of the same, to a great multitude of suits or prosecutions that would have followed the failure or refusal to put such rates in force. And they deny that the said rates, both as to freight and passenger can not be continued in effect without irreparable loss to the complainant or serious or irreparable injury to and destruction of the property, rights and interests of the complainant and of all persons interested in said property as creditors or stockholders.

(16) And for answer to the paragraph marked 10th of the complaint, said Defendants say that it is not true that the penalties prescribed by the Statutes of the State of Arkansas for the violation of the rules and regulaions of said Commission, and the rates of freight and passenger fare put in force by said Commission, are unreasonable and excessive in amount. They aver that they have been advised that it is not a ground of complaint against the laws of the State of Arkansas that a party has been a frequent and persistent offender, and because of this fact the penalties he may have incurred may aggregate a considerable sum. And they have been advised and aver that if accumulated penalties are incurred on any account by an offender of the said laws, it is due to a disposition of the person to frequently offend. And they have also been advised and aver that it is not an excuse to an offender that he has a constitutional disposition to disregard the law and commit offenses prohibited by the laws of the State under which he exists and does business.
117 They deny that the said penalties were immoderate or out of proportion of the acts designed to be punished. They deny that they are absurd or unreasonable in that they apply without discrimination to a great variety of acts that are wholly unlike and dissimilar, both in regard to the nature of the act done or omitted, and in the effect thereof upon the rights of the public and individ-

uals. They deny that any provisions of the Statutes are designed to operate as a menace to compel unquestioning obedience on the part of the railroad companies, their officers, agents and employees, to all orders, rules and regulations promulgated by said Commission without regard to their unlawfulness, by exposing said companies to such ruinous fines and penalties, and the officers, agents and employees of said companies likewise to such severe and ruinous penalties, as to deter said companies and the officers, agents and employees thereof from resisting on any ground, however harsh or unreasonable, the action of said Commission may be or seem, or for the purpose of deterring any parties from resorting to the Courts for the purpose of testing the legality of any rules, regulations and rates for fear of being harassed and oppressed by a multitude of prosecutions and suits during the pendency of such decision, or because of the consequence to them in case they should fail to maintain the ground of contest. And they deny that any of said provisions were discriminative or deprived complainant, and all others in like condition, of their property without due process of law or the equal protection of the law, or imposed unreasonable fines or unusual punishment, within the meaning of the Constitution of the United States or of the State of Arkansas.

(17) For answer to the said paragraph marked 9th and 10th of the complaint and also some of the preceding para-
118 graphs of the said complaint, in which an effort is made to maintain a bill in equity for the purpose of testing the constitutionality of the laws of the State of Arkansas, applicable to railroads and railroad rates, without reference to any existing and actual cause of complaint, these Defendants aver, as they are advised, that such matters are not within the jurisdiction of a Court of Equity and do not present a case for equitable relief.

(18) For answer to paragraph marked 11th of the said complaint, said Defendants say they do not know and are not advised whether Henry Leigh or George McLean, their co-defendants, are in the habit of travelling on plaintiff's trains or not, nor whether they are large shippers of freight on the lines of railroad of the complainant, but they admit that a large number of persons residing in the said State are in the habit of travelling on complainant's passenger trains between stations in the State. They deny that if the complainant shall disregard, violate or refuse to put into force the aforesaid rates prescribed by said Commission for the transportation of freight and passengers, or any or either of said roads, or shall violate or fail to carry into effect any of the rates, charges, orders, rules, regulations or classifications prescribed by said Commission on the ground that the same are unjust or unfair or unreasonable or confiscatory or in violation of the Constitution or laws of the United States, that the said Commission will cause penalty suits to be instituted against it as authorized by the provisions of the aforesaid statutes through the prosecuting attorneys of the various judicial districts in the State. They deny that
119 at present a great number of suits at law for the recovery of penalties for any prospective violation of rates contained

in schedule known as Standard Freight Distance Tariff No. 3, are in contemplation. They deny that any suits will be brought against complainant for the violation of each of the rates for the transportation of passengers as well as freight between the many stations on its lines of railroad, or that any large number of suits for penalties or double damages will be brought against complainant by these defendants or by any of Defenadnts who are shippers and patrons of complainant and others of the same class involving a large number of suits in many counties in said State. But they admit that if suits are brought it may be that the complainant will be ordered to produce its books and papers in the defense of such cases, but no more so than other persons whose defense depends upon books of account. They deny that the said complainant has been afflicted with suits for acts of wrongdoing done by it to shippers and other residents within the said State of Arkansas, but aver on the contrary that the disposition of the people of said State and of the said Railroad Commission has been to overlook most of the acts of wrong, if not nearly all the acts of wrong done by said complainant, except in instances where the wrongdoing of the said complainant was of so aggravating a character and involving such gross discriminations in favor of its own coal mines as to justify action upon the part of the said Railroad Commission. And they say that if the said Commission ever had to institute suits, they were finally decided in favor of the contention of the said Railroad Commission. And they further say that in all cases where the
120 Acts of the General Assembly of the State of Arkansas came up for consideration relating to the duties of common carriers by rail the Acts have been so construed as to give the said common carriers the benefit of any reasonable excuse they had for not complying with said provisions of the Statutes. They deny that any improper expense would be entailed by the said complainant by reason of the enforcement of any of the said rates, rules or regulations of said Commission, or that it would be in any manner great or involve any great or serious loss to complainant. And they say that if the complainant is correct in saying that it would be precluded from pleading or proving the unreasonableness of said rates and proceedings instituted by private shippers it could correct the same by testing the reasonableness thereof in a direct proceeding had for that purpose. But they say, as they have heretofore said, that by the provisions of the Statutes of Arkansas, the rates fixed by said Railroad Commission are not conclusive; that it can be shown in defense thereto that they are unjust, and the only effect they have is that they are taken to be prima facie binding until they are shown to be unreasonable and, for that reason, unenforceable. They deny that the question as to whether the rates prescribed by the Commission are reasonable or not could not be properly determined in a suit of that character, or that the loss sustained by complainant in an attempt to defend such suits would be serious or would be irreparable.

And having answered, these Defendants ask that the complaint be dismissed and that they be permitted to go hence with their costs.

WILLIAM F. KIRBY,
*Attorney General.*

121 ROSE, HEMINGWAY, CANTRELL & LOUGHBOROUGH,
MORRIS M. COHN,
*Sol's for Said Defendants,*

STATE OF ARKANSAS,
*County of Pulaski, ss:*

John E. Hampton, one of the Defendants herein, being duly sworn, says that the matters and things set out in the foregoing Answer as being based on personal knowledge are true, and that the matters and things set out as being upon information, he believes to be true.

JOHN E. HAMPTON.

Subscribed and sworn to before me this 25 day of July, 1908.
[SEAL.] NOEL LOEB,
*Notary Public.*

My Commission Expires Jan. 6, 1910.

Endorsed on back threof: "Filed Jul- 25, 1908. W. P. Feild, Clerk."

122 And on July 31, 1908, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,
vs.
ROBERT P. ALLEN et al.

Now on this day comes the complainant by its solicitors and come the Defendants by their Soli-tors and thereupon the hearing of complainant's application for temporary injunction is continued and said application is set for further hearing August 31, 1908, before the undersigned Circuit Judge at Chambers, at St. Paul, Minn., and it is thereupon ordered that the complainants serve the solicitors of the Defendants with copies of affidavits and exhibits to be used by the complainant at said hearing on or before August 8, 1908; that the Defendants serve the complainant's solicitors with all affidavits and exhibits to be used by them at said hearing on or before August 24th, 1908, and that complainant serve Defendants' solicitors with any rebutting affidavits and exhibits that they intend to use at said hearing on or before August 29, 1908.

Done at St. Paul, Minn., July 28, 1908.

(Signed) WILLIS VAN DEVANTER,
*Circuit Judge.*

And on August 28, 1908, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,
vs.
ROBERT P. ALLEN et al., &c.

Come the Defendants by William F. Kirby, Morris M. Cohn, Rose, Hemingway, Cantrell & Loughborough, Esqs., their
123 solicitors and file herein the affidavits with exhibits thereto of F. F. Wharton F. Bache, J. B. Allen, R. T. Brook, T. J. Gay, T. B. Jacobs, W. R. Duly, J. E. Hampton, James L. Jones, A. R. Bragg, George R. Brown, J. T. Jarrell, James J. Mandlebaum, S. P. Scott, C. F. Edrington, A. D. Allen, W. W. Dickinson, Fred L. LaGrave, A. B. Alexander, Guy V. Swaim and F. W. Boltz.

And on September 3, 1908, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,
vs.
ROBERT P. ALLEN, JOHN W. CROCKETT AND JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, Henry Leigh and George McLean.

This cause came on to be heard on the motion of the complainant for a temporary restraining order, and after the submission of the proof, was argued by counsel; and now, upon consideration thereof, it is ordered as follows:

That as to the complainant, all the rates prescribed by the Defendants, the Railroad Commissioners of the State of Arkansas, for transporting and carrying intrastate freights in said State in Standard Freight Distance Tariff No. 3, which was issued by the orders of said Commissioners, which took effect on June 15th, 1908, and all amendments and supplements thereto, be and are hereby suspended and the enforcement of each and all thereof be and the same is hereby restrained and enjoined until the further order of Court.

It is further ordered that the enforcement of the two cents per mile rate prescribed in an Act of the Legislature of the State
124 of Arkansas, approved February 9th, 1907, entitled, "An Act to Amend Section 6611 of Kirby's Digest of the Statutes of Arkansas, by fixing passenger rates in this State and for other purposes," and also prescribed in the order made by the Defendants, the Railroad Commissioners of the State of Arkansas, on May 15th, 1907, putting in force the rates prescribed by the aforesaid Statute be and the same are hereby suspended and restrained as to the complainant herein until the further order of the Court.

It is further ordered that no suit or suits, action or actions, shall at any time be instituted or maintained against the complainant, its officers, agents and employees by any of the defendants for or on account of its failure to continue and keep in force any of the aforesaid inhibited rates, during the time this order shall continue in force, and that the defendants, the Railroad Commissioners of the State of Arkansas, be and they are hereby enjoined from at any time instituting or prosecuting any suit or action as aforesaid or causing the same to be instituted or prosecuted by any officer, agent or attorney of said Commission, or by any officer of the State of Arkansas, or any other person for a failure to keep in effect and observe the aforesaid inhibited rates; that the defendants, Henry Leigh and George McLean, and all other persons and each of them, from and after the time that they shall have knowledge of this order be enjoined from at any time instituting any such suit or action for or on account of any failure of the complainant to keep in effect and observe said inhibited rates or for the recovery of damages by reason of such failure, during the time this order shall continue in effect.

It is further ordered that complainant execute a bond to the United States of America in the penal sum of Two Hundred
125 Thousand Dollars, conditioned that said complainant shall keep a correct account, showing, as respects every carriage of passengers or freight, the difference between the tariff actually charged and that which would have been charged had the rates inhibited hereby been applied, showing the particular carriage in question and the stations betwen which the same occurred and the name of the person affected, so far as may be practicable, which record shall be made and kept subject to the further order of this Court, and further conditioned that if it shall eventually be decided that so much of this order as inhibits the enforcement of existing rates should not have been made, that said complainant shall, within a reasonable time, to be fixed by the Court, refund in every instance to the party entitled thereto the excess of charge over what would have been charged had the inhibited rate been applied, together with lawful interest and damages.

It is further ordered that this order suspending the aforesaid rates and restraining the said Defendants take effect upon the filing of the aforesaid bond and the approval thereof by the Clerk of this Court, but not within less than ten days hereof. Nothing recited in this order shall operate to prevent the said Railroad Commissioners of the State of Arkansas from establishing and enforcing any reasonably compensatory and lawful rates in place of those whose enforcement is hereby inhibited.

Dated September 3rd, 1908.

(Signed) WILLIS VAN DEVANTER,
*Circuit Judge.*

And on the same day the following memorandum opinion of Court was filed:

**In the Circuit Court of the United States for the Eastern District of Arkansas.**

126 Sem*t*ember 3, 1908.

In re Arkansas Railroad Rates.

Mr. John M. Moore, for Complainants.

Mr. William F. Kirby, Attorney-General, Mr. George B. Rose, and Mr. Morris M. Cohn, for Defendants.

*Memorandum Opinion.*

VAN DEVANTER, *Circuit Judge:*

The matter now under consideration is an application in each of four suits against the Railroad Commissioners of the State of Arkansas and others for a temporary injunction restraining the enforcement of the prescribed rates for the transportation of freight and passengers in intrastate commerce in that State, it being contended on the part of complainant that these rates are unreasonable, non-compensatory, and, therefore, confiscatory. The matter was first brought on for hearing on July 28th last, when, at the request of the Defendants, the hearing was postponed until August 31st, that they might be better prepared to meet the contention of the complainants. On the latter dates the parties appeared, and three days were consumed in the presentation of proofs and in the arguments of counsel. Each of the four railroad companies is engaged in the transportation of freight and passengers, both intra-state and inter-state, in the State of Arkansas, and each has made a practical and extended application or test of the rates in question. The freight rates were prescribed
127 by the Railroad Commissioners while acting under the State Statutes, and the passenger rate, which is two cents per mile was prescribed by the Statute. The proofs disclose the revenues actually derived by each railroad, upon the application of these rates, from its business in the State, the revenues from each class of traffic being stated so as to show separately the earnings from intrastate freight, interstate freight, intrastate passengers and interstate passengers; and also disclose the value of the property employed by each road in the traffic within the State, the taxes paid thereon, the actual cost of conducting the freight traffic and the actual cost of conducting the passenger traffic. The first question for consideration is, How shall cost be apportioned between the intrastate and interstate traffic? The proofs make it quite plain that the production of a given amount of revenue is attended with greater cost in intrastate business, than in interstate business; and that this is a generally recognized fact is attested by the decisions in other cases where the reasons which make it so are fully stated. Chicago, etc., Co. v. Thompkins, 176 U. S. 167-178; Minneapolis, etc., v. Minnesota 186 U. S. 257, 262; Northern Pacific Railway Co. v. Keyes, 91 Fed. 51, 53. Here the additional

cost is shown to be at least one hundred per cent in freight traffic, and at least fifteen per cent in passenger traffic and this is not more than what has been shown in other cases. Undoubtedly these differences furnish a standard by which to apportion the total cost between the traffic which is intrastate and that which is interstate. Other standards are suggested, but the proofs indicate that none of them is as satisfactory or accurate as is the difference in cost in its relation to the revenue.

128 That standard must therefore be applied, and this may be done in this way, taking the freight and passenger traffic separately: increase the intrastate earnings by the ascertained percentage representing the difference in cost, thereby ascertaining what would have been earned by the same actual expenditure in conducting the intrastate traffic, had it been attended with the same relative cost as the interstate traffic; then add the intrastate earnings, as so decreased, to the interstate earnings, thereby ascertaining what would have been earned by the actual expenditure in conducting both the intrastate and interstate traffic, had they been attended with the same relative cost; then ascertain what proportion of this total represents the intrastate earnings as so increased, and then ascertain the corresponding proportions of the total cost of the intrastate and the interstate traffic. When this mode of apportionment is applied in these cases, the result shows that the earnings of each road from its intrastate freight traffic is much less than the proportion of the operating expenses and taxes properly attributable to it and that the earnings of two of them from intrastate passenger traffic is a little less than the proportion of the operating expenses and taxes properly attributable to it. As to the other two roads the earnings from the traffic last named are somewhat in excess of the proper proportion of the operating expenses and taxes, but not enough so to yield a return of one per centum per annum upon that proportion of the value of the property rightly attributable to such traffic. So the conclusion necessarily follows that the rates in question, both freight and passenger, are noncompensatory and unreasonable, and that their enforcement, although not so intended, is nothing other than a using or tak-

129 ing of the property of these railroad companies without due compensation, which is confiscation. This the Constitution of the United States does not permit, for, as was said in Smyth v. Ames, 169 U. S. 466, 526:

"1. A railroad corporation is a person within the meaning of the Fourteenth Amendment, declaring that no State shall deprive any person of property without due process of law nor deny to any person within its jurisdiction, the equal protection of the laws.

"2. A State enactment, or regulations made under the authority of a State enactment, establishing rates for the transportation of persons or property by railroad that will not admit of the carrier earning such compensation as under all the circumstances is just to it and to the public, would deprive such carrier of its property without due process of law and deny to it the equal protection of the laws, and would therefore be repugnant to the Fourteenth Amendment to the Constitution of the United States.

"3. While rates for the transportation of persons and property within the limits of a State are primarily for its determination, the question whether they are so unreasonably low as to deprive the carrier of its property without such compensation as the constitution secures and therefore without due process of law, can not be so conclusively determined by the Legislature of the State or by regulations adopted under its authority, that the matter may not become the subject of judicial inquiry."

It is pertinent in this connection to observe that in that case it was also said, p. 541:

"So far as rates of transportation are concerned, domestic business should not be made to bear the losses on interstate business,
130 nor the latter the losses on domestic business. It is only rates for the transportation of persons and property between points within the State that the State can prescribe; and when it undertakes to prescribe rates not to be exceeded by the carrier it must do so with reference exclusively to what is just and reasonable, as between the carrier and the public in respect of domestic business. The argument that a railroad line is an entirety; that its income goes into and its expenses are provided for, out of a common fund; and that its capitalization is on its entire line within and without the State, can have no application where the State is without authority over rates on the entire line, and can only deal with local rates and make such regulations as are necessary to give just compensation on local business."

But it is urged that a temporary injunction ought not to be granted because these railroads have heretofore applied and given effect to the rates in question, the contention being that a temporary injunction may be employed to preserve the status quo pending the suit but not to change it. It may be conceded that such an injunction is generally employed, as stated, and that the Courts are generally reluctant to employ it otherwise, but this does not mean that they may not or ought not to employ it otherwise, when the exigencies of the case justly require it; for as has often been held, Courts of Equity are not thus limited in their powers, but may, by a temporary injunction effect a change in the status quo, if it be necessary to do so, as here to avoid irreparable injury from what is plainly a continuing wrong. In re Lennon, 166 U. S., 548, 556; Chicago, etc., Co. v. Winnett, — C. C. A., —; 162 Fed. 242, 249; Pokegama Co. v. Klamath Co., 86 Fed. 528, 533, 535. It
131 would hardly do to say to a railroad company that by resorting to the very best method of testing the adequacy of a prescribed rate, that is, by putting it into actual practice for a reasonable period, all right to a temporary injunction, which might otherwise exist, will be lost; and yet that would be the result if the narrow view of the use of such an injunction here contended for were to prevail. True, some of the rates in question have been in force substantially in their present form for a considerable time, but enough of influence is accorded to this fact when it is made a reason for acquiring stronger and more persuasive proof of inadequacy than otherwise would be required; and that influence has been accorded to it here. A temporary injunction will be granted

as prayed for, but it will be required for the protection of shippers and passengers, that a proper bond be executed in the sum of Two Hundred Thousand Dollars, conditioned that the railroad company shall keep a correct account showing, as respects every carriage of freight or passengers, the difference between the carriage actually charged, and what would have been charged had the restraining rates been applied, and showing the particular carriage in question, the stations between which it occurred, and the name of the person affected, such record to be made and kept subject to the further order of the Court; and also conditioned that the excess charges with lawful interest and damages, shall be returned in each instance to the party entitled thereto within a reasonable date to be fixed by the Court, if it shall be eventually determined that the temporary injunction ought not to have been granted.

Endorsed on back: "Filed Sep. 3, 1908. W. P. Feild, Clerk."

132–451 The following affidavits, on behalf of the complainant, were introduced and read at the hearing of the motion for a temporary restraining order:

(Omitted in printing per stipulation.)

452 And on September 12th, 1908, the following proceedings were had, to-wit:

Before the Clerk in Vacation, September 12, 1908.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RY. CO.
vs.
ROBERT P. ALLEN et al., &c.

Comes the complainant, by Thomas M. Mehaffy, Esq., its solicitor and files herein its Bond in the sum of Two Hundred Thousand Dollars, with United States Fidelity and Guaranty Company, as surety, which Bond is approved by the Clerk of this Court, as required under restraining order of this Court of September 3, 1908. Which Bond is as follows:

In the Circuit Court of the United States within and for the Western Division of the Eastern District of Arkansas.

ST. LOUIS, IRON MOUNTAIN AND SOUTHERN RAILWAY COMPANY, Complainant,

vs.

ROBERT P. ALLEN, JOHN W. CROCKETT, and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas; Henry Leigh and George L. McLean, Defendants.

*Injunction Bond.*

Know all men by these presents, that the above complainant as Principal, and The United States Fidelity & Guaranty Company, a Corporation of the State of Maryland, as Surety, are held and firmly bound to the United States of America in the penal sum of Two Hundred Thousand ($200,000.00) Dollars, well and truly to
453 be paid in lawful money of the United States, for the payment of which they bind themselves, their successors and assigns firmly by these presents.

Signed with our hands and sealed with our seals and dated this eleventh day of September, A. D. 1908.

This bond is made upon the following conditions, to-wit:

Whereas, the Court in the above entitled cause, made an order on the third day of September, A. D. 1908, granting a restraining order and providing among other things as follows, to-wit:

"It is further ordered, that complainant execute a bond to the United States of America in the penal sum of Two Hundred Thousand Dollars conditioned that said complainant shall keep a correct account showing, as respects every carriage of passengers or freight, the difference between the tariff actually charged and that which would have been charged had the rate inhibited hereby been applied, showing the particular carriage in question and the stations between which the same occurred, and the name of the person affected as far as may be practicable, which record shall be made and kept subject to the further order of this Court, and further conditioned that if it should eventually be decided that so much of this order as inhibits the enforcement of existing rates should not have been made, that said complainant, shall, within a reasonable time, to be fixed by the Court, refund in every instance to the party entitled thereto, the excess in charge over what would have been charged had the inhibited rates been applied, together with lawful interest and damages."

Now, if the above named complainant, St. Louis, Iron
454 Mountain & Southern Railway Company, shall well and truly keep and perform all and singular the conditions of said restraining order as above set forth, then this obligation shall be null and void, otherwise to be and remain in full force and effect.

In testimony whereof, the above bounden Principal has caused its corporate name to be hereunto subscribed by its Vice-President, and its corporate seal to be hereto affixed and duly attested, and said Surety has caused its corporate name to be hereunto subscribed, and its corporate seal to be hereto affixed, by Sam W. Reyburn & D. H. Cantrell, its duly authorized Attorneys in Fact for this purpose this eleventh day of September, A. D. 1908.

[SEAL.] ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,
By C. S. CLARKE, *Vice-President.*

Attest:

F. W. IRLAND,
*Assistant Secretary.*

[SEAL.] UNITED STATES FIDELITY & GUARANTY CO.
By SAM W. REYBURN,
D. H. CANTRELL, *Attorneys in Fact.*

The foregoing bond is approved this 12th day of September, A. D. 1908.

W. P. FEILD, *Clerk.*

Endorsed on back: Filed September 12, 1908. W. P. Feild, Clerk.

455 And on October 5, 1911, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
vs.
ROBERT P. ALLEN et al., &c.

Come the parties by their respective Solicitors and file herein their written stipulation extending time in which to file replication to November rule day.

Which stipulation of Counsel is as follows:

In the United States Circuit Court for the Western Division of the Eastern District of Arkansas. In Chancery.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,
Complainant,
v.
ROBERT P. ALLEN et al., &c., Defendants.

It is stipulated between Counsel that the time for filing the replication in said cause may be postponed until the November Rules.

MOORE, SMITH & MOORE,
*Attorneys for Complainant.*
MORRIS M. COHN,
*Attorney for Defendants.*

Endorsed on back thereof: "Filed Oct. 5, 1908. W. P. Feild, Clerk."

456 UNITED STATES OF AMERICA,
*Western Division of the*
*Eastern District of Arkansas:*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 20th day of October, Anno Domini, One Thousand Nine Hundred and Eight, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber, Judge presiding and holding said Court, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

NOVEMBER 16TH, 1908.

Now on this day comes the complainant and files herein its verified petition for an order requiring the Defendants, Robert P. Allen, John W. Crockett and John E. Hampton and Roy D. Campbell, to appear and show cause why they should not be dealt with for disobedience of the order of injunction heretofore granted by this Court in said cause and it is thereupon by the Court ordered that said Defendants, Robert P. Allen, John W. Crockett and John E. Hampton and the said Roy D. Campbell appear in this Court on Thursday the 19th instant at 9:30 o'clock A. M., and show cause, if any they can, why they should not be dealt with for contempt of Court in violating the aforesaid order of injunction.

It is further ordered that a copy of said petition and of this order be served on said defendants and the said Roy D. Campbell.

(Signed) JACOB TREIBER, *Judge.*

Which petition for Rule on Defendants for Contempt, is as follows:

457 In the United States Circuit Court for the Western Division of the Eastern District of Arkansas. In Chancery.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, Complainant,

v.

ROBERT P. ALLEN, JOHN W. CROCKETT, and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al., Defendants.

Complainant would respectfully represent to this Honorable Court that under the order entered in said cause on the 3rd day of September, 1908, setting aside temporarily the rates prescribed by the Defendants, as the Railroad Commission of the State of Arkansas for the transportation of persons and property in said State, and enjoining and restraining said Defendants and all other persons from instituting or causing or procuring to be instituted any action or actions against said complainant by reason of its failure to continue in force the aforesaid rates prescribed by said Commission for the transportation of persons and property, it did on the 24" day of October, 1908, file with the said Commission a schedule of rates and charges to take effect and be in force between stations on its lines of railroad in the State of Arkansas, on and after the 2nd day of November, 1908, and on said last mentioned date did put said rates into force. That on the 31st day of October, 1908, the Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, as Railroad Commissioners of said State, made the following order, to-wit:

458 "The St. Louis, Iron Mountain & Southern Railway Company, St. Louis, Southwestern Railway Company, Chicago, Rock Island & Pacific Railway Company, St. Louis & San Francisco Railroad Company and the Kansas City Southern Railway Company, having severally filed with the Commission a tariff of freight rates bearing the endorsements: "Effective Nov. 2, 1908"; and the Commission having given due and legal notice that on this date, October 31, 1908, it would take up and consider the freight tariffs submitted by said companies, and the matter coming on for hearing the defendants being present; the St. Louis, Iron Mountain & Southern Railway Company by its Vice-President, J. M. Johnson;

the St. Louis, Southwestern Railway Company, by its Assistant General Freight Agent, J. D. Watson; the Chicago, Rock Island & Pacific Railway Company, by its Attorney, T. S. Buzbee, and General Freight Agent, H. W. Morrison; and the St. Louis & San Francisco Railroad Company by its General Freight Agent, E. K. Voorhees. (The Kansas City Southern Railway Company had received due and legal notice, but had no representative at the meeting.) After hearing the statements and arguments of all parties desiring to be heard, including those of a large number of shippers representing different lines of business, and giving due consideration to the same, the Commission finds that the said tariffs of freight rates submitted by the said railway companies are unjust, unreasonable and extortionate, and the same are in all things disapproved and said companies are hereby prohibited from applying or putting same into effect or making any charges whatsoever on shipments of freight within this State based upon said tariffs, under the penalties denounced by the laws of this State providing for a Railroad Commission, creating its powers and duties, and providing for the enforcement of its orders.

459 "The Commission finds further: that the rates as issued and published in its Standard Freight Distance Tariff No. 3 are just, reasonable and compensatory, although it recognizes fully that it is enjoined temporarily by the Circuit Court of the United States from enforcing the same, and it does not attempt in any way to enforce the rates provided in said Standard Distance Tariff No. 3, nor shall it attempt to do so while said temporary injunction is in force.

"It is further ordered by the Commission that this order take effect immediately, and that the Secretary of the Commission transmit a copy of the same at once to the General Freight Agents of each of the said lines."

That afterward, on the 14" day of November, 1908, the said Commissioners, without making or prescribing any other or different rates than those mentioned and referred to in the aforesaid order of the Court, caused suit to be instituted by Roy D. Campbell, acting — against complainant for the recovery of penalties for the failure of complainant to continue and keep in force the rates prescribed by said Commission, which suit was instituted under the Statutes of Arkansas imposing a penalty for the violation of "the tariff of charges as fixed by said Commission."

Complainant further represents and shows to the Court that the action of said defendants in causing and procuring suits to be instituted for the recovery of statutory penalties as aforesaid and of the said Roy D. Campbell in instituting said suit is in violation of said order of injunction, and is in contempt of the authority of this Honorable Court.

Wherefore, complainant prays that said Robert P. Allen, John W. Crockett, John E. Hampton and Roy D. Campbell be

460 cited to appear before this Honorable Court and required to show cause why they should not be dealt with for disobedience

of said order, and for such other action as may seem meet and proper in the premises.

MOORE, SMITH & MOORE,
*Attorneys.*

STATE OF ARKANSAS,
*County of Pulaski, ss:*

William Jeffery being duly sworn, states that he is the Rate Clerk of the St. Louis, Iron Mountain & Southern Railway Company, and that the facts set out in the foregoing petition are true.

WILLIAM JEFFERY.

Subscribed and sworn to before me this the 16th day of November, 1908.

[SEAL.]

JOHN W. ROSE,
*Notary Public.*

My Commission expires Aug. 7th, 1912.

Endorsed on Back thereof: "Filed Nov. 16, 1908. W. P. Feild, Clerk."

And on November 19th, 1908, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al., &c.

NOVEMBER 19*th*, 1909.

461 Now on this day come the parties hereto, and the respondents to the citation of contempt heretofore issued, to-wit:

Robert P. Allen, John W. Crockett and John E. Hampton and Roy D. Campbell and file their responses to the petition for citation and the matter coming on to be heard on the petition and responses and the Court being well and sufficiently advised in the premises doth find and hold that said responses are insufficient.

It is therefore considered, ordered and adjudged that the respondents, Robert P. Allen, John W. Crockett and John E. Hampton in ordering suits to be brought against the St. Louis, Iron Mountain & Southern Railway Company complainant for violation of order 375 F of the Railroad Commission of Arkansas and respondent Roy D. Campbell, in instituting said suit as the agent and attorney of his co-respondents violated the order of temporary injunction heretofore entered in this cause and they and each of them are in contempt of Court.

It is ordered that the further hearing be postponed until November 23, 1908.

(Signed) JACOB TREIBER, *Judge.*

Which responses of Defendants are as follows:

In the United States Circuit Court for the Western Division of the Eastern District of Arkansas, in Chancery.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, Complainant,

v.

462 ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas et al., Defendants.

*Response to Petition for Rule.*

Come the respondents, Robert P. Allen, John W. Crockett and John E. Hampton, Railroad Commissioners of the State of Arkansas, and Roy D. Campbell, Prosecuting Attorney for the Sixth Judicial Circuit of Arkansas, and for response to the petition of the complainant, the St. Louis, Iron Mountain & Southern Railway Company, for a rule against them and to the order of this Honorable Court, requiring them on this day to show cause why they should not be dealt with for contempt, say:

(1) That it is true that this Honorable Court did, on September 3rd, 1908, enter an order setting aside and suspending temporarily the rates subscribed by the Railroad Commission of Arkansas set out in its "Standard Freight Distance Tariff No. 3, which was issued by the order of the said Commission and effective June 15th, 1908, and all amendments and supplements thereto"; and that said order further enjoined and restrained the Defendant Commissioners, or any of its officials, agents or attorneys, from instituting or causing or procuring to be instituted any action or actions against the complainant Railway Companies "for a failure to keep in effect and observe the aforesaid inhibited rates"; as fixed by said Tariff No. 3, or amendments or supplements thereto.

(2) That it is true that the complainant did on October 24th, 1908, file with the said Railroad Commission, a schedule of rates and charges to take effect and be in force between stations on its lines of railroad in Arkansas, in and after the 2nd day of

463 November, 1908; and that on said last mentioned date, it did put same in force.

(3) That it is true that said Robert P. Allen, John W. Crockett and John E. Hampton, acting as such Railroad Commissioners, of Arkansas, did on October 31st, 1908, after notice to complainants and a full hearing thereon make the order (No. 375-F), set forth in the Complainant's petition for a rule.

(4) That it is not true that said respondent Railroad Commissioners did on November 14th, 1908, or at any other time, cause suit to be instituted by the respondent, Roy D. Campbell, Prosecuting Attorney, acting as officer, Agent and Attorney for said Commission, against said Complainant, St. Louis, Iron Mountain & Southern Railway Company, "for the recovery of the penalties for failure of said complainant to continue and keep in force the rates prescribed by said Commission."

Further answering, the respondents allege the truth to be:

(6) That on said November 14th said Roy D. Campbell, Prosecuting Attorney, acting as Attorney for said Railroad Commission of Arkansas and by its direction, did bring a suit against said Complainant St. Louis, Iron Mountain & Southern Railway Company, for penalties incurred by it for violation of the aforesaid Order No. 375-F of the Railroad Commission of Arkansas set out in Complainant's petition for a rule; but that said Order No. 375-F did not seek to continue and keep in force the rates prohibited by the order of this Honorable Court of September 3rd, 1908, but only to prohibit the subsequent schedule filed by the Complainant, St. Louis, Iron Mountain & Southern Railway Company, on October 24th, 1908.

That the respondents made said Order No. 375-F, in
464 the exercise of their proper discretion and judgment in the conscientious discharge of their duties as such Commissioners under the law of the State of Arkansas, giving them full power and authority to make reasonable and just rates of freight, express and passenger tariffs to be observed by all railroad companies and to approve as just and reasonable rates and tariff charges for transportation by railroad companies, and to disapprove unjust and unreasonable rates of tariff charges by such transportation companies and prohibit the enforcement of such unreasonable and unjust charges, under the pains and penalties prescribed by such law. That the said schedule of rates and charges proposed by said company were and are so unreasonable, unjust and exhorbitant as to constrain them in the proper exercise of their official duty to prohibit their charge and enforcement, which they did and had the right to do.

That said suit was brought by respondents for the penalty prescribed, for violating said order prohibiting the putting in force of the unjust and unreasonable rate complained about. Which said rate charged unreasonable and unjust and prohibited by respondents—is 100 per cent more than that prescribed in Standard Distance Tariff No. 3, enjoined, and in fact and effect more than 200 per cent greater than the rate voluntarily fixed by complainants before respondents ever made any rate.

That in the making of said order No. 375-F, and in bringing the suit for penalties incurred by violation thereof, respondents did not in any manner violate the order of this Honorable Court afore mentioned, and that neither of these respondents desires, desired or intends to do so, and that they expressly disclaim any attempt, inten-

tion or disposition to violate said order and injunction in
465 their said order No. 375-F. They did not make any other or different rates than those enjoined, believing that same upon a final hearing will be determined reasonable, just and compensatory and leaving the said complainant the right, without limitation, to fix any reasonable and just rates higher than those enjoined by the Court and below the ones prohibited by their order.

Wherefore, having fully responded, and being guilty of no contempt or disobedience of the aforesaid order of this Honorable Court, Respondents pray that the rule herein be discharged.

Respectfully submitted,

WM. F. KIRBY,
*Attorney General;*
ROY D. CAMPBELL,
*Pros. Att'y, 6th Circuit;*
JOE T. ROBINSON,
*Solicitors for Defendants.*

Comes Roy D. Campbell, one of the Respondents herein and states upon oath that the foregoing statements contained in said response, are true to the best of his knowledge and belief.

ROY D. CAMPBELL.
ROBERT P. ALLEN.
JOHN W. CROCKETT.
JOHN E. HAMPTON.

Subscribed and sworn to before me this 19th Nov. 1908.
W. P. FEILD, *Clerk.*

Endorsed on back thereof: Filed Nov. 19, 1908. W. P. Feild, Clerk.

466 In the United States Circuit Court for the Western Division of the Eastern District of Arkansas. In Chancery.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,
Complainant,
v.
ROBERT P. ALLEN, JOHN W. CROCKETT, and JOHN E. HAMPTON,
Railroad Commissioners, and ROY D. CAMPBELL.

*Separate Response of Roy D. Campbell.*

Comes the Respondent, Roy D. Campbell, Prosecuting Attorney for the Sixth Judicial Circuit of Arkansas, and for Separate Response to the petition of the complainant for a rule against him to show cause why he be not dealt with for contempt of this Honorable Court, says:

That it is made the duty of the Prosecuting Attorney of any District in the State of Arkansas, when called to do so by the Railroad Commission, to institute any suit for the violation of the order of said Commission.

That on the 14th day of November, 1908, the Railroad Commission of Arkansas directed the said Roy D. Campbell, as Prosecuting Attorney of the Sixth Judicial District of Arkansas, to institute the suit herein complained of; and that same was by him instituted in obedience to the law and the said request of the Railroad Commission.

That he was not a party to the suit in this Court wherein
467 the Railroad Commission was enjoined from enforcement of certain rates by them prescribed. That he expressly disclaims any intention or desire to violate the orders of this Honorable Court and whatever action has been by him taken in this matter, has been taken because it was his official duty, fixed by law so to do.

Wherefore, he prays that the rule herein as against him be discharged.

ROY D. CAMPBELL,
*Respondent.*

Endorsed on back thereof: Filed Nov. 19, 1908. W. P. Feild, Clerk.

And on November 23d, the following proceedings were had, to-wit:

**No. 1637.**

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

**On Rule for Contempt.**

Come the parties by their respective Solicitors and the hearing on the citation for contempt of said Respondents, Robert P. Allen, John W. Crockett and John E. Hampton, as Railroad Commissioners of the State of Arkansas, and Roy D. Campbell, as Prosecuting Attorney, now come on — further hearing; and it being made to appear to the Court that the suits brought by said Railroad Commissioners and said Prosecuting Attorney in the Courts of this State against said complainant in violation of the injunction granted herein have been dismissed and further proceeding thereunder abandoned.

It is now ordered by the Court that the rule herein be dis-
468 missed and that said respondents and each of them are hereby discharged therefrom, and that they pay the costs of this proceeding.

And on February 4th, 1909, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Come Morris M. Cohn and Rose, Hemingway, Cantrell & Loughborough, Esqs., and file herein their petition, asking leave of the Court to withdraw their further appearance as Counsel for said Defendants herein, and the Court being sufficiently advised in the premises doth grant said petition, and said Solicitors are permitted to withdraw from this cause.

Which petition of Solicitors to withdraw from the case is as follows:

In the United States Circuit Court for the Eastern District of Arkansas, Western Division.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Come the undersigned and withdraw their further appearance for the Defendants, Robert P. Allen, John W. Crockett and John
469 E. Hampton, as Railroad Commissioners of the State of Arkansas, they being no longer connected with said cause, as attorneys for said Defendants.

MORRIS M. COHN.
ROSE, HEMINGWAY, CANTRELL & LOUGHBOROUGH.

Feb'y 4/09.

Endorsed on back thereof: Filed Feb'y 4, 1909. W. P. Feild, Clerk.

And on February 18, 1909, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Come the Defendants, the Railroad Commissioners of the State of Arkansas, by Hal Norwood, Joseph M. Hill, William F. Kirby and James H. Harrod, Esqs., their Solicitors and file herein their motion to dissolve the injunction heretofore granted herein, and also the

affidavits of E. E. Russell, J. I. Porter, J. G. Wallace, J. T. Rutherford, A. C. Curtis, J. R. Case, F. W. Heinsteadt, C. K. Smith, J. E. Hampton, R. H. Oliver, J. J. Mandelbaum, L. S. Dunaway, G. W. Swaim, T. J. Gay, F. S. Williams, F. N. Atchison, E. W. Hoffman, J. P. Logan, S. J. Beauchamp, F. M. Moore, S. T. Edwards, C. W. Clark, J. E. Daley, G. W. Swaim, C. W. Linthicum, John Patterson, M. L. Mardis, A. D. Allen, W. F. Kirby, R. O. Burks, J. T. Jarrell, F. J. Rentelherber, T. H. Bunch, R. W. McFarland, C. E. Taylor and A. R. Bragg, C. H. Ivers, D. D. Adams, F. F. Freeman, W. E. Floyd.

Which motion to dissolve injunction is as follows:

470 In the United States Circuit Court for the Western Division of the Eastern District of Arkansas. In Chancery.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, Complainant,

v.

ROBERT P. ALLEN, JOHN W. CROCKETT, and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al., Defendants.

*Motion to Dissolve Injunction.*

Come the Defendants herein, Robert P. Allen, John W. Crockett, and John E. Hampton, constituting the Railroad Commission of the State of Arkansas, and move the Court that the temporary injunction herein granted by His Honor Willis Van Deventer, Circuit Judge, be not continued until the final hearing or until the further order of the Court and that same be dissolved, or if in the judgment of the Court the injunction should be continued, that it be so modified as to give the Defendants and those they represent the equitable relief to which they are entitled. That the Defendants allege the following grounds for discontinuance of said injunction, to-wit:

I.

That said injunction was improvidently granted, for these reasons, to-wit:

(*a*) That the evidence of the Plaintiff, which sought to sustain the allegations of the bill that the freight and passenger rates were confiscatory, was based upon statistics of six months' business of
471 the Plaintiff Railroad Company and during almost half of said period there was a financial and business panic, when the industries and traffic all over the country, and particularly the State of Arkansas, were partially paralyzed and there was a scarcity of money to move the crops and products, and a lack of demand for coal, timber and manufacturing products. And, since the granting of said injunction, the Supreme Court of the United States has, on January 4th, 1909, said in regard to a similar situation:

"We think it was error to confine the investigation to, and base the judgment upon, that year alone. The precise subject of inquiry was, what would be the effect of the ordinance (referring to an ordinance fixing rates) in the future. The operations of the preceding fiscal year, or of any other fiscal year, were valueless if the year was abnormal, and were only of significance so far as they foretold the future. If, as in this case, sufficient time has passed, so that certainty, instead of prophesy can be obtained, the certainty would be preferable to the prophesy."

Had the Court made this utterance prior to the preliminary hearing herein it is confidently asserted that His Honor, Judge Van Deventer, would not have granted the temporary injunction upon the evidence adduced, based upon statistics of the operation of the Plaintiff's road during half of an abnormal year.

(*b*) The injunction was improvidently granted for the further reason that it changed the status quo of the freight and passenger rates which had long been in force, particularly the freight
472 rates, and it is contrary to the principles of equity jurisprudence that a status quo be changed by a preliminary injunction. The facts in regard thereto are these, towit:

The freight rates established by the Commission, which were enjoined, with the exception of a few changes from time to time which did not materially diminish the aggregate of the Plaintiff's income, had been in force on single lines since April 10th, 1900, and on two or more lines since July, 1903. And the reports made to the Commission by the Plaintiff, which it was required by law to make, showed that it made more money on its Arkansas business in the years 1906, 1907, and 1908 than it did prior to the promulgation of said Tariff in April, 1900. That in said last three years the percentage of income to operating expense was steadily increasing. That the passenger rates had been put in effect by an Act of the General Assembly and the railroads had operated under same for a period of about sixteen months prior to the injunction herein, and said reduced passenger rates did not cause any material loss, if loss at all, to the Plaintiff railroad company, as the increased travel without a corresponding increase in expense compensated for the reduced passenger fare.

Wherefore, said injunction, having been issued contrary to the established principles of equity jurisprudence, should not be continued but should be dissolved.

## II.

These Defendants assert that the filing of the bill in equity herein, seeking a temporary and permanent injunction, bound said plaintiff to do equity, as it was seeking relief in a Court of Equity,
473 and, when said temporary injunction was granted restraining the enforcement of the passenger and freight rates upon the ground that said rates were unreasonable and confiscatory, the said Plaintiff was bound by the principles of equity jurisprudence to put in force, if it exercised its power, only reasonable rates, and was not at liberty to avail itself of the injunction against the rates estab-

lished under the law and put in force unreasonable rates. In violation of this settled principle of equity jurisprudence the Plaintiff has, since the rates established by the Commission and the General Assembly were temporarily enjoined, established freight and passenger rates on all intrastate shipments and said freights and passenger rates are unreasonable and exhorbitant and are destroying many of the industries of the State. And said Plaintiff is maintaining interstate rates so low that the same amount to a discrimination against the business and industries of the State of Arkansas. That it discriminates in favor of longer hauls of interstate shipments, under similar and like circumstances, against shorter hauls or intrastate shipments to the great detriment of the shippers and consumers of the State of Arkansas.

The tariff put in by the Railroad since said injunction upon the leading articles of commerce in the State is an unreasonable increase. On grain there is an increase of 50 per cent over the Commission rates; on cotton 140 per cent over the Commission rate, on packing house products 100 per cent, on coal 35 per cent, on brick, stone and sand, 75 per cent, on lumber 107 per cent, and on the various lines of merchandise about 75 per cent. There is an average increase on the principal commodities of the State of 77 per cent over
474 the Commission rate which these defendants aver is unreasonable, extortionate and oppressive to the shippers and consumers of the State.

The Commission avers that its Freight Tariff as a whole is fair, compensatory and reasonable, and this the defendants expect to maintain by satisfactory evidence at the final hearing of this suit. And said Commission has, since the injunction by Judge Van Deventer, by proper action, after notice to the Plaintiff and all other railroads putting in such unreasonable and exhorbitant rates, after a hearing, declared said freight rates so established by the Plaintiff and the other railroads to be unreasonable. And these Defendants now submit with this petition many affidavits to sustain the action of said Commission in declaring the rates unreasonable, and to sustain the allegation herein that said rates are unreasonable, extortionate and discriminatory against the State of Arkansas and destructive and detrimental to the shippers of the State.

These Defendants allege that it is a principal of equity that detriment to the public is a consideration proper to be considered by a Chancellor when considering an application for a discontinuance of an injunction. That the Plaintiff has taken advantage of its injunction against the Commission and put in force unreasonable, extortionate and oppressive rates. Wherefore, having violated the spirit of the injunction obtained by it, the Plaintiff is not entitled to a continuance thereof, but, under the settled principles of equity the same should be dissolved.

The Defendants further allege that in many instances the unreasonably high rate established by the railroads since the
475 temporary injunction herein has diminished the value of traffic, and the Plaintiff itself is suffering a material loss of business from its destruction of the industries of the State, and, in

many instances, the injunction is injuring it as well as the shippers and consumers and the industries of the State.

The Defendants allege that, after the injunction was granted temporarily restraining the two cent passenger rate put in force by the Act of the General Assembly, *that* the Plaintiff has increased the passenger rate to three cents per mile and has not afforded any better service while doing —. And the Defendants further allege that the Plaintiff is transporting all persons who buy two thousand mile tickets at two cents per mile, while requiring travellers who do not buy such mileage books to pay three cents a mile, and is thereby materially decreasing the amount of travel. The Defendants aver that the increase in travel at the rate of two cents a mile, except in abnormal years and in times of panic, will not cause any loss to Plaintiff or any other trunk line in the State of Arkansas, as the increased travel on account of the reduced rate will compensate for the loss in rate, and if the Plaintiff gives said two cent passenger rate a fair test, as it has not done, the same will prove to be true. The Defendants further allege that neither the Plaintiff nor these Defendants are able to state the exact effect of the two cent passenger rate, and there has been no fair test of it under the principles established by the Supreme Court of the United States, it is a matter of prophesy and not of fact as to the effect of the same, and according to the decisions of that Honorable Court, in such a case the Plaintiff is not
476 entitled to a temporary or permanent injunction until it has fairly tested said rate and found the same confiscatory so long a length of time that the future can be foretold by its past operation.

III.

If, in the better judgment of the Court, it is found that Plaintiff's violation of the spirit of the injunction does not entitle the Defendants to its dissolution, then the Defendants allege that those they represent are entitled to have the injunction continued only upon terms which would be equitable to the Plaintiff and to the interests represented by the Commission, said terms being that the Plaintiff be enjoined from enforcing its existing rates where shown to be exorbitant and unreasonable and that it be enjoined to put into force fair and reasonable rates pending the final determination of this litigation over the rates enjoined by it.

IV.

The Defendant- alleges that the Plaintiff has a plain and adequate remedy against any rate established by the Commission which is not reasonable and compensatory and should not be entitled to seek a remedy in a court of equity until it had exhausted its efforts to obtain a reasonable and compensatory tariff under the existing law, which affords it ample and complete redress against any injustice in the freight rate established by the Commission. That it is made the duty of the Commission "to hear all complaints made by any person, firm or corporation against any such tariff or charges, so approved (by it); to hear the parties to the controversy in person or by at-

torney, or both, and may take testimony, orally and in writing, and
regulate the argument thereon, and conduct the investigation
477 of such complaints in such manner as to the Commission may
seem best to arrive at the truth, and when any changes are made in the tariff notice thereof shall be given to the person or corporation to be affected thereby." And it is further made the duty of the Commission, in changing or fixing rates, to take into consideration the character or nature of the service to be performed, the entire earnings of the railroad, the expense of operating same and the income and value thereof. And the Defendants assert the facts to be that when the first tariff was established by the Commission, in 1900, *that* it assured the Plaintiff and all other railroads affected by it, that, if said tariff did not produce a fair profit, the Commission, upon a showing so made, would readjust so as to produce, if possible, for the Plaintiff a fair profit upon its investment. And such has been the attitude of the Commission from then until the present time and is still the attitude of the Commission. That several small line railroads have applied to the Commission for relief against the existing rates, and, where the showing has been made of the justice of the application, the Commission has granted the same. That the Plaintiff has not presented any complaint to the Commission alleging that any rate, or the tariff as a whole, established by it, was not compensatory and asking for an increase of any rate or of the tariff as a whole. That the Commission recognizes now, as it has always done, no tariff, whether promulgated by a railroad or a Commission is perfect, and that all tariffs should be changed from time to time to meet changed conditions, in order to do justice to the railroads or shipper, as the case may be and this the
Commission has at all times been ready to do whenever satis-
478 factory evidence should be offered to it showing the justice of and necessity for same.

The Defendants assert that the temporary injunction should not be continued until the Plaintiff has availed itself of its legal right to obtain redress of its alleged grievance, insofar as the freight rates are concerned before the Commission, and alleges it is contrary to the principles of equity to entertain a suit where full and adequate remedy at law is open to the Plaintiff; that it is contrary to the comity which Federal Courts extend to State Tribunals to grant relief in said Federal Courts against State regulations promulgated under State laws, until the Plaintiff has sought its constitutional right in the tribunals wherein the alleged unconstitutional regulation is attempted to be enforced.

The Defendants allege that they are called upon to defend in this Court the rates of their predecessors, and maintained by themselves, with a few changes as called for from time to time, without having had an opportunity to hear the complaint of the Plaintiff and pass upon its justice.

Wherefore, the Defendants pray that the injunction be discontinued or its operation suspended until the Plaintiff applies for redress before the Commission and gives it an opportunity to pass

upon the justice of the matters which are alleged in Plaintiff's complaint.

V.

The Defendants allege that the Plaintiff's case is predicated upon the relative cost of intrastate over interstate traffic, and that the method of computing intrastate traffic is one upon which railroad accountants differ. The General Auditor of the Plaintiff,
479 in his affidavit filed in this case, has testified:

"There is a diversity of opinion among railroad officials and accountants who deal with the accounts of railroad corporations as to how expenses should be divided between the two classes of service, intrastate and interstate. For operating purposes the train mile, car mile, and ton mile are often used as units to determine the division of freight service and freight cost."

Said Auditor asserts that the revenue basis is the proper one, but competent and equally skilled accountants assert that it is not the true basis but the ton mile basis should control. This difference of opinion is one of the issues to be determined in this suit, and if the ton mile basis is established to be the proper basis, then under the evidence submitted by the Plaintiff as to its gross earnings, operating expenses and value of its property, the Commission's tariff is providing it a large revenue and affording a fair compensation upon its investment. That it is contrary to the principles of equity that a temporary injunction should change the status quo where the matter to be litigated is gravely doubtful, and upon such gravely doubtful contention the Plaintiff's whole case is predicated. When an injunction is granted against a rate fixed by law as violative of constitutional right, the invalidating facts must be proved to the satisfaction of the Court and not merely rest upon a difference of opinion among expert accountants.

VI.

If the injunction in whole, or modified so as to require the Plaintiff to do equity while this litigation is pending by
480 establishing reasonable rates, is continued, then the Defendants pray that it be further modified so as to afford the interests they represent adequate relief, in the event that the Defendants are ultimately successful in the following particulars:

(*a*) The bond required of the Plaintiff is wholly inadequate to cover the losses to the interests represented by this Commission, to-wit: the shippers and passengers of the State. And the Defendants allege the facts to be, taking the increased rate of 33⅓ per cent on passenger traffic, established by the railroads, and applying said increase to the passenger traffic of the six months for which the Plaintiff furnished statistics, the increased revenue to the Plaintiff on the passenger business would amount to $557,694.80 per annum. From this gross sum should be deducted the amount of travel that the Plaintiff still permits to be had at two cents a mile, the exact amount of which is not known to these defendants. Taking the statistics for the six months' freight business furnished

by the Plaintiff, and applying to it the increase of 75 per cent (which is really less than the true increase) an increased revenue of $960,375.24 is produced. From this should be deducted the loss of business to the Plaintiff from its destruction of the various industries that are not now under its high tariff, shipping the commodities which they would otherwise have shipped. The Defendants allege that these calculations, based upon the statistics of the Plaintiff, show that a bond of $200,000.00 is wholly inadequate to protect the people who are paying the extortionate and unreasonable rates, in the event that the Plaintiff does not finally prevail in this case, and that such bond should be required as will
481 protect such interests.

(*b*) That the injunction herein requires the Plaintiff shall keep a correct account, showing, as respects every carriage of passengers or freight, the difference between the tariffs actually charged and that which would have been charged had the rates inhibited been applied, showing the particular carriage in question and the stations between which the same occurred, and the name of the person affected, so far as may be practicable, and that Plaintiff keep a record of the same, subject to the order of the court, and conditioned to refund the excess should the injunction not be finally sustained. These Defendants allege that said requirement is not ample to secure the shippers and passengers and pray that should the injunction be continued, the plaintiff be required to furnish to each passenger and to each shipper a certificate or coupon showing the excess payment over the rates enjoined, so that said passenger or shipper would have prima facie evidence of the amount due him from the Plaintiff should the Plaintiff not ultimately succeed herein.

And these Defendants further assert, upon information and belief that the Plaintiff is not keeping such an account as is required by the injunction, and pray that it be required to file an account, showing the excess of freight and passenger rates collected by it over the rates enjoined, and from whom such freight and passenger fares have been collected, to the end that the rights of all parties interested may be protected.

And these Defendants pray for all further relief which the Court may find in equity and good conscience they and those they represent are entitled to receive.

HAL L. NORWOOD,
*Attorney General;*
482 JOSEPH M. HILL,
WILLIAM F. KIRBY,
JAMES H. HARROD,
*Counsel for State.*

We, Robert P. Allen, John W. Crockett and John E. Hampton state on oath that we verily believe the matters set forth in the foregoing petition are true.

____ ____.
____ ____.
____ ____.

Sworn to and subscribed before me this 17th day of February, 1909.

—— ——.

Endorsed on back thereof: Filed Feb'y 18, 1909, W. P. Feild, Clerk.

And on March 4, 1909, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant by Moore, Smith & Moore and Thomas S. Buzbee, Esqs., its Solicitors, and come the Defendants, the Railroad Commissioners of the State of Arkansas, by Hal L. Norwood, Joseph M. Hill, William F. Kirby, James H. Harrod, Esqs., their Solicitors, and the motion of the Defendants to dissolve the injunction heretofore granted herein coming on for hearing the Court proceeds to hear the argument of counsel thereon;
483 and the hearing thereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on March 5, 1909, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes on to be heard the sufficiency of the motion to dissolve the injunction herein, or, in the alternative to modify the same.

It was agreed that in the event that the Court held the motion sufficient in law to grant any relief as prayed, the complainant should have an opportunity to take issue with the facts therein stated. The sufficiency of the motion being fully argued by Counsel for Complainant and Defendants, the Court doth declare that the first paragraph of the motion is overruled, to which ruling the Defendants at the time excepted.

The Court doth declare that the second and third paragraphs of the motion are sufficient in law to require the Complainant to respond thereto and to entitle the Defendants to a hearing on the allegations contained in said paragraphs and it sustains the legal sufficiency and the allegations thereof to entitle Defendants to a response and hearing thereon.

The Court doth overrule the fourth and fifth paragraphs, to which ruling the Defendants at the time excepted.

484 The hearing upon the sixth paragraph was continued subject to be called up by either party.

It is further ordered that the Complainant file its response and affidavits on or before the 22nd day of March and that the Defendants have until March 29th for rebuttal affidavits and the further hearing of the motion is continued until said date.

(Signed) JACOB TREIBER, *Judge.*

485 UNITED STATES OF AMERICA,
*Western Division of the*
*Eastern District of Arkansas:*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 5th day of April, Anno Domini, One Thousand Nine Hundred and Nine, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber, Judge presiding and holding said Court, the following proceedings were had, to-wit: April 5th, 1909.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Come the Defendants by Hal. L. Norwood, J. M. Hill, W. F. Kirby, and J. H. Harrod, Esqs., their Solicitors, and file herein the affidavits of G. W. Swaim, J. E. Hampton, J. T. Jarrell, C. K. Smith, Thomas Cox, J. I. Porter, T. J. Gay, Bert C. Simon, J. J. Mandelbaum, T. F. Wharton, John W. Crockett, E. E. Russell, A. D. Allen and A. R. Bragg, in support of their motion to dissolve the injunction heretofore granted herein.

NOTE.—By direction of Counsel for defendants, all the affidavits of both complainant and defendants to the motion to dissolve the injunction herein, are omitted from this record.

CLERK.

486 And on April 6th, 1909, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant by Moore, Smith & Moore, and Thomas S. Buzbee, Esqs., its Solicitors and come the Defendants, by Hal. L. Norwood, Attorney General of the State of Arkansas, and Joseph M. Hill, William F. Kirby and James H. Harrod, Esqs., their Solicitors; and the further hearing on the motion of Defendants to dissolve the injunction heretofore granted herein is now resumed,

and the hearing hereof not being concluded the same is continued until tomorrow morning.

And on April 7th, 1909, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant by Moore, Smith and Moore and Thomas S. Buzbee, Esqs., its Solicitors and comes the Defendants by Hal. L. Norwood, Attorney General of the State of Arkansas, and Joseph M. Hill, William F. Kirby and James H. Harrod, Esqs., their Solicitors; and the hearing hereof not being concluded on yesterday the same is now resumed and the hearing hereof not being
487 concluded, the same is continued until tomorrow morning.

And on April 8th, 1909, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant by Moore, Smith & Moore and Thomas S. Buzbee, its Solicitors, and come the Defendants by Hal L. Norwood, Attorney General of the State of Arkansas; Joseph M. Hill, William F. Kirby and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being completed on yesterday, the same is now resumed, and the hearing hereof not being completed the same is continued until tomorrow morning at half past nine o'clock.

And on April 9th, 1909, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant, by Moore, Smith & Moore and Thomas S. Buzbee, Esqs., its Solicitors, and come the Defendants by Hal L. Norwood, Joseph M. Hill, William F. Kirby and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being completed on yesterday the same is now resumed; and the hearing
488 hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on April 10th, 1909, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant, by Moore, Smith & Moore and Thomas S. Buzbee, Esqs., its Solicitors, and come the Defendants by Hal. L. Norwood, Attorney General of the State of Arkansas; Joseph M. Hill, William F. Kirby and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being completed on yesterday the same is now resumed; and the Court having heard the arguments of Counsel thereon and not now being sufficiently advised in the premises, takes time to consider of its Judgment thereon.

And on June 1st, 1909, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

The Court being sufficiently advised as to what disposition to make of the motion to modify the temporary injunction heretofore granted in this case and which was submitted at a previous day of this term.

489 It is ordered, adjudged and decreed that, in addition to the conditions upon which the temporary injunction was granted herein the following conditions be and they are hereby prescribed by the Court:

That from the affidavits and evidence submitted the Court finds that the tariff of freight charges put into effect by the said St. Louis, Iron Mountain & Southern Railway since the granting of the temporary injunction is unreasonable, and, therefore,

It is ordered, that the freight rates pending this action to be charged by the said railway company shall be so arranged as to produce a net increase of thirty three and one third (33⅓%) per cent, of the revenue produced by Standard Distance Tariff Number Three (No. 3), put into effect by the Defendants, the Board of Railroad Commissioners, and in force at the time the temporary injunction was granted; and that the same be put into effect not later than June Seventh (7th), 1909, and continued in force until the further order of the Court, with leave to either party to apply to the Court for a modification of said Tariff, if it shall be found that it does not conform to the order of the Court in respect to the aforesaid increase in the revenue of the said St. Louis, Iron Mountain & Southern Railway Company.

And thereupon come the parties and file a tariff of freight rates which both parties believe conforms to the order of the Court and said tariff is ordered to be filed, marked Exhibit "A" to the decree modifying a temporary injunction, and made a part of the record in the cause.

It is further ordered that the security given by the said
490-520 St. Louis, Iron Mountain & Southern Railway Company upon the granting of the preliminary injunction shall in no wise be affected by this order, but shall remain liable in the same manner for the rate charged under the tariff promulgated under this order of Court as if this order had been embodied in the order granting the preliminary injunction; and a failure to comply with the schedule herein filed shall be cause *with* the dissolution of the temporary injunction.

(Signed) JACOB TREIBER, *Judge*.

Which Exhibit "A" to order modifying injunction is as follows:

(Omitted in printing per stipulation.)

521 And on the same day the following opinion of Court was filed:

In the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas.

In re ARKANSAS RAILROAD RATES.

John M. Moore, Buzbee & Hicks, Reid & McDonough and B. R. Davidson, for Complainants.

Hal L. Norwood, Attorney General, Joseph M. Hill, James H. Harrod and William F. Kirby, for Defendants.

On Motion for Modification of Preliminary Injunctions.

TREIBER, *D. J.*:

Upon application for a temporary injunction made by the railroads of this State, and heard by Judge Van Deventer, one of the Circuit Judges of this Circuit, preliminary injunctions were granted restraining the enforcement of the intrastate rates then prescribed by the Railroad Commission of the State of Arkansas, for the transportation of freight and the two cents a mile passenger Act of the General Assembly of the State of Arkansas, approved February 9, 1907, the contention on the part of Complainants being that they were unreasonable, non-compensatory and confiscatory. At that hearing the learned Judge found from the evidence submitted that the additional cost of intrastate traffic exceeds that of the interstate of the complaining roads one hundred per cent on freight, and fifteen per cent on passenger traffic, and applying this rule to the earnings of the

roads and their values decided that, "the rates in question
522 are non-compensatory and unreasonable, and that their enforcement, although not so intended, is nothing other than a taking of the property of the railroad companies without due compensation, which is confiscation." The opinion on that hearing will be found in 163 Fed. 141.

The State Railroad Commission now applies for a modification of these temporary injunctions, alleging, that, "Since the granting of the preliminary injunctions the railroad companies have established freight and passenger rates on all intrastate business, which are unreasonable and exorbitant and are destroying many of the industries of the State." It is charged that the passenger rate has been raised to three cents a mile, and the freight tariffs put into effect, increased those prescribed by the Commission and in force at the time the temporary injunctions were granted, as follows: 50% on grain; on cotton 140%; on packing house products 100%; on coal 35%; on brick, stone and sand 75%; on lumber 107%, and other various lines of merchandise, about 75%; that the average increase on the principal commodities of the State on a revenue producing basis is over 77%, which rates it is claimed are unreasonable, extortionate and oppressive to the shippers and consumers of the State. It is, therefore, asked that the preliminary injunctions be modified so as to prevent this injustice.

That a preliminary injunction may be modified at any time whenever the ends of justice require it is beyond question. Not only may it be done by the trial court, but upon appeal by the appellate tribunal. Denver and Rio Grande R. Co. vs. United States, 124 Fed. 156, 59 C. C. A. 579. Judge Sanborn, who delivered
523 the opinion of the Court in that case said that, "a preliminary injunction may be modified when by such modification the injury or inconvenience of one or more of the litigants may be decreased without increasing the danger of loss to their opponents." And, accordingly, he modified the temporary injunction which had been granted by the lower Court. There can be no doubt that a temporary injunction can not be claimed as an absolute right, but is within the sound discretion of the Court, that discretion of course, to be controlled by the established principles of equity jurisprudence. Shubert vs. Woodward, 167 Fed. 47, — C. C. A. —. In the head note of that case, prepared by the Court, it is said, "the specific performance of contracts and the issuance of injunction are not matters of right; they rest not in the arbitrary or whimsical will, but in the judicial discretion of the Court, informed and guided by the established principles, rules and practice in equity, which are advisory rather than mandatory;" see also New York City vs. Pine 185 U. S. 93. 22 Sup. Ct. 592, 46 L. Ed. 820. Kansas vs. Colorado 206 U. S. 46, 27 Sup. Ct. 655, 51 L. Ed. 956.

Granting or refusing a preliminary injunction proper regard must be had for the comparative injury which will be sustained by the defendant if the injunction were granted, and by complainant if it were refused, and in order to prevent great injury to the Defendant when the complainant is prima facie entitled to a temporary injunc-

tion, the Court, in the exercise of its discretion, frequently resorts to the expediency of imposing terms and conditions upon the parties at whose instance it proposes to act. Russell vs. Farley, 105 U. S. 433, 438, 442, 26 L. Ed. 1060; Myers vs. Block, 120 U. S. 206,
524 214, 7 S. Ct. 529, 30 L. Ed. 644; Ewing vs. Filley, 43 Pa. St. 384, 387; Denver & Rio Grande R. Co. vs. United States 142 Fed. 625, 73 C. C. A. 621; Vogel vs. Warsing, 146 Fed. 449, 77 C. C. A. 109; McElroy vs. Kansas City, 21 Fed. 257, 264, 263 (C. C.); McCaul vs. Braham, 16 Fed. 37, 42, (C. C.); Spring Valley Water Co. vs. San Francisco, 165 Fed. 667 (C. C.); Macon R. R. Co. vs. Gibson, 85 Ga. 1, 11 S. E. 442; Careton vs. Rugg 149 Mass. 550; Kerr on Injunction (2nd Am. Ed. 30); Spelling on Injunction, p. 1031-1033. The authorities cited by Counsel for Complainants all refer to permanent, and not preliminary injunctions and for this reason are not applicable to this proceeding.

In Denver & Rio Grande R. Co. vs. United States, supra, it was said that, "The purpose of a preliminary injunction is to protect and preserve the rights of all the litigants with the least injury to each until the controversy between them can be tried and finally decided."

In Spring Valley Water Co. vs. San Francisco, supra, the question before the Court was the terms upon which a preliminary injunction should be granted against the enforcement of an ordinance fixing water rates to be charged by Complainant. Judge Farrington, in a very exhaustive and learned opinion held that,

"This Court can not control the discretion of the supervisors; it can not substitute its judgment for theirs. The power and duty of fixing water rates is cast by the Constitution on that board and not on this Court. The law nowhere provides an appeal to this Court from an ordinance adopted by the Board of Supervisors, nor does it clothe this tribunal with any authority to review, revise, cor-
525 rect or send back to that body for reconsideration an ordinance establishing the compensation to be collected for water * * *. It would seem, therefore, that the Court is limited to the determination of a single question, namely, is the ordinance confiscatory?"

And coming to the question of a preliminary injunction the learned Judge says: "It is an abuse of judicial discretion to issue an injunction which will permit one party to obtain any advantage by acting, when the hands of the adverse party are tied by the writ."

From these authorities it may be stated that a Court, when called upon to grant a preliminary injunction, may impose such terms, on granting it, as will protect the rights of the defendant as well as those of the complaining party, and if, after the temporary injunction has been granted, and before a final hearing while it is in force, it is shown to the Court that great injustice is being done by reason thereof, that the acts of the plaintiff are unjust, oppressive and unmindful of the rights of the defendant, the Court may modify it by imposing terms which will prevent such injustice.

This leaves for determination another very important matter,

Can the Court, for the purpose of requiring the complainant, who obtained the preliminary injunction, to do equity and preventing the imposition of extortionate rates for the carriage of freight and passengers, fix maximum rates beyond which complainants must not go during the pendency of the litigation, and make a compliance with these rates a condition upon which the temporary injunction will be continued? That the making of carrier's rates is a legislative
526 act and not judicial is frankly conceded by Counsel for the Defendant, and for this reason Courts are powerless to make them. Upon final hearing the Court must, if it is shown that the Commission rates are compensatory, within the meaning of the law, dissolve the preliminary injunction or make it perpetual if they are found to be non-compensatory, and therefore confiscatory. The authorities are not only numerous but harmonious on this subject. A few of the leading and late cases is all that is necessary to cite on the subject. Reagan vs. Farmer's Loan & Trust Co. 154 U. S. 362, 400, 14 S. Ct. 1054, 38 L. Ed. 1014; Interstate Commerce Commission vs. Ry. Co. 167 U. S. 479, 499, 505, 17 S. Ct. 896, 42 L. Ed. 242; Prentiss vs. Atlantic Coast Line 211 U. S. 210, 226. But when the application is for a temporary injunction the rule is different. As was said in Spring Valley Water Co. vs. San Francisco, supra,

"While it appears that the ordinance in question is probably confiscatory and therefore invalid, the fact that complainant will suffer irreparable injury unless an injunction issues is not decisive. The Court owes equal consideration to both parties; it must not issue an injunction which will do more harm to one party than good to the other; it should so preserve the matters in dispute as to protect each party as far as possible from harm. We have no means of knowing the plans of the company, whether it will raise the rates for the remainder of the fiscal year to the full amount of what is alleged to be reasonable—that *it*, so as to realize an income for more than $3,000.00 net—or whether it will be content with something less. If the ordi-
nance is finally adjudged valid, any collections made in excess
527 of the rates specified therein must be repaid. Such repayment can be secured by a proper bond; but if the ordinance is adjudged confiscatory and therefore invalid, there is no practicable remedy for the consumer, who, under the necessity of agreeing to the terms offered by the company or foregoing the use of water, contracts to pay and does pay more than is just. His injury is irreparable. It is not sufficient to say that Courts will enjoin the unreasonable charges, or that this Court will promptly dissolve the injunction, if, pending the suit, complainant abuses the process of the Court. Whether the rates so fixed by the company are reasonable or unreasonable is a question of fact which no court would presume to decide without a hearing, and such a hearing may be long and expensive. Most consumers will consider water of any quality or price cheaper than litigation. Neither conception of the status quo is satisfactory. Neither, if maintained, will afford adequate protection but to one party. If the ordinance is confiscatory, complainant is entitled to an additional sum which will make its compensation just and reasonable. This sum will be lost to complainant if the injunction is

denied. On the other hand, if the ordinance is confiscatory and the injunction is granted as prayed for, if complainant exacts a compensation in excess of what is just, the excess will be lost to San Francisco and its inhabitants. Equity, however, has no peculiar concern for the status quo, except that its preservation usually, if not always, accomplishes that which is the object of a preliminary injunction; that object is to preserve the fund, the property, the right or other thing in dispute, from waste, destruction or disturbance until the rights and equities of the contending parties can be finally considered and determined. Notwithstanding the fact that the
528 ordinance is probably confiscatory, and that its enforcement should be restrained pending suit in order to save complainant from irreparable injury, and interlocutory injunction, the effect of which is to give complainant the authority, practically without limit, to fix prices at which it will sell water, must be denied for the following reasons." He then proceeds to state the reasons which it is unnecessary to repeat here.

The effect of the preliminary injunctions is to leave the State without any regulating freight rates (it is otherwise as to the passenger rates as the statue in force at the time of the enactment of the Act of 1907 limiting them to three cents a mile is undoubtedly effective if the later Act is void. Railway Co. vs. State, 86 Ark. 363) and leaves the railroads without any limitation, so far as the laws of the State of Arkansas are concerned, to make them what they deem proper until the final determination of these causes. Assuming from the figures presented by the Complainants, and as found by Judge Van Devanter, that the rates enjoined are confiscatory or at least not sufficiently remunerative, the injunction, if the evidence at the final hearing is the same, would have to be made perpetual. In that event the rates collected during the pendency of these actions, no matter how excessive and unreasonable, and until the Commission can make new rates, rates sufficient to enable the roads to earn a reasonable compensation, will be wholly lost to the shippers. It is true, the preliminary injunction specially provided that, "Nothing recited in this order shall operate to prevent the said Railroad Commission of the State of Arkansas from establishing and enforcing any reasonable, compensatory and lawful rates, in place of those whose enforce-
529 ment is hereby inhibited." But it is not very probable, nay almost certain that any rates which may be proposed by the Commission, if less than those rates put in effect by the Complainants, which they claim are as low as they can make them, will cause further litigation, as supplementary bills would be filed to enjoin them as confiscatory. Of course, the Court could refuse to grant the injunction if the rates were not shown to be confiscatory, but in order to do that the Court would necessarily have to determine what rates were compensatory and just, and in all likelihood from evidence identical with that submitted at this hearing. As the Railroad Commission contends, and no doubt every member thereof believes that the rates now enjoined were compensatory, or, if not, that a very slight increase would make them so, the probabilities are that a number of suits would have to be filed by each of the railroads until a

tariff would be prepared which would justify the Court, acting upon the basis of apportionment of expense made in this case, and which will not be disturbed before there is a final hearing, if then, to refuse a preliminary injunction. In the meantime the rates, although they may be unjust and oppressive, would be collected.

Therefore, to prevent not only a multiplicity of suits, but to require complainants who seek equity — do equity, this Court is justified in prescribing such maximum rates as may be just to the railroad as well as the public. In Spring Valley Water Company vs. San Francisco, supra, Judge Farrington found that complainant would probably be entitled to a gross income of $266,675.60 in excess of that afforded by the rates fixed by the supervisors, and thereupon he held that complainant was entitled to so much relief but no
530 more and granted the preliminary injunction upon that condition.

It is true that in the San Francisco Water Company case there were only a few rates to be fixed while in these cases hundreds of different rates must be determined. This may necessitate a great deal more labor and may require the assistance of a special master, if the parties are unable to reach an agreement under the directions and instructions of the Court, if the Court finds that the rates put in force by the railroad companies since the granting of the preliminary injunctions are so exorbitant as to be unjust and oppressive. But this ought not to prevent the Court from doing justice and preventing a wrong. The difference is only one of degree and not of principle. If it appears from the evidence that the rates now in force are unreasonable, enabling Complainants to increase their earnings on intrastate rates to a much greater extent than is necessary to enable them to make a reasonable return on their investment, great damage will necessarily be sustained by the public who pay these rates, for some of which there can be no redress, even if the injunction should be dissolved. For the Court to refuse to act in such a case would be an injustice which no Court of equity should ever be guilty of. The bond executed by the railroad companies and the provisions made by the orders granting the preliminary injunctions, providing for an ascertainment of the damages, will only become effective if, upon final hearing, the injunctions are dissolved, but if it should appear upon that hearing that the rates while compensatory to some extent are still not sufficient to enable complainants to earn as much as in the opinion of the Court they are lawfully entitled to, the injunction would have to be made perpetual, although a small increase of the rates from five to
531 ten per cent would be sufficient to have made the rates compensatory within the meaning of the law. In such a case no recovery could be had by the Defendants, even if it should appear that the increase in the rates during the pendency of the temporary injunction exceeded one hundred per cent. And even if the injunction should upon final hearing be dissolved, the only damages which the law would permit to be recovered would be the difference between the rates paid under the increased tariff schedules and what would have been paid under the rates enjoined. In the mean time

industries may have been prostrated and whole-sale houses driven from the State, because, owing to the high rates in force during the pendency of these proceedings, they are unable to maintain their trade in competition with others located outside of the State and enjoying the benefits of lower interstate rates.

At the hearing of this application a great deal of testimony was introduced tending to show not only the extent of the increase of rates since the preliminary injunctions have been granted, but it was also shown that interstate rates from points outside of this State on business competitive with that of the business men of this State have not been increased. It appears from these affidavits that some branches of business have been practically suspended so far as intrastate business is concerned by reason of the fact that the lower rates given to competitors doing business in other States prevented them from being able to deliver to retail dealers in parts of this State their articles of manufacture at the same prices. It is true the railroads claim, and no doubt justly, that although the new intrastate rates have been in force for over five months, and no changes in
532 interstate tariffs have yet been made, they will soon put them in effect and they will be as high as those now in force on intrastate business; they claim that the changing of these tariffs requires a great deal of time; that the last few months have been the busiest of the year, and that under the interstate commerce law, before new intertsate rates can become effective, they must be filed with the Interstate Commerce Commission thirty days. The Court has no doubt that these statements are true, and that these complainants do not intend to discriminate against the people of this State whose welfare is necessary to their own existence; still the injury has been, and is still, being inflicted. While these facts would not be sufficient to justify this Court in declaring the rates exorbitant and unjust, they are circumstances which would be taken into consideration, not so much for the purpose of determining whether their present tariff is exorbitant as for the purpose of determining the propriety of the Court, sitting as a Court of equity, to exercise its power to prevent injustice to and oppression of the people of the State if the proofs show that it is being done.

This hearing was had on ex parte affidavits, testimony which can never be said to be conducive to obtaining exact facts, still as the most important testimony is based upon documentary evidence, the tariffs in force at the different times, and the income and expenditures of the roads, it is comparatively easy to ascertain the effect of these new rates.

On the part of the Railroad Commission comparative statements of the freight rates in force when the bill was filed and those put in since the granting of the preliminary injunctions, and
533 which are conceded to be correct, were introduced. These indicate that some rates have been raised over 200 per cent, and the average increase in the freight rates on a revenue basis, it is claimed; exceeds 77 per cent. On the other hand it is claimed by the railroad companies that some of the rates of the Commission

were absurdly low, and that the increase of the new rates, as shown by the earnings for the month of November, 1908, the first month the new rates went into effect (for one of the roads it is based on the earnings for the months of November and December, 1907) the increase is as follows:—

St. L. I. M. & S. Ry. Co., 41.80%
St. L. & S. W. Ry. Co., 41.59%
C. R. I. & P. Ry. Co., 24.95%
St. L. & S. F. Ry. Co., 17.77%
K. C. Southern Ry., 38.31%

or an average of the five roads of 36.75%. These calculations are based on the actual sums collected, compared with what would have been collected upon the basis of the rates enjoined. No doubt this is the most satisfactory, if not the only correct basis, for ascertaining, on a revenue basis, the actual increase of the rates, especially as these actions are based solely upon the ground that the Commission rates were so low as not to earn anything on the investment of complainants. But, can it be said that the business of one, or even two months, especially the first, after the new increased rates went into effect, is a proper criterion for the ascertainment of these facts. It is urged that during the winter months the rates which were raised the highest, fruit and vegetables, on which the average raise is from one hundred to two hundred per cent; grapes nearly
534 three hundred per cent; seeds from one hundred fifty to two hundred per cent; lumber, the largest tonnage commodity of the State, over one hundred per cent, do not move extensively during the months of November or December; and in addition thereto it is claimed, and so shown by the affidavits of a number of merchants, that immediately after notice had been given of the new rates, and for the several weeks before they went into effect, a great many merchants purchased all their goods on which the increase of rates was material, and had them shipped to their places of business, so as to obtain the benefit of the lower rates. These statements seem reasonable and fair; but, in any event, it is hardly reasonable, in view of the large variety of products in this State, to take the business of any one or two months for the proper standard for the year's business. This is fully shown by the fact that the revenue increase on a percentage basis of the different roads varies greatly; while the St. L. I. M. & S. R. R. Co., and the St. Louis Southwestern Ry. Co., report an increase of nearly 42%, the St. L. & S. F. Ry. Co., shows an increase of only 17.77%, and the Rock Island Railway an increase of less than 25%. No doubt the fact that the industries, as well as the products, mineral, forest and agricultural, along the line of the latter roads are different from those of the other roads, accounts for this difference. The fact that 40% of the entire tonnage of the intrastate business of the State is that of lumber and forest materials, for which the tariff has been raised over 100%, is of itself sufficient to show that the business for the months of November and December would hardly be proper tests for the business of the railroads of the State for the year, for there are hardly any

months during the year in which there is less building ma-
535 terial used than during those months. In addition to this, it must not be overlooked that the rates are not raised horizontally, but run from 3% to over 200%. Defendants have submitted some calculations based on a large number of freight bills, paid during the five months the rates have been in force. These show an average increase on a revenue basis of over 77%. But they can not be accepted as a proper test for several reasons. It has been shown that these bills constitute but a little over 1% of the freight earnings during that time, and there is nothing to show that these bills cover those rates which have been but slightly raised, say from 3% to 20%, as well as those which were increased greatly. The probabilities are that shippers would pay but little attention to small increases and furnish only such bills as indicated what they considered excessive rates. Taking the two tariff sheets, those in force at the time the injunction was granted, and those now in operation, with the percentages of increases as figured out by the experts of Complainants, and admitted by defendants to be correct, it is reasonable to say that the increase will exceed on a revenue basis considerably over 50%.

On behalf of the complainants it is also claimed that these large increases are based on the Commission rates which were much lower than the rates in force before the Commission was created, and the tariff then in force is offered in evidence to show that the present rates are but slightly, if any, in excess of those then in force. The tariff sheet offered is that of the St. Louis, Iron Mountain & Southern Railway Co. 1508-A, but it is shown that that tariff was only nominally in effect; that the real tariff was Number 3315,
536 called the "Jobber's Tariff" on which most of the freight traffic was carried, and in addition to this, there were special rates for almost every commodity in the State and that only a few of the small shippers who were ignorant of the tariff schedules were charged rates under 1508-A; that the Commission tariffs were but slightly lower than tariff Number 3315, and higher than many of the special tariffs in force at that time.

As to the special tariffs, the Court is satisfied from the evidence that they were made very low, in many instances below the cost of carriage, for the purpose of aiding in the establishment of new industries along the lines of railroads, and by these means build up the country, and thus, indirectly, increase the business and earnings of the trade. Such rates, which were not illegal at the time, can not be considered as a fair test for the purpose of determining what would be compensatory rates. That the Commission did make material reductions, even from the "Jobber's Tariff," No. 3315, has been fully established, but it is doubtful whether they amounted to as much as twenty per cent, although the Commission in its first report, claimed credit for having made reductions exceeding thirty per cent. But in considering this claim of the Commission, the Court is satisfied that in making it they were influenced by the fact that many of the large shippers who had theretofore enjoyed special rates, and which were lost by the acts of the Commission, which prohibited

discriminations, had attacked the acts of the Commission and were urging the repeal of the statute creating it. A twenty per cent reduction is a liberal estimate for the tariff of the Commission.

On the part of the Defendants it is also urged that these rates had been in force for eight years without any complaint on the
537 part of the railroads, or any effort to restrain them, and for this reason it is claimed a strong presumption arises that they were not only not confiscatory, but were just and fair. It is true that in the absence of any proof, such acts of the railroads would raise a strong presumption that the rates were compensatory, a presumption as strong as that rates made by legislative authority are fair and reasonable; still, it is only a presumption and may be rebutted. For that purpose it has been shown that the Commission rates were only submitted to under vigorous and continuous protests, and after it had been fully established by fair trial that these rates were confiscatory did the railroad companies feel justified in invoking the aid of the Courts to prevent what they consider a great injustice to them. In addition to that, it has been shown that since then there has been a continual increase in the operating expenses of the railroads in this State. The taxes have been more than doubled since the Commission first established its tariff; the cost of materials necessary for the operation of the trains and maintenance of the tracks, has increased largely; wages of all employés have been raised very materially; the legislation of the State, while no doubt prompted by the best motives, for the purpose of protecting the lives and property of its citizens, has greatly increased the operating expenses of all railroads in this State. The fellow servant rule of the common law has been abolished; railroads are made liable for all losses sustained by fires caused by sparks from locomotives, regardless of any question of diligence or negligence; the hours of labor of some of their employés have been shortened by statute; additional brakemen are required for freight trains; every
538 locomotive is required to be provided with powerful electric headlights; many new stations have been established; in some of the cities through which the roads run, they have been required to erect viaducts over some of the streets to prevent injury to persons using these streets; heavy penalties have been prescribed to secure prompt payment of wages of employés; and many other matters deemed necessary for the protection of property and the lives and comfort of the public are now prescribed by statute which were not required eight years ago. All of these add very much to the financial burden of these companies. These facts must, of course, be taken into consideration for the purposes of determining what rates are compensatory. As stated by this Court in Kansas City Southern Railway Company vs. Board of Railroad Commissioners, 106 Fed. 353, 358 (affirmed in 187 U. S. 617), in speaking of such additional expenses necessarily incurred by reason of the enactment of such laws by the different States, "And perhaps in consideration of these additional burdens imposed on railroads, it (the State) may allow a greater charge for the transportation of passengers as well

as freight through its territory than neighboring states in which no such burdens are imposed."

That the large increase in their business caused by the development of the natural resources of the State, as well as the rapid growth of its population; the use of improved machinery and rolling stock; the improved condition of the road beds after they are used for a number of years, enable the companies to carry freight, as well as passengers at a lower rate than formerly can not be doubted, but proofs now before the Court would hardly justify a finding that there has not been some increase in the cost of the operation
539 of trains in this State within the last few years, since the Commission rates went into effect, increases which were gradual but continuous.

Giving due weight to these facts, the next inquiry to be made is what rates would enable them to earn reasonable returns on their investments? So far as the passenger rates are concerned, it is, of course, easy to ascertain the increase, as the rate was raised from two cents to three cents a mile, an increase of fifty per cent; but, it is claimed that in view of the reduced rates received from the sale of mileage books, and the reductions usually offered to the public as excursion rates, when it is sought to attract large crowds for certain occasions, usually of a public nature, and reduced rates furnished to ministers of the Gospel, the actual increase in the gross receipts on passenger rates is only about thirty five per cent.

A three cent a mile rate in view of the fact that, comparatively speaking, this State is but sparsely settled and that there are no large cities in it, is not so unreasonable that the Court would feel justified upon the showing made by the roads, indicating a considerable loss on its intrastate passenger traffic, while the two cents a mile rate was in force, to disturb it while these proceedings are pending. Besides, it is well settled that for the purpose of determining whether rates are confiscatory or not, all sources of revenue must be considered. Minnesota & St. Louis R. R. Co. vs. Minnesota, 186 U. S. 257, 22 S. Ct. 900, 46 L. Ed. 1151; Seaboard Air Line Co. vs. Florida, 203 U. S. 261, 27 S. Ct. 109, 51 L. Ed. 175; Atlantic Coast Line R. R. Co. vs. North Carolina Corporation Commission, 206 U. S. 1, 27 S. Ct. 585, 51 L. Ed. 933.

540 The increased earnings from one class of traffic will, therefore, justify a corresponding decrease in another class, if the net earnings from all sources are compensatory. For this reason, if the net earnings on passenger traffic are larger, that fact would be considered in determining whether the freight tariffs fixed by the complainants are too high, and also aid in determining what they should be. It is true that lower passenger rates are felt more generally, and for this reason are more fully appreciated by the large majority of the public than lower freight rates, which are not felt so readily by the consumer, the same as the collection of direct and indirect taxes. But, so far as the interests of the public at large are concerned, it is of much more importance to them to enjoy the benefit of the lower freight rates than passenger rates, provided the latter are not excessive or unreasonable. High freight

tariffs not only directly affect the prices of commodities to the consumer, but may seriously cripple, if not totally destroy, manufacturing industries, and the business of wholesale dealers, if higher than those charged from competitive points outside of the State, as it is the price at the place of delivery which will control the trade. As the injunction against the enforcement of the two cents a mile passenger rate as being confiscatory and therefore violative of the provisions of the national constitution, leaves the three cents a mile statute, St. L. I. M. & S. Ry. Co. v. State 86 Ark, 343 (Sec. 6611, Kirby's Digest of the Statues of Arkansas) in full force, and this rate has been put in operation by the railroads since the
541 granting of the temporary injunction, this change, therefore, adds to the net earnings of the complainants at least thirty five per cent without any corresponding increase of expenditures. Whether the railroad companies should not be charged with a fifty per cent increase in these rates, in view of the fact that the reduction below three cents a mile is voluntary on their part, and not in pursuance of any act of the legislature or the Commission, need not be determined at this time, although in view of the decisions of the Supreme Court, it is very doubtful whether the railroads, if they exercise this power, can be heard to complain if by reason thereof their earnings are not compensatory. In Lake Shore, etc. R. R. Co. vs. Smith, 173 U. S. 684, 696, 19 S. Ct. 565, 43 L. Ed. 585, it was held that the State had not the power to enact such legislation without violating the national constitution, and in Knoxville vs. Knoxville Water Co., 212 U. S. 1, S. Ct. 148, it was expressly held that if the company sees proper to make reductions in special cases when not required to do so by law, the decrease, by reason of such reduction can not be considered by the Courts in determining the reasonableness of the rates fixed by law. The Court there said:

"The Company, it is true, might, if it chooses, allow such a discount (a discount of 5% for prompt payments) from the ordinance rates, but the ordinance required no discount from the rate established by it, and the company, therefore, was bound to offer none. If it stood upon the letter of the ordinance, as it had the right to do, and exacted from the consumers the full charge prescribed by the ordinance, the amount which would have been realized
542 would have been over four thousand dollars more than that found by the master."

But, as this case is not now before the Court for final determination and in view of the fact that the public is the beneficiary of these reduced, special rates, they being general and uniform, and the further fact that in this motion to modify the injunction the Court is asked to require a reduction of passenger rates, it is unnecessary at this time, to determine that question, but for the purpose of ascertaining the earnings of complainants, the Court will charge them with an increase of thirty five per cent.

As to what constitutes a reasonable rate must depend upon the facts of each case, and can not be determined without reference to the interests of the public. Covington & Lexington Turnpike Co.

vs. Sanford, 164 U. S. 378, 17 S. Ct. 198, 41 L. Ed. 560; Smyth vs. Ames, 169 U. S. 545, 18 S. Ct. 418, 42 L. Ed. 819; Reagan vs. Farmer's Loan & Trust Co., Supra; San Diego Land Co. vs. National City, 174 U. S. 739, 755, 19 S. Ct. 804, 43 L. Ed. 1154; Chicago & Northwestern R. R. Co. vs. Dey 35 Fed. 866, 878.

In Covington, etc. Turnpike Co. vs. Sandford, the Court said:

"It can not be said that a corporation is entitled of right, and without reference to the interests of the public, to realize a given per cent upon its capital stock."

This was quoted with approval in Smyth vs. Ames, and the Court there added:

"It can not, therefore, be admitted that a railroad corporation maintaining a highway under authority of the state, may
543 fix its rates with a view solely to its own interests and ignore the rights of the public. But the rights of the public would be ignored if rates of transportation of persons or property on a railroad are exacted without reference to the fair value of the property used for the public or the fair value of the services rendered, but in order simply that the corporation may meet operating expenses, pay interest on its obligations, and declare a dividend to its stockholders."

Another matter which is entitled to consideration is the fact which has been brought out at this hearing, that the St. Louis, Iron Mountain & Southern Railway Co. and the Chicago, Rock Island & Pacific Ry. Co., have, within the last few years, and since the establishment of the Commission rates, constructed extensive branch lines through new and unsettled sections of the State; that these lines were constructed at great expense, owing to the fact that the greater part of these branches runs through a swampy country, some of it subject to overflows, which necessitated high embankments; that these roads were built principally to serve as feeders for the main line, and at the same time enable these roads to obtain shorter lines for that part of its interstate traffic, which merely passed through the State. These are matters which must be taken into consideration in determining what would be proper net earnings on the investments. It would hardly be proper for the Courts to say that such roads are entitled to as great a compensation, on their investments, from intrastate business as the ordinary roads built for the accommodation of the intrastate as well as the interstate business. As is well known some of the Pacific Roads traverse the desert for hundreds of miles through a strip of territory where there is
544 practically no intrastate business, either freight or passenger. Would it be proper, in such cases, to hold that the road should have the right to charge for its intrastate traffic in that section tariff rates high enough to enable it to earn a certain, fixed percentage on its investment? Would not in such a case, the rates have to be so high as to be confiscatory of the property of the residents of that State? Must the public guaranty the railroads a certain income on their investment, regardless of the condition of the country traversed, or whether bad judgment was exercised in the selection of the route? We do not think so. New lines or branches to increase

the business of the trunk line, or the exercise of bad judgment in the building of a railroad are matters to be considered in determining what rates would be fair and just to the corporation as well as the public. That the railroads are entitled to reasonable profits on their investments, and the public to reasonable rates, or, to express it differently, that the rights of the public and railroad companies are reciprocal, is the correct rule of law.

In Reagan vs. Farmer's Loan & Trust Co., supra, Mr. Justice Brewer, speaking for the Court, in the concluding part of the opinion, said:

"It is unnecessary to decide, and we do not wish to be understood as laying down as an absolute rule, that in every case a failure to produce some profit to those who have invested their money in the building of a road is conclusive that the tariff is unjust and unreasonable. And yet justice demands that every one should receive some compensation for the use of his money or property, if it
545 be possible without prejudice to the rights of others. There may be circumstances which would justify such a tariff; there may have been extravagance and a needless expenditure of money; there may be waste in the management of the road; enormous salaries, unjust discrimination as between individual shippers, resulting in general loss. The construction may have been at a time when material and labor were at the highest price, so that the actual cost far exceeds the present value; the road may have been unwisely built, in localities where there is not sufficient business to sustain a road. Doubtless too, there are many other matters affecting the rights of the community in which the road is built as well as the rights of those who have built the road." 154 U. S. 412.

In San Diego, etc., Co. vs. Jasper, 189 U. S. 439, 446, 23 S. Ct. 571, 47 L. Ed. 892, is was held,

"If a plant is built, as probably this was, for a larger area than it finds itself able to supply, or, apart from that, if it does not, as yet, have the customers contemplated, neither justice or the Constitution requires that, say,—two-thirds of the contemplated number should pay a full return."

Nor is it required that the particular rate of compensation must in all cases and in all parts of the Country be the same. Wilcox vs. Consolidated Gas. Co., 212 U. S. 19, 29 S. Ct. 192.

Guided by these principles, the Court is of the opinion
546 that rates which will enable the complainant to earn six per cent on their investment, if fairly entitled thereto by prevailing conditions, would be reasonable, especially in view of the fact that a large part of the money used in the construction of these roads was obtained from loans secured by mortgage, and these loans only bear from four to five per cent interest per annum, thus leaving a larger return for the stockholder, who, of course, is secured, and in case of insolvency of the company would be postponed until the mortgage bondholders are paid in full. For these reasons, the risk of the investment of the stockholder being greater than that of the bondholders, he is entitled to a higher rate of interest on his in-

vestment. In determining what rates would be just and reasonable, the Court is relieved of passing upon conflicting evidence for the purpose of determining the value of the investment. Complainants in their bills, only ask for compensatory rates on the value of the roads, as determined by the State Board of Railroad Assessors for the purpose of taxation. The assessments in this State are conceded to be upon the basis of fifty per cent of the actual value of the property, and they therefore ask to be permitted to earn fair dividends on double the amount their roads are assessed for taxes. (This does not apply to the branch line of the Rock Island, lately constructed, and which is assessed at a nominal value.) For the purpose of determining how much of that amount should be taken into consideration for the intrastate traffic calculations were made by expert accountants under the direction of Judge Van Deventer and the calculations adopted by him for the purpose of passing upon
547 the motions for preliminary injunctions are now adopted.

While the revenues of the roads, and especially the increased earnings since the new rates, pending this litigation, have been put into effect, vary somewhat, it is impossible to make different rates for each road. The fact that in most of the larger cities of the State two or more of the roads compete for business, and therefore must carry freight at the same rates would prevent making different rates, and the tariffs prepared by the roads themselves are practically uniform.

The values of the roads for the intrastate traffic, as ascertained by the accountants and adopted by Judge Van Deventer, are as follows:—

| | |
|---|---|
| St. L. I. M. & S. Ry. Co. | $12,880,982.44 |
| St. L. & S. W. Ry. Co. | 4,774,880.82 |
| C. R. I. & P. Ry. Co. | 5,200,422.39 |
| St. L. & S. F. Ry. Co. | 3,519,791.41 |

The earnings of these roads for the last six months of the year 1907, calculated on a revenue basis, allowing for the greater cost of intrastate business, one hundred per cent on freight, and fifteen per cent on passenger traffic more than for interstate business, as determined by Judge Van Deventer in these cases, are as follows:

| Name of Road. | Gross Frt. Ernngs. | Frt. Exp. | Gross Pass. Ergs. | Pass. Expenses. | Net Loss. |
|---|---|---|---|---|---|
| St. L. I. M. & S. Ry. Co. | $640,248.17 | $800,041.29 | $836,542.20 | $865,423.66 | $188,674.58 |
| St. L. & S. W. Ry. Co. | ..... | ..... | ..... | ..... | 43,319.22 |
| C. R. I. & P. Ry. Co. | 210,813.57 | 372,913.48 | 253,395.52 | 220,750.00 | 129,454.39 |
| St. L. & S. F. Ry. Co. | 139,002.89 | 218,917.65 | 187,173.87 | 176,493.67 | 69,234.57 |

NOTE.—The returns of the St. L. & S. F. Ry. Co. were only for four months and in order to make them uniform with the others this table shows the earnings and expenditures for six months. 50% has been added and is included in the above. The returns of the St. L. & S. W. Ry. Co. include the earnings for the entire year ending June 30, 1908.



PAGE BOUND VERTICAL IN BOOK

549 In addition to these earnings each of the roads also showed the receipt of considerable sums from what is called "Miscellaneous Earnings," which are not included in the above tables. These earnings come principally from mail and express, but there is nothing in the evidence to show whether these items caused a net profit or not, as the auditors testified that it is impossible to divide them between intra- and interstate business. These earnings were as follows, and constitute the percentages of the entire business of the roads as shown by the figures on the following table:

PAGE BOUND VERTICAL IN BOOK



550 *Miscellaneous Earnings.*

| Name of Road. | Gross Frt. Ernge. | Percentage. | Gross Pass. Ergs. | Percentage. | Total Gross Earnings. |
|---|---|---|---|---|---|
| St. L. I. M. & S. Ry. Co. | $122,814.41 | 2.51% | $373,785.47 | 21.01% | $496,599.88 |
| C. R. I. & P. Ry. Co. | 19,033.43 | 1.48% | 78,940.50 | 11.29% | 97,940.50 |
| St. L. & S. W. Ry. Co. | 46,228.88 | 1.43% | 154,285.75 | 17.14% | 200,514.63 |

NOTE.—The St. L. & S. F. Ry. Co. did not include this item in its statement, but it would probably average the same proportion to the entire business as that of the other roads.

551 For the purpose of these proceedings, the Court is of the opinion that an increase of 33⅓% on the tariff of freight rates in force at the time these injunctions were granted, the increase to be calculated upon a revenue basis, will enable complainants to earn a reasonable compensation when added to the increased passenger rates, and at the same time prevent the exaction of unjust and unreasonable rates from the public. Calculating the increase of revenue upon that basis, the net earnings for a year, assuming that the business will be the same as it has been, will be as follows:

| Road. | Incrs. in Frt. Ergs. | Incrs. in Pass. Ergs. | Total. | Net Income. |
|---|---|---|---|---|
| St. L. I. M. & S. Ry. Co | $426,833.12 | $585,579.40 | $1,012,412.52 | $635,063.36 |
| St. L. & S. W. Ry. Co | 116,112.53 | 154,158.42 | 270,270.95 | 226,951.73 |
| C. R. I. & P. Ry. Co | 140,542.38 | 177,376.85 | 317,919.23 | 59,010.45 |
| St. L. & S. F. Ry. Co | 92,668.59 | 131,021.45 | 223,690.04 | 85,220.90 |

The net income will allow the companies a profit on their respective investments, as follows:

| | |
|---|---|
| St. L. I. M. & S. Ry. Co. | over 5% |
| St. L. & S. W. Ry. Co. | " 4.8% |
| C. R. I. & P. Ry. Co., a little less than | 1½% |
| St. L. & S. F. Ry. Co. about | 2½% |

These figures indicate that some of the roads would earn but a very small dividend on their investment so far as the intrastate traffic is concerned, but it is impossible, for the reasons hereinbefore stated, to provide the same earnings for roads whose conditions differ so widely as these do. The St. Louis, Iron Mountain & Southern Co., which does the largest proportionate intrastate business, will earn over five per cent on its investment. In view of the fact that it has built two very extensive branches lately
552 through a country having but few inhabitants and no industries, lines intended primarily for its through interstate business, so as to enable it to have a short line from the west to the Gulf of Mexico, this is a very reasonable and fair compensation. The St. Louis, South Western Ry. Co., which does the much largest proportionate intrastate business, will earn nearly 5% on the basis of its earnings for the year ending June 30, 1908, which included the first six months of the year 1908, when confessedly traffic was the smallest. Lumber which is its largest tonnage, was practically not moving at all during that time. At the final hearing, the evidence will, no doubt, show what should be considered as earnings for ordinary times. The St. Louis & San Francisco Ry. Co., although it has a large mileage in the State, does but a comparatively small intrastate business, as shown by its statement hereinbefore set out. Its gross earnings on both passenger and freight traffic being only about nine per cent of its valuation. The earnings of the Chicago, Rock Island & Pacific Ry. Co., seem to be the smallest in proportion to its investment, but a new branch line of 147 miles is included at a valuation of $3,000,000.00, although assessed at less than $300,000.00, by reason of that fact that it was but recently built through a swampy section of the State, has been but a short time in operation and was intended principally for its through interstate business. A computation of the earnings of each of the roads from its intrastate business, as compared with its valuation, as shown by their statements, will show practically
553 the same differences:

| Road. | Net loss for year. | Percentage of loss on capital invested in intrastate traffic. |
|---|---|---|
| St. L. I. M. & S. Ry. Co. | $377,349.16 | About 2.9% |
| St. L. S. W. Ry. Co. | 43,319.22 | " .9% |
| C. R. I. & P. Ry. Co. | 258,908.78 | " 5 % |
| St. L. & S. F. Ry. Co. | 138,469.14 | " 3.9% |

As the country traversed by these roads is being rapidly settled, and new industries and manufacturing plants are springing up along these lines, the intrastate business will, in all likelihood, increase rapidly. In any event, unless different rates should be made for each road, according to its location, cost of building, judgment in selection of the line, it is impossible to fix any rates which will enable each of the roads to earn the same dividend. The tariffs which they have put in effect are the same for all of the roads, and for the reasons hereinbefore stated, it would be impracticable to do otherwise.

As these suits will necessarily require considerable time before the final decrees can be rendered, either party may at any time apply to the Court for a modification of this order, if, after a fair trial, it is found that the rates are unjust to either party. The Railroad Commission, the Court is informed, has prepared a freight tariff, which, in its opinion, would increase the net revenue of these roads from freight traffic thirty three and one third per cent. Copies of these schedules should be furnished immediately to the complain-
554 ants, and the Court has no doubt that if these tariff sheets are found to be inaccurate and will not produce such an increase in revenue, the parties can agree among themselves to make such changes as will bring about that result. Should they be unable to do so, the Court will refer the matter to a Special Master for the purpose of preparing such tariff rates.

A decree modifying the injunctions now in force, in conformity with the views herein expressed may be prepared by the parties and submitted to the Court.

Endorsed on back thereof: Filed June 1, 1909. W. P. Feild, Clerk.

555 And on June 23, 1909, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

On this day come the parties in the said case, and it is thereupon ordered that Complainant execute a bond to the United States of America in the sum of Eight Hundred Thousand Dollars, signed by itself, without additional sureties, conditioned that it shall, on and after July 1st, 1909, issue to each person purchasing a ticket or paying cash fare upon the train from one point in the State of Arkansas to another point in the same State, and confined exclusively to intrastate travel, a certificate or coupon showing the amount paid by such passenger for such ticket and the date thereof; and to every shipper or consigned when paying freight on any commodity shipped from one part of the State of Arkansas to another part and which is wholly the subject of intrastate traffic a

receipt or freight bill showing the amount charged for the carriage of such freight, and also endorsed on the same bill the amount or rate which would have been charged had the inhibited rates continued in force; which receipt or coupon or freight bill shall be prima facie evidence of the amount paid and the date of payment. The Complainant shall keep a correct account, showing as respects the carriage of freight and passengers, the difference between the amount actually charged and that which would have been charged had the inhibited rate been applied, and further conditioned that if it should eventually be decided that so much of this order
556 as inhibits enforcement of the rates prescribed by the Railroad Commission of the State of Arkansas in Distance Tariff No. 3, and the two cents per mile rate prescribed by the Statute of 1907, should not have been made, that the Complainant shall refund to the owners and holders of the certificates issued by it the excess charges as shown by the same, provided, however, that such certificates as to the amounts and dates shall only be prima facie evidence of these facts.

Such bond shall be in addition to the bond heretofore executed and not in lieu thereof.

(Signed) JACOB TREIBER, *Judge*.

And on June 30, 1909, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

The Complainant Railway Company shall submit to examination and inspection of the Railroad Commission, and its Counsel and its experts and accountants, all its books, records, vouchers, reports, pay rolls, receipts, contracts and any other documents or writing relating to its intrastate business in the State of Arkansas, kept either in its general office, or in any station, upon reasonable notice to the General Auditor of the Complainant, or the person in charge of the Auditor's Office, and at such examination the Complainant may be present by its employés.

557 The information obtained by the Defendant Commission under this order shall not be divulged for any other purpose than the defense of these suits.

It is further ordered that should any employé of the Commission, or any person obtaining information by reason of these proceedings, divulge information obtained hereunder otherwise than herein provided, or conduct himself in an improper or obnoxious manner the Special Master shall report the same to the Court, in order that the Court may inflict punishment on him as for contempt, and also disbar him from further employment in the examination or investigation herein provided.

That for the purpose of ascertaining any facts relevant to the

issues involved in this action, it is necessary to examine books, reports or other papers in which interstate business as well as intrastate matters are kept, Defendant Commission, their agents and employés, shall have access to such books, reports and papers in the same manner as is provided herein for those relating to intrastate business alone.

That all matters referred to the Master in Chancery herein, in which the parties are unable to agree, the Master is authorized to determine the matters in dispute.

(Signed) JACOB TREIBER, *Judge*.

And on July 1, 1909, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
vs.
ROBERT P. ALLEN et al.

558 On this day come the parties hereto, the cause being at issue, and ask the appointment of a Commissioner to take the testimony herein, it being agreed that same may be taken on oral interrogatories, and that the testimony taken in this case and also in that of the St. Louis Southwestern Railway Company vs. Robert P. Allen et al., pending herein, may be used in each of these cases as though same were consolidated and heard together as far as applicable.

And the Court being advised that the testimony can not be produced in the usual time,—It is therefore considered and ordered that P. C. Dooley, Esq., the standing Master of this Court, be and he is hereby directed to take said testimony, with full power to compel the attendance of all witnesses and require the examination and production of all books, papers, writings, accounts, vouchers and other documents necessary; and that the Plaintiff shall have sixty days, if necessary, in which to produce its testimony before said Master, beginning October 1st, 1909; that the Defendant shall produce their testimony in sixty days, beginning at the end of said sixty days allowed Plaintiff, or when the Plaintiff's testimony is finished, if it shall conclude before the expiration of said sixty days; and that each party shall have thirty days after the finishing of the taking of testimony in chief for the production of evidence in reply or rebuttal; and this order having been made on June —th, 1909, but not entered of record, it is ordered by the Court that it be entered now for then.

(Signed) JACOB TREIBER, *Judge*.

559 And on the same day the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RY. CO.
v.
ROBERT P. ALLEN et al.

Comes the Complainant, by John M. Moore, Esq., its Solicitor, and files herein its replication to Answer of Defendant; and leave for filing said replication having been obtained on June 2nd, 1909, but not entered of that date, it is ordered by the Court that this entry bear date as of June 2nd, 1909.

Which replication is as follows:

United States Circuit Court, Western Division of the Eastern District of Arkansas. In Chancery.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY CO., Complainant,
versus
ROBERT P. ALLEN et al., Defendants.

This replicant, St. Louis, Iron Mountain & Southern Ry. Company, saving and reserving to himself all and all manner of advantages of exceptions which may be had and taken to the manifold errors, uncertainties and insufficiencies of the Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, for replication thereunto saith that he doth and will aver, maintain and
560 prove his said bill to be true, certain and sufficient in the law to be answered unto by the said Defendant, and that the answer of the said Defendant is very uncertain, evasive, and insufficient in law to be replied unto by this replicant; without that, that any other matter or thing in the said answer contained, material or effectual in the law to be replied unto, and not herein and hereby well and sufficiently replied unto, confessed or avoided, traversed or denied, is true; all of which matters and things this replicant is ready to aver, maintain and prove, as this Honorable Court shall direct and humbly prays as in and by his said bill he hath already prayed.

MOORE, SMITH & MOORE,
*Solicitors for Complainant.*

Endorsed on back: Filed June 2, 1909. W. P. Feild, Clerk.

And on July 5, 1909, the following proceedings were had, towit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RY. CO.
v.
ROBERT P. ALLEN et al.

Comes the Complainant by John M. Moore, Esq., its Solicitor and files herein its additional bond for eight hundred thousand dollars

($800,000.00) as required by order of Court dated June 23, 1909 and said Bond having been examined by the Judge of this Court the same is approved.

Which bond is as follows:

561 Know all men by these presents: That the St. Louis, Iron Mountain & Southern R'y Company is held and firmly bound unto the United States of America in the penal sum of Eight Hundred Thousand Dollars ($800,000.00), for the payment of which it hereby binds itself, its successors and assigns.

The conditions of this obligation are such that:

Whereas, in a suit of the above bounden (a corporation) against Robert P. Allen, John W. Crockett and John E. Hampton, Railroad Commission of the State of Arkansas, and Henry Leigh and George McLean, an order of temporary injunction was issued enjoining and restraining the Defendant Railroad Commissioners of the State of Arkansas from enforcing certain freight and passenger rates in said State; and,

Whereas, it was subsequently ordered in said proceeding:

"That Complainant execute a bond to the United States of America in the penal- of Eight Hundred Thousand Dollars, ($800,000.00), signed by itself without additional sureties, conditioned that it shall, on and after July 1, 1909, issue to each person purchasing a ticket or paying cash fare upon the train from one point in the State of Arkansas to another point in the same State, and confined exclusively to intrastate travel, a certificate or coupon showing the amount paid by such passenger for such ticket and the date thereof; and to every shipper or consignee when paying freight on any commodity shipped from one part of the State of Arkansas to another part, and

562 which is wholly the subject of intrastate traffic, a receipt or freight bill, showing the amount charged for the carriage of such freight, and also endorsed on the same bill the amount or rate which would have been charged had the inhibited rate continued in force; which receipt or coupon or freight bill shall be prima facie evidence of the amount paid and the date of payment. The Complainant shall keep a correct account showing as respects the carriage of freight and passengers, the difference between the amount actually charged and that which would have been charged had the inhibited rates been applied, and further conditioned that if it should eventually be decided that so much of this order as inhibits enforcement of the rates prescribed by the Railroad Commission of the State of Arkansas in Distance Tariff No. 3 and the two cents per mile passenger rate prescribed by the Statute of 1907, should not have been made, that the complainant shall refund to the owners and holders of the certificates issued by it, the excess charges as shown by the same, provided, however, that such certificate as to the amounts and dates shall only be prima facie evidence of these facts;" and,

Now, therefore, if the said St. Louis, Iron Mountain & Southern Railway Co. shall comply with and perform each and all of the terms, conditions and provisions above set forth, and shall issue the certificates or coupons to passengers, receipts or freight bills to shippers and consignees and keep the accounts as required by said

563 order to be kept, and make the payments or refunds as therein provided to be made, if it should be eventually decided that

so much of said order of injunction as inhibits the enforcement of said inhibited rates should not have been made, then this obligation shall be null and void, otherwise to remain in full force and effect.

In witness whereof, the said St. Louis, Iron Mountain & Southern Ry. Co. has caused these presents to be executed this the third day of July, 1909.

[SEAL.] ST. LOUIS, IRON MOUNTAIN & SOUTHERN RY. CO.,
By C. S. CLARKE, *Vice-President.*

Attest:
F. W. IRLAND, *Assistant Secretary.*
Approved:
JACOB TREIBER, *Judge.*

Endorsed on back: Filed July 5th, 1909. W. P. Feild, Clerk.

564 UNITED STATES OF AMERICA,
*Western Division of the Eastern District of Arkansas:*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 4th day of April, Anno Domini, One Thousand Nine Hundred and Ten, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber, Judge presiding and holding said Court, the following proceedings were had, to-wit: June 10, 1910:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes P. C. Dooley, Esq., Master herein and files his report and petition for an allowance on account of services and expenses.

Which Report of Master is as follows:

565 In the United States Circuit Court, Western Division of the Eastern District of Arkansas. In Chancery.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

To the Honorables the Judges of said Court, Honorable Jacob Treiber, Judge Presiding:

Your Master has the honor to report progress to date in the hearing before him in this cause.

October 1, 1909 was fixed by the Court as the time for the hearing

to begin. The Plaintiff not being ready, the hearing was postponed and begun on November 10, 1909, at St. Louis, Mo.

The Plaintiff closed the hearing and the taking of its testimony in Chicago, on January 29, 1910.

The volume of direct testimony taken by the Plaintiff at the hearing before the Master is about 4000 folios, all taken in St. Louis and Chicago.

The taking of testimony on the part of the Defendants was begun before the Master on the 19th day of April, 1910 and is not yet finished.

Your Master further shows to the Court that he has filed with the Clerk of this Court the direct testimony taken at the hearings before him by the Plaintiff, consisting of 1418 pages and forty nine exhibits of various kinds in five volumns.

Your Master further shows that he has paid out
566 as necessary expense, in connection with the hearing, and taking of testimony on the part of the Plaintiff, the sum of..... $317.85
And in relation to the taking of testimony on the part of the Defendants, to date, the sum of..... 151.25

Total..... $469.10

Your Master begs leave to suggest further that he has been paid nothing for his services, nor for his expenses, and inasmuch as the hearing and taking of testimony is likely to continue several more months, the Master asks that he be reimbursed the sum expended by him as above shown; and that he be made a partial allowance for his services in the sum of $2000.00. That the Court direct by whom it shall be paid and that it be paid at once.

Very respectfully submitted,

P. C. DOOLEY, *Master.*

Endorsed on back: Filed June 8, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

And on the same day the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Now, on this day comes the Complainant, St. Louis, Iron Mountain & Southern Railway Company, by its Solicitor John M.
567 Moore, Esq., and the Defendants Robert P. Allen et al., by their Solicitor, William F. Kirby, Esq., and the application of P. C. Dooley, Master herein, for the payment to him of the sum of Four Hundred and Sixty Nine Dollars and Ten Cents ($469.10), for money disbursed by him as necessary expense of the Master to

date in relation to the hearing herein and that he be allowed and paid the sum of Two Thousand Dollars ($2000.00) as a partial payment on account of services, as Master, coming on for hearing and upon consideration thereof,—

It is considered, ordered and adjudged that the Master be and he is allowed the sum of Four Hundred and Sixty Nine Dollars and Ten Cents ($469.10) for his expenses to date; and the sum of Two Thousand Dollars, ($2000.00) as partial compensation on account of his services as Master.

That the Complainants St. Louis, Iron Mountain & Southern Railway Company, and St. Louis South Western Railway Company, pay one half of said sum—$1234.55—and that the Defendants, Robert P. Allen, et al., pay one half thereof, $1234.55—which said sums shall be taxed by the Clerk of this Court as costs in this case.

(Signed) JACOB TREIBER, *Judge.*

And on July 5, 1910, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

568 Now, on this day come the parties to said cause by their respective Solicitors, and it is ordered that the taking of testimony in rebuttal on the part of the Plaintiffs be postponed until the 26th day of September, 1910.

And on September 29th, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al., Railroad Commissioners, &c.

P. C. Dooley, Esq., the Standing Master in Chancery who was directed to take the proof in these causes having died and there still being some evidence to be taken herein, it is ordered by the Court that Charles M. Rice, Esq., be and is hereby appointed Special Examiner to take the proofs offered in the above entitled causes with all the powers of and subject to the direction given by the Court to the said P. C. Dooley, Esq., in these causes.

(Signed) JACOB TREIBER, *Judge.*

And on October 1, 1910, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al., Railroad Commissioners, &c.

Comes Charles M. Rice, Esq., heretofore appointed Special Examiner to take the proof offered in the above entitled cause
569 and files herein his oath as such Special Examiner, which is as follows:

"UNITED STATES OF AMERICA,
*Eastern District of Missouri:*

I, Charles M. Rice, do solemnly swear that I will support the Constitution and laws of the United States and that I will faithfully discharge the duties of Special Examiner in the causes of St. Louis, Iron Mountain & Southern Railway Company vs. Robert P. Allen, et al., State Board of Railroad Commissioners of Arkansas, No. 1637 and St. Louis Southwestern Railway Company against same Defendants, No. 1636, pending in the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas, to which position I have been appointed by the said Court.

(Signed) CHARLES M. RICE.

Subscribed and sworn to before me this 30th day of September, A. D., 1910.

[SEAL OF SAID COURT.] JAMES R. GRAY,
*Clerk of the Circuit Court*
*Eastern District of Missouri.*"

Which said oath is on file in this office.

And on October 12, 1910, the following proceedings were had to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

570 Comes the Defendant, Railroad Commission of Arkansas, by James M. Hill, William F. Kirby and James H. Harrod, Esqs., its Solicitors and files herein its Motion to modify the order heretofore entered herein permitting the Complainant to charge three cents per mile on passenger traffic and to restrain it from charging more than two cents per mile on intrastate passenger traffic.

Which Motion to Modify the Injunction is as follows:—

In the United States Circuit Court for the Eastern District of Arkansas.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, Plaintiff,

v.

ROBERT P. ALLEN et al., Defendants.

Comes W. A. Falconer, Chairman, Robert P. Allen, and John W. Crockett, Commissioners, constituting the Railroad Commission of the State of Arkansas, Defendants herein, and under leave of Court heretofore granted and move this Honorable Court for a change in the rates in force by the Plaintiff Railroad pending this litigation, — say:

That at the hearing heretofore had this Honorable Court found the freight rates promulgated by the Plaintiff Railroad to be unreasonable, and pursuant to a suggestion made by the Court the traffic officials of various railroads, including the Plaintiff Railroad and the Railroad Commissioners, conferred over the con-
571 struction of a tariff which would yield to Plaintiff Railroad approximately thirty three and one third per cent more revenue than Distance Tariff No. 3, the enforcement of which had been enjoined by Honorable Willis Van Deventer, United States Circuit Judge. That a tariff was agreed upon and put in force on June 1, 1909, known as the "Court Tariff." Under the operation of said tariff Plaintiff Railroad has increased its State freight revenue — per cent, so the Defendants are informed and believe. That at the hearing aforesaid this Honorable Court declined to interfere with the three cent passenger rate which had been put in force by the Plaintiff Railroad, and the Plaintiff Railroad has charged three cents per mile passenger rate from that time until the present time and is still charging the same.

That in sustaining its case, the theory upon which the Plaintiff seeks to prove that freight and passenger rates in force were confiscatory is known as "the revenue theory," and by a vast preponderance of the testimony already taken in the case it is established that whatever value that theory may have elsewhere, so far as applied to the conditions in Arkansas its application as a factor to divide the intrastate and interstate expenses is without relation to the subject, owing to the rate conditions prevailing in the State of Arkansas.

The State rate and interstate rate are such that it is impossible to measure the expenses by the revenue received from the traffic with even a remote approximation to accuracy. That the State has carefully examined the expenses of the Plaintiff Railroad in the State of Arkansas and has localized, so far as possible, all ex-
572 penses between State and interstate traffic, and where it is impossible to localize those expenses, has used the most appropriate factor to approximate the same, taking the factor in each instance

most nearly representing actual conditions. In this way the State has been able to demonstrate that the contentions of the Plaintiff made in ex parte affidavits submitted to Judge Van Deventer, that the State passenger traffic cost fifteen to fifty per cent more than interstate passenger traffic, in proportion to revenue, was wholly without foundation in fact. On the contrary, the facts are that for the six months ended December 31, 1907, when the two cent passenger fare was in force, the Plaintiff Railroad was making a return upon its property devoted to intrastate passenger business (dividing such property according to the Railroad's formula of so dividing it) of 5.21 per cent; and suffering a loss on the interstate passenger business of 3.44 per cent. That during said period the revenue per passenger mile on State traffic was $.01929; and the revenue per passenger mile in interstate traffic was $.01865.

It was further shown that on the total State business Plaintiff Railroad was earning 7.69 per cent return upon its property, (dividing its property according to the railroad's formula of dividing same).

That owing to the increased freight earnings under the Court Tariff over Standard Distance Tariff No. 3, and owing to the increase in the passenger earnings over said period of from two to three cents, the rates, passenger and freight, now being earned
573 by the Plaintiff Railroad are unreasonable, unlawful and burdensome to the people of the State.

Reference is made to a petition filed in these cases in the case of J. J. Carle vs. Chicago, Rock Island & Pacific Railway, and to the case of Wilbur F. Boyle vs. St. Louis & San Francisco Railroad, wherein it is shown that said railroads have been operating for the past fifteen months under a two and one half cents passenger rate, and are now seeking to impose a three cent passenger rate in the State of Arkansas, on all intrastate passengers. That for the reasons set forth in the petition of the Railroad Commission in said cases, said Commission conceives it is its duty to oppose the three cent passenger rate being put in force by said roads, and in view of the fact that said roads are making less return upon their property devoted to State traffic, it would be inequitable and unjust to prevent them charging three cents while the Plaintiff Railroad is charging three cents.

In view of the facts developed in said hearing, as hereinbefore set forth, the Railroad Commission prays this Honorable Court to modify the order heretofore made, permitting the Plaintiff Railroad to charge three cents per mile on passenger traffic and restrain it from charging more than two cents per mile on intrastate passenger traffic.

JOSEPH M. HILL,
WILLIAM F. KIRBY,
JAMES H. HARROD,
*Attorneys for the Railroad Commission.*

Endorsed on back: Filed Oct. 12, 1910. W. P. Feild, Clerk.

574 And on October 13, 1910, the following proceedings were had, to-wit:

No. 1537.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant by Moore, Smith & Moore, Esqs, its Solicitors, and files herein its response to the Motion filed herein on October 11, 1910.

Which response of the Complainants is as follows:

No. 1637.

In the United States Circuit Court for the Eastern District of Arkansas. In Chancery.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, Plaintiff,
v.
ROBERT P. ALLEN et al., Defendants.

*Response by Complainant to Defendants' Motion to Modify the Injunctions in said Cause.*

Complainant in response to Defendants' aforesaid application denies that it has earned or is earning a greater amount of revenue from its passenger traffic or a sufficient amount to enable it to realize a net revenue of 6% per annum on said business, or to amount to reasonable or adequate compensation for the service performed by it conducting said traffic.

It further denies that it is earning a net revenue equal to
575 6% per annum or reasonable or adequate compensation on its freight business under the Court Tariff.

It denies that under the operation of said Tariff it has increased its State freight revenue more than — above that allowed by the Arkansas Commission.

For further response Complainant represents that all of the testimony in chief on the part of the Complainant in support of its views as to the relative expense of conducting State and interstate traffic and the manner in which same should be divided between said classes of traffic, upon which the Honorable Willis Van Deventer, Circuit Judge, acted in granting the preliminary injunction in said proceeding, and all the testimony in chief on the part of the Defendants contesting the aforesaid views and methods of apportionment of expense as between State and interstate traffic, and in support of other views and methods entertained by them have also taken, and Complainant is now engaged in taking its testimony in rebuttal and it believes will complete same before the end of the current month.

That the effect of said motion as entertained by the Court would be to arrest the taking of testimony during the hearing thereof and require the Court to hear the present application on ex parte statements, or to investigate and hear argument on the effect of the testimony that has been taken as aforesaid, notwithstanding the fact that the Complainant is in the midst of taking its testimony in rebuttal and expects to take additional testimony that
576 will be relevant and material in support of its contention and in opposition to the contention of the Defendants, and that this cause will be ready for submission in a few weeks and would then have to be re-argued and re-heard by the Court, which Complainant verily believes and alleges would operate as great a hardship upon it and as a great burden upon the Court and Counsel and would not conduce to the ends of justice.

Wherfore, Complainant prays that Defendants' motion to re-open the question upon which the temporary injunction was granted and to modify said injunction on an interlocutory hearing at this stage of the case and on a part only of the testimony material to its determination be denied.

MOORE, SMITH & MOORE,
*Attorneys for Respondent.*

Endorsed on back: Filed Oct. 13, 1910. W. P. Feild, Clerk.

577 UNITED STATES OF AMERICA,
*Western Division of the*
*Eastern District of Arkansas:*

Be it remembered, that at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 17th day of October, Anno Domini, One Thousand Nine Hundred and Ten, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber, Judge presiding and holding said Court, the following proceedings were had, to-wit: January 2nd, 1911.

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant by John M. Moore, Esq., its Solicitor, and come the Defendants by James H. Harrod, Esq., their Solicitor, and this cause having been set down for final hearing on the date, and it appearing to the Court that Joseph M. Hill, senior Counsel for Defendants, is unavoidably detained and can not reach the hearing, it is ordered by the Court, by agreement of parties, that the hearing hereof be continued until tomorrow morning.

578 And on January 3rd, 1911, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT, and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas; Henry Leigh and George L. McLean.

Comes the Complainant, by Moore, Smith & Moore, Esqs., and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and this cause now coming on for final hearing upon the bill, exhibits thereto, answer, replication and all pleadings and proofs in the case, together with all depositions and exhibits thereto taken before the Master or otherwise, thereupon the Court proceeds to hear the evidence and argument of Counsel as well on the part of the Defendants as of the Complainant, and the hearing hereof not being concluded, the same is continued until tomorrow morning at half past nine o'clock.

And on January 4th, 1911, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not
579 being concluded on yesterday the same is now resumed, and the hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 5th, 1911, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed; and the hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 6th, 1911, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and
580 James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed; and the hearing hereof not being concluded, the same is continued until tomorrow morning at half past nine o'clock.

And on the same day the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes Charles M. Rice, Esq., Special Examiner herein, and asked the Court for an allowance for his services and expenses in these causes and come the parties by their respective Solicitors and the Court being well and sufficiently advised in the premises,

It is considered, ordered and adjudged by the Court that Charles M. Rice be and he is hereby allowed the sum of Five Hundred Dollars, ($500.00) as his compensation for his services as Special Examiner and the further sum of Forty-Three Dollars and Twenty-five Cents ($43.25) for expenses incurred by him in the performance of his duties as such Special Examiner, and that the Complainants, St. Louis, Southwestern Railway Company and St. Louis, Iron Mountain & Southern Railway Company pay one half of said sum ($271.63) and that the Defendants Robert P. Allen et al., &c., pay one half thereof, ($271.62), which said sum shall be taxed by the Clerk of this Court as costs in these causes, when finally determined.

581 And on January 7, 1911, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod,

Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed; and the hearing hereof not being concluded, the same is continued until Monday afternoon at half past one o'clock.

And on January 9, 1911, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on Saturday, the same is now resumed; and the hearing hereof not being concluded the same is continued until Mon-
582 day morning, January 16th, 1911, at half past nine o'clock.

And on January 9th, 1911, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, their Solicitors, and it being made to appear to the Court that the term of office of John W. Crockett and John E. Hampton, Railroad Commissioners of the State of Arkansas, Defendants herein, has expired, and that under the laws of the State of Arkansas, W. F. McKnight and George W. Bellamy have been elected to succeed said John W. Crockett and John E. Hampton, as Railroad Commissioners of the State of Arkansas, and have qualified and are now acting as such.

It is now ordered by the Court, by consent of the parties hereto that the names of W. F. McKnight and George W. Bellamy be substituted for that of John W. Crockett and John E. Hampton, and that this cause abate as to said Crockett and Hampton, and progress in the name of W. F. McKnight and George W. Bellamy, substituted as Defendants herein.

And on January 16, 1911, the following proceedings were had, to-wit:

583 No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, W. F. MCKNIGHT, and GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on January 9th, 1911, is now resumed; and the hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 17th, 1911, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, W. F. MCKNIGHT, and GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors and come the Defendants by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed; and the hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 18th, 1911, the following proceedings were had, to-wit:—

584 No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, W. F. MCKNIGHT, and GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., its Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed; and the hearing hereof not being concluded, the same is continued until tomorrow morning at half past nine o'clock.

And on January 19th, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, W. F. MCKNIGHT, and GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed; and the hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 20th, 1911, the following proceedings were had, to-wit:—

585 No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, W. F. MCKNIGHT, and GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Eqs., its Solicitors and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed; and the hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 21, 1911, the following proceedings were had, to-wit:—

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, W. F. MCKNIGHT, and GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors; and the hearing hereof not being concluded on yesterday, the same is now resumed; and the Court having heard the evidence and argument of Counsel and not now being well and sufficiently advised as to what judgment to render herein takes time to consider of its judgment.

586 UNITED STATES OF AMERICA,
*Western Division of the Eastern District of Arkansas:*

Be it remembered, that at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 4th day of April, Anno Domini, One Thousand Nine Hundred and Eleven, at the United States Court Room in the City of Little Rock, Arkansas, the Honorable Jacob Treiber, Judge presiding and holding said Court, the following proceedings were had, to-wit: On May 11th, 1911:

587 No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY, and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George McLean.

Now, on this day comes the Complainant, by its Solicitors, Moore, Smith & Moore, Esqs., and also come the Defendants, by their Solicitors, Joseph M. Hill and James H. Harrod, Esqs., and thereupon said cause having been argued and submitted upon the evidence and stipulations on file and of record in said cause, and having been taken under advisement at a former term of this Court, and the Court being well and sufficiently advised in the premises,

It is accordingly ordered and decreed that the Defendants Robert P. Allen, George W. Bellamy and William F. McKnight, as Railroad Commissioners of the State of Arkansas, and Henry Leigh and George McLean, and each of them, their agents, employees and successors as well as all other persons patrons of complainant, either in the shipment of freight, or as passengers between stations on Complainant's road in the State of Arkansas, are hereby perpetually enjoined from enforcing or attempting directly or indirectly by any suit or in any manner whatsoever to enforce against the Complainant, its officers, agents, employees or servants, any of the provisions of Standard Freight Distance Tariff No. 3, and amendments thereto adopted prior to the institution of this section, prescribing the rate or rates for the transportation of classes and commodities or any provision of said tariff whereby any of said
588 rates shall be continued in force, or from enforcing or attempting directly or indirectly, by suit or in any other manner whatsoever, to enforce against Complainant, its officers, agents, or servants, any of the provisions of an Act of the General Assembly of the State of Arkansas, entitled, "An Act to Amend Section 6611 of Kirby's Digest of the Statutes of Arkansas, by Fixing Passenger Rates in this State and For Other Purposes," approved February 9th, 1907, or to enforce the provisions of any other Act or Acts of the Legislature of said State providing penalties for non-compliance by Complainant with the provisions and requirements of Standard Freight Distance Tariff No. 3 and amendments thereto as aforesaid,

or the aforesaid Act of the Legislature of the State of Arkansas, fixing passenger rates in said State.

It is further ordered that the costs incurred by Complainant and Defendants respectively, in procuring the attendance of witnesses before the Master and the payment of the fees of stenographers in the recording of said testimony be borne by the Complainant and the Defendants, Robert P. Allen, George W. Bellamy and William F. McKnight and that neither party recover from the other therefor; that all remaining costs including Master's fees, the Complainant pay one fourth and the Defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners aforesaid pay one half, the other one fourth to be paid by Complainants in case No. 1636, the payment of said costs to be recovered by execution to be issued by the Clerk of this Court upon application of either party in interest.

589 It is further ordered that the bond for injunction filed by the Complainant here be released and the sureties thereon discharged from liability.

And the Court hereby reserves and retains unto itself jurisdiction of the subject matter of this suit and of all parts hereto to the end that such other and further orders and decrees may be made herein as may become necessary herein by reason of any changed condition as to the facts, equities or rights that may hereafter take place or arise.

(Signed) JACOB TREIBER, *Judge.*

The following testimony was adduced at the hearing of the cause:

590 The Circuit Court of the United States for the Western Division of the Eastern District of Arkansas.

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
vs.
ROBT. P. ALLEN et al.
and
THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
vs.
ROBT. P. ALLEN et al.

*Hearing Before the Master.*

ST. LOUIS, MO., *Nov.* 10, 1909.

The above entitled causes coming on for hearing before the Master duly appointed by the Court, the parties appeared by their respective counsel at the Federal Building, in the City of St. Louis, Missouri, on the 10th day of November, A. D. 1909.

Appearances:

Hon. P. C. Dooley, Special Master.
Mr. J. M. Moore appeared in behalf of the Complainants.
Messrs. J. M. Hill and W. F. Kirby appeared in behalf of the Defendants.

The following proceedings were had:

It is stipulated by and between counsel that all the testimony taken before the Master, under the reference, will be used, so far as applicable, in both cases above named, and that all exceptions as to competency and relevancy are reserved to the hearing before the court.

591 FRED P. JOHNSON, a witness called on behalf of the complainants, being first duly sworn, testified as follows:

Direct examination.

By Mr. MOORE:

Q. Mr. Johnson, will you state your name in full; your residence and your occupation?

A. Fred P. Johnson; St. Louis, Mo. Chief Clerk in the Auditor's office of the Iron Mountain Railroad.

Q. Are you an accountant, is that your business?

A. That is my experience.

Q. State what your connection is with the St. Louis, Iron Mountain & Southern Railroad Company at this time, and how long have you maintained that relation?

A. I began work with the Iron Mountain Railway as a messenger boy, twenty-one years ago. All of my service has been in the Auditor's office and in such departments as deal entirely with the accounts of the Railroad. For seven years I have been in charge of a department in connection with the special operating statistics.

Q. How long have you been working in the accounting department of the Railroad Company.

A. For the twenty-one years.

Q. Otherwise than as messenger; that is, in direct con-
592 nection with the accounts that are kept in that department?

A. For perhaps nineteen years, nineteen of the twenty-one.

Q. Have you a map of the Missouri Pacific Railway system, including the St. Louis, Iron Mountain & Southern Railroad?

A. Yes sir.

Q. Will you file that map as Exhibit 1, of your testimony?

A. Yes sir.

The paper referred to is offered in evidence, as Exhibit 1, to Mr. Johnson's testimony; said exhibit being — the words and figures as follows, to wit:

For Exhibit One, see Volume 8, page 5236.

593 Q. Please state in what manner the line of the St. Louis, Iron Mountain & Southern Railroad is designated on the map you have filed.

A. The map shows all of the lines of the Missouri Pacific-Iron Mountain system and connections in Texas. The Iron Mountain Railway is shown in blue. In the states of Missouri, Arkansas, Louisiana and Oklahoma, the Iron Mountain is designated by the blue line.

Q. What are the red lines?

A. The red line indicates the Missouri Pacific Railway, and (I presume it is pink), indicates the St. Louis Southwestern.

Q. Have you prepared a statement showing the track mileage of the St. Louis, Iron Mountain & Southern Railway?

A. Yes sir. I have a statement here that shows the mileage of the St. Louis, Iron Mountain & Southern Railway by branches; also divided between the miles owned and the miles leased, and the statement shows the proportion of the mileage of each of the branches located in the state of Arkansas.

Q. Please state the dates at which all of the mileage shown in the map, in the state of Arkansas, was acquired by the Railway Company.

A. The statement itself is made up from our records as of June 30, 1908; but I will say there has been no change in the mileage between that date and the present time.

Q. Please state if all, and if not all, what parts of the line as shown on the map, were in operation during the year 1907.

594 A. All of the mileage indicated on the map was in operation during the latter part of 1907; if I understand the question right.

The paper showing track mileage is offered in evidence, as Exhibit 2, to Mr. Johnson's testimony; said exhibit being in the words and figures as follows, to wit:

For Exhibit two, see Volume 8, page 5237.

595 Q. Have you a statement showing the earnings and expenses of the operation of the St. Louis, Iron Mountain & Southern Railway, in the state of Arkansas, for the six months ending December 31, 1907?

A. Yes sir.

Q. Who prepared that statement?

A. The statement itself was prepared under my direction. The details were worked out by several departments.

Q. Does the statement correctly reflect what is shown by the books of the Railway Company, as to earnings and expenses?

A. Yes sir.

Q. And is that the record that is used by the Company in its business, in its reports and all of its affairs?

A. Yes sir.

Q. Does that statement show earnings and expenses of transportation, in freight and passengers, respectively?

A. Yes sir.

Q. Does it separate the state from the interstate earnings?

A. Yes sir; in so far as freight and passenger are concerned.

Q. Does it show the basis upon which the revenue is divided between states, and between interstate and intrastate business?

A. Yes sir.

Q. Does it show the basis used in dividing the expenses
596 of operation, taxes and rentals, between states, and between freight and passenger business?

A. Yes sir.

Q. Does the statement contain a comparison of expenses of conducting freight and passenger transportation, between state and interstate business, and the basis and formula used for that purpose?

A. Yes.

Q. Will you introduce the statement as Exhibit 3?

A. Yes sir.

The paper referred to is offered in evidence, as Exhibit 3, to Mr. Johnson's testimony; said exhibit being in the words and figures as follows, to-wit:

For Exhibit three, see Volume 8, page 5239.

597 Q. Mr. Johnson, that statement consists of an account of earnings and expenses and is then followed by various statements relating to the matters in regard to which I have asked you in connection with this. I wish you now to begin with the accounts, and in your own language, without any further questions from me, to explain the accounts and the statements attached thereto, in the order in which they appear on the statement.

A. The exhibit itself consists of a statement of earnings and expenses of the Iron Mountain Company in the state of Arkansas, for six months ending December 31, 1907.

Paragraph A, shows the gross revenue of the Iron Mountain Company, in the state, divided between intrastate freight and interstate freight; miscellaneous freight; intra-state passenger and interstate passenger, and all miscellaneous passengers. The statement also shows the percentage of each class of freight and passenger revenue, to the total of each class——

Q. You mean the total of each account?

A. Yes, to the total of each account, and the percentage of each class of revenue to the grand total of revenue.

Q. Of both?

A. Of both freight and passenger. Now, paragraph A, is supported by statement #1, that shows the revenue under the various nineteen counts authorized by the Interstate Commerce Commission.

598 The methods used in apportioning the revenue to the State of Arkansas, and of dividing the revenue between intrastate and interstate, are shown in Statement #2, attached to that exhibit,—attached to this exhibit is statement #3, showing the gross revenue under the nineteen revenue accounts for the entire line, and also the revenue under each of these accounts for the state of Arkansas.

Statement No. 3 also shows various statistics relative to train, car and engine mileage, and the volume of business handled both upon the entire line and in the State of Arkansas; and the percentage of revenue from the business handled in the State to the revenue of the

business of the entire line. The purpose of that statement is to show that the proportions of the revenue accruing in the state of Arkansas are in line with the business handled.

Paragraph B, of the exhibit, shows the total operating expenses, taxes and rentals, of the Iron Mountain in the state of Arkansas, divided between freight and passenger, and separated under the general expense items, such as maintenance of way and structures; maintenance of equipment, and general expenses. The basis used in apportioning the expenses to the state of Arkansas and of dividing them between the freight and the passenger service, are shown in Exhibit #5; or rather, in statement #5, let me make that. Statement #4, attached to the exhibit, shows the operating expenses under each individual expense account, both for the entire line and for the state of Arkansas, and the proportion of the state of Arkansas to the entire line.

599 These percentages were worked out for the purpose of compairing them with the revenue and the business handled, to indicate that the expenses had been normal.

Paragraph C, of this exhibit, shows the assessment of the State Board of Equalization for the purpose of taxation, showing the amount assessed for the purpose of taxation, and this amount is divided between the freight and passenger service, and also divided to show a proportion of the total assessment for the six months' period, and underneath that we show the interest upon these amounts, both at six percent and seven percent, and at eight percent.

Paragraph D, is a——

Q. The amount of the assessment as set out in paragraph C, is $20,156,022.00. Please state how you arrived at that amount and for what purpose.

A. The item of $20,156,022.00 is the assessment made by the Arkansas State Board of Equalization.

Q. Upon what basis of valuation?

A. We have always understood that that was on the basis of fifty percent of what they considered the actual value; so in determining the value, for the purpose of this statement, we have multiplied the twenty million dollars by two; to get valuation of the property, and six percent interest is figured upon one-half of that amount to determine the amount of interest for six months.

Q. You take the figures $20,156,022.00 as representing one-half of the total valuation, as indicated by the assessment, appli-

600 cable to the six months, the half year?

A. Yes sir. Paragraph D, is merely a recapitulation of the total business in the state of Arkansas, as shown in the preceding paragraphs, and indicates that after deducting taxes and rentals, there is a balance of $1,464,207.80 in freight and $35,567.55 in passenger business, and that that is equivalent to a return of 9.9% upon the assessed value shown in paragraph C, in freight service, and .66% in passenger service, or a total of 7.44% return upon the assessed value of the property. That is both state and interstate combined.

Paragraph E, shows the intrastate gross freight and passenger revenue and the proportion of the total operating expenses in the state

of Arkansas, ascertained upon a revenue basis, assigning to the intrastate services 13.08% of the entire freight expense, which was the percentage of intrastate freight revenue to the total freight revenue, and assigning 47.03% of the entire passenger expenses to the intrastate passenger service, and then deducting a proportion of the taxes and rentals, ascertained in the same way, leaving in the freight service $191,334.05; in the passenger service $16,690.16.

Now from the amounts thus left we have deducted, in paragraph F, various amounts to cover extra cost of handling state freight.

Q. Mr. Johnson, please state why the results are stated as they appear in paragraph F, of your exhibit.

601 A. The various percents of extra cost were figured at the request of our legal department. We have figured the extra cost at various percentages, showing the results here.

Paragraph G, shows the percentage of the assessed valuation of the property assignable to the intrastate business on a basis of the revenue percentages. This paragraph shows, that making no allowance for the extra cost of handling intrastate traffic, the percent of the return upon the values shown would be 9.89% in freight, and .66% in passenger; or, 4.66% on the total business. Allowing fifty percent for the extra cost of handling intrastate traffic, and making no allowance for the extra cost of the passenger, the percentage of the return would be, in freight .93%; passenger .66% or a total of .78%.

Now, the statements accompanying this exhibit are merely the detailed figures in support of the exhibit itself.

Q. What are statements numbered 6 and 7?

A. Statement number 6 shows the formula or method used in arriving at the extra cost in handling state business under the various percentages used. Statement number 7 shows the same information for the passenger service. I want to say in connection with the division of these earnings, as between intrastate and interstate, they are handled under or by a special department in charge of Mr. Roth, of our office and he is, perhaps, in a better position to explain them in detail than anyone else would be.

602 Q. I notice, Mr. Johnson, that in the two paragraphs of the note at the end of statement number 2, you say no attempt has been made to divide miscellaneous revenue between state and interstate. Please explain why that was not done.

A. Well, in the first place, we have no reasonable basis for making such divisions, and we don't believe that miscellaneous business has any bearing on this case; at least, we did not in making up these figures. The miscellaneous revenue includes the revenue from mail and express business. The rates upon mail and express were not under the control of the railroad, nor are they part of this litigation, and for that reason no attempt has been made to assign any part of the miscellaneous earnings, either of freight or passenger, to the intrastate and interstate freight or passenger service. In place of that we have assigned to the miscellaneous earnings a certain proportion of the operating expenses in each class of service, so as to provide for

the expense of that business, and then deal entirely with the freight and passenger traffic.

Q. You have eliminated the miscellaneous expenses as well as the miscellaneous earnings then, have you?

A. Yes sir.

Q. And have excluded both classes from your statements?

A. Yes sir.

Q. Do the rates prescribed by the Railroad Commission of the state of Arkansas cover express transportation?

A. Freight railroad rates do not.

That statement, exhibit #2, if you please, takes up each
603 one of the nineteen revenue accounts and it shows how we divide the revenue between the state of Arkansas and between other states, and how the various miscellaneous revenue accounts are divided as between freight and passenger service, treating each one of them separately.

Q. Is there any further explanation you desire to make in connection with exhibit 3?

A. No sir.

Q. Have you prepared a statement of the earnings and expenses for the six months ending December 31, 1907, as the same were ascertained and divided by Judge Vandevanter at the hearing held by him on the application for the injunction in this case?

A. Yes sir.

Q. Will you file that statement as Exhibit 4?

The paper referred to is offered in evidence, as Exhibit 4, to Mr. Johnson's testimony; said exhibit being in the words and figures as follows, to wit:

For Exhibit four, see Volume 8, page 5620.

604 Q. In what way did Judge Vandevanter apportion the values as shown by the assessment made by the state of Arkansas, as between intrastate and interstate?

A. Shall I explain that or shall I read it? I just embodied his own words in this.

Q. You can just state that.

A. Judge Vandevanter's basis of assigning the value of the property between each class of service, is shown on the first page of the statement #1, which accompanies this exhibit.

Q. That is on the basis of the cost of operation?

A. The amount of the assessment would be divided between the various classes of the business on the basis of the cost to operate each class, and the division upon that basis; or rather, the percentages of that division, are shown on the third page of this statement #1.

Q. Have you prepared a statement containing statistics which have a bearing on the relation to the business handled during the six months that are covered by Exhibit 3?

A. Yes.

Q. Will you file that as exhibit number 5?

A. Yes sir.

The paper referred to is offered in evidence as Exhibit 5, to Mr. Johnson's testimony; said exhibit being in the words and figures as follows, to wit:

For Exhibit five, see Volume 8, page 5266.

605 A. This statement simply shows the number of tons, ton miles and the revenue on each class of business, and the various items of train and car mileage, for the period of six months ending December 31, 1907.

Q. Have you also prepared a statement showing comparative averages, based upon statistics published by the Interstate Commerce Commission for 1907, with the average based on the business handled by the Railroad Company during the period referred to in Exhibit 3?

A. Yes sir.

Q. Will you file that as Exhibit number 6?

A. Yes sir.

The paper referred to is offered in evidence, as Exhibit 6, to Mr. Johnson's testimony; said exhibit being in the words and figures as follows, to wit:

For Exhibit six, see Volume 8, page 5269.

606 A. That statement shows the percentage of each class of revenue to the total revenue, and the percentage of each class of operating expenses to the total operating expenses; and miscellaneous passenger and freight statistics covering the railroad business of the United States, and the business of all lines in what is called by the Interstate Commerce Commission, "Group number 8," with the same statistics for the St. Louis, Iron Mountain & Southern Railway Company, and for that portion of the Iron Mountain Railway located in the state of Arkansas. The purpose of compiling it was to show the comparison between those various groups. The statistics covering the United States and Group 8, were taken from the 20th annual report of the Interstate Commerce Commission.

Q. What states comprise Group 8?

A. Missouri, south of the Missouri River; Arkansas, Louisiana, Texas, Oklahoma and Kansas, I believe.

607 HUBERT ROTH, a witness called on behalf of the complainants, being first duly sworn, testified as follows:

Direct examination.

By Mr. MOORE:

Q. Mr. Roth, state your name in full, please; your residence and your occupation.

A. Hubert Roth; Webster Grove, Mo. I am assistant chief clerk, in charge of special statistics.

Q. Do you mean of the St. Louis, Iron Mountain Railroad?

A. Yes, sir, St. Louis & Iron Mountain Railway.

Q. How long have you been engaged in that kind of work?

A. I have worked for the Iron Mountain about ten years.

Q. And have you had experience in compiling statistics and in keeping accounts?

A. For all of that time, yes, sir.

Q. Did you prepare the statement number 1, attached to Exhibit #3, introduced by Mr. Johnson in this case, showing the interstate gross revenue of the St. Louis, Iron Mountain, for the six months ending December 31, 1907?

A. Yes, sir.

Q. Now, what source was that information obtained from that is embodied in that statement?

A. The intrastate freight was compiled separately from our journals, which are a record of the way-bills. The interstate earnings are worked up month by month, by dividing the total earn-

608 ings of the Iron Mountain Railway by the percentages which the Arkansas track miles; or rather, the haul through Arkansas bears, to the whole of the haul of that particular freight over the Iron Mountain. Then we take the total earnings as shown by the books, as accruing in the state of Arkansas, and deduct from that the special intrastate statistics we have worked up, which would give us the interstate end of the earnings.

Q. Now, I understand, Mr. Roth, you took the statement of the interstate business from the books of the Company. Is that correct?

A. The total business, yes; which includes both interstate and intrastate.

Q. You obtained that from the books of the Company?

A. Yes sir.

Q. And this statement contains an account of the intrastate, or state business?

A. Yes.

Q. Did you work that up? That is what I want to know.

A. We worked that up, yes, sir.

Q. It was done under your supervision and direction?

A. Yes sir.

Q. And did you have personal cognizance of it?

A. Yes sir.

Q. And you know it is correctly taken from the books and data contained in the records.

A. Yes sir.

609 FRED P. JOHNSON recalled:

Cross-examination.

By Mr. J. M. HILL:

Q. You have not included in your exhibit 3, your assessment of the State Board of Railroad Commissioners, for the year 1907 by divisions, have you?

A. No sir.

Q. Have you made up such a statement which you can furnish to the Master?

A. Yes sir, we have such a record.

Q. Look at this and see if that is it?
A. (After examining paper) Yes, sir.
Q. This is a correct statement, is it Mr. Johnson?
A. It is, so far as I know. It is taken from the reports of the Board of Equalization, yes, sir.
Q. Have you some other copies of this? If convenient I would like to make this your cross-examination exhibit No. 7.
A. I have not any copies, but I can have them prepared.

The paper referred to is offered in evidence, as Exhibit 7 to Mr. Johnson's testimony.
Said exhibit is in the words and figures following to-wit:
For Exhibit seven, see Volume 8, page 5271.

610 Q. Does exhibit 7 contain all of the line of road belonging in this litigation?
A. It contains all of the lines in this suit. I don't know how you would distinguish the cases. I understand the subsidiary lines of the Iron Mountain have separate suits.
Mr. MOORE: The lines in this suit.

A. This embraces all of the mileage of the St. Louis, Iron Mountain & Southern Railway.

Mr. HILL:

Q. Those in this particular suit?
A. Yes sir.
Q. You have some other suit, the Arkansas Central, and possibly some other subsidiary lines of your Company?
A. I don't know what condition the suits are in, or whether they are brought or not. I know each of those roads received a temporary injunction. I don't know just what the status of the case is.
Q. As a matter of fact, there are two or three of those short lines which obtained temporary injunctions, and those suits have been passed, subject to this suit. What is in this assessment, exhibit 7. is the property in this particular law suit we are now trying?
A. Yes sir.
Q. And this includes all of the property that is in this litigation?
A. Yes sir.
Q. Your exhibit 1, the map, shows all of this property and considerably more: am I correct, Mr. Johnson?
A. The map shows all of this mileage, yes, sir.
Q. And shows much more than this particular mileage, doesn't it, being a map of the lines in Arkansas, it does not rep-
611 resented solely the lines in this litigation.
A. The map itself shows not only the Iron Mountain but it shows the Cotton Belt and it shows the mileage of these various subsidiary lines; but they are not in blue.
Q. Aren't they in blue?
A. No, sir, the subsidiary lines are in black.
Q. So far as you are advised, Mr. Johnson, the blue line on this map represents the lines in this litigation.
A. Yes sir.

Q. And the black lines do not?
A. No, sir, they represent the subsidiary lines.
Q. What is the Iron Mountain Railway of Memphis?
A. It is a switching line 1.07 miles long, located in the City of Memphis; and in our statement of track mileage we show that as a separate item, in our exhibit 2.
Q. That is not included in your exhibit 7?
A. I believe not. The mileage of that line in Memphis, of course would not be in the Arkansas assessment.
Q. Are the earnings and expenses of that piece of road charged to Arkansas in these statements which you have just introduced in evidence?
A. Yes sir.
Q. You have included here as a leased line, the Van Buren Line: what is that, Mr. Johnson?
A. It is the Frisco trackage at Van Buren, across the Arkansas River.
Q. Does your road use that track at Van Buren and use the Frisco Bridge?
A. Yes sir, we have trackage rights there.
Q. Your road has a contract of some sort, I believe, with the Frisco Road, by which it may use the Frisco bridge and a
612 small part of the Frisco track, from the junction with your line? Isn't that a fact?
A. Yes sir.
Q. That is what is intended by this?
A. Yes sir.
Q. That is, your road over that bridge and a small portion of the Frisco track?
A. Yes sir.
Q. That is not used by any of your freight trains, is it Mr. Johnson?
A. I do not believe I can answer that positively. I do not believe it is. I think it is used exclusively for passenger business but I may be mistaken.
Q. You are right.
—. It is only used for a part of the passenger trains, isn't it?
A. In what way?
Q. You do not run all of your passenger trains over that route, do you?
A. Oh no sir.
Q. You run two a day don't you?
A. I do not know how many.
Q. I wish you would get that information and tell me of some operating man who can definitely answer that.

Mr. MOORE: Mr. Johnson will get the information and answer the question.

Mr. HILL:

Q. Mr. Johnson, do you know whether your contract with that bridge has expired, or is about to expire?

A. I do not know anything about that Judge Hill. I do
613 not know anything about the contracts—that is, the length of the contract.

Q. You do not know what the contract is?

A. No sir.

Q. You merely know of the existence of such a contract?

A. I know there is such a contract.

Mr. HILL: That may become material, Mr. Moore. I cannot say now. Are you going to have some operating man on the stand shortly?

Mr. MOORE: Yes, we will get you whatever information you desire.

Mr. HILL:

Q. As a matter of fact, Mr. Johnson, I believe you run two trains a day over that track, and the balance of your traffic runs over the Cherokee Junction. Isn't that a fact?

A. I know our trains do run over Cherokee Junction, but as to the number of them each way I cannot say.

Q. This item represents whatever use is made of that mile and a half of track of the Frisco Road, including the bridge, and does not represent any of your own ownership?

A. 1.39.

Q. That represents merely your interest in that track?

A. Our rights over that Frisco track.

Mr. HILL:

Q. Mr. Moore I expect you had better show us that contract.

Mr. MOORE: Very well.

Mr. HILL:

Q. I do not believe you have in any of these exhibits the Arkansas Central Railway.

A. No sir.

Q. That is a separate corporation?

614 A. Yes sir.

Q. Owned by the Iron Mountain Railway, isn't it?

A. I cannot answer that.

Q. That road makes returns to your office doesn't it?

A. It makes returns to them yes. These accounts are handled by its own Auditor.

Q. And returns made to the Auditor of the Iron Mountain?

A. Yes sir, it is a matter of record in our office.

Q. Like the Arkansas Midland. Is that in the same condition?

A. The accounts of the Arkansas Midland are kept in our office.

Q. What do you do with the revenue of such lines as the Arkansas Central and the Arkansas Midland—or of any deficit which there might be? Is that paid by the Iron Mountain, and is the revenue received by it if there is any surplus?

A. I do not know what becomes of the revenue eventually. So far as the accounts of the Company are concerned it is never merged

with the Iron Mountain—if that is what you mean. In keeping the accounts of the Arkansas Midland we keep it just as it is were an entirely separate corporation. As to who makes up the deficit I cannot answer.

Q. Or who receives the surplus?

A. Or who receives the final surplus, if there is any.

Q. Do you know, as a matter of fact, Mr. Johnson (you may know as a matter of personal information) that those two roads are owned by the St. Louis, Iron Mountain & Southern Railway?

615 A. The Arkansas Midland is controlled by The St. Louis, Iron Mountain & Southern Railway but I do not know who owns the stock.

Q. Is any part of the expenses of those roads borne by the Iron Mountain?

A. No sir.

Q. Is any part of the general expenses of the St. Louis, Iron Mountain & Southern distributed to any of these subsidiary lines?

A. Of the general office expenses, you mean?

Q. Yes.

A. No sir.

Q. Or any of the other expenses of The St. Louis, Iron Mountain & Southern Railway?

A. Of all operating expenses they stand their proportion.

Q. They stand their proportion of the operating expenses?

A. Yes sir.

Q. I wish you would explain that Mr. Johnson. I do not quite understand that.

A. You are referring to any of these roads, aren't you?

Q. Yes. Take the Arkansas Central or the Arkansas Midland as an illustration, or any of these subsidiary lines.

A. Take the Arkansas & Louisiana as an illustration. That is under the supervision of the Superintendent of The St. Louis, Iron Mountain & Southern Railway and he is also Superintendent

616 of the Arkansas & Louisiana. A portion of his expenses and salary is assigned to the Arkansas & Louisiana road. Likewise a proportion of the salary of any other officer who might be connected with the Arkansas & Louisiana road in an operating capacity.

Now we have never charged against that road any part of the general office expenses. That is, any expense such as might be charged to the general expense account. But so far as operating expenses are concerned they stand their own expenses.

Q. How about the legal expenses?

A. The Arkansas & Louisiana road pays all the expenses of the legal department in Arkansas in connection with their own line.

Q. They are not charged with any part—well, that would mean that they bear only their own legal expenses?

A. That is all.

Q. Do they bear any relation to the St. Louis, Iron Mountain & Southern other than to share the general expenses—I mean operating expenses?

A. I do not know of any other relation. If I understand your question, you want to know whether the general office expenses of The St. Louis, Iron Mountain & Southern is chargeable, any part of it, to the Arkansas & Louisiana Railway?

Q. Yes, or any other expense. The first question was the general office expense, and now I ask you more broadly.

A. No part of the general office expense is charged to that line. I cannot conceive of any other expense that would be covered as a general expense.

Q. Does that become a factor in the statement you have
617 just introduced?

A. I cannot see that such a policy would have any bearing on the figures at all.

Q. Your expense figures which you have introduced have been those expenses that were left to The St. Louis, Iron Mountain & Southern Railway after taking out the expenses which have been distributed to these subsidiary lines?

A. Yes sir.

Q. That is the way you make up those expenses?

A. Yes sir.

Q. In other words, these expenses you have exhibited here are the net (if we can use such a term) after taking out what should be distributed to these subsidiary lines?

A. Yes sir, what shoud be assigned to these subsidiary companies. In other words, the expenses of these subsidiary companies never enter into the expense of the St. Louis, Iron Mountain & Southern Railway.

Q. But the expense of The St. Louis, Iron Mountain & Southern Railway does enter into the expense of these subsidiary railroads?

A. I do not see how. What I mean by that is, the train service of the Arkansas Midland, or the Arkansas & Louisiana, or any of these lines, is never charged to The St. Louis, Iron Mountain & Southern Railway. It is charged direct to the Arkansas Midland, or to the Arkansas & Louisiana, as the case may be.

Q. I see here the Little Rock Junction Railroad .59 miles as a part of your leased roads, included in statement No. 2. I
618 think that is also in statement No. 7, isn't it?

A. Yes sir.

Q. I wish you would explain what that is.

A. The only explanation I can make of it is that it is a piece of local track in the City of Little Rock.

Q. That is the bridge, isn't it?

A. The Baring Cross Bridge.

Q. There are two bridges there, aren't there?

A. Yes sir that is right.

Q. I expect that is the old bridge at Little Rock. That is my information and I want to know about it.

A. It is located in Little Rock, but just where I cannot tell you. However, it does not enter into our mileage of The St. Louis, Iron Mountain & Southern Railway System.

Q. That is in your "foreign"?

A. Yes sir, it enters into the foreign and we are paying the taxes on it.

Q. Do you know the ownership of it?

A. No sir.

Q. Do you know what you pay for the lease or rental of it?

A. Yes sir.

Q. What is it?

A. $26,100.00 a year.

Q. Is that 6% of the bonds of that corporation?

A. I do not know how that rental is arrived at.

Q. You do not know what the bonds are?

A. No sir.

Q. That is what the St. Louis, Iron Mountain & Southern is paying for the rental of that property?

619 A. Yes sir that is what The St. Louis, Iron Mountain & Southern is paying as rental.

Q. You do not know who owns that property?

A. No sir.

Q. Mr. Johnson in this exhibit 2 I see the Memphis Branch owned 88.94 miles and leased 2.17 miles; where is that 2.17 miles?

A. That is on both sides of the River, including the trackage across the Memphis Bridge.

Q. That is in the same shape as the St. Louis, Iron Mountain & Southern Railway Co. of Memphis?

A. Yes sir. One mile of that is located in the City of Memphis.

Q. And how much of it out of the State of Arkansas?

A. One mile.

Q. And 1.17 miles in Arkansas—or is it less than that?

A. That mileage divides between the State of Arkansas and the City of Memphis, from the center of the bridge.

Q. And you include the bridge in that mileage?

A. Yes sir as leased mileage. Our track stops at Bridge Junction, the connection with the Frisco.

Q. This begins then at the bridge, where your Memphis Branch ends?

A. Yes sir. It begins on the West side of the Bridge.

Q. That is very much like this Van Buren proposition, about which I am inquiring. You own the rights across that bridge?

A. Yes sir, it is a leased track. We have rights to cross that bridge and we pay so much for it. There is 2.17 miles which

620 we lease from the junction of our line to the end of the Frisco track. That is the end of such part of it as we make use of in Memphis, and one mile of that leased track is East of the center of the bridge and 1.17 miles is West of the center of the bridge.

Q. And when you get off that leased track you strike this leased 1.07 miles in Memphis, which represents your Memphis Terminals?

A. Yes sir.

Q. You have 34.5 miles of leased lines to The St. Louis Southwestern Railway Co.; where is that Mr. Johnson?

A. That is the part of the line of The St. Louis Southwestern

Railway from Illmo, Mo., to Paragould, Ark., and 34.5 miles represents the mileage from Paragould up to the Missouri and Arkansas State Line.

Q. All of that mileage is in the State of Arkansas?

A. Yes sir.

Q. That is used solely for freight purposes?

A. Yes sir.

Q. There are no passenger trains run on that?

A. No sir.

Q. How do you carry in your accounts the rentals which you pay for these bridge terminals at Memphis?

A. That is the rentals we pay for the tracks themselves as distinguished between the operating expenses of the terminals?

Q. Yes.

A. The rental of The St. Louis, Iron Mountain & Southern of Memphis is a fixed annual rental and included in our rental account. The rental we pay for the Frisco Bridge is in the
621 nature of a bridge toll and is deducted from our freight earnings or passenger earnings.

Q. What do you do with it at Van Buren?

A. I believe that is deducted from the passenger earnings, when we have it.

Q. Will you look into that, if you are not certain, and answer that definitely?

A. Yes sir.

Q. Now, how about this Little Rock Junction Road, that bridge at Little Rock?

A. That is included in our rental account.

Q. Is that used exclusively for freight?

A. I cannot answer that. I do not know.

Q. I wish you would look that up and see if you charged that exclusively to freight or to freight and passenger?

A. We divide it between freight and passenger service just as we would any other rental charge, just as we would the rent of the St. Louis, Iron Mountain & Southern Railway of Memphis. It is included in our item of rental and taxes.

Q. Why do you make that distinction between that Van Buren bridge and the one at Little Rock? Does the one at Little Rock carry only freight and the one at Van Buren carry passengers and freight?

A. I do not know that the .59 miles at Little Rock is used exclusively for freight.

Q. Will you make inquiry and answer about that in the morning?

A. Yes sir.

Q. What is the Coal Hill Branch, 3.83 miles?

A. It is a little branch that runs from Coal Hill on the
622 Little Rock & Ft. Smith Railway down to Lloyds.

Q. That is purely a coal proposition?

A. Yes sir, it is purely a branch line, purely a coal proposition.

Q. It handles no passengers?

A. It would carry passengers if they were offered, but we do not run any passenger trains on it.

Q. The Ouita Branch .42 miles, is the same thing, I suppose?

A. Yes sir.

Q. It is purely a coal proposition and no passengers carried.

A. Yes sir, that is from Russellville up to the coal mines on the Ft. Smith Branch.

Q. What is this River track?

A. That is a connecting line in the Little Rock Terminals.

Q. Is that a track for the delivery of coal down there, or do you know?

A. I do not know what particular purpose it is used for. I think it is part of the connecting line from the Little Rock Union Depot over into East Little Rock, making connection with our Little Rock, Mississippi and Texas Railway. There is 1.22 miles in that connecting river track, but this particular branch is .82 miles.

Q. Will you please get us the information about that?

A. Yes sir.

Q. What is called the Ft. Smith Branch? Is that the Greenwood Road?

A. Yes sir, from Ft. Smith to Greenwood.

623 Q. What do you do with the Ft. Smith Suburban?

A. I do not know how that is handled. We have no record of it at all in our office.

Q. It must be an orphan.

A. I am afraid it is, what little I have heard of it.

Q. Isn't it used as a part of your terminals there?

A. I don't know. If it is, we don't pay for it.

Q. It does not enter into your books?

A. No sir.

Q. Mr. Johnson, I wish you would turn to the appropriate sheet of your exhibit 3, statement No. 1, covering the miscellaneous earnings; I believe you say you have not separated that between intrastate and interstate, because it could not be done; is that correct?

A. Yes sir.

Q. Why can't it be?

A. Well, for lack of information upon our part, would be the best explanation of that.

Miscellaneous revenue takes in all of the revenue accounts from number three to number nineteen. The statement itself shows No. 1 and No. 2, and then No. 5 and No. 6.

Q. No. 1 and No. 2 are what?

A. No. 1 is freight and No. 2 is passenger. No 5 is mail. That is the next one.

Q. No. 3 is what?

A. They are not shown in that order on the statement. Statement No. 1 shows account No. 5 following No. 2. No. 5 is mail. No. 6 is express. Now mail and express revenue amounts to $336,000.00, in round numbers. The total miscellaneous passenger revenue amounts to $273,000.00. With those two items there is absolutely no way that I know of by which they can be separated between intrastate and interstate.

624

Q. Is there any way to separate the expense of mail and express and the expense of mail and passenger?

A. In my opinion there is a reasonable method by which it can be worked.

Q. What is it?

A. On the basis of the mail and express revenue percentage to the total passenger revenue.

Q. That is a theory of division but I am speaking of an actual basis.

A. There is no actual basis.

Q. In the absence of an actual basis, you would *go* the revenue theory for the apportionment of the expenses?

A. I would adopt that as the best basis, in the absence of an actual one.

Q. Of course I understand your view on the revenue theory but I am asking you if there is not any way of getting at the actual facts.

A. No sir not from our records, and I cannot conceive of any method by which you could get at the actual division of mail revenue.

Q. I am talking now about expenses. You say of revenue.

A. Well, there is no way of getting at the expenses, either.

Q. You take one of our ordinary passenger trains, carrying a mail and express car, and that train has a locomotive and five other cars and one mail and express car. Couldn't you get down to
625 pretty near the actual cost of that?

A. I don't see how you could. You might take it on the basis of the number of cars in that train.

Q. Wouldn't that be pretty close to the mark?

A. Oh no sir.

Q. Why?

A. Because the cars hauling passengers might be more expensive than the cars hauling mail.

Q. You have a record of those cars, haven't you?

A. I have a record of the car mileage.

Q. You have a record of the particular cars in that train haven't you?

A. Yes sir.

Q. Couldn't you figure that all out?

A. Suppose the train itself makes ten stops, receiving and delivering passengers; that would have some bearing on the cost of that train, but just what proportion I don't know.

Q. Suppose it makes ten stops and receives mail and express, don't they receive mail and express where they receive passengers?

A. The expense of stopping to receive and deliver mail would not be nearly so great as the stops to receive and deliver passenger.

Q. It would be for express?

A. It might be for express.

Q. Is there any substantial difference between the stops made for mail and express and the stops made to receive and deliver passengers?

A. Yes sir I should think so. The stops to receive and de-
626 liver passengers would be a great deal longer than the stops to receive and deliver mail. In the latter case many times there would not be any stop.

Q. You don't think you could work out a real division of the expenses there?

A. I don't believe I could work out a basis that would be any better than the revenue basis.

I will say this: that the revenue basis and the car mile basis would bring about practically the same result, in my estimation.

Q. You have not attempted any division of this on a car mile basis?

A. No sir.

Q. Do you think it should be done on that basis?

A. I think an estimate could be made on that basis.

Q. Still it would be an estimate?

A. Yes sir.

Q. What I am endeavoring to reach is a basis for getting the actual figures.

A. Well, I don't see how you can.

Q. On either mail or express.

A. No sir.

Q. What is the next item of miscellaneous revenue?

A. The next item is "excess baggage."

Q. How could you handle that?

A. As between what?

Q. As between state and interstate?

A. That might be divided on the basis of the ticket report itself. I believe it could be divided between intrastate and interstate. But the percentage of excess baggage revenue to the total miscellaneous revenue is insignificant. It is only 4%.

627 Q. There is no advantage in dividing that and apportioning the expense by the actual expense, and not upon any estimated basis?

A. You could not get at the actual expense of earning excess baggage revenue, but you could divide it between intrastate and interstate revenue.

Q. The tickets themselves upon which the excess baggage was charged would fix whether it was intrastate or interstate?

A. Yes sir.

Q. And you have that record?

A. Yes sir.

Q. And that data could be obtained?

A. It could be worked up with a great deal of labor, but it is accessible data?

A. Yes sir.

Q. What is the next item?

A. The next item is "Parlor and chair cars."

Q. Can that be divided on an actual basis?

A. Yes sir, I believe the reports we have in our office would enable

as to determine whether that was intrastate or interstate. That revenue amounts to $1000.

Q. That is very small?

A. Yes sir.

Q. Milk revenue I see is the next item.

A. That is $15.00.

Q. Going back to parlor and chair car revenue, do you know about the relative amount of each of those classes, intrastate and interstate?

A. No sir.

625 Q. Have you an opinion about it, from your familiarity with the work?

A. No sir I have no opinion on that subject.

Q. The next item is "other passenger and train revenue."

A. That amounts to $480.00.

Q. What does that cover?

A. It is miscellaneous.

Q. It is the news privileges, and things of that kind isn't it?

A. No sir, it is not the news privilege (after examining statement) it is just what the heading would indicate, miscellaneous items not provided for by any of the regular revenue accounts.

Q. I would like to know what would fall in it, so we could have the record, so as to divide it between intrastate and interstate.

A. I don't know that I could tell you. There is no little—it is only $480.00. It may be one amount in any of the six months.

Q. You know those that are passenger could be easily located as to whether intrastate or interstate?

A. No sir, but if it is train revenue it may be either, or it may not be divisible.

Q. Find out about that Mr. Johnson. I don't know whether it would amount to anything but I would like to know. The next is switching revenue.

A. That switching revenue may be divided between intrastate and interstate by an examination of the original haul in each individual case.

Q. You have the records for that?

620 A. The record is there.

Q. You could do that?

A. Yes sir.

Q. You could locate all of that as between intrastate and interstate?

A. I think so.

Q. No. 10 is special train service. That is some trivial item. Do you know whether that could be located or not as between intrastate and interstate?

A. I should think it could. It is $141.00.

Q. No. 11 is the miscellaneous transportation revenue; what does that mean, Mr. Johnson?

A. There happens to be a deficit in that particular item during these particular six months. It would be miscellaneous items. I should think that could be divided as between intrastate and interstate.

Q. No. 12 is station and train privileges; how about those?

A. I don't see how you could divide that between intrastate and interstate, because in some cases it is a fixed charge which we make for train privileges within certain territories. It is a fixed payment. It does not depend upon the amount of business handled; or the business itself may be of such a nature that we could not determine. For instance, a man might have the privilege of operating upon trains in our Northern Kansas Division or upon our Omaha Division. The concession is leased to him in that way, to cover certain territory. Now I don't know how you would divide that revenue as between interstate and interstate. He has a right to operate upon all
630 trains within certain limits. That amounts to $1400.00.

Q. Is there any expense to that business?

A. Any expense to us, you mean?

Q. Yes.

A. No sir. The principal items in there are the rights to sell newspapers and fruit upon the trains and in stations; and the placing of these automatic vending machines, and such items as that.

Q. It is an item of revenue that has no attendant item of expense.

A. No sir, unless it would be indirectly the cost of maintaining the station building and the train in which these concessions are sold.

Q. They are already there for some other purpose and I presume are handled otherwise?

A. Yes sir.

Q. Your station privileges, part of it, could be assigned?

A. Yes sir part of it could be assigned to interstate and intrastate.

Q. All that could be assigned.

A. I don't know whether it could or not. A concession might be at Little Rock. There might be a good deal of State traffic which brings about the value of that concession at Little Rock; or, on the other hand, it might be the interstate traffic. I don't know that you have a right to assume that all of the revenue we receive from any local concession would be all intrastate or not.

Q. The incidental cost of keeping up that building is all charged to Arkansas.

A. Not to Arkansas intrastate.

Q. But you divide this on a revenue basis after you get
631 through. But it is charged up to the building in Arkansas?

A. Yes sir.

Q. That is a small item, isn't it?

A. Which one?

Q. That one we have just been discussing.

A. No sir it is a comparatively large item. It is $1400.00.

Q. How do you divide that between freight and passenger, or do you divide it?

A. Well, we divide that between freight and passenger upon the actual freight and passenger earnings. That is, upon the percent if the revenue in accounts Nos. 1 and 2.

Q. You divide between those two accounts on a revenue basis?

A. Yes sir, those two items.

Q. The next is parcel room receipts.

A. We have no revenue on that account at all.
Q. The next is storage of freight: can you divide that?
A. That could be divided by reference to the individual shipments. If it were an interstate shipment I would say it would be an interstate earning, and if it were an intrastate shipment I would say it would be intrastate earnings.
Q. The same would be true of the next item, the storage of packages, wouldn't it?
A. Yes sir, that amount is $300.00.
Q. The next is car service. That is what you receive from other companies for the use of your equipment?
A. No sir, this is demurrage. That might be divided between intrastate and interstate, by reference to the individual shipment in each case.
Q. Your records would show every car on which that demurrage would accrue?
A. Yes sir.
Q. And it could be readily divided, by spending enough labor on it?
A. Well, I could not very readily divide it. It could be done by expending enough labor upon it.
Q. The next is rent of buildings and other property: what do you say to that, Mr. Johnson?
A. I don't see how you can divide that. For instance your accountants are trying to do that now. As an illustration, you have the rental of a part of the depot at Newport, where we receive a rental from the Pacific Express Co. Now, I don't know how we could divide that as between intrastate and interstate. I haven't any idea. The Pacific Express Co. pays us $5.00 as the rent of a part of that depot in Newport. I used that case as an illustration because it was mentioned to me this morning. That gives you an idea of what this account consists of.
Q. I wish you would explain, generally, what is included in that item.
A. That is what it consists of. It is the rent of portions of buildings and of places upon our right of way. There are other items in there.
Q. How does that differ from the one we were discussing up here, about train and station privileges?
A. The train and station privileges is concession rent. I don't know that there is a difference between that. But with the station privileges we rent the right to do business there; to place these automatic vending facilities there; that is the principal item in there. Now if we rent a part of our depot building or a part of our office building at so much per month, that is credited to account No. 18.
Q. Take Little Rock. You had the old station rented to Mr. Pratt for hotel purposes.
A. Any rent paid by Mr. Pratt would be credited up to account No. 18.
Q. Suppose you had a saloon in there, would that go in as rental?
A. If he rented quarters for a saloon it would go into this account.

If Mr. Van Noy or Mr. Harvey rented a concession to set up a slot machine, it would not be considered a part of the rent of a part of that depot.

Q. Take the value of the property, couldn't that be ascertained and divided between intrastate and interstate?

A. The value of that would depend altogether on the patronage be received. And whether that patronage came from interstate traffic or intrastate traffic I couldn't tell.

Q. You would not know how to divide that item?

A. No sir I would not know any actual basis for dividing it between intrastate and interstate.

Q. There is a miscellaneous item there, Mr. Johnson—miscellaneous of miscellaneous; what does that include?

A. It is the account to which everything is credited which can not be credited to any of the other 18.

Q. What are in it, Mr. Johnson?

A. I don't know. I have never had any occasion to analyze it.

634 Q. I see it is a somewhat considerable item.

A. It is about $15,000.00.

Q. I wish you would look into it and see if it is capable of being divided between intrastate and interstate. Get a general idea of it so you can discuss it later.

A. An analysis of that account is being made.

Q. I just want to know generally the nature of it so we can find out whether it could be divided.

A. Very well.

Q. In this sub-division F to your exhibit, where you put in the assumed extra cost of handling intrastate traffic, I believe you said that was put in at the instance of the legal department: the question I want to ask you is that: you carry no such statement as that upon the accounts of the Company?

A. No sir, nor do we, as a matter of record, ever attempt to make any division between intrastate and interstate in our accounts.

Q. That is all a new question?

A. Well, it is not required in the accounts as we handle them now. It is worked up specially for cases of this kind.

Q. In various litigations of this kind this question of bookkeeping has been injected into the accounts?

A. Yes sir.

Q. Do you know who is the author of that system of bookkeeping on the revenue basis?

A. Who made the first division, you mean?

Q. Yes, where it originated.

A. The first occasion I know of is in that Smythe vs. Ames

635 case where that system was adopted.

Q. That was not the first time.

A. It is the first time I ever heard of it.

Q. That did not go into the book-keeping proposition. That used merely the question of expert opinion, in that case.

A. It was used in their final figures.

Q. It may have been. I know it was used as testimony.

A. Yes sir.

Q. Mr. Johnson, I wish you would explain the method of charging up ties on your road.

A. The ties themselves when purchased are charged to what we call our "Cross tie account." It is a holding account. Now, those ties as they are placed into the track are reported to our division officials by the foremen in charge of each particular section, showing the number of ties, replaced in the section; the average cost of the tie is ascertained from the records in the office, and the cost of those ties, based upon this average cost for the month is charged to the operating expenses.

Q. For that particular division?

A. For that particular mile of road.

Q. This purchase is by the entire Missouri Pacific System, isn't it?

A. Yes sir.

Q. This "pooling" arrangement is, then, with the St. Louis, Iron Mountain & Southern and the Missouri Pacific jointly. In other words, the Iron Mountain is a part of the Missouri Pacific, so far as the purchase of ties is concerned?

636 A. Yes, so far as the purchase of ties is concerned, yes.

Q. And in charging to Arkansas, or any other part of that system, the average price of ties then prevailing, you take the price prevailing throughout the entire system, to get an average price?

A. We take the average price of those ties to us.

Q. But whether that tie was purchased in Arkansas, Kansas, or Nebraska——

A. Without any regard to where the tie was purchased.

Q. And if you had one million ties and a quarter million of them were purchased in Arkansas, a quarter million in Missouri, and a quarter million in Nebraska, all at different prices in each of those States, they would be thrown together and the average price of those to the entire system would be taken: is that correct?

A. That would be the case if we should by any chance do such a thing as that.

Q. That is your system?

A. Yes sir, that would be the system. But I do not believe we are buying ties in any such quantities from any such locations as you have named.

Q. I was using that purely as an illustration.

A. The cost of those ties is determined without regard to where they are purchased. What I mean by that is, if we buy ties in Arkansas those ties may be used in Missouri. If we buy ties in Missouri they may be used in Arkansas. Now the cost of all ties is figured to an average cost.

Q. And that particular mile of road is charged with that average cost?

A. Yes sir.

637 What is the average cost of your ties during the period we have under inquiry?

A. I don't believe I can answer that generally. The average price, for instance, of white oak ties, which I understand were principally used at that particular time, October 1907, was fixed at 54 cents. To that is added various items of expense incurred by the Company in handling those ties, such as inspection, cost of loading, and the salaries of our Tie and Timber Department, are all added to the cost of this tie. The result was that on the Arkansas Division in 1907 the average cost was 59 cents per tie. Now, that average cost might vary slightly from month to month during any of those six months.

Q. If that tie cost in Arkansas 35 cents and the same sort of tie would cost you 65 cents in Missouri, and that tie was put on the road in Arkansas, Arkansas would not be charged with the 35 cents paid for the tie down there, but would be charged with the average price paid for the tie between those purchases in Arkansas, Missouri and elsewhere: is that right?

A. Well, Arkansas would be charged with whatever the tie cost us, without regard to what the price was in any locality. I cannot say where we buy those ties or what we paid for them at that particular time.

Q. But that is the system?

A. Yes sir, that is the system of arriving at that cost.

Q. Mr. Johnson, you make the entries for the charges of Company material, don't you? Those are made in your office aren't they?

A. Yes sir.

638 Q. What is the Company material charged to?

A. It is charged to the cost of operation of the road. It depends on what the material is.

Q. I did not frame my question properly. I mean, what price do you charge to transportation cost?

A. That is figured at two mills per ton per mile.

Q. There has been a change in the figure used on that in the last few years?

A. That is the only figure we ever used in that connection, and we only used that for a limited length of time.

Q. The two mills?

A. Yes sir. We figure that two mills in order to get the cost of handling company material into our operating expenses, in one case, and as a credit to operating expenses in the other. What I mean by that is, all our company material moved over the St. Louis, Iron Mountain & Southern Railway for the benefit of The Missouri Pacific Railway we charge to the cost of that material the freight charges at the rate of two mills per ton per mile. And that cost was charged to the maintenance of way department, or to any other department using the material, added to the price of the material. Then, in turn, it becomes a credit to the transportation expense of the operating division over which that company material moved.

Q. It used to be 7½ mills didn't it?

A. I don't know. That method of handling it has been a recent matter on our road.

Q. Do you know when it went into effect?

A. I believe it was the summer, or perhaps the spring of 1906.

Q. You don't suppose the two mills per ton per mile rep-
639 resents the actual expense, do you?

A. No sir.

Q. It is considerably more than that?

A. No sir, that two mills was never intended to cover the actual cost of transportation but simply the train and engine cost.

Q. Do you think it would cover that?

A. I guess it would come pretty close to it. I am speaking of simply the train and engine cost. It is an arbitrary amount. It is not based upon any actual cost.

Q. If the balance of trade, so to speak, betwen the Iron Mountain and the Missouri Pacific was one way, that would benefit the road in whose favor the balance of trade was, wouldn't it?

A. So far as the expense is concerned, yes.

Mr. MOORE: You mean assuming it was less than the charge ought to have been.

Mr. HILL: He says it is arbitrary. It would depend upon how the balance of trade ran.

Mr. MOORE: But take it in the direction of balance of trade and it would just reverse itself.

Mr. HILL:

Q. Turn to item 115, exhibit 3, statement 4, foreign agencies, freight: you have fifty four thousand and some odd dollars charged to Arkansas.

A. Yes sir.

Q. I wish you would explain that item.

A. Account 115 represents the cost of our soliciting agency, such as commercial agency, traveling freight agents, soliciting agents, etc. There are some few cases where an expense of that kind is located to the point or rather to the State in which the of-
640 ficial himself is located; but, as a rule, we consider all commercial or foreign agencies as a system expense, and that expense is pro-rated between the various States on the basis of gross earnings in each State.

Q. You have charged this amount to Arkansas. That includes all of the Arkansas business, interstate and intrastate?

A. Yes.

Q. And subsequently, in your further division, Arkansas, will be charged with a good proportion of that other intrastate freight, will it not?

A. Yes sir.

Q. Is that proper Mr. Johnson?

A. I think so.

Q. Do you think any of these foreign agencies obtain one pound of intrastate freight?

A. I think the expense of these foreign agencies will contribute toward an increase of intrastate business. The relation of these expenses to the intrastate business in Arkansas may not be direct, but I believe the intratate business should stand its proportion of that expense just the same as any other expense. I wish to say here, Judge Hill, that the commercial agency at Little Rock is treated in precisely the same way as the commercial agency at Pittsburg. We do not charge the expense of that commercial agency at Little Rock altogether to Arkansas.

Q. You throw them all together?

A. Yes sir, and it is pro-rated on the basis of the gross earnings in each State.

Q. How many of these agents have you in Arkansas?

641 A. Two or three, I have forgotten which—two, I believe.

Q. One at Little Rock and one at Ft. Smith?

A. Yes sir, and one at Memphis, just across the river.

Q. The man at Memphis would not get any intrastate business for Arkansas, and would not attempt to, would he? He is engaged entirely upon the interstate movement, isn't he, Mr. Johnson?

A. I would not say so. He is engaged in that locality and if he can solicit business on the Memphis Branch it is his duty to do so.

Q. Certainly, but would he solicit business between White Oak and West Point, for instance?

A. If he can help in developing any business in that locality, that is what he is there for.

Q. Do you think he helps to develop business between White Oak and West Point, or any other local points?

A. I don't know what he is doing, but that is his duty.

Q. To develop business between local points?

A. Anywhere he can get it. We have apportioned the expense of the Industrial Bureau to freight accounts, and the Immigration Bureau to the passenger account, and it seems to me that has a direct effect on the intrastate business. It helps develop the State.

Q. You think anything that helps develop the State you ought to charge up a proporion of it to the intrastate freight?

A. I think so.

Q. You have made all your expense accounts on that

642 theory, that if helps to develop Arkansas you would charge the intrastate freight with its proportion?

A. Well, I would not make it so broad as that. There is very little expense of the railroad which would especially develop the intrastate business, or any other business, but that is one account.

Q. So if there is an agency in London or Paris, it would help develop Arkansas?

A. I don't believe you could attempt to separate those agencies and say what should and what should not be apportioned to intrastate business. The proportion is very small.

Q. Small or large it is a charge.

A. Yes sir, it is a charge.

Q. What Industrial Agency do you think would affect intrastate business?

A. Any agency we might maintain that would be the means of bringing into the State of Arkansas, any industry, might have a tendency to increase our intrastate business.

Q. Have you such agencies?

A. Such industrial agencies? Yes.

Q. How much of this cost is attributable to them?

A. You mean what part of these industrial agencies included in this item?

Q. Yes.

A. All of their expenses.

Q. I want to get a general idea of what proportion their expenses bear to the commercial agencies?

A. I can ascertain that.

Q. Are those the only two classes included in there, the commercial and the industrial?

643 A. Yes sir. The immigration agencies are included in the passenger account No. 111.

Q. I am speaking of this freight item. Please get that statement also about the immigration bureau.

A. Very well.

644 Cross-examination of Mr. F. P. JOHNSON, continued as follows, by Mr. HILL:

Q. There are several things I asked you to get for this morning: have you prepared those Mr. Johnson?

A. No sir they are working on them now. Possibly we can get them sometime during the day.

Q. As to those matters, then, we had better pass them over until a little later.

Redirect examination.

By Mr. J. M. MOORE:

Q. Mr. Johnson have you a statement showing the earnings and expenses of operation of The St. Louis, Iron Mountain & Southern in the State of Arkansas for the six months ending June 30th, 1907?

A. Yes sir.

Q. Have you a statement also, of the same character, covering the earnings and expenses of the road for the year 1907?

A. That is all embodied in the one statement.

Q. You have a statement showing both periods; that is to say, the earnings and expenses for the first half of the year and one for the entire year?

A. Yes sir.

Q. Will you file the statement referred to as exhibit
645 8 to your testimony?

A. I will.

The paper referred to is marked F. P. Johnson exhibit 8.
Said exhibit is in the words and figures following, to-wit:

For Exhibit eight, see Volume 8, page 5275.

646 Q. Was this statement made up in the same manner that you have testified that the statement for the last half of the year 1907 was made up?

A. Yes sir.

Q. Are the results of operation for each period shown correctly upon the statement?

A. Yes sir. I would like to make an explanation in connection with these two statements.

Q. If there is any explanation that you think should be made in connection with that exhibit please make it.

A. The only explanation I wish to make is that the Interstate Commerce Commission classification of these accounts became effective July 1, 1907 and the accounts shown in these statements were of course made up on the basis of the accounting system in use by The St. Louis, Iron Mountain & Southern Railway Co. at that time. For that reason the individual expense accounts for the two periods of six months each could not be added together. The result is that in showing the results of operation for the calendar year 1907 we have simply added the surplus to show what the return would be, rather than to add the operating expenses for both periods.

Q. Do I understand that the manner of keeping the accounts was changed after July 1, 1907?

A. On July 1st, 1907 the Interstate Commerce Commission basis became effective upon our road as well as on all others.

Q. And that necessitated the change you speak of in the manner of keeping the accounts?

A. Yes sir.

647 Recross-examination.

By Mr. Hill:

Q. Mr. Johnson turn to the present return on the assessed valuation of the property after deducting taxes, and rentals, on those two statements. On the last half of 1907, which is the six months operation alleged in your complaint, I see your freight earnings for all business in Arkansas amounted to 9.90% of your property; and that your passenger earnings amounted to .66%.

In the first half of that year your freight earnings were 11.92% and your passengers earnings were 4.25%.

I have given them correctly, have I?

A. Yes sir.

Q. In other words, the six months period as alleged in your bill, showed in round numbers 2% decrease of freight earnings and 3.5% decrease of passenger earnings?

A. Yes sir.

Q. Do you consider the last half of 1907, especially in view of the question you have just answered, to be a fair and normal test of operations on The St. Louis, Iron Mountain & Southern Railway in Arkansas?

A. I do, under the two cent rate.

Q. I am asking more broadly than that. I am asking you is that a fair test, whether on a 2 cent rate or not.

A. I believe it would be.

Q. I would ask you separately as to the different classes of freight, but I am asking you now as an entirety.

A. I believe the six months ending December 31st will
648 be a reasonable period and a fair test of the result of operations on our line.

Q. A fair test for what period of a year?

A. A fair test for any period, to show the returns upon the property, or of the earnings to the road.

Q. Do you think that would be a fair, representative period of your earnings and expenses?

A. Yes sir.

Q. I will call your attention to the fact that the freight revenue in that six months period decreased 2%; or rather, the return upon your property from freight revenue decreased 2%.

A. Yes sir.

Q. How do you account for that?

A. I account for that in this way: the fiscal year ending June 30th 1907, was perhaps the best year in the history of The St. Louis, Iron Mountain & Southern Railway Co., and its earnings during that period if anything would be abnormal, so far as freight is concerned.

Q. On the passenger earnings, the 2 cent passenger act went into force the latter part of this first period didn't it?

A. Yes sir.

Q. Do you remember the exact date?

A. I think it was April 19th. It was in April.

Q. That gave 2½ months with the two cent passenger rate in force during that six months period?

A. It gave us 2½ months on local business. On interline busi-
ness it would not be that much. The interline business, of
649 course, is included in our accounts for one month later; so any interline business that went into the April accounts would be on the three cent basis, practically.

Q. Your interline business is not upon a three cent basis, is it?

A. Oh, yes. I do not mean now interstate business, or competitive business, particularly; but interchange business between one or more roads.

Q. Illustrate just what you mean. I do not quite understand that.

A. Business originating on the St. Louis Southwestern Railway for points on our line.

Q. I am speaking of passenger business, Mr. Johnson.

A. So am I. That would be considered as interline business, and the reports of that business from the St. Louis Southwestern Railway to us would be included in the May accounts. I should say there were practically four months of the business during the six months period which would be on the three cent basis.

Q. So far as the returns and accounting is concerned?
A. Yes sir.
Q. While according to the way you make up your accounts it would be really only about two months on the two cent rate?
A. Yes sir.
Q. When did the panic begin to affect your business, Mr. Johnson?
A. I should say in November 1907.
Q. You do not think it affected it as early as October?
A. Well, I don't think it affected the earnings of the line
650 to any great extent in October.
Q. But it began to be felt in November?
A. Yes sir.
Q. And continued to be felt for sometime thereafter?
A. Yes sir.
Q. Didn't it affect the passenger business more quickly than it did the freight business?
A. I cannot answer that, but would say generally that perhaps it would.
Q. Do you recall the date when the panic really began, in the New York papers, the latter part of October wasn't it?
A. It was in October. I do not know just what the date was.
Q. You filed on yesterday exhibit 6 containing various statistics; I want to invite your attention to some of them. First, the percentage of earnings, passenger, freight and others; have you that before you?
A. Yes sir.
Q. Read that please, Mr. Johnson, as to the passenger earnings.
A. The percentage of the passenger revenue upon all lines in the United States during the fiscal year ending June 30th 1907 amounted to 21.81% of the total earnings of all lines.
In group 8 (the group in which Arkansas is located) amounted to 21.63%.
On the entire St. Louis, Iron Mountain & Southern Railway for the six months ending December 31, 1907 the passenger earnings amounted to 19.33%.
Upon that part of The St. Louis, Iron Mountain & South-
651 ern Railway in the State of Arkansas the passenger earnings amounted to 21.05% of the total earnings.
Q. That shows that Arkansas's percentage of passenger earnings is better than that of The St. Louis, Iron Mountain & Southern System.
A. Yes sir by a little over 1%.
Q. And it is almost equal to the percentage of passenger earnings in the United States generally?
A. Yes sir.
Q. And it is almost equal to the passenger earnings in group 8.
A. Yes sir.
Q. Do you know how many States included in group 8 were then operating under the two cent fare?

A. Missouri, Arkansas and Kansas. I do not know what the rate in Texas was at that time.

Q. Are you right about Kansas during that period?

A. Kansas two cent rate law went into effect just about the same time that the Missouri rate did.

Q. Doesn't the Interstate Commerce Commission make up its statistics for the year ending June 30th?

A. Yes sir.

Q. When you take this percentage of that, was it for that period?

A. It was for the fiscal year ending June 30th as compared with the six months on the St. Louis, Iron Mountain & Southern in Arkansas.

Q. That was for the succeeding six months?

A. Yes sir. The statement shows that.

Q. Then the two cent fare laws in Missouri and Kansas were not in effect when this percentage was made in regard to group 8?

652 A. No sir the two cent fare was not in effect in Missouri but one month.

Q. And how about Kansas?

A. The two cent rate was not in effect for the entire fiscal year in any of these States. Just what the dates were I do not know, but it was during that fiscal year that the rates were changed.

Q. It would be something near the end of that fiscal year?

A. Yes sir near the end of that fiscal year.

Q. So there would be a very little operation under the two cent acts included in that 21.63% in group 8?

A. Yes sir.

Q. Is the same true of this percentage of the United States as a whole?

A. Yes sir.

Q. Whereas the percentage you get from Arkansas for the succeeding six months was entirely under the two cent rate?

A. Yes sir and for the St. Louis, Iron Mountain & Southern Railway.

Q. Yes, and for The St. Louis, Iron Mountain & Southern Railway. That was entirely upon the two cent basis?

A. Yes sir.

Q. I call your attention to the paragraph below the one we have just referred to "Average number of passengers per train mile." Read that please Mr. Johnson.

653 A. In the entire United States the average number of passengers per train mile was 51.

In group 8 it was 42.

On the entire St. Louis, Iron Mountain & Southern Railway it was 47.

The St. Louis, Iron Mountain & Southern Railway it was 49.

Q. Arkansas was carrying within two passengers of what was carried in the United States as a whole?

A. Yes sir.

Q. And carrying 7 passengers more than the average in group 8?

A. Yes sir.

Q. And two more than on the St. Louis, Iron Mountain & Southern Railway System as a whole?

A. Yes sir.

Q. Under the head of "Average revenue per passenger per mile in cents" I see that in the United State as a whole the amount is 2.014 cents.

A. Yes sir.

Q. Whereas in Arkansas it is 1.903 cents.

A. Yes sir.

Q. I see in the average revenue from each passenger it was 64.6 cents in the entire United States.

A. Yes sir.

Q. And for Arkansas what was it?

A. 82.527 cents.

Q. I do not understand this last sub-division there "Density of passenger traffic"; I wish you would explain that Mr. Johnson.

654 A. It shows the volume of business carried for each mile of road, and it is ascertained by taking the total number of passengers hauled one mile and dividing that by the track mileage of the railroad. It shows the volume of business carried over the lines represented by the headings of the various columns.

Q. Dropping to the next paragraph, freight statistics, I will ask you to read the average number of tons per train mile.

A. In the entire United States it amounted to 357.35 tons.

In group 8 to 265.3 tons.

On the entire St. Louis, Iron Mountain & Southern Railway System it was 385.68 tons.

In the State of Arkansas 407.41 tons and per train mile.

Q. Now read the average revenue from each ton carried, expressed in dollars.

A. In the entire United States it was $1.05.

In group 8 it was $1.91.

On The St. Louis, Iron Mountain & Southern Railway System it was $1.65.

On The St. Louis, Iron Mountain & Southern Railway in the State of Arkansas $1.39.

Q. Mr. Johnson please give us the statistics there on the density of freight traffic.

A. Density of freight traffic in the United States as a whole was 1,052,119 tons.

Q. And for Arkansas what is it?

A. 487,919 tons.

Q. Is that worked in the same way you have just expressed as to the passenger?

A. Yes sir it is the number of tons hauled 1 mile divided 655 by the track mileage.

Q. I failed to ask you, when I was inquiring about your percentages of passenger revenue, the relative percent of freight revenue: Turn to that paragraph, please, and give us the percentage of freight revenue to total revenue?

A. That is the 5th line in the earnings from operation?

Q. Yes.

A. Freight revenue in the entire United States amounts to 70.44% of the total earnings.

In Group 8 it amounts to 69.73%.

On the St. Louis, Iron Mountain & Southern, 72.06%.

In the State of Arkansas, 71.51% of the total earnings.

Q. On the percentage of expenses to earnings on the second sheet of this Exhibit 6—I want to first ask you a question to see if I understand that: I will put an illustration to you: For every one hundred dollars of revenue does that 67.53 mean it would cost $67.53 for expenses?

A. To earn $100 in revenue it costs $67.53.

Q. It costs $67.53 in the United States as a whole to earn $100 of revenue?

A. Yes. sir.

Q. In Group 8 it costs $64.34?

A. Yes, sir.

Q. On the St. Louis, Iron Mountain & Southern it costs $74.24?

A. Yes sir.

Q. And on the St. Louis, Iron Mountain & Southern in Arkansas it costs $73.88?

A. Yes, sir.

656 Q. And on the St. Louis, Iron Mountain & Southern in Arkansas it costs $73.88?

A. Yes, sir.

Q. Your St. Louis, Iron Mountain & Southern expenses in Arkansas make it cost almost $9.00 more to earn $100 than it does in Group 8?

A. Yes, sir.

Q. Now let me see if I understand his apportionment of General Expenses: Out of every $100 of expenses, taking the United States as a whole, $3.74 is apportioned to General Expenses: Is that right?

A. That is what that perventage means, yes, sir.

A. And in Arkansas it would be $5.94?

A. Yes, sir.

Q. I invite your attention to statement No. 4 of Exhibit 3, Mr. Johnson: As I understand this statement, it is the operating expenses of the entire St. Louis, Iron Mountain & Southern Railway for the six months period ending December 31, 1907; and then a proportion of that is assigned to Arkansas; and a percentage of that proportion assigned to Arkansas.

A. That does not make the statement clear.

Q. I wish you would make it clear.

A. The first column shows the expenses of the entire St. Louis, Iron Mountain & Southern Railway.

Q. For the different items enumerated?

A. Yes, by the five different expense accounts.

657 The second column shows the expense of the St. Louis, Iron Mountain & Southern in the State of Arkansas.

The third column shows the percentage of the Arkansas expenses

to the total. But it does not mean, for instance in account No. 1, that we have arbitrarily charged 56% to the St. Louis, Iron Mountain & Southern expenses to the State of Arkansas.

Q. I did not mean to imply that by my question, but wanted to get the percentage of that expense which was assigned to Arkansas. I notice some of that percentage are quite above the average, and some quite below; and it is to those I desire to call your attention. What is shown to be the average percentage charged to Arkansas in your first paragraph?

A. You mean total for maintenance of way and structures?

Q. Yes.

A. On the first page it is shown to 54%. That is adjusted on the third page of that statement, and is made 53%. That is the actual percentage.

Q. Some of these are items that have gone into the "pooling" arrangement.

A. It is an estimated monthly charge in the detail, and that is adjusted on the succeeding page.

Q. That is only in a few cases?

A. Yes, sir; but sometimes it does affect the Department's expenses.

Q. Broadly speaking, the percentage of the St. Louis, Iron Mountain & Southern in Arkansas to the entire St. Louis, Iron Mountain & Southern, is about 54%.

A. That is shown in statement 3 as 53%.

658 Q. In this particular paragraph the amount assigned is 54%. The first item to which I call your attention is "ballast," which amounts to almost $32,000.00, as a whole; of which 70% was spent in Arkansas; Why was more money spent in Arkansas on that item than elsewhere in the System? Why such an abnormal percentage for Arkansas?

A. I cannot answer just why. While the proportion of the total expenses expended in Arkansas might be a little more than the average, the amount itself is not more than 2½% of the total maintenance expenses; and accounts of that kind are very apt to fluctuate from month to month, and between States. The condition of the track, perhaps, justified that expenditure in Arkansas at that particular period.

Q. Ought such a large amount—such a large percentage as that be charged to a six months' period?

A. This first column that shows the total for the St. Louis, Iron Mountain & Southern is for the same period. Now, it may be that the conditions at that particular time required the expenditure in Arkansas in excess of the expenditure for the same kind of expense in other States.

Q. But we are taking this as a normal year—or, rather, as a normal six months of a year.

A. You would not find any period or any year that would be absolutely normal in every item of expense of a railroad. These accounts are bound to fluctuate from year to year.

Q. That is a pretty heavy fluctuation, 70% on that item?

A. I should not say so, if the track was maintained in exactly the

same condition on the St. Louis, Iron Mountain & Southern at all times, you would require 52% to 53% of that expense anyway; and that it merely increased 17% on a small amount.

650 Q. Wouldn't that mean that the next month would have that much less per cent of expenses on that ballast account?

A. Not necessarily.

Q. It would, naturally, wouldn't it?

A. I would not say so. It may be that the entire St. Louis, Iron Mountain & Southern would require a great deal more than $32,000 for ballast within the next two months. Repairs and renewals of that kind are made in spots, not as general work all over the System. It is done just as it is required.

Q. The next item, account No. 45, is "Incidentals": Now what are "incidentals"?

A. That is just the same as was explained yesterday, under maintenance of equipment incidentals.

Q. It is the "junk shop"?

A. Yes, sir, the junk shop for maintenance of way accounts. In this case it amounts to $538.28.

Q. Little in size but large in proportion?

A. Yes, sir.

Q. Coming to the next paragraph, "Maintenance of Equipment," under item 40 I find "Tools and mac-inery, repairs of—70%: How are your tools and machinery repairs, and their accounts adjusted?

A. This account for repairs to tools and shop machinery and heating and lighting, are charged to an operating division, or, rather, they are charged to the jurisdiction of each Master Mechanic. In Arkansas, of course our principle Master Mechanic is at Little Rock, which perhaps entails a heavier expense than it does at any other division point.

Q. Why?

660 A. Because it is larger than any other Division point.

Q. Why?

A. Because it is larger than any other division point on the St. Louis, Iron Mountain & Southern Railway.

Q. Aren't those shop expenses apportioned over the entire Missouri Pacific System?

A. No sir not miscellaneous shop expenses, such as that item.

Q. What shop expenses are apportioned over the entire system?

A. The repair account is apportioned over the entire system. But the repairs to tools and shop machinery are localized to the particular division.

Q. Isn't this a repair account?

A. When I speak of a repair account I mean cost of repairing equipment, such as locomotives and cars.

Q. Why do you make a distinction between repairing those cars and locomotives and repairing the tools and shop machinery?

A. The only reason that I can give for that is that we have never thought it proper to pool the miscellaneous shop accounts. We localized them to the division where they occurred. If we pooled

them perhaps Arkansas would be compelled to stand a proportion of the other shop accounts.

Q. It does stand that on repairs to cars and locomotives?

A. Yes sir.

Q. Well, then, why should not it also stand it on repairs to tools and shop machinery?

661 A. The only reason is that the amount is too small to handle that way.

Q. It is a pretty considerable item here. I see it is $63,000.00.

A. Yes, out of one million dollars.

Q. That grows out of the Baring Cross shops?

A. The $48,000.00 does, yes.

Q. I believe this is $63,000.00.

A. It is $63,000.00 on The St. Louis, Iron Mountain & Southern Railway.

Q. And $48,000.00 on the Baring Cross shops, which runs up the percentage for Arkansas to 77.

A. Yes sir.

Q. Does that uniformly run that high, assigning that account to Arkansas?

A. You mean the proportion chargeable to Arkansas?

Q. Yes.

A. I would say that is a normal amount. I do not believe it fluctuates to any great extent and the basis for apportioning it has always been the same. Whatever the charge is on The St. Louis, Iron Mountain & Southern Railway proportionately 77% would be charged to Arkansas.

Q. You have repairs to locomotives assigned to Arkansas 53%.

Repairs to passenger cars 59%.

Repairs to freight cars 53%.

Repairs to work cars 57%.

And yet you have this item 77%. So it looks like Arkansas gets the worst of it when it doesn't go into that repair pool.

662 A. Well, if we were to pool this amount on the same basis we pool the repairs to locomotives and cars I am inclined to think the amount of money that is charged to the State of Arkansas would be just as large as the amount we have charged under that system.

Q. Why?

A. You understand our pooling arrangement, so far as repairs to equipment is concerned, is a pool between all of the Missouri Pacific and the Iron Mountain properties. And if we were to pool the share for repairs to tools and machinery, we would then include in one amount not only the $63,000.00 but the amount expended upon the other lines of the Missouri Pacific System.

Q. That is exactly what you do with your repairs to locomotives and cars isn't it?

A. Yes sir.

Q. Arkansas comes out better on that than where you do not pool it?

A. The shop account is all of a local nature, and if the cost of that

item on the Missouri Pacific is larger than it is on the Iron Mountain then the State of Arkansas would not be any better off under the pooling arrangement than she is now.

Q. The shop at Baring Cross is the biggest one you have, isn't it?

A. I think not.

Q. What is a bigger one?

A. I think the one at Sedalia is larger now.

663 Q. It is the biggest one on the St. Louis, Iron Mountain & Southern Railway.

A. Yes sir. But the pooling arrangement as to repairs of equipment extends not only over the St. Louis, Iron Mountain & Southern Railway but The Missouri Pacific as well.

Q. You think the Sedalia shops are as big as those at Baring Cross?

A. Yes sir.

Q. Those are the two biggest shops you have?

A. Yes sir.

Q. How many other shops have you?

A. We have repair shops at various points. We have them at Sedalia, Fort Scott, Coffeyville and Atchison.

Q. The next item I find here is "Incidentals" account, where Arkansas gets 57% out of the junk shop.

A. Those incidental items are of a local nature and are charged to the district on which they are incurred. The incidental charged there is $4,000.00.

Q. Here is a low one I find, item 52, "Station service, freight, 43%;" why should that be lower there and a less charge to Arkansas?

A. The station service is a local expense and it is charged to the State in which it is actually incurred.

Q. Item 56 "Yard supervision" I notice is only 47%. I suppose the same reason controls that.

A. That is right. We are not charging to the State of Arkansas any expense incurred on The St. Louis, Iron Mountain & Southern Railway in Missouri. And I presume our station and yard facilities in Missouri amount to a good deal. You will find quite a number of these items that are below the average.

664 Q. I believe I have called your attention to the lowest ones.

A. There are quite a number of those yard accounts that are less than the average.

Q. Item 81 "injuries to persons;" I see you have a pretty heavy account against Arkansas on that. Is that thoroughly localized?

A. Injuries to persons are charged to the exact location in which that injury occurs. It is the misfortune of the State of Arkansas that that charge is larger than the average.

Q. They seem to be paying a pretty good price for stock down there.

A. Most of the stock killed on the Missouri Pacific System is killed in the State of Arkansas.

Q. It is pretty fine stock.

A. I don't know about that. I never settled any of the claims.

Q. I will have to call the Claims Department to testify to that.

A. They would probably say it was claimed that it was very fine stock.

Q. You have a very high charge there in item 83 "loss and damage to baggage and personal property;" 81% of that occurs in Arkansas?

A. That loss is charged between the points between which the baggage itself moves. That is not an estimate.

Q. Do you think it is normal to have 81% of that item charged up to Arkansas? It is a small item but a large percentage.

A. It may be made up of a few claims that came in at that particular time. There is not any explanation of the fact that 81%
665 of the baggage claims were incurred in the State.

Q. I see here a small item but a large percentage item 107 "flood damages;" do you know whether that covers the usual flood damages or whether there was some large flood down there that accounts for that?

A. It must be a normal accident. It is caused by high water.

Q. There is nothing abnormal in the figures but the large percent of it. The entire amount of it is charged to Arkansas.

A. There is nothing abnormal in that amount, $2900.00. The conditions in Arkansas would justify that as against the other States.

Q. Item 111—I asked you to look that up.

A. That will take some time. I think they will get that some time today.

Q. Well, we will pass that until you get that information.

Item 127 "Law expenses" that is 64% in Arkansas; are your lawyers more expensive down there than elsewhere?

A. The lawyers are not more expensive than elsewhere but litigation sometime is.

Q. What do you include in that item?

A. I include in there a proportion of our general law expenses. That is, the general attorneys here at St. Louis, who cover the entire System. I include in that all of the expenses of the lawyers——

Q. How do you divide those General Attorneys between Arkansas and the balance of the System?

A. A system man is divided upon the basis of the gross
666 earnings in the several States. In other words, if we have one thousand dollars expense of a system nature, and forty percent of the entire earnings of the system are earned in Arkansas, 40% of that expense would be charged to Arkansas.

Q. Does that account for that high percentage of law expense?

A. No sir.

Q. What does?

A. The local law expense in the State, as against the local law expense in other States. For instance——

Q. But all the Attorneys are not confined to Arkansas.

A. Then it would not be charged to Arkansas.

Q. Take it in my town, Fort Smith, it would be distributed over Western Oklahoma and Arkansas.

A. Then a portion is charged to Oklahoma and a portion is charged to Arkansas.

Q. Then it is not all in this item.

A. All the Attorneys' expenses whose work is confined to Arkansas, is charged to Arkansas.

Q. And those whose work is done in some other States you divide on some equitable basis?

A. Yes sir, on the basis of the proportion of territory in each State.

Q. Some work is done by the Arkansas Attorneys in Louisiana.

A. In that case the work is not charged to Arkansas. We have one Attorney whose work covers partly Louisiana and partly Arkansas. Those expenses are divided.

667 Q. And it is the same with Missouri? Haven't you some Attorney in Arkansas who handles Missouri business?

A. I don't think so. The Missouri Attorneys work entirely in Missouri.

Q. But I believe some of the Arkansas Attorneys work in Louisiana. And in Fort Smith the same Attorney has charge of Arkansas and Western Oklahoma.

A. Yes sir but there is a large amount of law expense local to the State.

Q. Outside of the salaries of your Attorneys, what other items are included in there?

A. Court costs and miscellaneous expenses.

Q. Don't they follow the judgment, in personal injury cases?

A. Yes sir if a judgment is rendered. But sometimes there are expenses in connection with these suits before any judgment is rendered, and in the absence of any liability we charge it to general expenses.

The expense of compiling statistics for a case of this kind is charged to law expenses and to the State in which the suit is brought.

Q. Let me understand you, would any part of your Rate case in Missouri involving the St. Louis, Iron Mountain & Southern Railway be charged to Arkansas?

A. No sir.

Q. And no part of this case would be charged to Missouri?

A. No sir.

Q. Didn't I understand you awhile ago to say that 40% of your general law expenses would be charged by gross earnings—or did you use 40% as an illustration?

668 A. I used it as an illustration. I said, if we had a system charge of $1,000, and 40% of the gross earnings of the Missouri Pacific System was earned in Arkansas, 40% of the expense would be charged to Arkansas.

But a rate case of this nature is charged to the state in which the suit is brought. I mean by that, the State responsible for the suit. All the expense of the Missouri Rate Case was charged to the state of Missouri; and all the expense in this case will be charged to the state of Arkansas.

Q. I want to get at your line of adjustment between judgments and law expenses: take for illustration a man who is killed by a passenger train, and you adjust that without suit and pay a given amount of money: where is that sum charged?

A. It is charged to "Injuries to persons."

Q. Under the passenger side division?

A. Yes, sir.

Q. That is adjusted by your lawyers without litigation: would any part of that service go into those law expenses?

A. Any part of what service?

Q. The service in this settlement of this suit?

A. The Attorney's salary and expenses will go into the law expenses; but the judgment or the amount paid in settlement would go into "Injuries to persons."

Q. That is what I supposed, but I understood you to say that the court costs go into this.

A. If we have a law suit and there are incidental expenses in connection with the suit, which must be paid, before the suit is
669 settled or judgment paid, we consider that a law expense.

Q. It might be a law expense yet would not be a Court expense.

A. Perhaps I am wrong in distinguishing between court expenses and the incidental expenses of the law department.

Q. What you mean is that only the incidental expenses of the law department go into this sub-head?

A. That is it.

Q. The court costs would necessarily follow the judgment in its assignment to your different departments?

A. Yes sir.

Q. After that explanation, do you know of any reason why the proportion of law expenses in Arkansas should be 64%?

A. Well, yes. It costs a certain amount of money to maintain an organization of any kind. The greater the volume of business or the greater the territory covered by that organization, the less will be the proportionate charge.

Q. That covers about 52% I believe. But you have it 64%.

A. The density of traffic in Arkansas is a good deal larger than it is in other States. So far as our law department is concerned, we maintain a separate organization in each State. Our law department in Missouri, so far as the actual work is concerned, is entirely separate and distinct from that of Arkansas. And I presume it would be in all other States if the business there was large enough to justify it.

Q. The next item I see down there that is considerably above the average is "Dining Cars": I believe that is a balance,
670 isn't it, Mr. Johnson?

A. That is the net deficit in the operation of dining cars. That amounts to $1100.00. Now that is brought about by the fact that we are not operating dining cars on all of the trackage of the St. Louis, Iron Mountain & Southern Railway; and a larger proportion of the main line mileage of the Iron Mountain is located in Arkansas than in any other State.

Q. How much larger proportion?

A. I could not say.

Q. You have an exhibit here which will show that?

A. It will come pretty close to 60%.

Q. Roundly speaking, there is 60% of the main track in Arkansas, but your expense on that is 63% ; that probably accounts for that.

Mr. Johnson, can you ascertain actually what percentage of intrastate and interstate traffic use the dining car service?

A. No sir.

Q. You could ascertain that for the parlor cars, but I suppose you could not for the dining cars.

A. I haven't any idea what proportion of the interstate traffic would patronize the diner, as against the State traffic.

Q. There would naturally be much less patronage from the State traffic, the runs being much shorter, than from the interstate, wouldn't there?

A. Well, perhaps it would.

Q. That would be a natural inference.

A. I would not say that in Missouri. I don't know what
671 the conditions are in Arkansas.

Q. That is the natural inference one would draw from those facts, isn't it?

A. Perhaps the largest portion should be charged to the interstate business.

Q. You have "Rentals" down here. I believe in your recapitulation you figured out the percentage on that as 720?

A. Yes sir.

Q. I wish you would explain that item Mr. Johnson.

A. The rental account includes the amount we pay for the use of other lines, less the amount that other lines pay us for the use of our lines; and the rental itself is located to the State in which the facility rented is located. On The St. Louis, Iron Mountain & Southern as a whole our net charge for rentals amounts to $3,000.00.

Q. That is what you get off other railroads?

A. No sir it is what we pay other railroads less what other railroads pay us.

Q. That $3,000.00?

A. Yes sir.

Q. Proceed.

A. In Arkansas the amount we pay other railroads for property used in Arkansas, less what other railroads pay us for the use of our property located in Arkansas, amounts to $21,000.00.

Q. What properties are those Mr. Johnson?

A. There is quite a list of them.

Q. Give us the heaviest ones.

A. The heaviest one, perhaps, is the St. Louis Southwestern Railway.

672 We have trackage rights over the St. Louis Southwestern from the State line to Paragould.

Q. That is on that trackage arrangement you spoke of yesterday.

A. Yes sir. We pay rental for joint facilities at Texarkana. We pay rental for the mileage in Memphis, spoken of yesterday.

Q. Is that included in this item?

A. Yes sir that is included in here. We pay mileage for the use of the Little Rock Junction Railroad.

Q. And the Van Buren Bridge?

A. Yes sir and the Van Buren Bridge.

Q. Are there any other heavy items you recall?

A. No sir no other heavy items that I recall, but there are a number of small items.

Q. Did I give you a memorandum yesterday to look more fully into the Little Rock Bridge proposition as well as into the Van Buren bridge proposition?

A. You said you wanted to find out just where the Little Rock Junction Railway was located.

Q. Yes and I intended to ask you to look up the status just as you were to do for the Van Buren Bridge; find out who owns it, how much rent you pay and how much the bonds are. Get me all the information about that, as you promised to do about the Van Buren Bridge. And also let me know how you assign that. I presume from putting in this rental it would be assigned to freight and passenger.

A. Yes sir. We take our rental charge in total and divide that between freight and passenger.

673 Q. I understood you yesterday to say that the St. Louis Southwestern Railway would be charged only to freight, and that the Van Buren Bridge would be charged very likely only to passenger.

A. Not so far as rental is concerned. The expense of operating the St. Louis Southwestern track would be charged to freight only.

Q. But the rental would be charged indiscriminately.

A. Yes sir.

Q. Although as a matter of fact it is used for freight only?

A. Yes sir.

Q. After you get us that information I will question you further on that matter.

I see here an item of "Taxes"—but I suppose like death taxes cannot be escaped.

A. That is 70% of the total amount of taxes paid on The St. Louis, Iron Mountain & Southern.

Q. Mr. Johnson, in preparing the statistics used by the road you used the revenue theory in preparing any of your statistics for your own use?

A. We divide all of our system charges, of a general nature, on the revenue basis.

Q. What do you call "System charges"?

A. Such charges as I have explained, and take all of our general offices, say at St. Louis, where the duties of the officials and employees of the various departments cover the entire system.

Q. You divide that on the gross revenue basis and apportion it to the different departments on the gross revenue basis?

A. To the different States and operating divisions, yes sir.

674 Q. You don't do it to States, do you? Don't you do it to the different divisions?

A. That brings about a charge to the State. All of our statistics are compiled by what we call "Accounting District"; that is, the

system is divided up into small pieces of track, and those divisions are made along State Lines.

Q. Not entirely so, are they Mr. Johnson?

A. Yes sir.

Q. Take Ft. Smith, for instance, and these law expenses we were talking about; Mr. Miles is the General Attorney for Arkansas and Oklahoma.

A. Yes sir.

Q. That does not follow a State Line.

A. That expense is divided into accounting districts that "Break" at State Lines. We would charge Mr. Miles' expenses to our Fort Smith District and to our Waggoner District. Our Waggoner District is located in Oklahoma, and our Ft. Smith District is located in Arkansas.

Now take our St. Louis offices, and all of the expense there is divided to each one of these fifty one accounting districts on the basis of gross earnings. Those accounting districts added together make the State expenses.

Q. Do you make any statistical divisions according to the expense of operation?

A. We have never been called upon for any such statistics as that.

Q. You have not prepared them for your own use?

A. No sir except to carry out this statement of Judge Vandeventer's, that we filed here.

Q. That is purely for litigation purposes?

675 A. Yes sir. We have no regular statistics separating intrastate from interstate business.

Q. Have you any regular statistics separating freight and passenger?

A. We make it for the benefit of our operating department.

Q. What basis do you use in that?

A. The division between freight and passenger on common accounts, generally is made on the train mileage basis.

Our yard accounts are divided arbitrarily, 95% to freight and 5% to passenger. That percentage is based on the mileage of switch engines engaged in each class of service. The percentage itself was worked up some four or five years ago and is based upon the mileage of some four or five years and it will be used indefinitely.

Q. Are there any other bases which the road uses in compiling its own statistics?

A. Well, that would depend altogether on the kind of statistics that were wanted. Take some of our accounts, and we divide them for certain purposes on any number of bases.

Q. That is what I wish you to explain as an accountant, what various bases are used.

A. Take our mixed train expense. We have a certain number of mixed trains, and the wages of the employees of those trains are sometimes divided between freight and passenger. That is done on an arbitrary basis of 25% per passenger and 75% for freight. Those percentages are based upon the general percentage of the passenger earnings to the total earnings.

Q. Not on the basis of general expenses in the freight
676 earnings or in the passenger earnings.

A. That is based upon the gross passenger earnings and gross freight earnings.

Q. The expense of the total amount is not taken into account in dividing the expenses.

A. For mixed trains it is the expense itself we wish to divide.

Q. I didn't understand you. I see your point now. Go ahead.

A. That is about the only basis I know of for compiling regular statistics. Every department of a railroad will compile statistics for its own use.

Q. What basis is used for compiling these various statistics?

A. I have just given it to you. The principal basis is the train mile basis; it is the principal one for dividing the expense between freight and passenger.

Q. You use track miles, sometimes?

A. The track mile basis is used only where we have a man in charge of track miles, a Superintendent or a Road Master, who has jurisdiction over tracks located partly in one State and partly in another. That would be divided between those States upon the percentage of the track miles under his jurisdiction in each State.

Q. What percentage of your operating expenses do you divide on the basis of gross earnings, between freight and passenger?

A. I haven't the slightest idea.

Q. General expenses?

A. It would be general expenses and it would be traffic
677 expenses; and it would be a large proportion of the amount included in our expense account No. 21.

Q. Which is No. 21?

A. It is "Superintendents" under "Maintenance of Way."

Q. That is a general expense.

A. Well, it is entirely different from what we call "General Expense" in this statement.

Q. I understand that, but it is a general expense?

A. Yes sir, it is common to the entire system.

The same thing would apply to account No. 38, which is the "Superintendents" account under "Maintenance of Equipment".

Q. It is all a "Superintendents" account, of whatever nature.

A. Yes sir. Where there are general officials, that would be divided on that basis. No. 90 is another account.

Q. That is still another "Superintendents" proposition?

A. Yes sir. Practically everything under "Traffic expense" accounts 110 to 117; and everything that is not located in "general expense" accounts 121 to 129.

Q. What you might call "general common expenses"—common in general?

A. All expenses that are common to all parts of the line are divided on the basis of gross earnings.

Q. It amounts to something like 8 to 10%, possibly, of the total expenses, doesn't it?

A. I think it would be more than 10%. I think it would be a good deal nearer 12 or 14%.

678 Q. Referring to the question of rentals, the S. Louis, Iron Mountain & Southern Railway has a controversy down at Little Rock with the Bunch Elevator: I don't care about going into that controversy, but I just want to know whether that elevator property would be included in your rental.

A. Any rental we would receive from Mr. Bunch would be included in "rentals."

Q. I just wanted to know where to locate that matter. That would be in the "rentals" we have been discussing, like the Van Buren Bridge, etc.?

A. Yes sir. I understand that Mr. Wharton's men are now making an investigation of that matter.

Q. We want to know where it would be on this statement of yours. We know where it is actually.

A. It would be in these rental accounts. It goes into the "miscellaneous earnings" account No. 18.

Mr. HILL: That is all I have to ask Mr. Johnson until he gets the information he has been requested to furnish.

Thereupon the witness, F. P. Johnson, is temporarily withdrawn.

679 R. E. KIMBELL, a witness of lawful age, being duly produced, sworn and examined, testified as follows:

Direct examination.

By Mr. J. M. MOORE:

Q. Please state your name, residence and occupation?

A. R. E. Kimbell; St. Louis, Missouri; Assistant Auditor of the St. Louis Southwestern Railway Company.

Q. How much experience have you had in the accounting work of that railroad, Mr. Kimbell?

A. I have been connected with the St. Louis Southwestern Railway for twenty-three years.

Q. State in what capacities you have been so connected?

A. During the entire time in the auditing department. For the last six years I have held the position of Assistant General Auditor.

Q. Do you have charge of the records and of the accounts of that Railroad?

A. I do, under the direction of the General Auditor.

Q. Have you had any statements prepared, to be used as Exhibits in the case of the St. Louis Southwestern Railway vs. Robert P. Allen, et al.?

A. Yes, sir, I have.

Q. Have those statements been prepared under your directions?

A. They have.

Q. Have you personal knowledge as to the correctness of the statements?

680 A. I have.

Q. Do they reflect correctly what is shown by the books and records of the Company?

A. They do.

Q. Have you a map showing the line of the St. Louis Southwestern Railway?

A. Yes, sir, I have. (Witness produces map.)

Q. What part of that line does that show?

A. It shows the entire St. Louis Southwestern System, comprising the lines in Illinois, Missouri, Arkansas, Louisiana and Texas.

Q. Are the lines in the different States marked so as to separate them in any way?

A. Yes, sir; they are distinctly marked in red.

Q. Will you file a copy of that map as Exhibit 9 to your testimony?

A. I will.

The map referred to is marked "R. E. Kimbell Exhibit 9. Said Exhibit is in the words and figures following, to-wit:

For Exhibit nine, see Volume 8, page 5287.

681 Q. Have you a statement of the track mileage of the St. Louis Southwestern Railway?

A. Yes, sir, I have.

Q. Will you file that as Exhibit 10 to your testimony?

A. I will.

The statement referred to is marked R. E. Kimbell Exhibit 10." Said Exhibit is in the words and figures following, to wit:

For Exhibit ten, see Volume 8, page 5289.

682 Q. Have you a statement showing the operating revenues and the operating expenses, taxes and rentals for the St. Louis Southwestern Railway in the State of Arkansas, for the year ending June 30, 1908?

A. I have.

Q. Will you file that as your Exhibit 11?

A. I will.

The paper referred to is marked "R. E. Kimbell Exhibit 11. Said Exhibit is in the words and figures following, to-wit:

For Exhibit eleven, see Volume 8, page 5291.

683 Q. Have you a similar statement relating to the traffic in the State of Arkansas alone?

A. I have.

Q. Will you file that as your Exhibit 12?

A. I will.

The paper referred to is marked "R. E. Kimbell Exhibit 12." Said paper is in the words and figures following, to-wit:

For Exhibit 12, see Volume 8, page 5294.

684 Q. Have you prepared a statement of the formula used in ascertaining the relative cost of conducting State and interstate transportation on the St. Louis Southwestern?

A. I have.

Q. Will you file that as your Exhibit 13?

A. I will.

The paper referred to is marked "R. E. Kimbell Exhibit 13. Said paper is in the words and figures following, to-wit:

For Exhibit 13, see Volume 8, page 5299.

685 Q. Have you prepared a statement of the statistics which relate to and have a bearing upon the traffic for the years mentioned, being the fiscal years ending June 30th, 1907 and 1908?

A. I have.

Q. Will you file that as your Exhibit 14?

A. I will.

The paper referred to is marked "R. E. Kimbell Exhibit 14." Said paper is in the words and figures following, to-wit:

For Exhibit 14, see Volume 8, page 5304.

686 Q. Have you prepared a statement showing the valuation of the property of the St. Louis Southwes ern, its equipment and so forth, in the State of Arkansas, based upon the assessment made of its property in the State of Arkansas, in the year 1908, and will you file that as Exhibit 15 to your testimony?

A. I will.

The paper referred to is marked "R. E. Kimbell Exhibit 15." Said paper is in the words an dfigures following, to-wit:

For Exhibit 15, see Volume 8, page 5306.

687 Q. Mr. Kimbell, will you also prepare*d* a statement of the value of said property based upon the assessment made by the State Tax Commission of the State of Arkansas in the year 1909, and file same as your Exhibit 16?

A. I will.

The paper referred to is marked "R. E. Kimbell Exhibit 16." Said paper is in the words and figures following, to-wit:

For Exhibit 16, see Volume 8, page 5308.

688 Direct examination of R. E. KIMBELL continued.

By Mr. MOORE:

Q. Have you prepared a statement showing the bases used in dividing operating revenues between freight and passenger and between states?

A. I have.

Q. Will you file that as Exhibit 17?

A. I will.

The paper referred to is marked "R. E. Kimbell Exhibit 17."

Said exhibit is in the words and figures following to-wit:

For Exhibit 17, see Volume 8, page 5310.

689 Q. Have you prepared a statement showing the bases for dividing operating expenses common to the entire line, between state accounting divisions, and between freight and passenger?
A. I have.
Q. Will you file that statement as Exhibit 18?
A. I will.

The paper referred to is marked "R. E. Kimbell Exhibit 18."
Said exhibit is in the words and figures following to-wit:

For Exhibit 18, see Volume 8, page 5312.

690 Q. I notice that you filed in connection with the last exhibit, circular number 360. Please explain what connection that has with this exhibit.
A. Circular number 360 contains rules for the guidance of all departments in assigning operating expenses to state accounting divisions, and dividing the same between freight and passenger. Supplement A, to circular 360, defines the bases for dividing common items of expenses between state accounting divisions, and between freight and passenger.
Q. That circular contains the bases upon which those divisions are made, according to the regulations of the Company?
A. Yes sir.
Q. That is issued, I suppose, for the information of those who have these duties to perform?
A. Yes sir.
Q. Now, Mr. Kimbell, I would like you to state how these accounts are kept; make any explanations, and go through and explain these various statements; how they are gotten up.
A. I will say, in a general way, that the accounts of our Company are kept in accord with the rules and classifications of the Interstate Commerce Commission. The Commission does not, however, prescribe or require a division of expenses, between freight and passenger, but this is done by our Company for the purpose of making operating comparisons, and to test in a general way, the efficiency of operation, as to the two classes of traffic. Neither does the Commis*mis*sion require or provide for a division of expenses
691 between states, or of revenue between states. This is done to meet the requirements of State Commissions. Our operating expenses are not divided, in our regular accounts, between state and interstate, but this has been done in the exhibit filed in this case. The revenues, passenger and freight, are divided between state and interstate in our regular accounts, but no effort is made to divide revenues from mail, express and miscellaneous sources, between state and interstate. That is a statement, in a general way, of how our accounts are kept, regularly.
Q. While you made no effort to divide those last items you men-

tioned, which I suppose are grouped under the head of "miscellaneous," mail, express, etc.,——

A. I don't know of any practical basis of dividing the main items of miscellaneous revenue, such as mail, and miscellaneous of various kinds. There is no way that I know of that it could be divided readily.

Q. Mr. Kimbell, will you take these various exhibits, beginning with the first of them, and make any explanations that will be necessary to have us understand?

A. Exhibit 11, which is the statement of operating revenues—operating expenses, taxes, and rentals, in the state of Arkansas, for the year ending June 30, 1908. I think this statement will be found to be self-explanatory. It shows total operating revenues of $4,130,011.45, which total is subdivided between freight
692 revenue, state; freight revenue, interstate; passenger revenue, state; passenger revenue, interstate; and the remaining items grouped under the head of "miscellaneous."

The operating expenses, taxes and rentals, are also shown by the general accounts, as prescribed by the Interstate Commerce Commission, with a further subdivision between freight and passenger. Likewise, taxes and rentals are shown as separate items and subdivided between freight and passenger.

Exhibit 12 follows in sequence.

Mr. MOORE:

Q. I think that explains itself fully on the face of it, does it not?

A. Yes, and I think will be found self-explanatory.

Exhibit 13 shows the formula used in figuring the various ratios of extra cost, under which the results shown in Exhibit 12 were found.

Q. On what bases—going back a moment—were the operating expenses shown on Exhibit 12, divided as between interstate and intrastate?

A. They were divided in the first instance on the straight revenue bases.

Q. Explain in what manner a division was made, as to freight and passenger, in a few words.

A. In the first instance, the revenues are divided between freight and passenger, and the proportion of the revenue derived from the handling of state freight, for example, was found to be 9.79%.
693 Q. 9.79% of what?

A. Of the total freight revenues. This 9.79% was applied to the total operating expenses, taxes and rentals charged to freight business, thereby producing the proportion of that total expense chargeable to intrastate freight. The passenger was determined in the same way.

Q. Now, Exhibit 13, you say shows the formula for ascertaining the extra cost of conducting state or intrastate business, on the

assumption that there is an additional cost of the various percents that are set out in that statement?

A. Yes sir.

Q. Go to Exhibit 14. Is there anything that you wish to say about that?

A. I see nothing there that requires explanation. Exhibits 15 and 16 are the ones to be filed in connection with the valuation. Exhibit 17 defines the bases for dividing revenues between freight and passenger, and is self-explanatory. Likewise Exhibit 18, which defines the bases for dividing expenses between freight and passenger, and between states, and is self-explanatory.

Q. Mr. Kimbell, did the operating officers of the St. Louis Southwestern Railway Company make a test at any time after this litigation was instituted, for the purpose of ascertaining the relative cost of conducting state and interstate transportation? If so, I wish you would state what was done in that respect.

A. A test of that kind was made under my direction.

Q. What period did it cover?

694 A. The month of October, 1908. The temporary injunction was granted in St. Paul on September 3, and the month of October was selected for the purpose of this test, on account of it being the first full month following the injunction. October is rather a heavy month, but for a test of this kind, in my judgment, it fairly represents the general conditions.

Q. Would it represent, fairly, a year's business?

A. I should say so. It would represent relatively, the difference between the two classes of traffic.

Q. I wish you would describe in what way that test was made.

A. We employed special men to ride on every local freight train running in the state of Arkansas, during the month of October; and also stationed men at terminal points; all of these men being provided with special forms on which they were required to make an abstract showing way-bill, reference points from and to, and weight of all freight handled on their train. These reports were accumulated in our Superintendent's office by a representative stationed there, and sent to my office, where the ton miles and other data required, was figured out.

Q. Did they also obtain the weight of the car?

A. They also obtained the tare weight of all cars, loaded and empty; cabooses; gross weight of locomotives in each train. The fuel consumed on each run was reported by each engineer, which was the way we figured it could be most accurately obtained.

695 Q. Was there any record kept of the cost of labor?

A. The wages of train and engine men were obtained from the time slips of each train, and therefore are very accurate.

Q. All the various elements, then, that entered into the cost of moving freight on those trains, was ascertained, was it?

A. I think it was, yes.

Q. Have you prepared any statement showing the result of that test?

A. Yes sir.

Q. If you have, I would be glad to have you file such statement as you have, as Exhibit 19.

The paper referred to is marked "R. E. Kimbell Exhibit 19." Said paper is in the words and figures following, to wit:

For Exhibit 19, see Volume 8, page 5320.

696 Q. Have your prepared any additional statement of statistics that have a bearing upon the information obtained in that test?

A. I have prepared a statement of miscellaneous statistics, in connection with that, which I file as Exhibit 20.

The paper referred to is marked "R. E. Kimbell, Exhibit 20". Said paper is in the words and figures following, to wit:

For Exhibit 20, see Volume 8, page 5322.

697 Q. Did that test enable you to ascertain with exactness, the commercial ton miles made by the different trains, the through and local trains?

A. Yes sir, it did.

Q. And did it give you also the ton miles of dead weight, including the locomotive and caboose, and all cars, including empties, on all trains?

A. It did.

Q. Did it enable you to determine with exactness the cost, wages and fuel?

A. Yes sir.

Q. Mr. Kimbell, I wish you would state what result was shown. State it in your own language.

A. I have memoranda which embraces a good many figures, summarizing these results.

Q. Well, if you have you can just insert that as your statement, if you wish to.

A. In the first place, the results indicate that the cost, commercial ton per mile, for state freight, is .005483, or about 5½ mills; and for interstate, .000991, or a little less than one mill.

Q. You say that it indicates that. Does it indicate that or does it show it for a certainty?

A. Well, I consider that indicate means show.

Q. No there is a difference. What do you mean?

A. The statement shows that. Yes sir.

Q. Well, go on now.

698 A. Some of the important reasons why this——

Q. Does that contain any information as to the relative cost of transportation as between state and interstate?

A. I have just given the figures showing the cost per commercial ton, per mile, on state freight, as compared with the commercial cost per mile on interstate freight, and the difference, according to

those figures, is 5½ times greater for state freight than for interstate freight. Now some of the reasons why this difference appears to exist, are as follows:

First. The average cost on through trains, per train mile, of wages and fuel, was 34¢ and on local trains, 50¢. Of the total state business handled during the month, 22% moved on through trains, and 78% on local trains. The average cost for wages and fuel, per commercial ton mile, was .000865, on through trains; and .003883, on local trains; or, more than four times greater. 78% of all of the state business was handled on local trains, at a cost averaging nearly five times the cost of the remaining 22%, which was carried on through trains; whereas 92% of the interstate business was handled on through trains, at a cost of about one-fifth as much as the cost of the remaining 8%, which was carried on local trains. Owing to the large preponderance of the state business being necessarily carried on the local trains, and the much larger preponderance of interstate business being carried on through trains, the difference in the cost of the two classes of the business is apparent.

699 Second. Through trains cost less per train mile—34¢ against 50¢ for locals, but carry more than three times as many commercial ton miles per mile run, as the local trains, namely, 399 against 129 for locals.

Third. The average number of loaded cars, per train mile, in through trains was 23, or 72% of the total train; and in local trains, 11; or, 69% of the total train.

Fourth. The average number of empty cars per train mile, in through trains, was 9; or 28% of the total train; and in local trains 5; or 31% of the total train.

Fifth. The average number of all cars per train mile, in through trains was 32, and in local trains, 16.

Sixth. The average tons of commercial freight, per ton mile, in through trains, was 399; and in local trains 129.

Seventh. The through trains carried 49 tons of Company freight for each mile run; and the local trains carried 21 tons.

Eighth. The average tons of all dead weight—that is, non-revenue weight, including the weight of the engine, caboose, Company freight and all cars, per train mile was 734 on through trains, and 397 on local trains; the through trains carried more than three times as much commercial business as the local trains, but required less than two times as much dead weight.

Ninth. The average number of ton miles of dead weight, to a ton mile of commercial freight, was on through trains, less than carload, 4.59 tons; carload, 1.62 tons; both, 1.84 tons; and on local trains, less than carload, 9.44; carload, 1.90 tons; both, 4.09 tons.

700 Tenth. The percent of dead weight to gross weight, of through trains was 65%, and local trains 76%.

Eleventh. The percent of overtime to total wages of train and engine men, was 5% on through trains, and 19% on local trains.

Twelfth. The state ton miles of commercial freight amounted

to 5% of the total of all commercial ton miles, but cost over 20% of the total wages and fuel.

Those are some of the important reasons which I have made note of, which in my opinion, seem to indicate where the difference in cost exists.

Q. Was that test made with care and caution, and are you satisfied that the information as obtained was correct and accurate?

A. It was made under my personal direction and every possible care was taken to have it correct.

701 Cross-examination.

By Mr. HILL:

Q. Mr. Kimbell, take exhibit 19, revenue on through trains, $6,794.96. How did you reach that sum?

A. By applying the average revenue per ton per mile, on state freight, in the month of October, as shown in our regular accounts, to the ton miles shown in this statement.

Q. The next item is wages and fuel, $610.96. How did you reach that?

A. You will note that the total wages and fuel for the through train is $23,498.61. That amount was divided between state and interstate freight, on the basis of state and interstate revenue, as indicated by the item just above it. In other words, the revenue basis——

Q. What is the item above it? In other words, you arrived at that on a revenue basis? You have taken the actual costs as far as they go, and then apportioned them upon the revenue basis. That has been your system?

A. Yes; that is it.

Q. Now, a little lower down on that same sheet, Mr. Kimbell—"average cost of wages and fuel per ton mile, greater than interstate, 5.5 times."

A. Yes sir.

Q. Did you reach that on the revenue basis?

A. Exactly.

Q. Mr. Kimbell, your Exhibit 12, so far as the valuations of your property are concerned, are based upon the assess-
702 ments made by the Tax Commission of 1909, are they not?

A. They are, yes sir.

Q. Your entire calculation on the amount of revenue being received by your Company, from its property in the state, is based upon the valuation of that property as made by the Tax Commission in 1909?

A. So far as the valuation is concerned, that is correct.

(Colloquy here ensues regard- use of figures for 1909; whereupon the Master made the following statement:)

The MASTER: I am inclined to be liberal at this time and let the evidence go in, with the understanding that later it may be expunged on the application of counsel, whatever part of it is improper.

Mr. HILL:

Q. Mr. Kimbell, you have not made a detailed statement of your operating expenses, have you?

A. By primary accounts—no, I have not. They are shown, however, by general accounts, you will notice; general Interstate Commerce account, Exhibit 11.

Q. Now, in the Iron Mountain similar exhibit, there are 129 subdivisions of these items, which you have grouped in 5?

A. Yes sir.

Q. You have all the data in your office, that the Iron Mountain has to make up their exhibit, have you not?

703 A. I have.

Q. Can you not make up that?

A. I can.

Q. I would like to have you do it before I cross-examine you then. I feel that I ought to have a full disclosure of these items; to the extent of them and examining the books. There are a great many items I asked Mr. Johnson about, some I am satisfied with and others I am not. Can you get that up, Mr. Kimbell?

A. I will say that that will take me probably a day or so to do. There are 129 accounts and they have to be consolidated by months; that is twelve set of figures——

Q. I think you will be doing well if you do it in two or three days.

A. We can do it very easily, if you want it.

Mr. HILL: I don't believe I will cross-examine Mr. Kimbeil until I get that.

The MASTER: I think Judge Hill should be allowed that privilege.

Mr. HILL: However, there may be some general questions that I can dispose of now.

The MASTER: Examine him as far as you can now, and then recall him later on.

Mr. HILL:

Q. There is one matter I can discuss with you. These statements that you have given in 1908, are for a full year?

A. Yes sir.

Q. The year ending June 30, 1908. The statements that

704 you produced to Judge Vandevanter, upon which you obtained your preliminary injunction, were for the first half of that year.

A. No sir; for the same period exactly. We put in a full year.

Q. How much of that year was affected by the panic?

A. Well, that is very difficult to say. The panic was supposed to have affected us somewhere about November 1907.

Q. You did not begin to feel it until about November, you think?

A. I think not.

Q. You did begin to feel it then very severely, and from that time up until the close of this year 1908, your road was suffering from depression in business, probably, as it never suffered before?

A. Yes, I might add that it affected both classes of business, correspondingly, I should say.

Q. It is a fact that it was suffering?

A. The earnings were somewhat less than for the corresponding months of the previous year, I think.

Q. It was not normal in any respect, state or interstate?

A. Well, I wouldn't say that offhand. I have not had the occasion to look into that.

Q. Your judgment would be that it was?

A. My judgment would be that the earnings were somewhat less than for the corresponding months of the preceding year.

705 Q. I want to read you from the annual report of your road, dated June 30, 1908, page 12: "During the period, July to October, inclusive, there was a substantial increase in operating revenues over the corresponding period of the preceding year; but beginning with November the volume of traffic decreased and the gain previously made was lost, the net result for the year being a decrease of $676,290.00."

A. That is correct; you can't go behind that. I would like to say in that connection that that report is for the entire Cotton Belt system, including the Texas lines.

Q. Now on the next page I read: "The operating expenses for the fiscal year ending June 30, 1908, increased $497,447.70, as compared with the preceding year."

A. Increased?

Q. Yes. Now, as in round figures, a decrease in revenue of almost $700,000 and an increase in expenses of nearly a half million. That is law and gospel?

A. I should say so.

Q. That was hardly a normal year, was it, Mr. Kimbell?

A. Well, I have known conditions like that to exist in previous years.

Q. Did you escape a receiver's hands?

A. By a narrow margin.

Q. If there were many years like that, you would not escape a receiver, would you?

A. We made a fairly good showing at that.

Q. I thought you were making a very bad showing here in Arkansas?

706 A. That was only on state business.

Q. Where do you make your money, Mr. Kimbell?

A. Well, we certainly don't make it, Judge, on state business, I don't think.

Q. Well, I asked you where?

A. Perhaps you know as well as I do, that we make it in the transportation of freight and passenger business.

Q. What kind of transportation and passenger business?

A. All kinds of——

Q. Except state?

A. State business has shown to us as being a losing proposition.

Q. You lost in Missouri, did you not, on state business?

A. Quite likely; yes sir.

Q. You showed that, didn't you?

A. Our case was not tried in Missouri.
Q. You feel sure you are losing on state business in Arkansas?
A. I feel so, from facts I have been able to develop.
Q. How about the state business in Texas?
A. I have never made any test of that.
Q. Do you know anything about Illinois?
A. Well, you can hardly consider us an Illinois line. We operate trackage rights over there.
Q. Your interests there are comparatively small.
A. Very small.
707 Q. What do you think about Missouri business? Do you make money in Missouri?
A. Local business.
Q. Do you on state business?
A. I don't think so, sir.
Q. Then you would have to be making money on interstate business, wouldn't you?
A. Yes sir.
Q. Mr. Kimbell, during the period we are inquiring of, 1908, your road made no dividend, I believe?
A. No sir.
Q. The great drag on your road was the Texas end of it, wasn't it?
A. The Texas end produced a less income than any other part of the line, if that is what you mean.
Q. If you had cut off Texas you would have had a pretty nice income?.
A. I question whether we would have much left. Our income, north of Texas, is due largely to the business we exchange with our Texas line.
Q. You think that is where your money comes in then?
A. The largest part of it, yes.
Q. But the Texas earnings themselves, show much less than the Arkansas?
A. They are very slim.
Q. You had a deficit in Texas, according to your annual report, did you not?
A. We have had deficits in Texas. I presume that is correct for this year.

708 Mr. MOORE:

Q. Mr. Kimbell, are the Texas lines operated by the corporation that is plaintiff in this case?
A. They are absolutely separate corporate Companies, and they are so operated.

Mr. HILL:

Q. Well, this month you made the test in was October 1908, was it?
A. Yes sir; October 1908.
Q. The Commission tariff was then in force, freight tariff?
A. It was.

Q. The two cent passenger rate was then in force?

A. The two cent passenger rate broke in the middle of October, as I remember it; about October 19 the three cent passenger rate took effect. I think I am correct in that.

Q. I thought it went in when the freight tariff went in, November 2.

A. No, it went in in advance of the freight.

Q. Well, then, that month would represent about one-half two cent, and about one-half, three cent rate?

A. Yes; but the passenger rate has no relation to this test.

Q. You made no passenger test during that term?

A. No sir.

Q. Then on your freight test, it was all under the Commission tariff?

A. Yes sir.

Q. Do you think that one month would fairly represent
709 the business of your line for a year?

A. I think for the purpose of a test of that kind, determining the relative difference between the two classes of freight, that one month is perhaps as good as another.

Q. Why did you select October?

A. As explained, it was the first full month after Judge Vandevanter granted the injunction. He granted it in September, September 3; we wanted to make this test as soon as possible, so we selected the first full month.

Q. In your judgment, a test of this kind, made for the month of October, would fairly represent the operation for a year, or for a series of years?

A. I should say so.

Q. Well, do you think that would be affected by the fact that this was after the panic, when the normal condition of affairs was not fairly resumed?

A. I don't understand that the month of October was after the panic.

Q. That was when the panic began.

A. Right along in there we began to feel it.

Q. This was the year after the panic begun.

A. Exactly.

Q. Well, do you think that matters had fairly resumed themselves, so that you could make a fair test of that year?

A. I think so. I believe that under almost any conditions, good times or bad, the relative difference between the two classes of
710 freight would travel uniformly. In other words, if we have poor business, it is going to affect both classes of traffic.

Q. And you think that any one month completely worked up, would fairly represent those conditions?

A. I do; yes sir.

Q. Mr. Kimbell, on this question of miscellaneous earnings. The largest item on that is express—your exhibit 11.

A. Express, yes sir.

Q. Do you think there is any way of separating that so as to determine——

A. It is possible to do that, but it would be entirely in the hands of the express company.

Q. How could you do that? I would like you to explain it.

A. I should say that the way-bills covering the express are quite as susceptible to division between interstate and intrastate, as the way-bills covering freight would be.

Q. That it seems to me would be absolutely true. And with the way-bills covering freight, you can separate it to a mill, can't you?

A. I can.

Q. Have you made any effort to do that?

A. Never, sir. It would not be possible for us to do it. We would have to get the Express Company to do it. We have no detail whatever of the express.

Q. You made no effort whatever?

A. No sir.

Q. How about the mail? That is the next largest item,
711 I believe, is it not?

A. Well, I cannot conceive of any possible way of dividing that between state and interstate.

Q. How are those mail matters handled?

A. They are made by routes. For example, we have a route—our main line extends from Cairo, Illinois, to Texarkana, Texas, and we are allotted a stated compensation per annum.

Q. So much per pound?

A. No, it is determined by the Government and allowed as a stated rate per annum, as a compensation for the use of that road.

Q. That one route from Cairo to Texarkana?

A. Yes sir.

Q. That is your main line?

A. Yes sir.

Q. Of course, that is the heaviest route embraced in this?

A. Exactly.

Q. Do you know of any way it could be separated, on a mileage basis or any other basis?

A. I can't conceive how it would be possible to determine how much of that mail is state mail and how much is interstate mail.

Q. Well, what do you say about the expense of that? Can't you separate that?

A. I know of no way of separating the expenses for mail, express and miscellaneous, excepting the revenue.

712 Q. Well, now, take that route that you are speaking of. How many cars do you put on your trains to carry the mail?

A. That is very apt to vary. Many of the cars are combination, baggage, express and mail cars.

Q. You have a record, though, of every train that goes out, how much of it is devoted to mail; haven't you?

A. It could be obtained; we don't keep it.

Q. Well, it is in your records in some shape or form?

A. No sir; I can't say that it is, only the number of cars that we run on that train.

Q. Can you show what those cars are?

A. How much to mail; how much to express, and how much to baggage, is not shown.

Q. But it could be shown by getting reports on it, without any great difficulty?

A. I suppose so.

Q. On those heavier mail trains, you would probably have one car entirely devoted to mail, would you not?

A. Quite likely; I think that is the case.

Q. In an instance like that you wouldn't have any great difficulty in arriving at the expense of that mail, would you?

A. I should say we would. I don't know what proportion of the maintenance of way, for example, I would charge to that mail car. I don't know what proportion of general expenses I would charge to that car. It would be an exceedingly complex matter.

Q. That is one of the most difficult accounts of all of them to locate, is it not?

713 A. I think so.

Q. Much more difficult than the express account?

A. The express account it would be possible to divide the revenue between state and interstate, but would require a great deal of clerical work to do it.

Q. Well, it requires a great deal of clerical labor to divide your freight between state and interstate, does it not?

A. It does, indeed.

Q. This would not be near so big a job as that?

A. I think it would be bigger. The express business, although in the aggregate it is not as large as the freight, it is made up of very small items.

Q. It would be a big job, all right?

A. It would, indeed.

Q. You have not attempted to handle it though?

A. I never found any occasion for doing so.

Q. Now, the next largest item is what?

A. Switching revenue.

Q. Well, can't you divide that?

A. No sir.

Q. Why?

A. That would not be divisible. When we switch cars for connecting lines we don't know anything about where the car comes from or where it is going to. We are handed a car number and requested to switch a car to an industry located on our tracks. That is the extent of our information. There may be an occasional car of our own that we switch to an industry and charge switching, but those are rare.

714 Q. But you would know of a car coming in, where that car came from?

A. No sir.

Q. Is that what this switching charge is made up of, what you charge other lines?

A. That is switching we have performed for other lines, or possibly for industries.

Q. That is the principal part of it, is it not, switching for industries?

A. Switching to industries is the principal part, but when the switching is performed for another line to that industry, the other line does the paying.

Q. Where do you have that in Arkansas?

A. Pine Bluff, for example. We will have industries on our track; the Iron Mountain will bring freight into Pine Bluff and request our agent to switch a car to Mr. So and So's industry. We have no information regarding where the car comes from.

Q. Now, how do you settle that with the Iron Mountain?

A. They pay us by a switching voucher.

Q. How does the Iron Mountain know whom to charge it to?

A. It is their own freight.

Q. It is collected from somebody?

A. Either collected or absorbed. A great deal of the business they absorb.

Q. Well, if they wanted to collect from an industry, they would have to have a record showing where that car came from?

715 A. They would.

Q. If you used their records jointly with yours, there would be no difficulty in ascertaining it, would there?

A. I suppose we would have difficulty in getting access to another line's records. The question of competition comes in there, and they are not inclined to show their records.

Q. You say you can get that information?

A. I can't say that. We can if the other railroad is willing to give it to us.

Q. Well, that is the point. It is there of record and by seeing their books on that you could get it?

A. It could be gotten.

Q. It is not like this mail proposition?

A. No; mail is absolutely——

Q. Probably between you and the Iron Mountain; if you are competitors you would not want to show it, but when you are developing a lawsuit and questioning them as witnesses, you can get anything from their books, can you not?

A. Well, I don't know; that is probably a legal point——

Q. Well, the only thing that you know of in the way, is that it would require an inspection of their books in connection with your own?

A. Exactly.

Q. But if that is done, you can ascertain the switching charges and locate them between state and interstate?

A. That would require other lines' consent, not only the Iron Mountain.

716 Q. I understand. Q. What is the next item in that?

A. Well, we have special service, train revenue.

Q. What is that?

A. Well, that is very apt to be a circus train. That account is composed of items of that nature, and while I don't know about this particular one, I imagine that is what it is.

Q. Couldn't you divide a circus train between state and interstate?
A. Oh, yes; that could be done.
Q. It has not been done in your calculation?
A. I never had occasion to do it.
Q. Well, what is the next item?
A. Miscellaneous transportation revenue.
Q. What is that?
A. That is made up of such items as a charge for reconsigning cars; stop over privileges; transferring overloaded cars.
Q. Can't that be classified?
A. Yes, we could determine whether that charge was assessed on a state shipment or an interstate shipment.
Q. The next, I see, is about station and train privileges. What about that?
A. Well, that is newspapers, etc., as you probably know, on trains. I can hardly conceive of any way to tell how much fruit and candy a state passenger buys, and how much an interstate man buys.
717 Q. Well, you could locate that on your local trains, couldn't you?
A. No sir; our local trains handle interstate passengers just as they do state passengers.
Q. Your trains are all local, are they not?
A. Well, if you mean we don't run any trains de luxe, I will say yes.
Q. You stop everywhere?
A. I think a few of our trains make a little faster time than others.
Q. But for practical purposes you might call your service all a local service?
A. I think probably so.
Q. Now, this storage of freight, can't that be located?
A. You can tell whether that storage was earned on a state shipment or an interstate.
Q. The same thing is true with the next, baggage?
A. Yes, sir.
Q. Car service is your demurrage, is it not?
A. Yes, and that can be ascertained in the same way.
Q. Rents of buildings and other property?
A. That is an item very much like mail. We would have to divide it arbitrarily in some way.
Q. Just what is in that item, Mr. Kimbell?
A. Well, we will rent a little space occasionally, to the Express Company. We will rent ground to the beer companies to build a beer depot along the right of way. Items of that character.
Q. What about cotton oil mills, compresses, and things of that kind? Do you get a rental from them, that have their
718 facilities along your right of way?
A. I don't know if we have any, but if we had it would go into that account.
Q. Well, "miscellaneous" is your junk shop, I suppose?

A. That is it.

Q. Quite a considerable one in this instance, isn't it, amounted to $10,000 or more?

A. Yes; I don't know just what that is——

Q. Do you know the general character?

A. I will see what the classification provides on it.

I should say that the greater part of that amount was received for detouring trains. As I recall it, the Iron Mountain was washed out in the state of Arkansas, and several trains were detoured from Texarkana to Pine Bluff, over the Cotton Belt. Interstate Commerce account number 19, provides that revenue from that source shall be put in the miscellaneous.

Q. It would be right difficult to locate between state and interstate, wouldn't it?

A. It would, indeed; yes sir.

Q. Do you know of any other large item that would enter into this account?

A. I was just looking over the classification here and I don't see another item that I think is in that account. I imagine that covers the whole business.

Mr. HILL: I believe that that is as far as I can go with Mr. Kimbell until I get a detailed statement.

719 Redirect examination.

By Mr. MOORE:

Q. Mr. Kimbell, when did the panic of 1907-08 begin to have its effect on the railroads?

A. I should say in November, 1907.

Q. Well, when did the effect of the panic—when was it fully felt by the railroads?

A. It began to be felt during the month of November, and I should say it increased in its intensity from month to month and was felt very severely in February or March.

Q. Was it not at its height in the spring, in March?

A. I think so.

Q. It began, then, in November?

A. Yes sir.

Q. Is it true that the effect of it was felt severely in November, or did it come on later, the severity of it?

A. I can only testify from memory of the situation, and not from——

Q. I want your best impression in regard to that; whether it was felt severely in November, or began to be felt in the spring.

A. My impression is that it did not begin to be seriously felt until the early part of 1908.

Q. The reason I ask you is, Judge Hill asked you if it was severely felt in November, and you stated it was, and I wanted to know, whether you understood his question.

720 A. I expect I should have qualified that, because I think that is where it commenced, in November.

Q. And it became severely felt and was perhaps at its height later on, in the spring of the next year?

A. Yes sir.

Q. Mr. Kimbell, referring to that paragraph of the 17th annual report of the St. Louis Southwestern Railway Company, to which your attention was called, on page 12: "During the period, July to October, inclusive, there was a substantial increase in operating revenues over the corresponding period of the preceding year; but beginning with November the volume of traffic decreased and the gain previously made was lost".

Now, I want you to state, taking the period of six months ending December 31, 1907, and taking into consideration the gain that accrued from July to October; and considering also any loss that may have accrued from the panic (which you say began to be felt in November of that year), I want you to state the character of that period; how the business of that period compared with the corresponding part of the previous years—three, four or fives years.

(Witness examines papers.)

Mr. Kimbell, will you state what the gross earnings of the St. Louis Southwestern Railway system was for the last half of the year 1907?

A. $5,435,028.77.

Q. Now, I wish you would state what it was for the last half of the five preceding years; that is, the four preceding years. I want to cover a period of five years; 1906, 1905, 1904 and

721 1903.

A. The last half of 1906 was, $5,341,985.89. The last half of 1905 was, 4,594,748.99. The last half of 1904 was, 4,753,-032.78. The last half of 1903 was, $4,064,853.19.

Q. The gross earnings for the last half of the year 1907, were larger than they were for any of the other five years, of which that year is the last, were they not?

A. Yes sir.

Q. What were the earnings for the last half of the year 1908?

A. $5,530,815.00.

Q. What were the earnings in the first half of each year from 1908, going back for a period of five years?

A. The first half of 1908 was, $4,163,235.09; 1907, 5,211,149.17; 1906, 4,394,815.31; 1905, 4,107,198.69; 1904, 3,584,632.15; 1903, 3,415,084.95.

Q. Now, state the first half of 1909, while you are at it.

A. $4,801,074.25, for the first half of 1909.

Q. Mr. Kimbell, what does page 58 of the annual report of the St. Louis Southwestern Railway, referred to, show to have been the earnings in the month of November 1907?

A. $875,623.75.

Q. What was it in November 1906?

A. $945,387.83.

Q. What was it in 1905?

A. November 1905, $820,439.02.

722 Q. What was it in 1904?

A. $846,771.37.

Q. And the year preceding that, 1903?
A. November 1903, $771,412.59.
Q. What were the earnings in October of 1907?
A. $1,034,671.76.
Q. What were they in October of 1906?
A. $985,419.24.
Q. What were they in October 1908?
A. $1,011,323.69.

Q. Mr. Kimbell, page 14 of the report read by counsel, your attention was called to a statement of the total operating expenses for the fiscal year ending June 30, 1908—increase $497,447.00. Does that apply to the St. Louis Southwestern Railway in Missouri and Arkansas alone, or to the entire system?

A. It applies to the entire system.
Q. Operating in Missouri, Arkansas, Illinois——
A. Illinois, Missouri, Arkansas, Louisiana and Texas.

Q. Mr. Kimbell, was there any increase in material and wages along about that time?

A. I think there has been a gradual increase in material and wages for some years.
Q. Would that enter into the increased expenses to any extent?
A. That would have the effect of increasing the cost of operation.

723 Q. And is that increase in wages and material still operative and effective, and is it still continuing?

A. I don't know of any decrease. It seems to be all increase.

Q. Your report also states that $331,970.00 of that increase represents charges of depreciation of equipment, made during the current fiscal year, in compliance with the rules of the Interstate Commerce Commission. Was there any charge in the previous year for that?

A. There was not.
Q. Why not?

A. The rules of the Interstate Commerce Commission, promulgated and effective July 1, 1907, provided for a charge for depreciation of equipment. Prior to that time no charge of that character was made.

Q. Was that character of charge made for the year 1908?
A. Yes sir.
Q. State what was charged on that account for that year.

A. Well, there are several amounts here that have to be added together. The year ending June 30, 1908, there was a charge of $331,970.69 for depreciation on the several classes of equipment.

Q. Now, state if there was any charge, and if so, what, for the year ending June 30, 1909.

A. The year ending June 30, 1909, was $331,360.08, charged to depreciation of the various classes of equipment.

Q. Mr. Kimbell, that increase referred to in that report
724 grows very largely out of that charge, does it not; that increase in expense?

A. Yes, that comprises apparently the greater part of the increase.

Q. Is that a permanent increase that will have to be carried hereafter, under the regulations of the Interstate Commerce Commission?

A. Yes sir.

Q. Mr. Kimbell, speaking of the test you made for October 1908, did I understand you to state that that test was based upon an ascertainment of the relative cost in the various percentages of service that was involved in transacting the two classes of business—that is, it was intrastate and interstate?

A. That is freight only.

Q. I said nothing about passenger. I say the two classes of business, interstate and intrastate freight.

A. Yes sir.

Q. That, then, developed the actual expenses of each one and therefore the relative expense as between them?

A. I think so.

Q. Now, would the ratio be affected or changed, by a change in the prosperity of the business of the road; would it depend upon whether the business was light or whether it was large?

A. I would say that the relative proportion of state and interstate traffic would travel uniformly, whether business was
725 up or down.

Q. Mr. Kimbell, you state that if you could get possession of the way-bills of the express company, you might be able to separate express business which you have charged to "miscellaneous" as between state and interstate. Could you do that without obtaining the way-bills?

A. It couldn't be done without an inspection of the way-bills.

Q. Have you any control over the way-bills?

A. Absolutely none.

Q. Would the express company be liable to entrust you with their way bills for that purpose, or do the service for you?

A. Oh, yes; they would certainly do it, under our contract.

Q. How are mail, baggage and express carried; are they carried in combination cars, or in separate cars?

A. On the St. Louis Southwestern Railway I expect the greater portion of it is carried in combination cars.

Q. What effect would that have upon your ability to separate either revenue or expense?

A. Under no conditions could we separate the revenue from mail, between state and interstate. I can't conceive of any possible basis for doing that.

Q. How in regard to the expenses, Mr. Kimbell?

A. The expenses might be arbitrarily set aside on some basis. It would be purely arbitrary, however.

726 Q. I don't mean arbitrarily. I mean upon the facts in relation to and connection with the service rendered; how would it be in regard to dividing the expense? Is there any basis attainable, except by assuming an arbitrary one?

A. I should say that it would be a very difficult proposition to get anything like a fair basis for that purpose.

Q. Can you think now, and can you state any basis upon which you would arrive at an actual division; I don't mean an arbitrary, but an actual division, based upon the differences—the differences in the cost?

A. We might ascertain what proportion of the space of a car was devoted to the handling of mail, baggage and express, but after we have obtained that, I don't see how it would be fair to use those proportions to determine the relative expense. There are no doubt other elements entering in there that would make that unfair.

Q. For instance, in a combination car; that is partly passenger car, is it not?

A. Yes, we have some combination cars.

Q. And partly baggage?

A. Yes; partly baggage, express and mail.

Q. The Company handles its baggage?

A. Yes sir.

Q. And it employs a porter, or a man in the passenger part of the car, does it not?

A. Yes.

Q. Does it handle the express or mail, or have anything to do with it, except to allow it to be taken into and put out of

727 this car?

A. In some trains the mail is in the custody of the joint baggage man.

Q. How about express matter?

A. Likewise express matter.

Q. Don't the express company carry an agent?

A. Not on all trains; there are joint men on the smaller runs.

Q. How about the larger runs?

A. On the larger runs there is usually a mail clerk, but as a general thing there is a combinat' baggage and express man, who handles both the Company baggage and the express business.

Q. How is the compensation for the service in carrying mail ascertained?

A. It is fixed by mail routes, by the United States Government.

Q. How are you paid?

A. Quarterly.

Q. How is the amount to be paid ascertained, by weight?

A. The Government makes the tests, I think, every four years.

Q. Does it pay by weight?

A. Yes sir.

Q. Is there any distinction between state and interstate mails?

A. Absolutely none that I ever heard of.

728 Recross-examination.

By HILL:

Q. Mr. Kimbell, I understood you to say in answer to the question by Mr. Moore, about this division of expenses that you made for the

month of October 1908, that you had made an actual division of the expenses. You don't mean you made an actual division of all the expenses?

A. Only the principal train expenses, wages and fuel.

Q. Wages and fuel?

A. Yes sir.

Q. And you only made that; that is as far as your division went, as to those two items?

A. Yes sir.

Q. And then you divided those on a revenue basis, after you get the actual expenses on those two?

A. Yes sir.

Q. Now, on this question of combination of agents for mail and express, and baggage; when one fellow acts in that two-fold capacity, he is paid by the different Companies, is he not?

A. Usually.

Q. Do you know what proportion they pay him?

A. It is very apt to vary on every run.

Q. Generally in proportion to the business——

A. There is no part of it, I might say, paid by the United States Government, for handling mails; that is included in their general compensation.

729 Q. What I had in mind was between the baggage and express.

A. Yes sir; that is divided on a contract basis.

Q. About how is that divided, do you know, as a matter of fact?

A. As near as the service for each class of business has justified.

Q. How do you get at that division?

A. It is purely arbitrary, and made satisfactory to both Companies. For instance, we can have a man running on the Stutgart branch; the Railroad Company will agree with the Express Company that they will pay one-half and the Express Company one-half.

Q. Both parties will have some idea of what that——

A. I suppose so; I don't know what they——

Mr. MOORE:

Q. You don't know anything about it?

A. It is usually on the basis of the service.

Mr. HILL:

Q. That is frequently done?

A. There is quite a little of that, for economical purposes.

Q. I understood you to say to Mr. Moore, in explaining these statements of increased cost, that there had been no decrease up to the present time, so far as you knew?

A. Well, in connection with what was that?

730 Mr. MOORE: With the cost of material and service wages.

A. Oh, I made a general statement; that is my impression, that there has been a general increase in wages and cost of material. So far as I am aware, there has been no material decrease in either.

Mr. HILL:

Q. I want to read you from the law and gospel—1909, page 13: "From the foregoing it will be noted that while the expenditures for maintenance of the property were considerably in excess of those for the preceding year, the transportation expenses were considerably less, notwithstanding the substantial increase in the volume and the revenue derived therefrom."

So there has been some decrease, anyhow, has there not?

A. That might be due to greater efficiency in operation.

Q. Have you been getting a lot of more efficient men, or have you all been getting more efficient as time went on?

A. There might be a number of reasons for that, better explained by an operating man who is running the road.

Q. When Mr. Moore was questioning you about some basis to divide mail and express, particularly express, I believe, between state and interstate, you said that it might be possible on express to get some arbitrary basis to divide it. None that would be accurate?

A. I don't think I said that as regards express.

Q. What do you say about express?

A. I say what I said in answer to your question, that it would be obtainable if we had access to——

731 Q. I am speaking of the expenses.

A. Then I reiterate that it would have to be some arbitrary basis.

Q. Is not the revenue basis an arbitrary one?

A. Yes sir.

Q. It is just a judgment then, of yourself and other experts, as to which is the best arbitrary basis, is it not?

A. I can say in that connection that I am not posing as an expert; but I will say in answer to your question, that I don't know of any other basis which could be reasonably used.

Q. But this one is necessarily an arbitrary basis?

A. Yes sir.

Q. I wish you would explain this depreciation matter in this respect: after you charge off to operating expenses a given per cent of depreciation, under the rules of the Interstate Commerce Commission, that is credited to reserve account, is it not?

A. Yes sir.

Q. Then what becomes of an engine that is broken up and thrown away?

A. It is subject to replacement and charged to that reserve account.

Q. After that goes to the reserve account it is not charged off to depreciation any more, or operating expenses?

A. The depreciation account sets up a reserve fund which

732 is utilized for the purpose of replacing equipment; that, in substance, is what the depreciation account amounts to.

Q. Before you had that depreciation account, what did you do with your wornout engines, depreciation, and things of that kind?

A. We were compelled to issue bonds, as a general thing, when

we wanted new equipment. It is a scientific deduction laid down by the Interstate Commerce Commission, which seems to me to be pretty sound.

Q. It is just another way of book-keeping——

A. In this way the traffic is made to bear what it should bear, the depreciation on the property. Prior to that it did not bear that.

Q. It should have been charged off heretofore just as it is being charged off now?

A. I think it is customary to do that in industrial and other concerns, but not in railroads, prior to July 1, 1907.

Q. This rule just places in effect a good business principle?

A. It seems so to me.

Q. That loss is going on all the time and this just makes it appear upon the books of the company.

A. It must be provided for.

Mr. MOORE:

Q. And that change in the method of book-keeping, and from issuing bonds, and charging to reserve, is what accounts for
733 a large proportion of the increase of expenses, is it not?

A. It does.

734 Cross-examination of the witness F. P. JOHNSON continued as follows:

By Mr. HILL:

Q. Mr. Johnson, you were to ascertain the status of the Little Rock Junction Company for us.

A. The Little Rock Junction Railroad extends from Argenta Junction to a connection with the Little Rock, Mississippi River and Texas Railway Company, and is .9 miles east of Little Rock Depot.

The Little Rock Junction Railway is leased to the St. Louis, Iron Mountain & Southern Railway under a rental of $26,100 per annum.

Now, that $26,000 is the interest on its mortgage at six per cent. That is what you wanted to know?

Q. I believe you did not know that when I inquired the other day, and you find that is what it is—interest on its mortgage?

A. Yes, sir. That line is used for freight traffic only. The rental charge is merged with the other rental items and divided between freight and passenger expenses in our statistics.

735 Q. That is a mistake, isn't it, Mr. Johnson?

A. Well, I don't know. I believe that items of that kind should be treated broadly, and any change we might make in that particular item would not make very much in the final result.

Q. We are not figuring on the effect of it, but figuring on just how it should be.

A. If you are going to analyze every dollar of rentals, perhaps that $26,000 could be charged back to the freight traffic.

Q. Is not that in effect a double charge of six per cent there? You are making a calculation seeking to obtain six per cent interest

or seven per cent or eight per cent, as the case may be, upon your property; and, yet, this property is already giving six per cent charged off as "rentals."

A. Well, I don't know that that is a double charge. We are assessed $100,000 by the Arkansas Railroad Commission, or the Arkansas Taxing Board, for the value of the Baring Cross Bridge.

Q. That is a part of the property of this Little Rock Junction Railway?

A. Yes, sir, it is a part of the property of the Little Rock Junction Railway. Now, whether that rental charge we pay,—the contract as I remember it requires us to pay all of the taxes upon that bridge, as a part of the rentals.

Q. That corporation, the Little Rock Junction Railway is paying no taxes, other than what the Iron Mountain pays, is it?

736 A. Not that I know of. We are paying its taxes, under our contract.

Q. You operate the property?

A. Yes, sir.

Q. And you maintain it?

A. Yes, sir.

Q. In view of that fact, when you are seeking to get 6% interest on your investment in this suit, is not that a double charge so far as this property is concerned?

A. I do not know that it could be considered a double charge. In fact, I did not know the $100,000 was in this statement.

Q. After looking into it, Mr. Johnson, are not you convinced that is a mistake?

A. I think the $100,000 should be eliminated from the value of our property.

Q. You think there should be eliminated $200,000, double on that assessment?

A. (After examining statement.) It is $162,740, instead of $100,000.

Q. It would be double that amount?

A. The double of that amount would be what I should think should be eliminated from this statement Exhibit 7.

Q. Give the total figures there.

A. The $162,740 is the assessment levied by the Taxing Board. Twice that amount would be $325,480.

Q. I believe you stated that the charge of that rental

737 should be against freight traffic and not against freight and passenger?

A. If you are going to analyze every item of rental, perhaps that should be a charge. I believe those rentals should be treated broadly.

Q. Just what do you mean by "treated broadly," Mr. Johnson?

A. Take your entire net amount for rentals, divide that between the freight and the passenger service. Because any track of that kind that we rent or that we secure trackage rights over, in a general way affects both the freight and the passenger business of the state.

Q. But when you come to divide the freight and passenger business, you cannot sustain that broad classification, can you?

A. I think you can on the rental charge.

Q. Take up the Paragould trackage: it is 34 miles, isn't it, if I remember it correctly, that you lease from the Cotton Belt Railway?

A. Yes, sir.

Q. Is not that used exclusively for interstate freight?

A. Yes, sir.

Q. You are not permitted to do any local business on that trackage, are you?

A. No, sir.

Q. Do you think it is right to charge that to your intra-
738 state freight charges in Arkansas?

A. Yes, sir. That rental charge is included in our total amount and is also divided between freight and passenger as well.

Q. Didn't you tell me the other day it was charged only to freight?

A. The operating expenses. The maintenance of that line is charged to freight. That is, the service is a freight train expense and is charged to freight in our expenses. But the rental charge is merged in one amount and the net amount paid for rental and taxes is divided between freight and passenger service and between state and interstate business.

That Cotton Belt track is practically a double line, and when we secure the privilege to operate over the Cotton Belt to Paragould and to the state line and north of that, it benefits our main line from Texarkana to St. Louis, to the extent that it gives us more use for other than through freight business.

Q. If you have any double trackage arrangement from state line to the City of St. Louis, it would benefit your business also, wouldn't it?

A. In Missouri? Yes, sir.

Q. Would not it benefit your Arkansas business, too?

A. I do not say any double track in the country would particularly benefit the state business of Arkansas.

Q. Would it not give you better facilities to carry it right up from Arkansas to St. Louis?

739 A. Provided that track extended into Arkansas, yes.

Q. That is what I intended to ask: if that double trackage was continued clear up to St. Louis, would it not be incidentally a benefit to Arkansas?

A. Yes, sir. It is, practically.

Q. But you charge only that part in Arkansas to Arkansas?

A. That is all, yes, sir.

Q. As I understand you it is used exclusively for interstate traffic and while you have it charged to state and interstate so far as operating expenses are concerned and so far as rental is concerned you have it charged to state and interstate, passenger and freight traffic?

A. Yes, sir.

Q. Do you think that is right?

A. I do.

Q. Tell us about the Van Buren Bridge: have you looked into that any further?

A. Yes, sir. We have a contract with the St. Louis & San Francisco Railroad Company for trackage rights over the Van Buren Bridge. Now that contract expires in 1916, and it requires us to pay trackage at the following rates.

| | |
|---|---|
| We pay for locomotives | $2.00 |
| For fr-ight cars | 1.50 |
| For passenger cars | 2.00 |

With a minimum charge of $1,000 per month. That is, we are compelled to pay $1,000 a month regardless of the volume of
740 the business handled over that bridge. If the business figured at the rates I have just mentioned, amounts to more than $1,000 a month, those rates would apply on all excess business.

Q. Those rates are applicable only where if they have been applied they ran over $1,000 a month?

A. Yes, sir. Now, that charge of $1,000 a month is made to operating expenses and rentals, and the basis is authorized by the owning line. That is, in rendering a bill against the Iron Mountain Railway for the use of that bridge, the St. Louis & San Francisco Railway will show on that bill how that amount is credited upon their books; and we are compelled to make the corresponding charge on our books. That is by arrangement of the Interstate Commerce Commission.

That $1,000 in the month of October, 1907, was divided as follows:

| | |
|---|---|
| General expenses | 166.66 |
| Maintenance of way & structures | $5.00 |
| Transportation expenses | 164.00 |
| Rentals | 624.34 |

That makes $1,000.

Q. That is used exclusively for passengers, isn't it?

A. Yes, sir. We have one passenger train each way, daily.

Q. You run no freight trains over it at all?

A. No, sir.

741 Q. Would your rental charge, by the car and locomotive charge, amount to $1,000 a month with two passenger trains per day?

A. No, sir, I do not believe it exceeded $1,000 a month but twice. Some special arrangement we have there, that required an additional rental.

Q. I don't think I made my question clear, Mr. Johnson. It is this: If you did not have that minimum of $1,000, would the service of that bridge amount to $1,000 a month, at the fixed rate of $2 for locomotives and $2 for passenger cars?

A. No, sir, the service we have received from that bridge has

never amounted to $1,000 a month. We are compelled to pay the minimum, by the contract.

Q. This minimum you are really paying all the time, instead of the car and locomotive rates?

A. Yes, sir, that is right.

Q. Do you think that is proper, to charge a proportion of that to the freight business?

A. Yes, sir, in line with the other rentals we have.

We have not attempted to divide our rent at all between the freight and passenger service, based upon the actual facilities we rent; any more than we attempt to divide our taxes.

Q. What is the attitude of the Fort Smith Suburban Railway?

742 A. The Fort Smith Suburban Railway, so far as I can find out, is intended to be a belt line out of Fort Smith, Arkansas; and is not included in the track mileage of the Iron Mountain and no trains of the Iron Mountain Railway operates over it. It is possible we may run a switch engine there.

Q. The point I wanted to get at is, are you charging any part of the operation of that road in the operation expenses of the St. Louis, Iron Mountain & Southern Railway?

A. We are not operating it. If we run a switch engine over it, for any purpose, we would, of course, charge that into the operating expenses of the Iron Mountain road.

Q. There is some use made of it. I have seen trains run over it myself.

A. If there is any expense, it is in all probability in our central division. But my understanding is, that the Suburban Railway itself is not complete, and for that reason they are not operating it.

Q. My information is they are running a train a day on it.

A. The Iron Mountain?

Q. I don't know. But somebody is running it and that is what I was wanting you to indicate, who was running that and the expense of running it. I am satisfied there is no revenue from it, of any moment.

A. The expense if any would be incidental, and would undoubtedly be in our expenses, if we have any engine there. But
743 we have no train schedule there.

Q. And you have not any revenue from it?

A. No, sir, if there is any revenue from it it would be in the Iron Mountain revenue.

Q. But you have not found it?

A. No, sir, I have not found any.

Q. You found neither revenue nor expenses?

A. No, sir.

Q. I asked you about the river line at Little Rock.

A. That .82 miles between our main line just north of the Little Rock Union Depot connects with our Little Rock Mississippi River and Texas line just south of the connection with the Little Rock Junction road. It is a connecting line between the two divisions. That is not a leased line covered by any rental. That is part of

our own track. It is merely a sub-division in this track mileage statement, because it was built as a separate track and not a continuation of any of the main line.

Q. It is used generally?

A. Yes, sir.

Q. Mr. Johnson, I asked you to get up data about the industrial agent and the foreign agents: have you done so?

A. Yes, sir. The amount charged to "outside Agency" for immigration and industrial bureaus for the six months ending Dec. 31, 1901, amounted to $2,802.50.

Q. Where are your immigration agents located?

744 A. Our immigration and industrial agents are both located in the City of St. Louis. They cover the entire territory and are constantly on the road, as I understand it.

Q. You have commercial agents located at various commercial centers throughout the country?

A. Yes, sir.

Q. And your immigration agency is only in St. Louis?

A. That is their headquarters. The men employed in those bureaus are on the road all the time. Their territory is the entire system. So is the commercial agent's territory the entire system.

Q. But they are located in different points?

A. They are located in different points, yes, sir.

Q. The immigration agent, is he the one you call the industrial agent?

A. We have two. We have what we call an "immigration and industrial bureau," but we have separate officials in charge of each.

Q. And that is handled here at St. Louis?

A. Yes, sir.

Q. Where are your commercial agents located: have you a list of them?

A. Do you want me to read a list of them?

A. Give me a reference to that and I will find it, without encumbering the record with the list.

A. You will find it in our official list of stations and

745 agents: there are perhaps 50 of them.

You wanted to know what our miscellaneous account No. 12 consisted of.

Q. Yes, give us that now, please, Mr. Johnson.

A. That includes amounts we received from the renting of space for automatic vending machines in the stations. Those machines are placed in the stations and the Railroad Company receives a commission. That commission is collected by each of our agents and remitted to the general office.

We also receive a commission for the use of space for weighing and name plate machines; and from the sale of newspapers, magazines, and fruit at stations and upon trains.

Q. You might call that the "catch-penny" account?

A. Yes, sir. Now the payment from the Van Noy News Company for the privilege of selling newspapers and periodicals on our trains is paid for in a lump sum, $30,000 a year.

Q. That is for the entire system?

A. Yes, sir. And 45¢ per month per mile of road in addition to the mileage in force when this contract was made. That is, if we increase our mileage they increase their payment to us at the rate 45¢ per mile per month.

Now that is a general monthly charge, and we have no means of telling how much was made in Arkansas or how much was made on state or interstate business.

Q. And you separate that on the revenue basis?

A. Yes, sir, and make no attempt to divide that between state and interstate.

746 Nor to divide it between passenger and freight?

A. Yes, sir. We have divided the total revenue on that account between passenger and freight, on the revenue basis.

Q. And have not attempted any actual division of it other than that?

A. No, sir, that is all.

Q. Mr. Johnson, all that privilege you sell to the Van Noy News Company is a privilege on passenger trains, isn't it?

A. Yes, sir, and at stations. Not only on passenger trains but at stations.

Q. That includes the stations as well as the trains?

A. Yes, sir.

Q. How do you divide that between passenger and freight?

A. We divide that between the freight passenger service on the basis of the actual freight and the actual passenger revenue in the state.

Q. Ought any part of that be credited to freight revenue?

A. I think so. I think any revenue——

Q. It is not derived from the freight service in any way at all, is it?

A. I think any revenue we may get that is to be credited to that account through the privileges we rent at stations might be earned by reason of the freight business just as well as by reason of the passenger business.

747 Q. Isn't this privilege from its very nature, such that its profit is made out of passengers and traveling public, and not from the freight?

A. So far as the station is concerned, it is made from the people who patronize the stations.

Q. That is in passenger stations. It is all in the passenger stations?

A. I would say that the shippers of freight would patronize those stations in connection with their freight business. It is not altogether from large stations but it is received from all parts of our system. I can readily conceive that the automatic vending machines would be patronized through our freight as well as our passenger business.

Q. Are your freight and passenger stations usually joint or are they separate?

A. They are usually a combination station except at large points, like Little Rock, Pine Bluff and Fort Smith.

Q. At all your large points you have separate freight and passenger stations?

A. Yes, sir. But the great majority of our stations are combination stations.

Q. But necessarily it would be a very small proportion of that amount from the freight business, wouldn't it?

A. It is a very small item, anyway.

Q. It makes no difference how small the item is, I am asking about the proportion.

A. I cannot say.

748 Q. How about the trains?

A. Practically all that revenue we receive from trains would be earned from the passenger service.

Q. But you do not credit it to the passenger service?

A. No, sir, we divide it between freight and passenger service.

Q. On a revenue basis?

A. Yes, sir, on a revenue basis.

Q. Mr. Johnson, you were to get up the miscellaneous rents, weren't you?

A. No, sir, I believe I stated the other day that Mr. Wharton's men were analyzing the miscellaneous rents. I have seen their exhibit of it.

Q. You have been working on that jointly, haven't you?

A. Yes, sir.

Q. You haven't that?

A. No, sir.

Q. Except the legal expenses, is there any data I asked you about that you have not mentioned?

A. That is all I know of, and I have gone through the testimony to find out.

Mr. HILL: The legal expenses, Mr. Moore, I wish to look over before questioning Mr. Johnson further.

Mr. MOORE: That is all right.

749 Cross-examination of F. P. JOHNSON, continued.

By Mr. HILL:

Q. Mr. Johnson, in your legal expenses I see several items of payments to Leake & Henry, of Dallas, Texas; and to S. R. Fisher, of Austin, Texas: I do not recall the exact words, and I will ask you if you remember those vouchers, and I want you to explain what that service was for.

A. Leake & Henry represent the St. Louis Iron Mountain & Southern in connection with any suits that may be brought in the State of Texas. The expenses of the firm of Leake & Henry are charged to the entire St. Louis Iron Mountain & Southern System. We cannot charge it to the State of Texas, because we have no trackage there.

Now, it may be that is in connection with the expense of a suit for loss and damage, where a shipment originated in Texas. But Arkansas is charged with only a proportion of the expenses of Leake & Henry, based upon the gross earnings in the State of Arkansas as compared with the entire earnings of the Iron Mountain Railway.

Q. There will be a proportion of the amounts paid Leake & Henry charged to the intrastate traffic of Arkansas?

A. Yes sir, a small proportion.

750 Q. Have their services been incurred in any way in regard to the intrastate traffic of Arkansas?

A. Well, I cannot say that, unless I could see each individual suit.

Q. They have not tried any cases in Arkansas, have they?

A. They would not try any cases in the Arkansas courts, no sir.

Q. It is a service that is connected wholly with the interstate shipments, isn't it?

A. Well, I should say that perhaps most of it was. But they represent us in the state of Texas. They would handle any business we might have; and if it is possible, as was suggested by you some time ago, that suits could be brought in Texas on account of an Arkansas loss or damage, just as they can in Louisiana, then Leake & Henry would handle that suit.

Q. I believe you made answer to that, that it would be charged to Arkansas and not to Texas?

A. In that event it would.

Q. So if there was an Arkansas suit brought in Texas, all the expense of that would be charged to Arkansas?

A. Yes sir.

Q. And if a Texas suit was brought in Arkansas, that would be charged to Texas?

A. We cannot charge it to Texas, because we have no mileage in Texas.

Q. I am using that as an illustration, of course. I mean, if you had any mileage there.

751 A. Yes sir.

Q. The Iron Mountain has no corporation in Texas?

A. I think not. I cannot answer that question positively.

Q. How could you be sued if you have no mileage there, no road there, and no corporation?

A. We might have traffic originating in Texas and delivered to our line at Texarkana, and the Iron Mountain would be made a party to that suit.

Q. How would they get service on the Iron Mountain, if it is not there?

A. That I cannot answer.

Q. Isn't it a fact that these are suits to which the Texas & Pacific Railroad is a party?

A. No sir. Any business that Leake & Henry would handle for the Texas & Pacific would be billed against the Texas & Pacific, and we would have nothing to do with it at all.

Q. I cannot quite understand, Mr. Johnson, how you can charge any part of their services to the intrastate traffic. I can understand how you might charge it to the interstate traffic in Arkansas, but I cannot understand how you could charge it to the intrastate traffic; will you give me your ideas a little more fully on that?

A. Leake & Henry represent the St. Louis Iron Mountain & Southern Railway in connection with any business we might have in the Texas courts. It is possible—I do not know that it is so,
752 but it is possible they may have handled suits there in connection with what might be purely intrastate. It may be a small part of the total business.

Leake & Henry are not salaried attorneys. They get a fee for each case they handle.

Q. Will you look over the vouchers embraced in this six months' period, paid to Leake & Henry—there are not many of them—and answer us at the next sitting, or whenever it is convenient, as to whether they were paid for services in any suit that originated in Arkansas?

A. Yes sir.

Q. And let us know just what these matters were for?

A. Yes sir.

Q. Now, what about Mr. S. R. Fisher, of Austin, Texas?

A. I don't remember him at all. That must be a very small amount and it must be for some special cases.

Q. I think there are two or three items here, but I wish you would look him up at the same time you do the others. I notice one of the vouchers is numbered 2001; I think there are two or three for him here in this six months' period. Find out the nature of that.

A. Yes sir.

Q. I find here some Memphis lawyers, McFarland & Canada. They are on your regular pay roll at $200.00 a month, I believe, for every month during this period. They are your regular attorneys at Memphis, aren't they?

A. Yes sir.

753 Q. Their work is confined to Memphis, isn't it?

A. It is confined to Tennessee, yes sir.

Q. But you have charged a proportion of their salaries to the intrastate traffic of Arkansas: is that right?

A. Yes sir.

Q. In the month of November 1907, I find that you have paid judgments, in the case of the State of Arkansas vs. the St. Louis Iron Mountain & Southern Railway in fines, for a violation of the law against furnishing free transportation to legislaturs, of something over $10,000—or, $10,000 plus the court costs; that is correct, isn't it?

A. Yes sir.

Q. That was for a violation of the statutes, to which the Railroad Company pleaded guilty, wasn't it?

A. Yes sir, that is the way the account reads.

Q. I find charged up to the legal expenses salary of $200.00 per month, of T. L. Cox: do you know Mr. Cox?

A. No sir.

Q. Do you know whether he is a lawyer or not?

A. I haven't any idea. I never met him. The voucher itself reads "For services rendered to the law department."

Q. Did you pay that under authority of the general officers?

A. The voucher is approved by the head of the legal department.

Q. That charge runs all through this six months' period
754 we have been investigating, I believe?

A. Yes sir, that is his monthly salary.

Q. I find in your general expenses a charge for W. H. Phelps, assistant to the Vice-President, a monthly charge of $499.50. I presume that is $500.00 salary, less 50¢ for the hospital fund?

A. Yes sir.

Q. I see that $128.22 of that is charged to the Iron Mountain in Arkansas: is that correct?

A. A proportion of that is charged to the Iron Mountain in Arkansas. I do not know just what the amount is.

Q. Do you know what services Mr. Phelps renders in Arkansas?

A. I do not.

Q. Do you know Mr. Phelps?

A. I know him when I see him but I do not know him personally.

Q. Do you know what his occupation is?

A. He is a lawyer.

Q. Do you know of his having any legal business for the road in Arkansas?

A. I do not know anything about what service he performs.

Q. That, like these other vouchers, is paid under the direction of these other officials?

A. That is his title, assistant to the Vice-President, and his voucher is approved by the Vice-President.

755 Q. I see Mr. J. M. Seibert is included in the legal expenses in Missouri, and a part of that is charged to Arkansas. I find Mr. Seibert has a salary of $250.00 per month as Commissioner of Statistics in the legal department, of which $110.33 is charged to the St. Louis Iron Mountain & Southern in Arkansas: is that right?

A. That is his salary, and a proportion of that would be charged to Arkansas. I cannot identify the amount.

Q. What are Mr. Seibert's dtuies as Commissioner of Statistics?

A. I don't know. He is an employé of the general offices and of the law department.

Q. What service does he render in the State of Arkansas? Do you know?

A. I haven't the slightest idea.

Q. I notice in looking at the expenses of the general offices, that Mr. Schuyler, the auditor, gets a general salary of $10,000 per annum, I believe; that is divided up, a part to the St. Louis Iron Mountain & Southern, and a part to the other roads. A part of that seems to be paid by the Western Coal & Mining Company: is that a fact?

A. Yes sir, $90.00 of it, I think, is billed against the Western Coal & Mining Company, per month.

Q. Do you know whether any part of his salary is paid by the Arkansas Central Railroad?

A. No part of it is paid by the Arkansas Central Railroad.

756 Q. Didn't you state the other day you were under the impression that some of these smaller roads are paying part of his salary?

A. They are.

Q. Which ones?

A. The Arkansas Midland Railroad is paying part of it.

Q. I thought it was the Arkansas Central. Do you know whether any other road is paying part of his salary?

A. I would not answer positively whether there are any others or not. Mr. Schuyler has nothing to do with the Arkansas Central, as general auditor of that road.

Q. It reports to the general auditor, doesn't it?

A. It sends a report into our office, but it has an accounting department of its own.

Q. Mr. Johnson, I notice in these itemized accounts of the expenses of the legal department quite a number of items for transcripts of your cases to the Supreme Court, printing of briefs, payment of witnesses, and various other proper legal expenses, that are carried into the general legal expense account. I understood from you the other day that all of these damage suits and liabilities of the road in various ways, are localized, charged off to the proper locality, and to the proper department. But that would not include these various items that are paid you might say, preliminary to the payment of the judgments, would it?

A. No sir. Such expenses as the cost of the transcript in a case, we consider as an incidental expense of the law department,

757 and charge it as such. Now the charges in a damage suit would be charged to the transportation department, if incurred by trains; or if incurred in the maintenance of way department it would be charged to that department.

Q. And it may be that quite a large amount of money had been paid on that particular suit before then, and charged up to "General expenses"?

A. Such expenses as you have just mentioned, yes.

Q. The result of that would be that you charge off all these various accounts to the different departments; isn't it an absolutely accurate amount that is charged there?

A. You mean the amount we charge to the various departments would not always represent the total expense in connection with that particular suit?

Q. Yes.

A. No sir.

Q. That would really be, in a way, but an approximation of it?

A. That is all that is intended to be charged on that account, if that is what you mean. That transcript, for instance, is provided for by the Interstate Commerce Commission's classification, and should be charged to "law department expenses."

Q. I am not questioning the correctness of these, Mr. Johnson. I think it is entirely correct. But the point is whether you charge it off to various departments, like "maintenance of way" and so on;

that is really not an actual amount that you have charged to
758 that account, because there have been previous expenses on that account which have been paid in another account?

A. I don't understand that question, nor could I give an answer that would make it clear.

Q. Suppose you had a personal injury suit and before it went to judgment you had expended $1,000, that had gone in to your general legal expenses, and you had to pay $10,000 judgment?

A. I cannot imagine such a case, where the preliminary expenses would be $1,000.

Q. I find one item down here, in one matter, of $700 and odd dollars, so I don't suppose that is very badly off. Use that as an illustration.

A. What is the nature of that particular item?

Q. Voucher 1618, Tom N. Mahaffey, money expended on legal services, $771.52—which I understand from the voucher embraces various matters like payment for witnesses, lost time for witnesses, etc., all proper and legitimate expenses.

A. That may be several cases.

Q. I don't know about that. Use that as an illustration. Or, take $1,000 and $10, if you please.

A. If we had $1,000 preliminary expenses in connection with any suit, that would be a preliminary expense of the law department, and it would be charged to the law department; and the transportation department, or the maintenance of way department, or any department that might be responsible for that damage would never be charged with that amount.

759 Q. That is the point. It would be charged only with the final payment?

A. Yes sir, and the court costs incident to that payment.

Q. That would all be included in the last voucher, I suppose, wouldn't it?

A. Yes sir.

Q. I notice in the legal department for Western Arkansas, the salaries paid to Mr. Miles and his various office assistants, are divided, I presume, between Arkansas and Oklahoma. Do you know on what basis that is divided?

A. That would be divided on the basis of the earnings on the lines in his territory in the State of Arkansas, as compared with the lines in his territory in the State of Oklahoma.

Q. Are you certain of that, Mr. Johnson? I think they are divided on a mileage basis. I will ask you to look at some of these vouchers. You might be able to tell us about that.

A. I will look it up, but that is my impression of the way it is handled.

Q. It seems to be a fixed division between them.

A. It would be on a fixed division basis. When I say on the "basis of earnings," I do not mean the percentage would change every month. We would use the earnings of this quarter for a division of the expenses for the next three months to come. Those percentages are changed each three months.

760 Q. I did not notice very carefully, but it seems to be on the percentage throughout.

A. I will look that up and will let you know later.

Q. I see an item in your "rental account" that has been analyzed, showing the buildings and elevator at Little Rock as leased to Mr. Bunch for $1.00 per year. Is that right?

A. That is my understanding. That is the "miscellaneous rental account" number 18.

Q. Do you know what that property is worth?

A. No sir.

Q. Do you know how it is carried in the assessment?

A. No sir.

Q. Is it included in the right of way?

A. No sir, I haven't any idea. They don't list that property on their assessments. They give us just the buildings.

Q. The Bunch elevator is on the right of way, is it not?

A. Yes sir, I believe it is, and that is the rental for it.

Q. Did you find any rental for the hotel at Little Rock, the Union Station Hotel?

A. No sir, I did not look for it. I turned over all of the papers to Mr. Hamilton and his assistants, in connection with that, and I understand that they looked for it.

Q. You get $1.00 a year out of that, don't you?

A. It would be there if we did. It might be in some other
761 period. I don't know what the rental is.

Q. I wish you would find out about it. Our information is that, like the elevator, it is $1.00 a year. I refer to the Pratt Hotel, the Union Station Hotel at Little Rock. Please find out what is included in what is rented to him. I don't know whether that bar there and those various catch penny rentals, all go to him or go to the Railroad. I would like to know about that. Also, who keeps up the maintenance of that Hotel. If you are not familiar with it, I can say that it is a hotel and union station, together.

A. If it is an annual, or a semi-annual rental, it might appear in the first six months of that calendar year.

Q. It seems the eating-house at Texarkana is rented to Mr. Pratt for $75.00 per month. I would like to know what the eating-house part of the station at Little Rock is rented to him for.

A. I will ascertain that.

Q. I notice the $200.00 item of salary of Mr. Cox is not all paid by the St. Louis Iron Mountain & Southern, but $190.70 of that is charged to the Iron Mountain, out of that salary of $200.00. Who pays the other part of his $200.00 salary?

A. Well, all of the subsidiary lines of the Iron Mountain in the State of Arkansas.

Q. Do the Missouri lines pay any part of that?

A. No, that is an Arkansas expense.

Q. That would be apportioned to the Arkansas Central—
762 A. Not to the Arkansas Central. The Arkansas Central has nothing to do with the accounts of the St. Louis, Iron Mountain & Southern Railway. We do not operate it.

Q. Well, it would be apportioned to the Arkansas Midland?

A. Yes sir, and to the Arkansas & Louisiana Railway; the Mississppi River, Hamburg & Western Railway, and the Brinkley, Helena & Indian Bay Railroad.

Mr. HILL: I haven't had a chance to examine all these rentals and when we get the others, we may want to ask Mr. Johnson some other questions about rentals, but this is all I wish to ask him just now.

763 Redirect examination.

By Mr. MOORE:

Q. You stated that the Arkansas Midland Railway pays a part of Mr. Schuyler's salary.

A. Yes, sir, that is my impression. My impression now is that Mr. Schuyler's salary is apportioned between all those subsidiary lines. There is a distinction between some of the subsidiary lines and others. For instance, the accounts of the Arkansas & Louisiana, or the Arkansas Midland, or the Brinkley, Helena & Indian Bay are entered in our office; but not those of the Arkansas Central, nor the Little Rock, Hot Springs & Western. Those are all kept in accounting departments of their own and all we get is a monthly statement of their expenses, submitted to our office simply as a record.

Q. For those lines, as I understand you, the accounts are kept in the Auditor's office, and they contribute to the payment of his salary?

A. I think that is the way it is handled.

Q. And the other lines whose accounts are kept by their own organization and which do not pass through the accounting department of The St. Louis, Iron Mountain & Southern Railway do not participate in that expense?

A. I think not. I will look that up.

Q. Mr. Johnson what is the character of service that the switching revenue accrues from?

A. There are several items in there, but the principal item is the switching we collect as a direct charge on an intermediate haul,
764 where we might make deliveries say at Little Rock from some road; or a shipment from some road delivered to us to be delivered to an industry located on our line.

Q. Is there a large proportion of that accruing out of switching done for other lines?

A. I say, the principal part of that is perhaps for such switching as that.

Q. You stated on your cross-examination that you thought those items could be located: I want you to state how that could be done and if there is any way it would be practicable to do that. In other words, if your statement then made is correct.

A. No, sir, that statement is not correct. Where we control the shipment and the way bill, we could then determine whether that charge was either a state or an interstate charge. But where we perform merely the intermediate haul, we would have no record of

our own to indicate whether it was a state or an interstate shipment. That is, we would have no record to indicate where that shipment originated.

Q. That would be true whether it was being transported to an industry or handled in some other way over a connecting line?

A. That is right. As long as the shipment did not originate on our line then our record would not be complete in that respect.

Q. When you said you thought it could be located, you referred to the switching done to traffic that had originated on your own lines, did you?

A. Yes, sir.

Q. But that would not apply to switching done on other
765 lines or covering traffic that did not originate on your line?

A. That is right.

Q. Item 115 in statement 4 to exhibit 3, "foreign agencies" is the salary and expenses of representatives of the railroads in the State of Arkansas and elsewhere, whose business it is to look after the commercial interests of the Company and build up, encourage and promote immigration and the location of industries in the State: am I correct about that?

A. That expense is included in account No. 115, yes, sir.

Q. You were asked if any part of that account was properly chargeable to intrastate expenses: I want to ask you if it is true that the results of the labor of those agencies is confined in its effect to interstate business.

A. Not at all, in my opinion.

Q. They do what they can to promote business in the country or district of the country in which they are located, don't they?

A. The business of the industrial and immigration bureaus is to build up the country in the States through which our line passes. Now it is the business of the commercial agent, whose expense is included in that account, to secure traffic to and from all points in the States through which our road passes. In my opinion the service they perform is just as much a benefit to the intrastate traffic as it is to the interstate traffic.

Q. I wish you would explain in what way it is a benefit to the intrastate traffic.

A. The industrial and immigation bureaus in seeking for in-
dustries and in building up the country in Arkansas, un-
766 doubtedly develops for us a larger intrastate traffic. Not only that, but the business that is secured by the commercial agent, that may be going into the State of Arkansas, is a traffic that is eventually distributed from the various distributing points in the State as intrastate traffic. And it is just as fair a charge to the State business, especially when you take into consideration that only a portion of that is charged to the State traffic, as any other expense of a general nature would be.

Under our system there is not but 13% of that $54,000.00 that is charged to intrastate traffic.

Q. I was going to ask you what proportion was charged to intrastate traffic.

A. 13.08%.

Q. Your attention was called on cross-examination to the fact that the earnings from freight under the statement filed by you in this case, appeared to be for the last half of the year 1907, about 2% less than the earnings from the same source during the first half of that year, and a difference of about 4% in the passenger earnings; the earnings for the first half of the year being about that much larger than those for the last half:

I want to ask you if that difference in the freight earnings is an unusual fluctuation.

A. I would not say it was. The increase or decrease may vary in any six months period, and a 2% variation would not be abnormal.

Q. Isn't it always the case that it does fluctuate one way or the other?

A. Yes, sir.

767 Q. Have you ever known of a case where the earnings for two different periods of a fiscal or a calendar year would be exactly the same?

A. No, sir, and as I explained at the time, the earnings for the first half of the calendar year 1907 were unusually large.

Q. I believe you stated that the passenger rate of 3 cents was in force during the first half of the year, up to the middle or the latter part of April.

A. Yes, sir.

Q. And during the rest of the year the passenger rate was two cents?

A. Yes, sir.

Q. That would naturally affect the earnings very materially wouldn't it?

A. Yes, sir, that would account to a large extent for the increase in percentages on the passenger business during that first half as compared with the last half of the year.

Q. I want to call your attention now to statements 3 and 4 attached to exhibit 3: I will take up first some items in statement No. 4:

Your attention was called to item No. 6 "ballast" as to which it appears that 70% of the expenses incurred during this six months covered by this statement accrued in Arkansas. I believe you stated on examination that that was based on the actual expenditures in that State on that account.

A. Yes, sir.

Q. Mr. Johnson I find among other items on there, in which there is a very much lower percentage, some lower than

768 50%:

I want you to state whether the items that enter into expenses fluctuate constantly or whether they remain stationary. I

mean items that enter into the maintenance of the track and equipment and expenses of that character.

A. I should say that all of the items in maintenance of way and structures, with the exception perhaps of "superintendence" are very apt to fluctuate from month to month in any six months period.

Q. Isn't it true, Mr. Johnson, that you could not take any two six months periods, covering the same part of the year, and find uniformity in expenditures of that character?

A. I do not believe you could, in any year.

Q. And isn't it also true that some items will be larger in any given period and other items will be smaller, growing out of the exigencies that might arise during any given period: is that true or not?

A. Yes, sir, that is true.

Q. I observe in connection with the item referred to, "rails" during that period is 20% in Arkansas as compared with the total; that, I take it, accrued out of the conditions that existed during that period.

A. Undoubtedly so.

Q. At other periods it might be—and isn't it very likely that would be so, and the "ballast" account charged to Arkansas would be lower?

A. Yes, sir.

769 Q. The next item I see there is "cross-ties:" Arkansas bears 63% of the total cost of cross ties for that year?

A. Yes, sir.

Q. That same thing is true there, isn't it?

A. Yes, sir.

Q. The next item is "track appliances" of which 45% is charged to Arkansas.

The next item is "railway tools" of which 46% is charged to Arkansas.

The other is for "road-way maintenance" 43%.

Now, what do those variations indicate, Mr. Johnson?

A. It indicates to my mind the needs of the track at that particular time and the fact that while our total expense for ballast was $31,000.00 and we charged 70% of that to the State of Arkansas, it merely indicates that out of the expense for ballasting during the particular period, the majority of the work was required in the State of Arkansas.

On the other hand, in our other road-way maintenance, miscellaneous repairs to track, but 43% of the total amount we expended upon the entire line was required in the State of Arkansas.

That condition might be entirely different in the next six months, or it might have been entirely different in the previous six months. But the item of expense itself is of a local nature and what we spend in one State would be no indication of the requirements of another locality.

Q. You stated awhile ago that these expenses in all their several

branches are continuously fluctuating, according to the needs
770 of the locality in which they are made: now you will find in some cases a large proportion chargeable to, we will say the State of Arkansas, and in another a very small proportion: I want you to state whether tha' evens itself up in the long run, and whether it is abnormal to say that 70% of the ballast is charged to Arkansas for that period? Does that show any abnormal condition or is that the result of the variations that occur in the fluctuations in the different items that constitute this expense account.

A. If I understand the question right, the ballast account itself does not indicate the general charge to the State of Arkansas. By that I mean that while we have charged 70% of our total ballast expense to the State; and but 43% of our other right-of-way maintenance to the State, the average charge upon all those accounts to the State of Arkansas for the six months is a fairly normal charge.

And perhaps the best unit to judge that charge would be the track miles. This statement shows that the total charge for all maintenance accounts during this period was 54%, as against a track mileage of 52%, located in the State.

Statement No. 3 attached to that exhibit shows that 52% of all the track miles of The St. Louis, Iron Mountain & Southern Railway are located in Arkansas.

Q. That is the first item of the second paragraph?

A. Yes, sir, it is the first item, in the statement of "various statistics."

Now that 54% is not an abnormal charge for maintenance
771 of 52% of our mileage.

Q. The point to which I more particularly wanted to call your attention by the last question was, whether the fact that one, two or half a dozen or more of the items embraced in the 129 items in this account happened during this particular peroid to appear to be large disturbs the balance of the account as it runs along from year to year.

A. No, sir, because items of that kind that fluctuate, are *are* almost negligible compared to the total maintenance expenses of a Railroad.

Q. And isn't it true that while a given item may be high one year it would be low another; and likewise an item that might be low one year would be high another?

A. Yes, sir.

Q. And aren't they continually changing and isn't it practically impossible to find any period of six months in which all the items would be high or in which all of the items would be low?

A. I do not think you could find any such period, or any period in which the items would be absolutely uniform.

Q. You have also stated that this ratio of 54% of the cost of maintenance of way and structures bears a close relationship to the track mileage in the State of Arkansas——

A. I might say it bears a still closer relationship to the train mileage.

Q. I was just going to ask you about that. What is the train mileage?

A. The train mileage is 54%. In other words, 54% of all the train miles upon The St. Louis, Iron Mountain & Southern Railway were made in the State of Arkansas.

772 Q. Now Mr. Johnson how does that ratio of cost of maintenance of way and structures compare with that of maintenance of equipment?

A. It is within 1% of it. The percentage of maintenance of equipment charged to the State of Arkansas is 55% of the total expense on The St. Louis, Iron Mountain & Southern Railway for maintenance of equipment.

Q. How does the total expense compare?

A. The total operating expense (on the last page) show- that 54% of all the operating expenses of the St. Louis, Iron Mountain & Southern Railway were charged to the State of Arkansas.

Q. Those charges, as far as can be, are based upon the actual expenditures, or the actual facts in connection with the expenditures, are they?

A. Yes sir, so far as possible they are the actual expenses incurred in the State.

Q. There is one item of "flood damage" on that account: Please turn to that.

A. Account No. 107 covers flood damage $3,210.20, charged to The St. Louis, Iron Mountain & Southern Railway, of which 92% was chargeable to Arkansas.

Q. Are you sufficiently familiar with the condition of the country in which the line is located, in Arkansas and Missouri, to state to what extent, the line is exposed to flood damage in Arkansas as compared with Missouri.

A. Generally speaking I would say, from what I have learned of conditions in Arkansas as compared with Oklahoma and Missouri, that the chances are that our expenses on that account would

773 be a good deal larger in Arkansas than in any other State for the St. Louis, Iron Mountain & Southern Railway.

Q. You are not familiar, however, with the physical conditions down there?

A. No sir I am not familiar with the physical conditions I do know that our expenses in Arkansas for this account has always been larger than it has for other States.

Q. I wish you would turn to your exhibit No. 6. The first division that appears on the first sheet of that exhibit, under the head of "total track mileage operated" and followed by a statement of the earnings and revenue, shows the various items under the head of "United States" "group 8" and "St. Louis, Iron Mountain & Southern" and "St. Louis, Iron Mountain & Southern in the State of Arkansas." Then it contains percentages under each column.

Now I want you to take the total passenger revenue in the United States, as stated on the first line, 564,606/343, and immediately under that the per cent that is of the total revenue stated, 21.81. I want you to state if in that column and each of the three columns to the right of it, the percentages given mean the percentage of all the

revenue derived from the territory that is covered by that particular column? For instance, under "United States" appears 21.81%. That represents that portion of the revenue that accrues from operation of the railroads of the entire United States, doesn't it?

A. Yes sir.

Q. And that is true all the way through, isn't it?

A. Yes sir.

Q. For instance, the freight revenue earned by the rail-
774 roads in the United States is 70.44% of the total revenue earned in the country?

A. Yes sir.

Q. And in the state of Arkansas it is 71.51% of the revenue earned in the State of Arkansas?

A. Yes sir.

Q. And the one preceding that, 72.06% is the ratio of the freight earnings to the total lines of the St. Louis, Iron Mountain & Southern Railway?

A. Yes sir.

Q. Your attention was called to the fact that the percentage of expenses to earnings is larger in the State of Arkansas than in group 8, referred to in this exhibit, there being nearly $9.00 in the $100.00 difference, I believe. I wish you would state if there is any reason to account for that, Mr. Johnson.

A. I think the principal reason is that it costs more to operate on the St. Louis, Iron Mountain & Southern and on that line in the State of Arkansas, than it does upon all of the lines in group 8. That is due, to a great extent, to the density of traffic on our line in the State of Arkansas as compared to the average density of traffic on the entire line.

Q. How does the density of traffic affect the ratio of expenses to earnings?

A. The density of the passenger traffic in group 8, for instance, is 72,000 miles.

In the freight business the density of traffic is 553,000 miles.

On our line in Arkansas the density of passenger traffic is
775 54,000 as against 72,000 in group 8.

And in freight it is 487,000 as against 553,000.

To my mind that would show the reason why the cost upon our line is greater than the percentage of cost of group 8. We have got to maintain our organization and it is going to cost so much to do it. It is going to cost us so much to run the trains and conduct the business, whether we have a great volume of business or a small volume of business. And the greater that volume of business the smaller the percentage of earnings to expenses is bound to be.

Q. How does the ratio of expenses to earnings on the St. Louis, Iron Mountain & Southern in the State of Arkansas compare with the entire line, as shown on that exhibit?

A. The percentage of expenses to earnings from the entire Iron Mountain is 74.24%. On that part of the Iron Mountain in the State of Arkansas it is 73.88%.

Q. How does the density of traffic compare, both as to passenger and freight, as to these two parts of the line?

A. The density of passenger traffic is about 11% greater in the State of Arkansas than it is upon the line as a whole; and there is a difference of about 3%. That is, the State of Arkansas is 3% greater in freight than it is upon the Iron Mountain as a whole.

Q. 11% greater for passenger and 3% greater for freight?

A. Yes sir. I think the passenger rate would have some bearing upon that as well. The average revenue from passenger is smaller in the State of Arkansas than it was during that period on all of the lines in group 8 for the entire period we show in this exhibit.

776 Q. What states comprise group 8? You stated that the other day, but I believe you desired to correct that.

A. I would like to make that correction. Group 8 is comprised of the States of Arkansas, Oklahoma, Kansas, part of Missouri, South of the Missouri River, and parts of Texas, Colorado and New Mexico.

Q. You were asked I think on cross examination something in regard to the division of miscellaneaus expenses. I believe the mail and express are the largest items included in that: now what would be necessary in order to make a division of the express business as between State and Interstate?

A. In order to divide our express earnings between state and interstate we would have to have the original way bill or a certified copy of it, one of the two. The way bill itself is the only record I know of that would indicate the points of origin and the point of destination of the express. Those way bills are in the possession of the Express Company.

Q. They are of course prepared by them and for them?

A. Yes sir by their agents and clerks.

Q. Has the Railroad access to them for any other purpose than perhaps to verify accounts furnished them by the Express Company?

A. Not to my knowledge. We have no record of them in our office at all.

Q. You would have to obtain any information there from them by going to the office of the Express Co.?

A. Yes sir.

Q. Would that be practicable, Mr. Johnson?

777 A. I dont' believe it would. It would require on the part of the railroads almost as large a force in the Express Company's office as they have in their own office, for the handling of their own freight bills. I do not believe it would be practicable at all. It would be impossible for us to get this information from the Express Companies because the expense would be entirely too great upon them.

Q. How is mail handled and what is the method by which the Railroad Company is compensated by the Government for carrying it; and by whom are the regualtions for the controlling of the United States mail, prescribed: just state in a general way what you know in regard to that.

A. The lines of The St. Louis, Iron Mountain & Southern Railway are divided into various mail routes and our compensation depends altogether on the volume of the mail handled over that particular route for certain periods. By that I mean that at certain

periods the United States Government weighs the mail and fixes the compensation to be paid to the Railroad Companies based upon the amount of mail handled and the facilities furnished.

Q. Is that done at stated periods or at irregular periods?

A. It is done I believe once in every four years.

Q. Does that rate of compensation fixed in that way continue in force for four years?

A. When the mail is weighed I don't believe that rate would remain constantly in force for four years. There may be a change in conditions that would change the rate. But the Government itself controls the mail and fixes the compensation.

778 Q. Does the Government prescribe the car space that is to be furnished by the Railroad Company for the accommodation of the mail?

A. That is my understanding.

Q. Isn't it a fact, Mr. Johnson, that when they fix the compensation, based upon weight, that that compensation continues for a period of four years, but in the meantime if the Government desires to have the Railroad Company enlarge the space, and should direct the Railway Company to furnish it, it makes an addition to this compensation on account of that enlargement of space?

A. That is what I meant by saying that a change of conditions might bring about a change in compensation.

Q. What service is rendered by the Railroads in connection with the mail? For instance, who delivers it to the officials and to the Government agencies at the various stations, or are you familiar with that service?

A. Where the volume of business justifies it, the Railroad Company will maintain a mail clerk, whose business it will be to deliver the mail from the train to the post office. That is one of the facilities we are compelled to furnish in the mail service.

Q. Are you required to carry the mail clerks of the United States in connection with the mail?

A. Yes sir.

Q. Are you paid a separate compensation for that service?

A. I don't know whether there is any special compensation or not; or whether that is all embodied in the rate we are paid for that particular service.

Q. You do not know anything about that?

A. No sir.

779 Q. Is there any requirement made on the part of the United States Government in regard to furnishing mail cars, and the manner of lighting and heating them?

A. Their contract would specify the general conditions under which that car is to be kept and maintained.

Q. In other words, the Railroad Company is required to furnish and heat and light the mail cars?

A. Yes sir, furnish and properly light and heat—in other words, properly equip it for use.

Q. Is there any requirement, Mr. Johnson, in the regulations of the Government about handling the mail, as to how cars shall be

placed to render them accessible to the agents of the Government at stations in Cities? Have you any knowledge as to that?

A. No sir I have no knowledge as to that.

Q. I will ask you, Mr. Johnson, if from your knowledge of the character of the service required in connection with the United States mail it does not differ in many respects from the ordinary service rendered in the carrying of freight and other classes of traffic.

A. I do not believe I understand the question.

(Previous question read to the witness.)

I should think the service rendered was of an entirely different nature from the service rendered to passengers or freight. That is an operating question that could be a good deal better answered by an operating man. I am not familiar with the operating conditions of that particular service.

780 Recross examination.

By Mr. HILL:

Q. Mr. Johnson there was one question I could have asked you before and I forgot it.

Do you think that fine of $10,000.00 in those cases of violating the law is a proper charge against operating expenses?

A. I don't know where else it would go. It is an incidental expense and I know of no other place you could put it.

Q. Do you think that is an operating expense?

A. It is an expense that is undoubtedly incurred in the operation of the railroad. You cannot charge it to "Capital account" and I don't know where else you would, put it.

Q. Ought not it be charged against surplus or profit and loss account?

A. I hardly think so.

Q. Your judgment as an accountant would be that a fine against a railroad for violating the law should properly go into operating expenses?

A. Yes sir.

Q. Speaking of the different percentages of cost of maintenance of way, you call attention to the fact that the percentage charged against Arkansas in this exhibit was 2% more than it would be if charged on a track mile division, and but little different if charged on a train mile basis: do you think the track mile or the train mile division would be the proper division of those maintenance of

781 way expenses.

A. I did not say 2%.

Q. You said one was 52% and the other was 54%.

A. I said it was 2% in excess of the track mileage.

Q. Didn't you say that the track mileage basis would be a good way of dividing it?

A. No sir I said that would be a good indication of the expenses that we had set up.

Q. What relation would there be?

A. Taking the track mile and the train mile together, it ought to

indicate, in a general way, the cost of maintaining that track. That is, if we have 50% of the entire track in any one State and 50% of the entire train mileage in any one State, I believe the operation expenses for maintaining of track ought to be somewhere in the same neighborhood. I would not say it should be arbitrarily divided that way, because the volume of business over that track would have a good deal to do with it.

Q. You do think they should bear an approximate realtion to each other: is that the idea?

A. I think so, yes sir.

Q. But on both those percentages Arkansas has something the worst of it, hasn't it?

A. No sir. The train mileage per cent and the maintenance per cent are identical, 54% in both cases. While the track mileage is 52%.

Q. But the track mileage would give Arkansas the worst
782 of it.

A. The volume of business over that track would have some bearing on the expense, of course. But I think the two of them are perhaps the most important factors in considering maintenance cost.

Q. Would the number of train miles be a good indication of the use of the track?

A. Yes sir, I think it would be some indication of the use of it.

Q. Wouldn't it have a very decided influence on it?

A. Yes sir, I should say so.

Q. Wouldn't that be a fair way to arrive at the division?

A. I would not divide a total charge for maintenance of way and structures to any particular portion of the track, if there was any way of getting at the actual expense—if that is what you mean.

Q. I am speaking of those that might not be located definitely.

A. Where you have a common account, that could not be divided on any other basis, I think train mileage is indicative of the cost.

Q. Wherever it can be located, you locate it.

A. Yes sir.

Q. And when you are not able to locate it, like the Superintendent's salary, say, then the train mileage would be the next best method of division?

A. I don't think the train mileage would be the best division for the Superintendent's salary.

Q. What would be?

783 A. Superintendence of Maintenance of Way has nothing to do with the train running, in itself.

Q. I took that at hap hazard, as a general expense. You select one.

A. He has absolute control of the track. We have used this train mileage basis in dividing all our maintenance of way expenses, as between freight and passenger, as being the best unit we could get.

Q. Have you any personal knowledge of the influence which these foreign agencies would have on the intrastate traffic of Arkansas?

A. Any personal knowledge?

Q. Yes.

A. No sir.

Q. Your answers to Mr. Moore's question along that line were based on general knowledge and not any specific knowledge of these particular items, we-n't they?

A. Yes sir. That is just my opinion.

Q. You don't know of a pound of freight they have ever caused to be moved from one point in Arkansas to another point in Arkansas, do you?

A. No sir, and I don't know of a pound of freight they have caused to be moved into the State of Arkansas. I don't know anything about the specific nature of their work.

Q. Do you know the general effect of their work on the traffic?

A. It is their business to solicit freight traffic, and it is
784 their activity that accounts for a good deal of the revenue of the Company.

Q. As to the industrial agents the same is true: you are not speaking of the effect of their work, but rather, of what their work tends to do?

A. Yes sir.

Q. Neither the industrial agent nor the foreign agent has anything to do with non-competitive business, has he?

A. The industrial agent has nothing to do with the traffic at all; nor has the immigration agent; I mean by that, they are not soliciting traffic.

Q. They are not soliciting non-competitive traffic?

A. No sir, nor competitive traffic.

Q. The industrial agent is supposed to solicit immigration that might go to Oklahoma or to Texas if it would not go to Arkansas?

A. To locate there, rather than to solicit the passengers themselves.

Q. The incidental benefit to the railroad and to the country would be to get them to travel over the line of the road, and to ship freight over them.

A. That is not their purpose. Their purpose is to get them to locate there.

Q. So as to produce the revenue for the Railroad Company?

A. Not by reason of their coming there so much as what they will produce after they are located in the State.

Q. "Laying up treasures in Heaven"—so to speak.

785 A. Or, rather, in the State of Arkansas.

Q. Now about the foreign agents: they do not solicit traffic between non-competitive points, do they?

A. I would not say a foreign agent was actually soliciting intrastate business, but I do say that in soliciting business and getting the movement into the State, his activity undoubetdly brings about an intrastate movement.

Q. What class of business are these foreign agents supposed to influence?

A. Anything they can get to go into the State.

Q. The movement of freight into the State over their line rather than over some competing line: is that the idea?

A. Yes sir.

Q. If there is a shipment to be made to Little Rock, it would be the place of that agent to try to get it over your line rather than to have it go over the Rock Island?

A. Yes sir.

Q. After it would get into Little Rock and that freight would be shipped out to Morrillton or Conway or other points on your line, would the foreign agent have any effect on that?

A. On its being shipped out of Little Rock?

Q. Yes.

A. No sir. But one of his duties might be, and one of his efforts might be, in the line of getting that business into Little Rock rather than into Memphis, provided we got the longest haul by taking it to Little Rock.

786 Q. That would be selling the goods instead of carrying freight, wouldn't it?

A. Oh no. It is the business of our commercial and soliciting agents to solicit all the business they can get.

Q. Unless the goods were sold in Little Rock he could not move them over his line into Little Rock. He would not sell them in Little Rock rather than Memphis, would he?

A. I am inclined to think he gets a great deal of business by soliciting it to go to Little Rock rather than to some other point and by developing the industries of Little Rock.

The influence of these outside agencies is perhaps directly assigned to the interstate traffic, but I believe we are perfectly justified in charging a proportion of that expense to the intrastate business.

Q. I have not quite understood yet how he could influence that shipment into Little Rock instead of Memphis. As I understood it, there would not be any freight to move until there was a sale of the goods, to be moved there into Little Rock. How could he influence the shipment of goods there instead of to Memphis? I do not understand your reasoning on that.

A. If we can get a manufacturer in Chicago, who has been delivering most of his wares and confining most of his trade to the St. Louis territory, to enlarge his business and go into foreign territory, or go into new territory, and select the State of Arkansas as a field for his business, we would then be delivering a much larger

787 business over the Iron Mountain, because originally most of his shipments would be to the City of St. Louis, if we could influence him to open up his trade and bring his freight to Little Rock.

Q. He would have to have an agent at Little Rock wouldn't he?

A. Yes sir, but it is the business of the commercial agent to keep in touch with that manufacturer and urge him to get him to go into Arkansas.

Q. I asked you if he was engaged in trying to sell goods in Arkansas.

A. He is engaged in doing anything he can to influence the shipment of goods into Arkansas.

Q. Do you think those commercial agents go into the market to

try to sell the goods to some manufacturer, shipper or dealer in Little Rock?

A. I have heard those commercial agents say they had succeeded in having such and such a concern extend their territory to certain points on our line. And I have heard them say they had succeeded in getting certain commercial houses to open up a branch house at certain points on our line. All that business tends to develop intrastate business in Arkansas just as well as the interstate business.

Q. On the theory that after they get in there there would be other intrastate movement?

A. Yes, sir, after they got in there, there would be developed other intrastate business.

788 Q. And does that indirect and subsequent movement justify you in charging this against the intrastate business; is that your idea?

A. It justifies charging some of it.

Q. You have charged the same per cent of it as you have the other?

A. 13%.

Q. According to the revenue?

A. Yes sir.

Q. You think 13% would be a fair division of this particular item?

A. I think it would.

Redirect examination.

By Mr. MOORE:

Q. Are these foreign agencies maintained by nearly all the large lines of railroad?

A. Yes sir.

Q. And you say their duty is to work up all kinds of business that will develop the country and the traffic of the roads they represent?

A. To develop the business of the lines, that they are interested in.

Q. Now, Mr. Johnson, isn't it a fact that any policy that will increase and develop the business of the railroad generally, will benefit every branch of it: isn't that true, as a general rule?

A. Well, I should think it would be, as a general rule. If we can develop our interstate business it will naturally bring about a development of the State business.

789 Q. Aren't the two branches of traffic so intimately related that whatever affects one affects the other; and aren't they very largely dependent, in other words, upon each other?

A. I should say so.

790 Recross-examination of F. P. JOHNSON, resumed as follows:

By Mr. HILL:

Q. Mr. Johnson, have you the information we called for yesterday?

A. Yes, sir.

Q. Before we go into that I want to ask you some further questions on these statistics as to the density of traffic, which you called attention to yesterday in your Exhibit No. 6: You have the density of passenger traffic as 54,576, I believe the figures are:

How do you arrive at that sum?

A. The density of passenger traffic is 73,842,620 passengers carried one mile, divided by the mileage of the St. Louis, Iron Mountain & Southern Ry. in the state of Arkansas, 1,353.

Q. Where do you get the number of passengers carried one mile?

A. It is the third figure in that same block.

Q. You divide that by the mileage, 1353?

A. Yes, sir.

Q. How do you get the 72,939 in group 8?

791 A. That is copied from the report of the Interstate Commerce Commission.

Q. It is arrived at in the same way?

A. Yes, sir, in the same manner.

Q. That you arrive at your mileage in the state of Arkansas?

A. Yes, sir.

Q. Take the density of freight traffic, you have 487,919: how do you arrive at that sum?

A. That is the number of tons carried one mile divided by the track mileage in the state of Arkansas.

Q. That is, 660,000,000 divided by your track mileage of 1353?

A. Yes, sir.

Q. And the corresponding figure in the United States and group 8 is taken from the Interstate Commerce Commission's reports?

A. Yes, sir.

Q. And it is reached in the same way?

A. Yes, sir.

Q. I notice that your statistics are based on a six months period: Isn't that correct?

A. That is right.

Q. And the Interstate Commerce Commission's statistics for the United States as a whole and group 8 are based on a year's period, aren't they?

A. Yes, sir.

792 Q. Is your comparison correct comparing a six month's period with a one year's period?

A. No, sir, I don't believe that would be correct on that basis.

Q. You should do what to get a correct result?

A. In order to get the correct density of traffic to compare with the United States and Group 8, we would have to get the ton mileage for the entire period.

Q. Could you give that?

A. No, sir, not for the state of Arkansas. We could for the entire St. Louis, Iron Mountain & Southern.

Q. How does the entire St. Louis, Iron Mountain & Southern in the State of Arkansas run? Pretty near the same? Is it denser in Arkansas?

A. A little bit denser in Arkansas than on the entire St. Louis, Iron Mountain & Southern.

Q. You have not the statistics to give it for the year on the St. Louis Iron Mountain & Southern?

A. No, sir, I have no statistics for state lines prior to July 1, 1907. The statistics for the first six months of that year have not been compiled by states.

Q. Have you it for 1908?

A. Yes, sir.

Q. Could you make a calculation on that?

A. Yes, sir.

Q. I do not think that would be admissable unless you
793 would think it would be substantially the same?

A. The fiscal year ending June 30, 1908, would not compare with the fiscal year ending June 30, 1907.

Q. If they would not be substantially the same I do not believe we would have fair data to work on.

A. No, sir.

Q. Could you take it, assuming the balance of 1907 would be the same as that six month's period?

A. Well, hardly. Our business for the six months ending June 30, 1908, was not nearly so good as for the six months ending Dec. 31, 1907.

Q. If it would be the same or substantially the same, you would have to double the figures you have given here?

A. If the volume of business was substantially the same in both halves of the year, then we could arrive at a close estimate by doubling those.

Q. You would take the 73,000,000 passenger miles and double it and divide by your 1353 miles?

A. Yes, sir.

Q. And you would take your 660,000,000 ton miles of freight and double that and divide it by your 1353 miles?

A. Yes, sir.

Q. You can see now at a glance, can't you Mr. Johnson, that the density of traffic in Arkansas will exceed that of group 8?

A. Yes, sir.

Q. So, the reasons you assigned yesterday, based upon
794 that misapprehension, would not apply, would they?

A. That is, the element of density of traffic would not apply. That is one of the elements that accounted for it.

Q. Mr. Johnson, give us the data we called for yesterday, in whatever order you have it there.

A. We have a contract with Mr. C. A. Pratt for the use of our facilities in the old depot at Little Rock. That contract was dated January 1, 1905, and expired Dec. 31, 1905, and called for an annual rental of $1.00 a year.

Q. Did that cover this period we are inquiring about?

A. No, sir. That rental was paid on the 23rd of January, 1905. The contract expired Dec. 31, 1905, and was not renewed for the old depot. We have a new contract with him that covers the new

station property. But the last rental we collected was on January 23, 1905, covering the rental for the calendar year 1905.

Q. Under what arrangement were you operating during the period we are inquiring about in 1909?

A. There was no contract in force and he was acting practically under the contract of 1905. It was never renewed.

Q. Paying $1.00 a year.

A. Yes, sir.

Q. What did that include?

A. That included all the privileges in the old depot in Little Rock.

Q. The saloon, the parcel room, the hotel and the eating
795 house?

A. Yes, sir, and everything else.

Q. What about the maintenance of that?

A. We maintain the depot. We maintain all of the property—that is, the repairs.

Q. You kept up that station like any other station, and kept up the property like you keep up any other property?

A. Yes, sir.

Q. None of these miscellaneous receipts you have given in your exhibit, from the parcel room and these various "catch penny" enterprises, and from the eating house and the saloon privileges, have been derived from that place?

A. From Little Rock?

Q. From that station there at Little Rock.

A. We have the automatic vending machines, the catch penny schemes, as you call them, that does not come under the contract with Mr. Pratt.

Q. That does not come under that contract?

A. No, sir.

Q. I understood you a while ago to say that all those privileges came under his contract.

A. By "all those privileges" I meant the hotel, restaurant and saloon. The automatic vending machine is merely a machine put in on the platform.

Q. What else was in that hotel? There was a parcel room?
796 A. Yes, sir.

Q. Did Mr. Pratt get the parcel room receipts?

A. Yes, sir. And there was also a barber shop.

Q. And how about the news privilege there?

A. He had the privilege of selling newspapers, etc., in his office there. Mr. Vannoy, I believe it is also has the news privilege there.

Q. I am not familiar with such privileges so I wish you would enumerates all the privileges that go into that, if I have not named them all.

A. Mr. Pratt had practically all the fixed privileges in the old depot. He maintained a hotel, had an eating house, there was a saloon there and I think a barber shop. Also a lunch counter. That is all I can think of.

Q. And the parcel room?

A. Yes, sir, and the parcel room.

Q. The news stand I believe you have named?

A. Yes, sir. Mr. Vannoy has a contract that covers all of the mileage of the St. Louis, Iron Mountain & Southern, for the news privilege.

Q. And Mr. Pratt also had the news privilege there?

A. Yes, sir, he had a privilege there.

Q. Did he have the weighing machine too?

A. No, sir, those weighing machines all come under this former contract we have.

Q. What is the next of the matters we were looking into?

797 A. The next was in connection with Lake and Henry's service rendered to the St. Louis, Iron Mountain & Southern. There were 13 vouchers during the six months amounting in total to $852, and they covered fees paid to Leake and Henry in taking care of our interests in cases that were brought in Texas. Most of these cases, the fees were nominal, $10, $15 and $25 for services, and incidental expenses in connection with the suits. Most of those suits were for the shipments of freight consigned to points on our line, where the Iron Mountain was a party to the haul, and was made a party to the suit.

Q. Aren't you mistaken about it being a party to the suit, Mr. Johnson?

A. No, sir, we might receive a shipment say, delivered to the I. & G. N. for delivery at Memphis. And there was an unlocated loss on that shipment. That shipment reached its destination, damaged, or it had gone astray. The Iron Mountain was made a party to the suit and we were compelled to have somebody represent us.

I say that is a part of those suits. I notice among these suits one for $2,000 for personal injuries to a switchman at Texarkana.

Q. Texarkana, Arkansas, or Texarkana, Texas?

A. Texarkana. Our switchman at Texarkana.

Q. Texarkana is in both states, you know.

A. The only liability we would have there would be if

798 one of our men would happen to cross the state line.

Q. How much was their fee in that case, do you recall?

A. Their fee in that case was merged with other fees, and they received $250 for their services in several cases.

Q. You do not know what the specific item in that was.

A. No, sir.

Q. With the exception of that personal injury case, all of these other services grew out of the interstate shipments, didn't they?

A. We have one case with Leake & Henry, where the fee paid was $50 and it was for services rendered to the St. Louis, Iron Mountain & Southern in a suit for damages to two race horses shipped from Texarkana to Hot Springs, Arkansas.

Q. That is an interstate shipment?

A. It would be if it were from Texarkana, Texas. The shipment itself shows to be from Texarkana to Hot Springs.

Q. You don't know whether that was interstate or not?

A. No, sir. I have another case here of a fee of $75 for taking

care of a suit for damages while riding in a coach between Texarkana and Memphis. Now that happens to be an interstate journey because it went to Memphis.

Q. What others have you there?

A. The rest of the cases are all in connection with interstate shipments.

Q. Everything there is an interstate shipment unless it is that personal injury suit and that shipment from Texarkana,

799 which you don't know is state or interstate.

A. No, sir, I don't know whether it is state or interstate. But if we received it at Texarkana from a connecting line it would probably be interstate. If the shipment originated at Texarkana we would treat it as a state shipment.

Q. I presume most likely it originated from a connecting line, or the suit would not be in Texas, would it?

A. I have not any idea how those suits are brought.

Q. What is the next item you have there?

A. As I say, there are quite a number of those items and they are all interstate shipments.

Q. I mean the total.

A. The total amount for both Leake & Henry and S. R. Fisher amounts to $852.

Q. What you have said about Leake & Henry also applies to S. R. Fisher?

A. Yes, sir. There are two vouchers for S. R. Fisher.

Q. What is the next item you were to look up.

A. The next item was the method of dividing the expense of Oscar L. Miles.

Q. Your Fort Smith attorney?

A. Yes, sir. I find during this six months his salary was divided on the train mileage basis. It was not until 1908 that they adopted the revenue system on that class of accounts.

800 Q. That applies not only to his salary but to his assistants, and his office expenses?

A. His entire account. It is divided on the basis of track mileage in each state.

Q. That is the entire expense of your legal department at Fort Smith?

A. Yes, sir.

Q. I believe I asked you about the Bunch elevator?

A. No, sir, you found the Bunch elevator. You asked me if I knew what the value of that property was.

Q. I thought I asked you if you knew where that was assessed?

A. I don't remember that.

Q. I may have overlooked that but I intended to ask you if you had any data or if you could find that out?

A. The only way we could find out would be from the Taxing Board of Arkansas.

Q. Is it included in your property here or is it included as outside property? That is the only interest I have in it.

A. I have not any idea where you could find that out from our record.

Q. I expect I will have to get that information.

At this point Mr. F. P. Johnson is withdrawn.

801 R. E. KIMBALL, recalled, testified as follows:

Cross-examination (continued).

By Mr. HILL:

Q. Mr. Kimbell, you have handed us two detailed statements, one showing the revenue in detail and the other showing operating expenses in detail, which will become your *your* exhibits 21 and 22?

A. Yes, sir.

The papers referred to are marked respectively "R. E. Kimbell Exhibit 21," and "R. E. Kimbell Exhibit 22."

Said exhibits are in the words and figures following to-wit:

For Exhibit 21, see Volume 8, page 5324.

For Exhibit 22, see Volume 8, page 5326.

802 Q. Mr. Kimbell, how did you get at the switching revenue (the 9th item) separated between the state of Arkansas and the balance of the line?

A. We allotted that as to the state.

Q. The actual location?

A. Yes, sir.

Q. How did you divide your express revenue, on what basis?

A. Allotting it to the state of Arkansas.

The express revenue is allotted on the basis of the revenue passenger train miles.

Q. And how do you allot the mail revenue.

A. Mail revenue is allotted to the states on the basis of the track mileage for the mail route, pro rated, to each state.

Q. Explain that. I don't quite understand that.

A. For example, we have a route from Cairo to Texarkana, which is our biggest route. We would divide the compensation paid us for the use of that route between Missouri and Arkansas, based on the mileage in Missouri and the mileage in Arkansas.

Q. And you did the same with each contract, separately?

A. Yes, sir.

Q. Instead of taking all the contracts together you took each and allotted it according to the mileage?

A. Yes, sir.

803 Q. Car service is demurrage?

A. Yes, sir.

Q. And how did you divide that?

A. It is localized to the state of Arkansas. If it accrued within the state of Arkansas, it was credited to the state.

Q. The switching I believe you said is done the same way?

A. Yes, sir.

Q. If you had a car switched to the St. Louis, Iron Mountain & Southern over your road for Pine Bluff, you credited that to Arkansas revenue?

A. Yes, sir.

Q. This account No. 19 "miscellaneous" how do you divide that?

A. We divide that on the basis of total revenue train miles, total train miles in other states on the one hand and total train miles within the state of Arkansas on the other hand.

Q. What are the principal items included in that "Miscellaneous" account?

A. As I recall it, that was for detouring passenger trains for the St. Louis Iron Mountain & Southern principally.

Q. And you divide that on what basis?

A. On the basis of the train mileage made throughout the line, allotting to Arkansas its percentage proportion, arrived at on the train mile basis.

804 Q. Suppose that service was all done within the state of Arkansas. Suppose the St. Louis, Iron Mountain & Southern tracks between Little Rock and Pine Bluffs would go out of service and they would detour their trains over your track there?

A. An item of that nature could be localized to Arkansas.

Q. You have not attempted to do it?

A. We have this general basis and it is followed in the division of the revenue.

Q. But all the detouring of the trains, and the revenue from the trains, can be localized except where it crosses the State line?

A. Yes, sir.

Q. Your record shows what the service is from, so it could be made up in your office?

A. It does.

Q. What are the other heavy items making up that "miscellaneous"?

A. As I testified the other day, looking at the classification that appears to be the only item in that account, without an analysis of it.

Q. If there are any other items, they must be small?

A. Yes, sir, they must be very small.

805 Q. Mr. Kimbell, I believe it is possible you and I are calling for different accounts. I called for Miscellaneous account No. 19 and I rather think (Mr. Wharton calls my attention to it) that you are probably referring to another account.

A. No. 19 is a miscellaneous account, to which trains moved over our line under a detouring arrangement would be credited.

Q. The other day I understood it the other way.

What is in account No. 11 "Miscellaneous Transportation Revenue"?

A. That is revenue, as I recall it, charged for re-consigning cars and transferring overloaded cars en route, and items of that character.

Q. I see there is a very small proportion of that in Arkansas.

A. It is a very small item in the aggregate, anyhow.

I might explain that, in a general way, Judge Hill, by saying

that that account is largely made up of charges we assess for transferring overloaded cars, and for re-consigning cars of lumber. We originate a great deal of lumber in Arkansas and by the time it reaches our northern terminals at Illmo and Dupo, we have re-consigning on it and that re-consigning is done outside of the state of Arkansas; and perhaps that accounts for the small proportion in Arkansas.

Q. How have you divided that item as between state and interstate?

A. It is divided on a train mileage basis.

806 Q. That can all be located, can it? That can be localized between the state and the entire line?

A. That amount is made up of reconsigning charges; stop over charges, and charges for transferring overloaded cars en route. It might be proper to localize the transfer of an overloaded car at some certain point, but it is a question whether it would be proper to localize a reconsignment charge. There might be no particular service done at the point where the car happens to be caught, by wire, and reconsigned. It is a charge that I should say properly would accrue to the entire route of the shipment over our line.

Q. That only happens in most instances, in interstate shipments? There would be a very few instances of that kind within the state?

A. I should say, yes. It does happen to interstate shipments largely.

Q. In your maintenance of way and structures operating expenses, how have you divided those various items, without taking them up in detail?

A. I would refer you in that connection to my Exhibit 18.

Q. You might answer that generally. You have divided them according to your Exhibit 18?

A. Exactly.

Q. You followed that in making these divisions?

A. Yes, sir, from which it will be noted that almost all of

807 the maintenance of way expenses are localized.

Q. Mr. Kimbell, I wish you would explain item No. 27 of Exhibit 22, containing the joint yards, tracks and other facilities.

A. That item No. 27 represents the proportion of the maintenance expenses of our lines—that is, the greater part of it—between Dexter, Missouri and Illmo, Missouri, used jointly by our line and the St. Louis Iron Mountain & Southern.

Q. Including the Thebes Bridge?

A. That is not involved in this. You will notice that consumes practically all of the credit. We have a few joint facility arrangements in Arkansas where we receive a credit, but they are very few. I mention The Pine Bluff Arkansas River Railway, one of our subsidiary lines, which uses our line between Pine Bluff and Robroy. The greater part of that credit, so far as Arkansas is concerned, is derived from that account.

Q. What about No. 26?

A. No. 26 is a charge we pay the greater part of it for the use

of the Illinois Division of the St. Louis Iron Mountain & Southern, the maintenance proportion of that expense.

In Arkansas there is $12,000 charge and my recollection is that the greater part of that is a proportion of the facilities at Little Rock, which we pay to the St. Louis Iron Mountain & Southern for the use of their facilities.

Q. Don't you pay anything at Texarkana?

808 A. And there is some at Texarkana. There is also a little payment at Pine Bluff, for the use of the Pine Bluff passenger station.

Q. That is represented in that $12,000?

A. Yes, sir. That is, the maintenance part of it.

Q. Take No. 35 of Exhibit 18, under maintenance of equipment and repairs to cars; and the same item runs to repairs of locomotives and others.

I wish you would state your basis for this division between the line and the state?

A. In the case of passenger cars the amount of ordinary repairs is pro rated between the states on the passenger car mile basis.

On freight cars, on the freight mile basis.

On locomotives, on the locomotive mile basis.

Q. Have you an item there of repairs to tools?

A. Yes, sir, account No. 47.

Q. What is included in that?

A. That is, as its name indicates, shop machinery and tools.

Q. How do you divide that?

A. On the basis of revenue train miles, between states.

Q. You do not localize that to the shop in Pine Bluff?

A. No, sir.

Q. Where are your shops?

A. At Pine Bluff.

809 Q. Where else on this line?

A. Only at Pine Bluff. We have repair shops at outside points. But they are small.

Q. These items all occur in the Pine Bluff shops, I presume, do they not?

A. Yes, sir.

Q. Take item 53: where does that come from—and I believe item 55 goes with that?

A. Those are the corresponding accounts to the maintenance accounts Nos. 26 and 27.

Q. And are derived from the same points?

A. They are a proportion of the same expenses.

Q. Just divided so much for maintenance of way and so much for maintenance of equipment?

A. Exactly.

Q. On what basis do you divide that between maintenance of way and maintenace of equipment?

A. That is purely on an arbitrary basis. It is figured as near to the service as it can be figured at the several points.

Q. While it is arbitrary, you attempt to make it as near actual as is possible?

A. We have a percentage worked up, which we probably will use for a year or two, but it — as near correct as we consider it should be.

Q. Take your items No. 54 and 56: they are the corresponding items, I presume.

810 A. Those items are a requirement of the Interstate Commerce Commission that the operating expenses shall be charged and credited with a proportion of the rentals we receive and pay for the hire of equipment. And the rates at which it was charged during this year was 24% of the regular per diem rate of 50 cents per day. The rate of 12 cents per day was provided by the Interstate Commerce Commission.

Q. Does this represent the 12 cents per day?

A. Yes, sir.

Q. You have a large credit to that, haven't you?

A. That signifies that there are more of our cars on foreign lines than there are foreign cars on our line.

Q. And it is a considerable source of revenue to you?

A. Yes, sir, I will call your attention to the fact that we credit it to Arkansas.

Q. You credit a proportion to Arkansas. How did you get that proportion which you credit to Arkansas?

A. That is on the basis of the total car miles of foreign line cars on this line, so far as cars are concerned.

And it is on the basis of locomotives so far as locomotives are concerned.

That refers to account No. 54.

Account No. 56 is credited on the basis of the total revenue car miles of home cars on this line, so far as cars are concerned.

And on the basis of locomotives, so far as locomotives are

811 concerned.

Q. Take item 58 "Outside Agency": how have you divided that between the line and Arkansas.

A. That is divided on the train mileage basis.

Q. What do those outside agencies do?

A. That includes the salaries and the office expenses such as rent, light and heat, and the salaries of all the traveling and soliciting agents located away from a point on the line. Those are the items that are embraced in that account.

Q. Are any on the line included in that account?

A. There are one or two employés of our division freight agent's office in Little Rock that are included. That is true. But outside of that, I think they are all off the line.

Q. Account No. 62 is "Industrial and Immigration Bureau." Where are they located?

A. Principally in the industrial agent's private car, developing business up and down the line. His office is in St. Louis.

Q. How do you divide that as between Arkansas and the entire line?

A. On a revenue train mileage basis.

Q. With the exceptions of these two clerks in the office at Little Rock, all of those outside agencies are outside of the state of Arkansas, aren't they?

812 A. I think that is true, with the exceptions of this Little Rock office, yes, sir.

Q. There are two there I believe you said?

A. Yes, sir.

Q. This item for fuel for road locomotives, Account No. 48, and also "Water" account No. 89: are those localized between the line and the state?

A. No, sir.

Q. How are they divided?

A. They are divided on a locomotive mileage basis.

Q. Both of those accounts?

A. All of those locomotive road expenses.

Q. Are the locomotive and train miles identical on your road?

A. Not always. The locomotive makes switching mileage, which will account for the large difference between the locomotive mileage and the train mileage.

Q. You do not have any double headers on your line, do you?

A. Occasionally, we do but not as a general thing.

Q. How much do you add to the locomotive mileage for switching, on your local trains?

A. We follow the Interstate Commerce Commission's requirement on that, which is as follows:

"Switching miles should be computed at the rate of 6 miles per hour for the actual time engaged in such service, in excess of
813 one hour at any one station."

That is a quotation from the Interstate Commerce Commission's classification.

Q. The first hour is not counted, and after that it is counted at the rate of six miles?

A. Yes, sir.

Q. You follow that classification.

A. We do. We follow the Interstate Commerce Commission's classification strictly in the compilation of all mileage statistics.

Q. How do you divide Account No. 116 "Law expenses" between the state and the entire line?

A. On the train mileage basis.

Q. Mr. Kimbell, you have put in an exhibit on a computation of your expenses on the revenue basis: so we can understand just exactly what the revenue basis is, I want you to make a simple computation, using $100,000 as the entire state revenue, for a convenient figure to utilize.——

A. I would a good deal rather figure out any problem on the stand. If you will give them to me I will work them out for you off the stand.

Q. Very well. Then I will ask you to work out the following

example for me, using the revenue basis as you have used it in your exhibit:

Assume that the entire revenue from the freight in the state was $100,000.

814 That the entire freight expenses say were $3,000.

That the interstate freight revenue was $85,000.

That the state freight revenue was $15,000.

Then, calculate the amount of expenses chargeable to the intrastate business and the amount of expenses chargeable to the interstate business.

Then assume that the intrastate state rates are increased 33 1-3%.

Then make the same calculation, showing what amount is chargeable to the intrastate business and what amount is chargeable to the interstate business.

Assume that the $70,000 expense account would remain stationary, and that the other rates remain stationary, except the changes I have indicated.

I would like you to file that as indicative of your revenue theory.

A. Very well.

Q. I will ask you also to file that under Judge Van Devanter's rule, assuming 100% more cost for the operation of the state freight business, leaving out of this entirely the passenger proposition.

A. Very well.

815 Redirect examination.

By Mr. MOORE:

Q. Mr. Kimbell, what kind of duties are performed by the outside agencies mentioned in Item 58, of Exhibit 22?

A. Those men are engaged in the solicitation of traffic.

Q. You stated in your former examination, explaining the test you made in the month of October, that you employed special men to ride on every local freight train running in the state during that month; you also stationed men at terminal points: for what purpose were men stationed at the terminal points?

A. They were stationed there to get a record of the shipments in and out on through trains; the men on the local trains being necessary to take care of that part of the business.

Q. You stated also that these men were provided with special forms on which they were required to make an abstract showing way-bills, revenues, points to and from, and weight of all freight handled on their train: does that include through, as well as local trains?

A. Yes sir, both classes of trains.

Q. Did that test furnish you with information as to the ton miles on dead weight, including the locomotive, caboose, and the cars, loaded and empty, on all trains?

A. It did, on all classes of trains.

816 Q. Referring to Exhibit 19, you stated on cross examination, that you computed the revenue on through trains to the amount of $6,794.96, by applying the average revenue per ton mile

of state freight during the month of October, as shown in the regular accounts, to the ton miles are shown in this statement: how did you get the same as to interstate freight?

A. In precisely the same way.

Q. On the first sheet of Exhibit 19 you state: "The average cost of wages and fuel per ton mile on local trains, is greater than on interstate 5.5 times."

A. That statement has reference, Judge Moore, to the state freight costing 5.5 times more than the interstate freight.

Q. You said on cross examination that you reached that result on an average basis: I want you to state whether that result was borne out by the facts that you collected in making that test; whether the actual facts showing the difference in cost, as developed by the investigation made by these men who were on the spot, carried out and corroborated that result which you arrived at on the revenue basis?

A. That result is the result itself of the facts and data accumulated by these men on the trains.

The computations embraced in the securing of the actual ton miles of state and interstate freight in through trains, and the corresponding items in local trains.

Likewise the actual expenditures for wages and fuel, which
817 are the principal items of train expense.

Now, having ascertained those, it became necessary to find a way of dividing the expense of the through trains, for example, between state and interstate freight.

No other basis presents itself to my mind as a logical one, except the revenue basis. Therefore it was used for that purpose.

Q. Mr. Kimbell, you state that in making this test men were placed on each local freight train and men were also stationed at terminal points. Your attention was called a little while ago to the fact that these men were supposed to obtain an abstract of all shipments, both state and interstate; and they also obtained the rate or light weight, of the cars and of the rolling stock, in both kinds of trains: is it true that that information furnished you the commercial ton miles of the state and interstate made by each through and local train, separately?

A. Yes sir, that is absolutely true.

Q. Did it also furnish you the ton miles of the dead weight on each kind of train?

A. It did.

Q. Mr. Kimbell, what was the relative average cost of the wages and fuel on through and local trains, per train mile, as shown by the actual facts ascertained in that test?

A. On through trains the actual cost for wages and fuel was 34 cents; and on local trains 50 cents.

818 Q. What proportion of the total state business handled during the month moved on each kind of train?

A. On the state business 22% moved on through trains and 78% moved on local trains.

Q. Were you able to ascertain the average cost for wages and fuel, per commercial ton mile, on each kind of train?

A. On through trains the cost as found to be $.000865; and on local trains $.003883; the cost being somewhat over four times.

Q. Is that fact ascertained on any basis which you might call arbitrary, or is the actual result of actual investigation of the actual facts?

A. That result is absolute.

Q. What proportion of all the state business was handled on local trains?

A. 78%.

Q. And what proportion of the state business was carried on through trains?

A. 28%.

Q. What proportion of interstate business was handled on through trains?

A. 92%.

Q. What proportion of interstate business was handled on local trains?

A. 8%.

Q. I want you to state, independently of any view you may have as to the proper basis of dividing expenses, whether
819 by revenue or any other basis, what these actual facts (which I understand are the facts ascertained by making this test), indicate?

A. I think I have explained before that this test embraces every freight train run on our line in the state of Arkansas, during the month of October 1908, and on every local freight train we placed special men for the purpose of accumulating data necessary to give us the actual ton miles of freight handled on that train.

This was unnecessary for through trains as we secured the data by placing special men at terminal points.

In the matter of wages we figured out the exact cost from the time slips for each train.

In the matter of fuel we required each engineer to make us a report at the end of his run, of the exact amount of fuel he had consumed on that run.

All of this data placed us in a position to ascertain exactly the number of ton miles of state and interstate freight on through trains, and likewise on local trains, and to make a division of expense of each class of train, which brings about the relative difference in the cost of state and interstate freight of 5½ times.

Q. Then, Mr. Kimbell, you don't depend entirely upon a division on a revenue or on any other basis, for the purpose of ascertaining this difference in cost. You have demonstrated it by figuring it, independently?

820 A. So far as the expense on through train as compared with the cost of the local train is concerned, there is no division necessary as between state and interstate. But when you seek to divide your expenses between state and interstate traffic then you must find a basis.

Q. I understand that, but what I want to call your attention to is whether the result of the basis you have adopted, to wit, the revenue basis, is borne out by the facts developed on this test—in other words, does that test corroborate it?

A. I think so, yes sir.

Q. Judge Hill read on your cross examination, an extract from the annual report of the St. Louis Southwestern Railway Company, for the fiscal year ending June 30, 1908, a statement to the effect that there had been a decrease in the operating revenue of $676,-290.00. I believe you stated that represented the lines with which the St. Louis Southwestern Railway is affiliated in Texas: can you tell me how much of that decrease is due to the line of the St. Louis Southwestern Railway?

A. For the year ending June 30, 1908, the total revenues of the St. Louis Southwestern Railway were $6,273,651.71.

For the preceding year, ending June 30, 1907, $6,698,427.60.

The decrease was $424,775.89.

The expenses for the year ending June 30, 1908, were $3,908,-127.78.

For the year ending June 30, 1907, they were $3,887,626.95.

An increase of $20,500.83.

821 The net operating revenues, being the difference between the revenues and the expenses, were, for the year ending June 30, 1908, $2,365,523.95.

And for the year ending June 30, 1907, $2,810,800.65.

The decrease being $445,276.72.

Now, this decrease is accounted for to the extent of about 50% by the proportion of depreciation charge made in the year ending June 30, 1908, which was not made in the preceding year.

There were also some changes in the accounts of the railroad, brought about by orders of the Interstate Commerce Commission, effective July 1, 1907, which made a comparison of the succeeding year with the past year, a very difficult thing. Certain charges were placed in revenue which had formerly been in the expenses, and vice versa. The real difference, which can be readily accounted for, was the depreciation charge, which was an entirely new charge, commencing July 1, 1907.

In view of these figures there does not appear to have been a very large decrease so far as the St. Louis Southwestern Railway proper, is concerned.

Q. In connection with a question on cross examination, relating to the source of income and the location of the loss from the operation of the road, you stated, I think, that there were losses in the state of Arkansas as well as in the state of Missouri: I wish you would state where the surplus of earnings or profits from operation, occurred from.

822 A. Unquestionably our profit is derived from our long haul, interstate traffic, which moves in large volume across the state of Arkansas.

823 Direct examination of R. E. KIMBALL continued, as follows.

By Mr. MOORE:

Q. What effect does the length of the haul and the increased tonnage have as between interstate and state business in reducing the comparative expense of operation?

A. The larger volume of long haul traffic necessarily affords the opportunity of loading the trains to nearer their maximum capacity and hauling the traffic at correspondingly less expense than the short haul traffic.

For example, in Exhibit 14, the average distance haul per ton in miles of State freight (which is representative of the short haul traffic) is 44 miles; and of interstate freight (which is representative of the long haul traffic) is 231 miles.

It is, therefore, apparent that it requires 5 shipments of state freight, with double station and train handlings for each, to make the same number of ton miles as one shipment of interstate freight.

The preponderance of long haul traffic, therefore, affects many of the elements of expense by largely reducing the same, as compared with the short haul traffic.

Q. Are those facts you have just stated elements which would explain the reason why your Company may earn a profit in its interstate business at the same time it is sustaining a loss on its state business?

A. I think it does.

824 Q. The Express business on your road is carried by an Express Company, isn't it? It is an independent organization?

A. Yes sir.

Q. I believe you have already said that the St. Louis Southwestern Railway has no records from which it could determine the character of the business done by the Express Companies, as between state and interstate.

A. That is true, yes.

Q. State how that business is handled, Mr. Kimbell.

A. The Railroad Company is required to handle free all safes, package trunks, as well as the messengers of the Express Company, in the cars assigned to express service.

Also all officials and agents of the Express Co. are carried free in passenger trains, when traveling on Express Company business.

The Express Company is permitted to send free over the lines of the Company, in our freight trains, such articles of equipment or other personal property as may be needed for its use in carrying on its business.

This free service is a part of the conditions of the operation of the express service over our line.

The compensation we receive for permitting the regular express business to be handled over the line is 50% of the earnings on such express business on our own line. That constitutes the elements entering into the express service.

Q. You stated on your former examination that under the contract of the Railroad Company with the Express Company you had

a right to look at their way bills: for what purpose is that done? I wish you would state sufficient in regard to the contract, that
825 we may understand the extent of and the limitations upon the rights of the Railroad Company to examine the way bills of the Express Company and the purposes for which that inspection would be made.

A. The Express Company is required, under our contract, to render to us each month a statement showing our proportion of the earnings on the business handled over our lines. And for the verification of those statements all the books, way bills and other papers of the Express Company, pertaining to our business, are subject to examination by any officer or employee designated by our General Manager.

The Express Company agrees under the contract, to retain such records for that purpose at least one year after the rendition of the accounts.

I do not find that we have any right or authority under the contract to examine the Express Company's records for any other purpose than the verification of the accounts as rendered by them to us.

Mr. HILL:

Q. Is this contract of which you have been testifying, in writing?
A. Yes sir.

Mr. HILL: I would prefer having the original rather than this secondary evidence, in regard to the contract.

Mr. MOORE:

Q. Have you any extracts from that contract?
A. The language I have used is in large measure an extract from the contract.

826 Mr. MOORE: I will get the contract for you, Judge Hill, and we can make excerpts of the parts pertaining to this matter. Do you object to a copy of it?
Mr. HILL: Oh no.

Mr. MOORE:

Q. Look at the paper I hand you, Mr. Kimbell, and state if that is a copy of the contract between the Railroad Company and the Express Co.

A. (After examining paper.) Yes sir, it is.

Q. Look at the heading of that contract and say which party is designated as party of the first part and which party is designated as party of the second part.

A. The St. Louis Southwestern Railway Co. is the party of the first part, and The Pacific Express Company is the party of the second part.

Q. I find a provision in this contract in the following language: "The party of the second part will render to the party of the first part not later than the 20th of each month a statement showing the amount due to the party of the first part under this agreement for the business of the preceding month, and will pay said amount on

the day the statement is rendered. And for verification of the accounts as rendered by said party of the second part, all books, way bills and other papers pertaining to the business of the parties hereto under this contract shall be subject to examination by any officer or employee designated by the General Manager of the party of the first part; and for this purpose all said books, way bills and
827 papers shall be carefully preserved by the party of the second part for at least one year after the rendition of the said accounts."

Is that the provision of the contract between the Railroad Company and the Express Company to which you referred in speaking of the rights of the Railroad Company under its contract to look at the books, way bills and other papers of the Express Company?

A. Yes sir, it is.

Mr. HILL: We would like to see that contract as an entirety in order that we may see whether there is anything else in it that is relevant to this issue.

Mr. MOORE:

Q. Mr. Kimbell how much time would it take to examine the records of the Express Company for the purpose of the verification contemplated in that provision of the contract I have just read?

A. I have never made a verification in full of our accounts, on account of the magnitude of the task.

Q. Mr. Kimbell to what extent would you go for an investigation of that sort? Would you go any further than to see if there was a correct rendering of the receipts?

A. An absolute verification would involve an examination of all the way bills, to see that they are properly abstracted and divided, etc.

Q. What would be necessary, for practical purposes, to enable the Railroad Company to accomplish the evident purpose of that provision, and see that it was not being imposed upon by false returns of the Express Company?

828 A. A general examination of the division and earning sheets, to illustrate to us that we were receiving the proper revenue to which we are entitled. This, however, would not mean that we would examine all the way bills, to verify the correctness of same as to rates, extensions, etc.

Q. Now what difference would there be in point of time and labor and interruption of the business of the Express Company, if you made an examination, even if you wanted to make it of the way bills, for the purpose of verifying the returns made by the Express Company and examining the way bills for the purpose, of determining what part of the business was interstate and what part was intrastate?

A. Well, I could only estimate that; but I should say it would take three or four clerks some three or four months to verify one month's account—and I may be under-estimating it.

Q. Would it be necessary in an examination of that sort to examine every way bill?

A. To be absolutely correct, it would.

Q. It would be in order to determine the character of the shipment, as between state and interstate.

A. That would require an examination of every way bill.

Q. Which would not only involve an examination of the way bill but also in order to determine the volume of each kind of business, to ascertain the amount earned on that way bill, the amount of the charge earned by that way bill.

829 A. It would.

Q. Is such an investigation practical, to inquire into the affairs of a separate and independent corporation? Have you ever known of such a thing as that being done?

A. We have never done it.

Q. You could not attempt to make a division without such an investigation as that, could you?

A. We could not, no sir.

Q. And you cannot make such a division upon any records kept in the office of the Company?

A. No sir.

Q. It is not practicable for you to keep such an account, on the data that is in your office, in the hands of your Agent?

A. No sir, it is not.

Q. Mr. Kimbell are you familiar with the manner in which mail is handled in the railway mail service, and also with the conditions that exist and have grown up under the contracts between the United States Government and the Railroad Companies as to how the compensation was fixed for the carrying of the mail? If so, I wish you would state what the conditions are.

A. As regards the compensation, the Post Office Department is required by law to weigh the mail on the mail routes for a number of successive working days, not less than ninety, and not less frequently than once in every four years, and to adjust the compensation on the basis of this weighing.

830 The service on train required by the Post Office Department is that the mail shall be conveyed with due frequency and speed, and that sufficient and suitable room, fixtures and furniture in cars or apartments, properly lighted and warmed, shall be provided for the postal clerks who accompany and distribute the mail.

In case the needs of the service for space and distribution require better facilities than can be secured by apartments in cars, the Post Office Department may authorize the use of railway post office cars, and additional pay may be allowed therefor.

All cars or apartments used for railway mail service shall be of such style, length and character and furnished in such manner as shall be required by the Post Office Department, and shall be constructed, fitted up, maintained, heated and lighted by and at the expense of the Railroad Companies.

Suitable safety heaters and safety lamps, as well as saws and axes are required to be furnished for use in case of accident.

The Railroad Companies are also required to convey upon any

train, without a specific charge therefor, all mail boxes, post office blanks, stationery, supplies and all duly accredited agents of the Post Office Department, and Post Office Inspectors.

The Railroad Companies are required to place their mail cars at points accessible to mail passengers or contractors for wagon service.

831 At points where a considerable amount of mail is handled the Railroad Companies must furnish the men necessary to handle the mails and to load the same in or take them out of the cars.

As regards the service at stations, I will say that at points where transfer clerks are employed the Railroad is required to provide suitable and sufficient rooms for handling and storing the mail and without a specific charge therefor.

These rooms must be lighted, heated, furnished, supplied with ice water, and kept in order by the Railroad Company.

Employees of the Railroad Company who handle the United States mails are required to keep a record of all the pouches due to be received or despatched by them, and to check all pouches when received or despatched.

The Railroad Company is required to take the mails from and deliver them into all terminal post offices, whatever may be the distance between the station and the office, except in Cities, where other provision for such service is made by the Post Office Department. In all cases where the Department has not made other provisions, the distance between the terminal post office and the nearest station is computed in and paid for as a part of the route.

The Railroad Company is required to take the mails from and deliver them into all intermediate post offices and postal stations located not more than eighty rods from the nearest railroad station at which the Company has an agent or other representative employed.

832 At junction points where the Railroad Company's stations are not over eighty rods apart, the railroad having the mails on its train to be forwarded by a connecting train, will be required to transfer such mails and deliver them into the connecting train. When the mail arrives at a late hour of the night the Railroad Company is required to retain custody thereof by placing the same in a safe or secure room or apartment of the depot until the following morning.

When mail cranes are used at stations the Railroad Company is required to furnish a lantern or light to be attached to the crane and keep same in proper condition.

For any failure or delinquency in connection with any of these rules of the Department, deductions from the compensation due the Railroad Company are made.

That is a general outline of the way I find the mail service is handled.

Q. What are the mail cranes that you speak of?

A. The mail cranes are established at points along the line where it is not practicable to keep an agent up late at night, for example, as

where the train does not make a stop, but catches the mail as it passes.

Q. Is it the practice to endeavor to deliver the mail at some of the stations without stopping the train?

A. I think it is done but it is not generally the practice with us, because we make most all of the stops.

Q. You state that mail is to be weighed not less than four years apart; how often in practice is that being done?

833 A. I think the Department is very regular in its mail weighings once every four years.

Q. And does the compensation based upon that weighing continue until there is another weighing?

A. Yes sir unless there is some change in the service.

Q. What do you mean by "change in the service"?

A. Additional facilities are provided, for example, in which case the Railroad Company would be allowed additional compensation.

Q. Do you know if there is any additional compensation growing out of increased weight allowed?

A. Generally not.

Q. How is the compensation fixed? Is it fixed by agreement between the Company and the Government, or is it prescribed by the Government?

A. It is prescribed by the Government.

Q. You stated on a former examination that mail matters are handled by routes and that the compensation is on a stated amount per annum. I wish you would explain those mail routes, and just what that signifies.

A. I will have to say from memory that we have perhaps twenty or twenty two routes on the Cotton Belt System, the main route extending from Cairo to Texarkana. Other routes exist, such as the route from Stuttgart to the end of the Stuttgart Branch, Gillett. Another route will extend from Lewisville, Ark, to Shreveport, La. Another one from Altheimer to Little Rock. Each part of the line is covered by a separate route.

Q. Are those local routes established for the purpose of

834 carrying the mail between the termini of the routes?

A. Yes sir.

Q. For instance, if there is a route from Stuttgart to Gillett, that is for the purpose of transporting the mails that is to be carried from Stuttgart to Gillett?

A. Yes sir, from Stuttgart to Gillett as well as intermediate mail that may be picked up.

Q. And as well the other way, from Gillett to Stuttgart and the intermediate points?

A. Yes sir.

Q. You say the compensation is allotted per annum; state just how that is arranged, please.

A. Based on the mail weighing, the annual compensation is determined.

Q. You are paid not by the trip or by any other way than by the year, so much per annum?

A. Yes sir, we are paid so much per annum.

I want to correct the statement I made the other day about our being paid quarterly. I find that we are paid monthly, under the rules of the Post Office Dep't.

Q. On the basis of compensation of so much per annum?

A. Yes sir, on the per annum basis.

Q. And that payment is for the route, so much per annum for each route?

A. Yes sir.

Q. You have been over the subject and described the manner in which the mail is handled by the Railroad Company: Now I
835 wish you would state whether or not there is any way in which it would be practicable to make an actual division of that business between state and interstate.

A. I don't see how it would be possible to divide the compensation for the mail service, between state and interstate.

Q. Is it practicable to keep separate account of the business—I mean with reference to the expense of the service, and of the two classes of service, state and interstate.

A. I should say that in view of the great variety and character of the service rendered in conection with handling mail, and to the fact that this service is so closely interwoven with the service of handling the railroad business generally, that there is absolutely no accurate way of determining the expense except upon a revenue basis, which comes nearest to taking into consideration all the elements of the service.

Q. In view of the service rendered by the Railroad Companies in the express business, I wish you would state if there is any way by which the expense chargeable to that service can be divided between state and interstate business other than on an assumed basis.

A. I think I testified, Judge, that a division was possible between state and interstate, by an examination of the way bills, if we had access to them.

Q. In the absence of the way bills, is there any way by which they could be divided?

A. Between state and interstate?

836 Q. Yes.

A. No sir.

Q. Are you speaking now of the expenses?

A. I spoke then of the separation between state and interstate, in answer to your question.

Q. What is the practicable method, in your judgment, for dividing the expenses of the business, incident to that service, as between state and interstate?

A. I don't know of any accurate way of making an absolutely correct division of the expenses of the express business from other railroad business, except on the basis of the revenue.

Q. You were speaking of dividing it from other kinds of business; I was going to ask you about that in the next question; if it were divisible, what would be the proper method of dividing it from other kinds of business conducted by the Railroad?

A. I think it is so similar to the mail business and so closely interwoven with other classes of railroad business, that there is no way of making an actual separation, except on the basis of revenue.

Recross-examination.

By Mr. HILL:

Q. Mr. Kimbell, the practical effect of your division of mail and express is to charge these accounts with the same proportion of expense that the interstate business is charged with, isn't it?

A. I consider that on the revenue basis all classes of traffic
837 would be charged with an equal per cent.

Q. That is the way you have treated mail, express, and other miscellaneous items, which you have filed here?

A. Yes sir.

Q. Then when you increase the expense of the intrastate business, you decrease proportionately the expense charged to mail and express on intrastate business also, don't you?

A. No sir.

Q. You do not?

A. No sir. The expenses of mail, express and miscellaneous are set aside on a straight revenue basis and when we assume there is an extra cost for handling state business it means a corresponding reduction in the cost of handling interstate business only, and does not affect the mail, express and miscellaneous.

Q. In the computation made under the direction of Judge Van Devanter did not he require that to be done?

A. No sir. Judge Van Devanter deducted the expenses for handling mail, express and miscellaneous, on a revenue basis, leaving the remainder of the expenses to be divided between state and interstate, freight and passenger traffic.

Q. Now I will call your attntion to your Exhibit 13, freight revenue, interstate and miscellaneous revenue; and to the difference in the increase in state revenue: do you see the total I am referring to?

A. Yes sir.

Q. What do you say to that?

838 A. If you will observe that exhibit closely you will note that the first item is "total operating expenses, taxes, rentals, and outside operations," from which is deducted "taxes, rentals and outside operation"; leaving the "total operating expenses" only.

Now our state revenue is shown by exhibit 12, freight as 9.79% of the total freight revenue, including miscellaneous. That per cent is increased under that first assumption of 50% extra cost, making the per cent 14% instead of 9.79%.

Judge Hill, at this point I see where I have made an error in the calculation, which was made entirely innocently, I assure you.

Q. Then in answer to my question you will have to state according to your exhibits here, that you have decreased the expenses charged to mail, express, and miscellaneous, by adding the increase to the interstate business, haven't you?

A. That calculation was made entirely by an oversight, and it is

not in accordance with our theory which we claim is correct. It is simply an error in calculation, which I would like to have the opportunity to correct.

Q. That is all right. Add any corrections you wish to make to it.

A. The increased per cent, you will notice, is arrived at by the formula which we claim is correct, but the application of this formula is made to the wrong figures.

Q. I want to submit to you exhibit 7 in the Iron Mountain
839 case, and ask you to look over that and see if the same mistake or wrong basis, as you now state it, is not used there.

A. I think Mr. Johnson can perhaps explain his statement better than I can.

Q. I just ask you, as an accountant, if it is not on the same basis as the one you have just stated in your exhibit.

A. (After examining F. P. Johnson Exhibit 7.) It appears to be, but I would have to work it out, to be certain.

Q. It appears to be the same.

A. Yes sir.

Q. You say that is wrong and that you should not decrease miscelaneous with the added cost of the state business: is that true?

Mr. MOORE: I should like to have your permission, Judge Hill, to have Mr. Johnson point out to Mr. Kimbell the confusion that has arisen in these figures.

Mr. HILL: I have no objection to that.

(At this point Messrs. Johnson and Kimbell examined the exhibits referred to.)

Mr. HILL:

Q. Are you ready now to answer the question Mr. Kimbell?

A. Yes sir. It was not my intention to do so, and I would like the opportunity of refiguring my statement by deducting the miscellaneous before adding the extra cost of the state business.

Q. I would have no objection, of course, to your adding any additional exhibits, but I want you to leave these exhibits, as they are, because they illustrate a point we are using in the matter.
840 Then you think the proper way is to just lay aside a proportion of miscellaneous revenue and make the calculation with the added cost for intrastate business as between state and interstate?

A. That is the theory laid down by Judge Van Devanter and it seems to me to be sound.

Q. That is the theory which you seek to present in this case, isn't it?

A. Yes sir.

Q. Under that theory the practical effect of the mail and express is to charge the expense of it in the same proportion that the interstate business is charged with it, isn't it?

A. That would not be the case after you had——

Q. I am speaking of before you take the added cost.

A. Yes sir on the straight revenue basis.

Q. On the straight revenue basis the mail express and other miscellaneous items would stand the same proportion as the interstate business; and you want to leave it after that, and add what you take to be the extra cost of the state business?

A. Yes sir, deducting correspondingly from the interstate.

Q. You have no data to determine if mail and express is costing you more than the interstate business, have you?

A. No data other than revenue.

Q. It may be costing you much more or much less, so far as you are able to learn from the actual facts?

841 A. It is one of those elements of expenses which is so closely intertwined with all the rest of the expense of doing the business, that there seems to be no way of dividing it, except on the revenue basis.

Q. In making the division on a revenue basis, between state and interstate, are you taking into consideration the increased revenue derived from the state traffic.

A. I am taking into consideration the exact revenue derived from all classes of traffic.

Q. The revenue per ton per mile on state traffic is something like two and one half times what it is on interstate traffic, on your road, isn't it?

A. Something like that, yes sir.

Q. You make two and a half times as much per ton per mile on that state traffic as you do on the interstate, and yet you add in addition to that five and a half times the extra cost: is that right?

A. Do I understand you to mean that we make two and a half times as much on a revenue basis as on what basis, for example?

Q. I did not say on any other basis. I said per ton per mile, you make two and a half times as much on your state as on your interstate business.

A. Our state traffic yields something over two times—I don't know that it reaches quite two and a half times per ton per mile more than what is realized on our interstate business.

Q. And yet you claim it costs five and a half times as much on the ton mile basis to handle that business as it does to handle the interstate business?

842 A. I have never made any computation on the ton mile basis.

Q. Haven't you used the ton mile basis in arriving at any of your calculations here?

A. Not in making the division between state and interstate.

Q. I know you have not in dividing between state and interstate.

A. In arriving at the revenue we necessarily arrive at the ton miles.

Mr. MOORE: I would like Mr. Kimbell to turn to his statistics he referred to a moment ago, where he said it cost two and a half times as much.

A. There are no statistics submitted which will show that theory worked out, Judge Moore. That was stated from knowledge.

Mr. HILL:

Q. Mr. Kimbell any statement of increased cost of the intrastate freight should take into consideration that you are making two and a half times as much on that as you are on the interstate traffic, shouldn't it?

A. It does do so when we use the revenue basis.

Q. Does it?

A. I think so. We credit up to freight revenue the full amount of the revenue earned on interstate traffic and likewise on state traffic. Therefore, when we divide on the basis of revenue the difference which you speak of is taken into consideration.

Q. I will put that same question to you, in this form Mr. Kimbell:
843 if you say that the intrastate freight costs twice as much as the interstate freight, on the revenue basis, don't you say in effect that it costs twice multiplied by two and one half per ton per mile?

A. I think your computation would involve a difference of five times as much.

Q. It would, wouldn't it?

A. No sir.

Q. Why wouldn't it?

A. We divide on the straight revenue basis.

Q. But to get your straight revenue you have gotten revenue from that of two and a half times what you get from the interstate, per ton per mile?

A. Yes sir, but when you divide expenses on that same basis, that same rate obtains, and not five times.

Q. But you are doubling your extra cost.

A. That percentage of extra cost is questionable. We have figured it on several bases, 50% and 100%.

Q. Take any one of them. I am taking them simply as an illustration, to illustrate the principle.

A. In effect, if we had one hundred per cent for extra cost it would mean something like five times as much as would be added on the ton mile basis.

Q. If you used the ton mile for ascertaining the revenue from the different classes of freight, intrastate and interstate, carried on your through and local trains, why don't you divide your actual train cost on the ton mile basis; I am referring now to your exhibit 19.

844 A. I have given a great deal of thought and consideration to this ton mile basis, particularly as our friends on the other side, representing the State of Arkansas, claimed it was the proper basis, at the time of the preliminary hearing in this case; and the conclusion I have reached is that it is an absolutely inaccurate basis to be used; for the reason that it measures all tons alike, high class freight with low class freight; car load with less than car load; long haul freight with short haul freight; they are all reduced to one common unit. The elements of the service are entirely lost sight of.

Now, on the other hand, it is my judgment that revenue in the first instance takes into consideration all of those elements, including

the different classes of freight; the long and the short haul; and that it comes nearer to covering all of those elements than any basis obtainable.

Q. That would be on the theory that the rates were based on the cost, wouldn't it?

A. It is assumed that rates are always made adequate to yield a proper return both to cover the cost and interest on the investment.

Q. If that were true, when the state rates are two and a half times greater than interstate rates, ought they not compensate equally with the interstate rates?

A. That question would depend very much on the extra cost for handling state freight. There is in my judgment an extra
845 cost.

Q. That is not due to the fact that that passenger crosses a state line. Isn't it due to the difference in the train service?

A. There are a great many elements which enter into that.

Q. There is no magic in crossing the state line, is there?

A. No sir, not at all. That is one class of business that might not cost any more than another class. But taking the aggregate business we find represented in the state business the short haul business; whereas in the interstate business we find represented the long haul, business. Now it seems patent on its face to me, that when it takes five shipments of state freight, five separate and distinct shipments to make as many ton miles as one interstate shipment, that there is necessarily a large element of extra expense there. That is a fact that I think is fairly borne out by the figures.

Q. That gets away from the question I asked you about the difference being in the class of train. Now you have been speaking about the expense of the local train and the through train in this test you made and you showed the percentage of interstate business on the through trains and the percentage of local business on the through trains, etc.; is that difference based on the difference in the train or on the train service, or what it based on? You say there is no magic in the state line.

A. None whatever. That is absolutely based on facts
846 which control the transportation and those facts are that 78% of the state business is handled on local trains, and the cost per ton per mile for handling business on those local trains is between four and five times as great as the corresponding cost for handling business on the through trains.

Q. And it resolves itself into a question of comparative expense of local trains and through trains, doesn't it?

A. That is one way of analyzing the situation.

Q. It costs no more to haul a ton of interstate freight on a through train than it costs to haul a ton of interstate freight, does it?

A. On that same through train?

Q. Yes.

A. No sir, I cannot see there would be any difference, except——

Q. And then——

A. Let me finish that answer, please. Except so far as the length of the haul is concerned.

Q. And the same is true of the local train? It costs no more to haul a ton of freight on that than it would on other classes of train, does it?

A. I should say not.

Q. You say "except for the length of the haul"; that brings in the question of terminals, doesn't it?

A. Yes sir.

Q. Is that a train cost?

A. Terminals, no.

Q. I was asking you about the train cost. This exhibit
847 you put in here was not applied to the train cost.

A. There is an element of train cost, however, in the fact that the long haul shipment can be and usually is hauled a long distance without the necessity of being handled; whereas it would take something like five state shipments or short haul shipments to make the same number of ton miles as that one long haul shipment, with the corresponding extra train handling.

Redirect examination.

By Mr. MOORE:

Q. You stated that one of the elements that entered into the extra cost of handling local freight is the shortness of the haul, that is, the short distance it is hauled, I believe.

A. Yes sir.

Q. You illustrated by stating that it would require five different shipments in local freight to be equal to one shipment of through freight, owing to the difference in the length of the haul.

A. Yes sir.

Q. Now, Mr. Kimbell, I believe you also showed that 78% of all the local freight is carried on local trains.

A. Yes sir.

Q. I believe you also stated that 92% of the interstate freight is carried on through trains, didn't you?

A. Yes sir.

848 Q. You were asked several times by counsel if there was any magic in crossing the state lines, and if it were the fact that it was hauled on a through or a local train that affected the cost; does the character of the service that is rendered to each class of business, increase the handling involved in the short rather than in the long haul?

A. That is true in connection also with the fact that the larger part of the state freight is handled on the expensive local trains.

Q. There are a great many other elements that enter into the difference in the cost of handling the local and the through trains, which you have not mentioned; I want to ask you if you have had any experience in operating, outside of the test which was made under your direction in October 1908.

A. No sir, my experience has been confined to handling accounts.

Q. Are you qualified to state all of the elements which enter into

the extra cost of handling local as distinguished from through freight?

A. I have no doubt an operating man could explain a great many I have not mentioned or do not know of.

Q. I have heard, for instance, that the expense of operating local trains is very largely increased by the fact that the employees who operate those trains receive higher wages.

A. I understand that to be the case.

Q. I have heard also that they work shorter hours for a
849 fixed minimum day's wages that they obtain.

A. That also is true.

Q. In that way the cost of the wages of employees on the two kinds of trains differs very materially; that of the employees on the local trains being very much higher. That is an element that enters into it, isn't it?

A. Yes sir.

Q. Isn't it also a fact that there is a larger comparative consumption of fuel required in operating local trains, on account of the frequent stops they make?

A. I should say so. But I think an operating man could better explain that.

Q. I wanted to ask you if you understand those differences as an operating man would.

A. Hardly.

Mr. HILL: I have not raised any question as to Mr. Kimbell's competency. I assumed he knew what he was talking about.

Mr. MOORE: I have never asked Mr. Kimbell anything about extra cost.

Mr. HILL: You opened up the question. He testified that was the right way.

Mr. MOORE: He testified about the revenue basis being the right way, but not about the extra cost.

Mr. HILL: I suppose this question would be more properly developed by an operating man, but if you choose to develop it through Mr. Kimbell I have no objection.

Mr. MOORE:

Q. Is the extra cost ascertained by a system of accounting, or through the actual operation of the trains?

850 A. It may be possible to analyze the accounts of a road and identify some of these elements of extra cost. We have tried to do that in the test I had made.

Q. Aside from that test I want to ask you if all the elements of extra cost are developed through the accounts of the Company, to the extent that they would by an operating man, directly connected with the operation of the train.

A. I should say not.

Q. If it costs more to operate local trains than it does to operate through trains, the fact that 78% of all the local business is carried on local trains would increase the ratio of expense to the extent

that the volume of the local traffic is greater on that class of train, wouldn't it.

A. Yes sir.

Q. And the same is true, isn't it, in regard to the percent of interstate business which is conducted on the through trains, which you say is 92%.

A. Yes sir.

Q. Those being less expensive trains and carrying so large a proportion of the interstate business, would materially diminish the relative cost per ton per mile, wouldn't it?

A. The results show that, yes sir.

Q. Do you recall the basis adopted by Judge Van Devanter in determining the relative cost of conducting state and interstate transportation?

A. Yes sir.

851 Q. Will you state what that was.

A. The revenue being first ascertained, and the expenses from conducting all classes of business being likewise obtained, the percentage which the revenue of mail express and miscellaneous business bears to the total revenue is deducted from the total expenses, leaving the expenses that are divisable between state and interstate freight and passenger traffic only. The revenue from state traffic was increased 100% and the revenue from state passenger traffic increased 15%. When this was done the percents were made as between state and interstate, and these percents applied to the expenses arrived at after deducting the proportion assignable to mail, express and miscellaneous.

Q. Was that the manner in which you intended to make up your statement?

A. That was the intention.

Q. Following Judge Van Devanter's formula?

A. Yes sir.

Q. But in making up the statement you find you have included the expense incident to mail express and miscellaneous matter, do you?

A. I find that in applying the percent of extra cost I have applied it to the total expenses, including mail, express and miscellaneous, which it was my intention to deduct before applying the percent.

Q. You have in reality not prepared a statement on the basis of or in accordance with the formula used by Judge Van Devanter.

852 A. My intention was to do so.

Q. But in fact it was not so prepared?

A. Unintentionally it was not so prepared.

Q. Will you prepare a statement based upon Judge Van Devanter's method of arriving at it, and attach that as an exhibit to your testimony?

A. I will.

The papers referred to will be marked as follows:
"R. E. Kimbell, Exhibit 12-A" and
"R. E. Kimbell, Exhibit 13-A".

Said exhibits are in the words and figures following, towit.
For Exhibit "12-*a*" see Volume 8, page 5297.
For Exhibit "13-*a*" see Volume 8, page 5302.

853 Cross-examination of R. E. KIMBELL continued as follows:

By Mr. HILL:

Q. You stated yesterday that it would be necessary in order to work up the intrastate and the interstate business in express matters, to examine all the way bills: I will ask you if it is not a fact that the express company keeps an agent's book that shows the origin and destination of each parcel of express carried?

A. I expect they keep records of that kind. I am not thoroughly familiar with them.

Q. But from your familiarity of express business, you have seen these books?

A. I know they keep a record of express forwarded and express received, but I do not know that they show in all cases the point of origin and the point of destination. There will be rebilled express.

Q. Well, it would be this: It might not show the point of origin, if it originated off its own line, but if it originated on its
854 line, it would show the point of origin, wouldn't it?

A. Quite likely. The heading of the way bill would show that.

Q. I am not speaking of the way bill but what is carried into their books.

A. Very likely their abstract would show it.

Mr. MOORE: Do you know about those things, Mr. Kimbell?

A. Yes, sir.

Mr. HILL:

Q. The only time the agent's book would not show that would be in the case of an express package received from some other express line, and then it would merely show it was received from the United States Express Company—or whatever company it was received from.

A. If a shipment is way-billed from a point in Arkansas to a point in Arkansas, that way-bill indicates that fact in the heading, then I know the heading is taken up in their reports in that way.

Q. If a piece of express is sent from St. Louis to Fort Smith or Little Rock, would not that likewise be shown?

A. Yes, sir, I think it would.

Q. And if it is sent to some point that the Pacific Express Company does not reach it would show merely it was received from some other express company at some given point, wouldn't it?

A. I think that is the rule.

855 Q. Isn't it a fact that from those books you could make up a division between state and interstate as well as you could from the way-bills.

A. I would not say those books would be entirely complete in that

respect; and, furthermore, as you know, we have no access to those books.

Q. Have you worked out the example I asked you to do yesterday on revenue?

A. Do you want that as an exhibit or as an answer to the question?

Q. Please file it as an exhibit.

The paper referred to is marked "R. E. Kimbell Exhibit 23." Said exhibit is in the words and figures following to-wit:

For Exhibit 23, see Volume 8, page 5330.

856 Q. Mr. Kimbell, I wish you would read into the record paragraphs 4 and 6 of the contract between the Pacific Express Company and the St. Louis Southwestern Railway Co.

A. Those Paragraphs 4 and 6, are in the words and figures following to-wit:

"In consideration of the facilities granted, and to be granted, under this agreement, the party of the second part agrees to pay to the party of the first part fifty per cent (50%) of its gross earnings on all business on the said lines of railway.

It is understood that the gross earnings on express business on the lines of railway of the party of the first part, of which said first party shall receive fifty per cent. (50%), shall include the entire earnings from local express business—that is, business transported locally to and from points on the lines of railway of the party of the first part, and its proportion of the earnings on through express business, arrived at by dividing the through express earnings on each shipment (not including charges advanced or proportion due other express companies) on a basis of the local express rates to and from the junction points of the railway lines over which the business is transported—in other words, the sums of local express rates will be used in dividing through rates between railway lines in interest.

The party of the second part will render to the party of the first part, not later than the 20th of each month, a statement showing the amount due the party of the first part under this agreement for the business of the preceding month, and will pay said amount on the date statement is rendered; and, for the verification of the accounts as rendered by the said party of the second part, all its books, waybills and other papers pertaining to the business of the parties hereto under this contract shall be subject to examination by any officer or employé designated by the General Manager of the party of the first part, and for this purpose all of said books, waybills and papers shall be carefully preserved by the party of the second part for at least one year after the rendition of said accounts."

Sixth. "The party of the second part agrees that its rate per one hundred pounds charged the public shall not be less than one and one-half the Railway Company's freight train rate on the same class of merchandise, except by special agreement with the Traffic Department of the said first party, and the said second party agrees

to furnish the Traffic Department of the party of the first part copies of all tariffs or other issues naming rates over the said first party's line of railway, promptly as issued."

857 Redirect examination.

By Mr. MOORE:

Q. Mr. Kimbell, you wish to correct a statement you made yesterday, I believe?

A. Yes, sir. In answer to Judge Hill's question yesterday regarding miscellaneous revenue account No. 19, I stated that the larger part of it embraced the amount paid to this company by the St. Louis Iron Mountain & Southern Railway for detouring trains between Pine Bluff and Texarkana; and I stated a division of that kind was made between states on the basis of train mileage.

I find, after looking into our methods, that we localize items wherever it is possible to do so, and divide only common items between States on the train mileage basis. And that this detouring service I spoke of in itself is localized to the State of Arkansas.

Q. I believe you stated it could be localized, in answer to my question?

A. Yes, sir.

Q. And now you find it was in fact localized?

A. Yes, sir.

Q. Mr. Kimbell, this exhibit 23 which you have just filed at the request of Judge Hill, is based on a hypothetical statement presented by him to you as follows:

Assume that the revenue from freight in the State is $100,000.

858 That the entire freight expenses in the state are $70,000.

That the interstate freight revenue is $85,000.

That the state revenue is $15,000.

He then asked you to calculate the amount of expense chargeable to state business and the amount of expense chargeable to interstate business.

And then to further assume that the intrastate rates are increased 33⅓%.

He then asked you to make the same calculation showing what amount is chargeable to interstate and what amount to intrastate assuming that the $70,000 expense account would remain stationery; and that the other rates would remain stationery, except such changes as he indicated.

Also under Judge Van Devanter's rule, assuming 100% more cost for state freight operations.

Exhibit 23, I understand, shows the figures prepared by you in working out that problem?

A. Yes, sir.

Q. Mr. Kimbell, is such a condition as that practicable and is it a fair test of the workings of the revenue basis, and the application of the rules prepared by Judge Van Devanter, of adding 100% extra cost of doing state over interstate business; and if not, I wish you would state your views fully.

A. The assumption of 33⅓% increase in freight rates, without any increase in interstate rates is in my judgment an
859 incorrect one. For that reason principally I should say that the example submitted by Judge Hill is not one that can be practically applied to any condition that might exist.

Q. Why do you say the assumption of the increase of state rates 33⅓% is incorrect?

A. I say it is incorrect without further assuming that there must be an increase in the interstate rates.

Q. In other words, the example submitted by Judge Hill disregards the relation between state and interstate rates, doesn't it?

A. It does.

Q. State if there is a relation, and if so what effect under the practice of the increase of the state rates would have upon interstate rates.

A. If the revenues from state business and the revenues from interstate business are increased or decreased proportionately, then, of course, the ratio remains the same. But if you assume that there is going to be an increase of 33⅓% (as was done in this example) in one class of business and not an increase of any character in the other class of business, then I would say the assumption is absolutely incorrect and impossible.

Q. And you base that upon the fact that there is a relation between the two rates under which when one is increased in the manner assumed the other necessarily would also be increased?

860 A. I am not a rate expert but I do know from general conditions that there is a relation of that kind, which could better be explained by a rate man.

Q. Mr. Kimbell, did you prepare additional statements which you stated on your examination yesterday you would prepare as your exhibits 12-*a* and 13-*a*, in regard to the earnings upon the basis to which your attention was called by Judge Hill?

A. I did, yes, sir.

Q. Is there any explanation you desire to make in regard to these exhibits? If so, I wish you would make it now.

A. I think the exhibits explain themselves, but it is well to call attention to the fact that so far as the freight business is concerned there is a very slight difference in the extra cost results figured in the way I originaly had them and in the way they now appear on exhibit 13-*a*.

Q. State right there what it is.

A. For example, on the assumption of 50% extra cost the amount in dollars and cents as figured on Exhibit 13-*a* is $74,423.30; whereas on exhibit 13 the amount is $74,548.74.

Now, likewise in the case of assuming 100% extra cost, the corrected figures on exhibit 13-*a* are $142,033.20; whereas on the original exhibit 13 they are $142,545.69.

These differences, it will be noted, are very slight and are due to the fact that a very small proportion of the miscellaneous revenue is freight revenue.

861 Now, a little different situation exists in the passenger traffic; the results showing that on the assumption of 25% extra cost as figured on the new exhibit, 13-*a*, the amount is $37,726.63 as against $48,291.45 on the original exhibit.

On the assumption of 15% extra cost the figures as shown on Exhibit 13-*a* $23,838.65 instead of $30,258.02 as shown on the original exhibit 13.

This larger change in the passenger business is explained by reason of the proportion of mail, express and miscellaneous revenue to the total passenger revenue being 17.43%.

Q. Mr. Kimbell, what is the difference in dollars in the result as to freight earnings between the statements which you filed this morning, on the basis of 50% increase in cost of handling the state freight business and 25% in the cost of handling state passenger business?

A. In dollars and cents the figures on the freight are $125.44.

Q. What is the difference on the basis of 100% increase in the cost of conducting state freight business and 15% increase in the cost of conducting state passenger business?

A. The difference in freight is $512.49. The difference in passenger on the 25% basis is $10,564.82. And on the 15% basis $6,419.37.

862 Q. There is a deficit in the passenger business on either assumption as to the extra cost of conducting business?

A. There is a deficit on the assumption of 15%. There is a deficit on the assumption of 25%. And there is a deficit on the straight revenue basis.

Q. What is the deficit in each case?

A. On the straight revenue basis $1,319.00.

On the 25% extra cost basis $39,045.63.

On the 15% extra cost basis $25,157.65.

That is on the bases of the figures shown in Exhibit 12-*a*.

Q. Now, state what the result is, in dollars and cents, as shown on the new exhibits, in regard to freight?

A. On the straight revenue basis there is a surplus balance, I will call it—of $141,129.57.

On the basis of 50% extra cost there is a surplus balance of $66,706.27.

On the basis of 100% extra cost there is a deficit of $903.63.

I might say in that connection that these results do not consider any return whatever on the investment.

Recross-examination.

By Mr. HILL:

Q. Mr. Kimbell, this change in the method of calculation which you have just been explaining, would make more difference in the St. Louis, Iron Mountain & Southern than it would in your road, wouldn't it?

863 A. I cannot answer that, Judge Hill, without checking the Iron Mountain's figures.

Q. I will call your attention to Mr. Johnson's Exhibit 3: he has on miscellaneous passenger 21.01 per cent. and your percentage for that same item is 17, I believe?

A. Yes, sir. Our percentage for that same item is 17.43.

Q. This change in the method of calculation would make more difference in the St. Louis, Iron Mountain & Southern than it would on the St. Louis, Southwestern Railway, wouldn't it?

A. It would probably make some slight difference. I do not know just what it would amount to.

Q. It would be more material on that road than on your road, having the percentage of 17.43 that would be eliminated?

A. It would be larger, yes, sir.

864 B. M. FLIPPEN, a witness of lawful age, being duly produced, sworn and examined on the part of the Complainant, testified as follows:

Direct examination.

By Mr. J. M. MOORE:

Q. Please state your name?

A. B. M. Flippen.

Q. Are you an official of the St. Louis, Iron Mountain & Southern Railway Company?

A. Yes, sir, I am Freight Traffic Manager.

Q. How long have you occupied that position?

A. Two years.

Q. How long have you been connected with that company?

A. Nearly five years.

Q. In what capacity did you serve prior to two years ago?

A. I was assistant Freight Traffic Manager prior to appointment as Freight Traffic Manager.

Q. Mr. Flippen, was a change made in the rates charged for the transportation of freight by the St. Louis, Iron Mountain & Southern Railway Company in the year 1908, in the State of Arkansas?

A. Yes, sir.

Q. That change was made following the order of injunction granted by Judge Van Devanter at the preliminary hearing of this case, wasn't it?

A. It was.

865 Q. You abandoned the rate that had been prescribed by the Railroad Commission of Arkansas, and put in a different class of rates?

A. Yes, sir, because we thought they were unremunerative.

Q. Was any change made, near the same time and in connection with the change in the state rates, in the interstate rates for the transportation of freight?

A. Yes, sir, there was. As soon as it could be accomplished, observing the usual statutory notice required by the Interstate Commerce Commission, and the work incident to the publication of the tariffs.

Q. Why was that done, Mr. Flippen?

A. Because we felt they were not remunerative in the same sense that the change in the state rates required, so the interstate rates were advanced in order that they might bear their proper relation to the state adjustment and as we term it, share their part of the transportation burdens.

Q. What is the practice of railroads usually in the observance of a relation between state and interstate rates, if there is any general practice.

A. There is a very close relation. In fact, the making of rates have to do with the commercial conditions; the cost of service; the conditions generally; and where the earnings have not been, as we figure it, compensatory in respect to state traffic, the same is
866 frequently true of interstate adjustments, because one is so very seriously affected by the other.

As in the case of the Arkansas state rates, if you please, for illustration, Memphis is just across the river from Arkansas, and that is an interstate adjustment; if your state rates are changed, either raised or lowered, it necessarily follows that there must be some readjustment of the interstate rates, because of the natural combination that works the bridge charge or the arbitrary crossing from Memphis to West Memphis, if you please, plus the state rates.

The same is true in that respect, that Memphis is adjusted with reference to Cairo and St. Louis, which are considered base points; there are certain differential figures observed, a certain equalization, if you please, at these various gateways. And if one is changed the other must be changed or it will work a hardship against such gateways and the territory working through such gate-ways.

Q. Judge Hill submitted a proposition to Mr. Kimbell in his cross examination in this case, assuming that the total freight revenues of a railroad were a certain amount; that those revenues accrued in certain given proportions, as between interstate and intrastate traffic; and assuming a certain amount of expenses.

He asked the witness then to figure out on the revenue basis what the expense would be of conducting freight transportation on the basis of the earnings from state and interstate traffic, respectively, and the total expenses.

867 Then he asked him further to figure what the result would be on the same, the revenue basis, if he should assume that the intrastate rates have been increased 33⅓%, leaving the interstate rates as they were originally.

He asked him to work out an example of what the result and effect of the raise in the intrastate rates, without any raise in the interstate rates, would have upon the expenses as worked out upon the revenue basis.

I wish you would state, as a traffic man, if such an example as that is practical, as an illustration. In other words, if the conditions upon which it is based are such as would occur in railroad practice.

A. I would say I consider it impossible, absolutely impracticable. It is mere theory. It will not work out. You cannot make it work out.

Q. Why do you consider it impossible to work out an example as-

suming that one class of rates should be increased and the others not changed; that is to say, assuming that the state rates would be increased 33⅓% and leave the interstate rates unchanged.

A. You mean the effect it would have upon the expenses?

Q. You said such a condition as that was impossible, meaning as I understand you, that the change of one class of rates would affect the other. Why is that true?

A. Because, as I previously stated, of competition and commercial conditions. It would result in rank discrimination against
868 the state man or the interstate man, if you please. There is such a close relation between the charge for the state freight and the charge for the interstate freight, that if you make a change in one without changing the other, then you are bound to hurt certain business interests seriously?

Q. Is it the universal custom in arranging a railroad rate to maintain the relation between interstate and intrastate rates?

A. Yes sir.

Q. That is the reason why such an example as was given to Mr. Kimbell is impracticable as an illustration?

A. I think so.

Q. Mr. Flippen, is there any regulation of the Interstate Commerce Commission that affects that proposition?

A. Yes sir. They hold by their rulings and in their decisions in various instances that the combination of rates if you please, whether two state rates, or an interstate rate plus a state rate, is prima facie evidence of the reasonableness of a charge of that kind. Therefore, if you raise a state rate it is only proper that the interstate rates should be adjusted in relation thereto. And that is followed as a practice and custom in making the rates.

Q. That rule, in other words the rule that the interstate rates will equal or be somewhere about equal to the combination of the rates in the state through which the shipment passes, is one that is recognized and acted upon by the Interstate Commerce Commis-
869 sion, is it?

A. Yes sir. Notwithstanding the influence that may have upon those state rates, they consider the fact that it is there is prima facie evidence of its reasonableness, and they insist upon its observance.

Q. Mr. Flippen, do the railroads that operate trunk lines as a rule maintain commercial agencies in other states than those in which the railroad itself is owned and operated?

A. They must necessarily do so in order to properly develop and handle the business that originates or finds destination within the various states.

For instance, the Missouri Pacific Railway traverses perhaps six, seven, or possibly eight states—I do not recall at the moment the exact number—and we have agencies throughout the United States, at the principal points of manufacture, the principal points of jobbing, and the principal points of forwarding shipments. That is all in relation to the development of the business that is intrastate as well as interstate.

Q. What are the duties that devolve upon those agencies?

A. To solicit business both ways, into and out of the state, and within the state; to be familiar with the resources and conditions of all of the territory the railroad traverses; to be in a position to meet the public; to attempt to advertise the state through which the road passes; in fact, they are particularly charged with the duty of
870 securing immigration, the location of industries, and the building up of the property, both intrastate as well as interstate.

Q. Are you familiar with the result of the efforts of that character of agent upon the traffic of the St. Louis, Iron Mountain & Southern Railway?

A. Yes, sir.

Q. As Traffic Manager is that within the scope of your duties, to be advised in regard to that?

A. Yes, sir. As I said, they are charged with the specific duty of the development of the property. They are part and parcel of it.

Q. In what way, Mr. Flippen, does the work of foreign agencies affect the local or intrastate traffic?

A. They have a great deal to do with it, in that in some of the large cities of the country where these so-called foreign agents are located, there is certain traffic that is controlled which is strictly intrastate.

I might cite, for instance, the case of Cincinnati, the Ivory soap people, the Proctor Gamble concern, have certain oil mill interests in the state of Arkansas. The traffic between points within a state, having its origin at a certain point and destined to Little Rock, if you please, or some other point, where these mills may be located, that traffic must be solicited and must be handled in the way of freight quotations, and by correspondence, I might say almost exclu-
871 sively with the traffic representative of that concern, who handle- and control- that business from the main office in Cincinnati.

The same is true of Chicago and other points, where these large industrial interests have their industries, and do certain business within the state of Arkansas, if you please. It has to be handled through these representatives at their headquarters.

Q. Mr. Flippen, in the illustration you put, of Cincinnati and this oil mill business in Arkansas, how does it come about that your foreign agents in the City of Cincinnati would be able to influence local shipments from one point to another point in Arkansas, from that office at Cincinnati?

A. In that the traffic is controlled by the representatives of the owners of this industrial interest in Arkansas, in the case I mentioned of the Proctor Gamble concern, it is controlled in Cincinnati; and, therefore, the solicitation for the handling and the effort to control this business, for instance between two points in the state of Arkansas, which may not be competitive particularly, must be handled through this agency.

Q. Please state an illustration.

A. Say from Brinkley or Forest City, if you please, cotton seed

and that sort of material, cotton seed and cotton seed hulls and cotton seed meal and cotton seed cake, shipped out of Little Rock to the points of consumption in Arkansas to competitive points on
872 the Frisco and the Cotton Belt Railroad. A great many points are common in the state of Arkansas and all that business has to be handled and solicited through the representations of these outside agencies.

Q. You mean to say that the routing you use of the cotton seed products in the oil mills or the products of the mill itself, to points within the state of Arkansas, is controlled at Cincinnati and not in the state of Arkansas?

A. So far as their interests in the mills are concerned, yes, sir.

Now, I frequently find it necessary to personally write the people in Cincinnati; and I sometimes make a trip to Cincinnati myself, to see them and ask if the conditions and circumstances are not such that they would favor us with their business say from Brinkley or Forest City into Little Rock.

Q. That applies to local competitive points, where they might ship over two or three lines of railroad?

A. Yes, sir. Of course, stuff that originates on the local line and is coming into Little Rock, if it moves in there you do not have to bother about that. But if it is at these competitive points, it is absolutely necessary to maintain these outside agencies, in order to secure a proper share of this business in competition with other lines.

Q. In that way their operations would have a direct effect upon the intrastate traffic?

873 A. There is no doubt of it in the world. It is a part and parcel of their duty. If you run through seven states you might say they have something to do in every state through which the railroad goes. They must know the conditions, and have the information in regard to the resources, or we do not think they are the right sort of representatives. They are busily engaged all the time in developing and trying to develop the resources of the state, because it is the development of those conditions that results in monetary returns to the railroad company.

Q. Referring to the interstate business that is influenced by those agencies: I suppose through their efforts considerable quantities of freight are transported from outside points, such as from wholesale houses or from industrial concerns, and jobbing houses into the state of Arkansas; is that true?

A. There is no question about that.

Q. Now, Mr. Flippen, are those shipments required to be distributed through the intrastate branch of your service, after the goods have reached the State of Arkansas?

A. Absolutely so. It would never reach the consumer otherwise. Arkansas of itself is a very limited producer of the manufactured articles of the country. That is, the ordinary stuff consumed within the state, such as boots, shoes, rice, molasses, if you please—all such articles particularly in the grocery line—they are all moved
874 from interstate points of origin. I might say perhaps 90 or 95% of them are moved from interstate points of origin,

And after they have been moved to the so-called jobbing points, which are limited in the state of Arkansas, perhaps they do not exceed 20 points, all of that has a direct influence upon the subsequent distribution of that stuff, which involves an intrastate movement.

Therefore, there is that same co-relation with the outside agencies. In fact, every employé of the railroad company must recognize that, because when it moves in there is an object in that; it does not mean its consumption at that particular point, but it must move again; and, therefore, that subsequent movement, I repeat, is an intrastate movement.

Q. Do these foreign agencies have any influence in causing industrial and manufacturing plants to be established in the state of Arkansas?

A. Oh, a surprisingly strong influence. We have had some of the best industries located in the different states through which our road passes, through the efforts of these agents; and the suggestion and then various conferences with these various parties; and trips with the men they know to point out to them the resources of the country; and then their subsequent negotiations with regard to facilities and trackage and rates, as to switching and interchange with connections, and all that sort of thing. Sometimes one man will spend as
875 much as 10 or 12 days in attempting to locate one industry.

Q. What effect does the location of a manufacturing enterprise of that kind have upon intrastate traffic in Arkansas?

A. It undoubtedly must redound to the development of the state and to the returns to the railroad company in the way of traffic.

A railroad has only one thing to sell, and that is transportation. The location of industries on its line means just that much more transportation to be sold.

Q. To what extent does it develop local traffic?

A. To the same extent it builds up local towns it builds up local traffic.

Q. Plants usually move material from the local points within the state to the place where they are located, and in that way builds up the local business within the limits of the state?

A. There is no question about that. That is the secret of the locating of an industry. They draw upon the resources of the state, such as its mineral or other products, and then the manufactured article is subsequently distributed to the consumer; as in a case I happen to recall, of the Arkansas Fertilizer Company.

That company draws its phosphate rock, which is the basis of its product, from Batesville, Arkansas. It employs men there
876 in getting out this stuff. It results in returns to the railroad company in the charges they get from it.

It comes to Little Rock or Lower Argenta and is there converted into the manufactured materials; and subsequently that goes out to the farmer and to the consumer and results in increased productivity of the soil, etc., and there are larger crops to be hauled. It is one of that sort of endless chain, propositions.

Q. In the instance you put, the fertilizer plant at Argenta or

Little Rock, you say it obtains the material which it converts into fertilizer, at Batesville?

A. Yes, sir.

Q. Where does it dispose of its products? Within the limits of the state?

A. I might say, according to their statement and our record, that 90% of their products finds ultimate destination within the state of Arkansas.

Q. And that transportation is all local?

A. Yes, sir, entirely so.

Cross-examination.

By Mr. Hill:

Q. Did this Arkansas Fertilizer Company you are referring to, establish its business through the influence of the foreign agencies?

A. It might have and it might not. I do not know the his-
877 tory of its establishment. But it is 99 chances out of one hundred that it was.

Q. You think your outside agencies established these plants?

A. Yes, sir, in the sense that I am an outside agent and my office is an outside agency; and the officials in New York and Memphis are outside agents. Some one particular man in the outside agency has influenced him to locate there, pointing out to him the advantages of such a location.

Q. Was that done in this particular instance you spoke of, this Fertilizer Company?

A. I don't know about that particular instance.

Q. You singled out that one industry as if you had established it there?

A. Not necessarily singled it out as if I had established it there, but citing it as an instance of what I referred to.

Q. Practically all of the freight handled by that concern is local?

A. I said that 90% of it was.

Q. And all the inbound freight from the Batesville quarry is local?

A. There is no question about that.

Q. All of its inbound freight would be local, and 90% of its outbound?

A. Not entirely all of it is inbound. The sulphuric acid and probably the pyrites, which all enters into the manufacture of the fertilizer, is perhaps all drawn from interstate points of origin.

878 Q. What per cent of the inbound freight to that plant would be intrastate and what per cent would be interstate?

A. To make a rough guess I would say 75%. There is a good deal of sand used in fertilizer.

Q. 75% of it would be intrastate?

A. Yes, sir.

Q. And 90% of the outbound freight would be intrastate?

A. I said 75% of the inbound freight would be intrastate.

Q. And 90% of the outbound would be intrastate?

A. Yes, sir, would find lodgment within the state. That is my guess. I do not know positively.

Q. Your intrastate traffic is unremunerative, I believe you said?

A. We certainly consider it so.

Q. Why do you want to spend money to get traffic that is unremunerative?

A. Why do we want to spend money to get traffic that is unremunerative?

Q. Yes.

A. We don't want to spend money to get business that is unremunerative; but we hope through the agency of the courts, or some adjustment to be made later, to get business that will be remunerative. And in the mean time we must get some business.

Q. Have you ever found the intrastate traffic remunerative?

879 A. Not in Arkansas. But under the voluntary tariff we issued in November 1908 we thought it was fairly representative of proper returns to us, and what we thought was a remunerative basis of figures; and what I considered really a scientific tariff.

Q. I will get back to that tariff a little later.

A. I suppose you will.

Q. Under your voluntary rate, before there was any Commission in Arkansas, did you find your state rates remunerative?

A. There were difficulties at that time, which, so far as my study of the property and my knowledge of it now goes——

Mr. MOORE:

Q. Were you there then?

A. No, sir, I was not. They were not, but they were operating under what might be called a sort of contingent basis, and I think it was an ill-advised proposition, all the way through.

Mr. HILL:

Q. Then so far as you know, the Arkansas state rates have always been unremunerative?

A. Yes, sir, until the establishment of this voluntary tariff.

Q. You refer to the tariff issued Nov. 2, 1908.

A. Yes, sir.

Q. So far as you know, prior to that date and going back to the matters we are inquiring into, your intrastate rates

880 have always been unremunerative?

A. Yes, sir, and that is true not only of Arkansas but other states we go through.

Q. Is that true in Missouri?

A. Yes, sir.

Q. How do you justify spending your money on the outside agencies to develop an unremunerative business? I am speaking of the past and not of what you prophecy as to the future, as the result of this litigation.

A. How do I justify spending money for the development of an industry which I figure is unremunerative?

Q. On which you figure the intrastate business is unremunerative?

A. With a volume of business, say 400% greater than we have today in Arkansas, we could afford to handle it at less rates. Therefore, if we can develop Arkansas by the location of industries there, and develop our tonnage to a greater extent than prevails today, we could unquestionably handle it at a lower rate than if that business was only nominal. That is the whole history of it.

We must develop it. Because they are consumers of interstate traffic.

Q. The whole proposition as to these outside agencies, goes back to the question of the development of the state?

A. Yes, sir, both. The state and the interstate. There is no question about that.

881 Q. The only ground upon which you can charge any of this expense to intrastate traffic is upon the ground of the benefit which the state would receive from the improvement in volume of traffic.

A. And the development of the traffic through the representation of said outside agency. The advertising, if you please, of the state and its industries.

Q. That is the same thing. It goes to the development of the state.

A. Certainly.

Q. You do not mean there would be any direct benefit to the state through these agencies, in influencing shipments from one local point in the state to another local point?

A. Certainly. If you develop the business you help one community as against another, and you are building up a game and through that means bringing the buyer and the seller together.

Q. It all goes to the question of development, and not to specific cases of soliciting freight and obtaining freight?

A. Oh, yes, I would not say it is not a question of not soliciting freight; because he does have to solicit freight.

Q. Intrastate freight?

A. Yes, sir, according to the concrete example I cited a moment ago, where I personally made a visit to Cincinnati to get
882 business from one point in the state to another point in the state.

Q. How did you get that cotton seed in Arkansas to move to a cotton mill, that would not have moved otherwise?

A. It would have been moved by our competitor. Therefore, that amount of my time is put into this thing on account of our freight business in the state of Arkansas.

Q. You got some cotton seed moved from Brinkley to Forest City or from Forest City to Brinkley, that might have moved into Brinkley over some other line; is that the idea?

A. Yes, sir.

Q. What other line did you have at Forest City, to move it over?

A. I don't know about between Forest City and Brinkley. I meant between Forest City and Brinkley and Little Rock. I used that as an illustration of my point, taking two lines serving those points into Little Rock, it is a question of the service and the equipment.

Q. Did you get that cotton seed moved from one point in Arkansas to another point in Arkansas?

A. Yes, sir. You have 41 cotton seed oil mills in Arkansas.

Q. I say, did you, by the solicitation you did in Cincinnati, get the business to move over your line?

A. Yes, sir. Through my personality and entertainment of the agent, and pointing out that we had the better facilities etc.

883 Q. Did the entertainment cost go in here too, Mr. Flippen?

A. No, sir, unfortunately that did not go in there.

Q. Why not that just as legitimately as the other. If we are going to have this indirect influence, and all that sort of thing?

You are speaking of competitive points, aren't you, Mr. Flippen?

A. Yes, sir.

Q. These outside agencies can have no influence on the non-competitive points in Arkansas?

A. Except in the development of the business.

Q. That goes to the question of development.

A. We have a point on our line, Judsonia, from which 75 cars of strawberries were shipped last year. Our outside agencies, have made efforts, to get additional farmers to go in there and develop that country. These farmers buy their box material for packing the berries, in the State; also their material for the crates. They get all their labor there.

It is all a closely co-related situation and you cannot get away from it.

Q. And the question of the relation of these things is the basis upon which you justify the charge?

A. Yes, sir, that is the broad term upon which you can

884 apply it.

Q. Coming to the tariff of November 2, 1908; you said you thought that was on a remunerative basis?

If you had applied the revenue theory to that, of doubling up your state cost of 100%, you would still have lost money on that, wouldn't you?

A. Yes, sir, I think we would.

Mr. MOORE: Have you any knowledge of that, Mr. Flippen? Do you know anything about that?

A. No, sir, I do not know.

Mr. HILL:

Q. You heard that testified to by Mr. Johnson, in the Federal Court in Little Rock?

A. I do not recall it.

Q. But as a mathematical proposition you know that is a fact, do you not?

A. What?

Q. That under that tariff, if you applied what they call "Judge Van Devanter's rule" of adding 100% extra cost to the state traffic, it would still be unremunerative?

A. I cannot say definitely as to that because it is a question of mathematics, and I have not gone into it.

Q. That is your information?
A. I have no information. I have not gone into the figures.
Q. I thought you said you thought it would.
A. I was merely guessing at it.

Q. That was an increase of more than 50% over the
885 Commission's tariff, wasn't it?

A. I do not recall what the percentage was but I know it did not yield that percentage of return in the revenue.
Q. I believe you claim your tariff increases it 42%?
A. I do not recall the figures but I believe it was 39.

Mr. HILL: I will ask Mr. Johnson.

Mr. JOHNSON: I think it was 42% for the two months we tried it.
A. Probably the two heaviest months in the year, November and December.

Mr. HILL:

Q. And still, under the 42% increase you thought it was unremunerative on the state basis?
A. I don't know what the figures are and that will have to be worked out by someone familiar with the figures.
Q. When you arranged that tariff, did you have a tabulation or statement of the cost and expenses of carrying the freight?
A. A general idea of it. And the tariff was made with respect to the commercial conditions, as we consider it, and by comparison with the rates that obtain in other sections of the country under like conditions.
Q. You did not know whether it was going to pay the extra cost entailed by the state business or not, when you put it in?

A. No one knows that, any more than we know what per
886 cent a tariff will return, until it is tried out.

You might handle 1,000 tons under the present tariff and you might handle 10,000 tons next month. It is a question of speculation.
Q. You cannot fix rates on the cost of operation?
A. You have to fix rates on the cost of operation in a general way, or you will not land right.
Q. It seems you landed wrong on your state tariff, didn't you?
A. Yes, sir, I don't think it is high enough.
Q. You say it was still unremunerative under this proof, and you should have made it higher, should you?
A. Yes, sir, I think we should. That is my judgment.
Like when you are selling goods, you know what it costs you as near as you can figure to manufacture your goods. But you cannot figure in your insurance and all those incidental expenses, down to the minutiæ; and at the same time you put on there what you think will yield a proper profit—and we haven't got it.
Q. If you succeed in getting this case won, as you prophesied a while ago, then you would in due regard to the interests of the company put your tariff in Arkansas higher than you had it on November 2nd, wouldn't you?

A. I think the tariff we had in effect on November 2nd, as near as I can estimate it, would perhaps yield proper returns, a fair return, for both sides of the case. That is all we are after.

887 Q. Still, it would be unremunerative as to the State business?

A. Yes, sir. Confined strictly to state business I believe it would not be remunerative. I cannot tell exactly as to that because I have not made any figures on it.

Q. You said that all the railroads have a practice of adjusting their interstate with their state rates; did you advance your interstate rates proportionately to the advance of your intrastate rates, in the tariffs that were promulgated after this injunction was obtained?

A. They could not be advanced proportionately, because they were all so much higher than the state rates. However, there was an advance in this interstate adjustment.

Q. You say they were relatively higher?

A. Yes, sir.

Q. Prior to that?

A. Yes, sir.

Q. You mean you charged more for interstate freight than you charged for intrastate freight?

A. We did, relatively. Therefore the state rates——

Q. What do you mean by the term "relatively?"

A. Does not the term explain itself?

A. Not quite, to my mind. I am new to these terms.

A. The first class rate, if you please, from St. Louis to Little Rock, I think is $1 per hundred pounds. That is, it was. I

888 am not positive of that, but it is close to $1. If I am wrong some one will correct me.

That in its relation to the adjustment within the state, conditions and service, distance and so forth considered was higher relatively than these state rates. That is what I mean.

Q. Per ton per mile it was not higher, was it?

A. I do not know as to that. It is a well established principle in freight rate making that as the distance increases the ratio of the rate decreases. You can handle a ton one thousand miles relatively cheaper than you can handle a similar ton 100 miles.

Q. That is what you mean when you say it was increased relatively, taking into consideration the long haul of the interstate traffic and the short haul of the state traffic: is that what you mean by the term "relatively"?

A. I mean the adjustment of the interstate rates was relatively higher, and I do not know that I can explain it any better than to say that the rates within the state, for equal commercial conditions and service, etc., considered, the interstate adjustment, rather, was very much higher; and even today it is from Little Rock to Memphis relatively higher than the state rates.

Q. Yesterday we had a statement from Mr. Kimbell to the effect that on the Cotton Belt Railway the revenue produced per ton per mile for state freight was about 2½ times that produced by the interstate freight: would that be true on your road?

889 A. I have made no computations on those points.

Q. Assuming that, I suppose there would be no great difference between the Cotton Belt and the Iron Mountain, and assuming there was not, what would you say?

A. There is considerable difference between the Cotton Belt and the Iron Mountain in the matter of resources and facilities and territory it traverses.

Q. Assuming those figures, for the purpose of illustrating the point, that it was 2½ times higher, what would be the relative rate between state and interstate: is that a proper relation or should it be more or should it be less?

A. I would have to figure the rate itself, the commodity upon which it applies, the distance, and the service involved, in order to be able to give you a definite answer.

Q. Those were his statistics on the entire volume of the traffic on his road?

A. I do not know as to that. I have not gone into the statistics feature.

Q. When you say you have to have a proper relation between them, I would like to know just what you would consider a proper relation between interstate and state rates, taking the whole volume of your traffic into consideration?

A. I do not know, without having it figured out exactly——

890 Q. How could you make that relation if you do not know——

A. I do not know without having figured it out exactly, because the conditions with respect to certain articles and commodities are so entirely different. You cannot take the whole volume, as a traffic man, and say just to a fraction just what the relative percentage of adjustment would be. It is impossible to do that.

Q. I am not asking it just to a fraction. I am asking you to give just your best approximation on that.

A. I cannot say as to that unless I make some figures on it.

Q. When you put in the state rates on November 2, 1908, did you make figures then of the relation that one should bear to the other?

A. Yes, sir, I explained how we made them. That we made them with relation to commercial conditions, and the service, by comparison with the figures that prevailed in other states under similar circumstances and conditions; and that as a whole it fitted in.

I don't know that I could explain it any better.

Q. Wasn't it shown down there in Little Rock at that hearing, in which you were a participant, that your rates were out of line with the rates of all the adjoining states?

A. No, sir, it was not. I don't think we would have gotten an injunction if it had been.

891 Q. I am speaking of the hearing before Judge Trieber, on the matter of your tariff of Nov. 2, 1908.

A. My answer applies to that the same.

Q. Did you get an injunction there?
A. No, sir, I understood it was sustained.
Q. You had the rates very materially reduced, didn't you?
A. Not very materially.
Q. You do not think there was any material reduction from your rates of November 2nd?
A. Yes, sir, with respect to certain articles, the re-establishment of the less than carload commodity rate was too low. That was a material reduction.
Q. Isn't there any reduction in the carload traffic rates?
A. Take the fourth class rate, which is the principal classification rating which applies in the distribution of the main part of your tonnage within the state, there was practically no reduction and in some cases a slight advance.
Q. Then these rates you are operating under now, known as "court tariff" is pretty near what you would consider a fair rate, is it?
A. It is a little too low, in my judgment.
Q. Competition makes many of your rates, doesn't it?
A. Unquestionably.
892 Q. When you put in the rate to meet competition, what consideration do you give to the making of that rate?
A. Competition.
Q. Alone?
A. Not necessarily. It is either that we meet the rate that is formulated, or ignore it. You might say there is a potential competition, and not active—such as in the case of River service, if you please.
Q. Do you take into consideration the cost of the service when you are meeting a competitive rate?
A. In a general way, we cannot lose sight of that fact. We figure we do not like to sell our goods at less than cost, and still we do not always know what it costs.
Q. Why don't you know what it costs?
A. No man has ever been able to figure out just what it costs to handle any one particular commodity in relation to the whole traffic handled by a railroad company.
Q. If you meet a rate at a competitive point you fix your rate primarily on the rate your competitor has fixed: on what basis does your competitor fix his rate?
A. There might be a variety of things which would fix it for him. He might make an inordinately low rate on the raw material into a manufacturing point, contingent on the manufactured article going out at a high rate. And, therefore, taking it as a whole, it might be remunerative.
893 Or it might be a low state rate predicated on a high interstate rate, and it might be remunerative.
Q. Don't you have any statistics compiled by which you can get at the cost of handling a given commodity?
A. The cost of handling any given commodity cannot be figured, no, sir.

Q. Can you have statistics compiled giving you generally the cost of transportation?

A. We know, taking the whole of it, all of the articles that the carrier handles, and the cost of the service, and all that sort of thing, it can be figured. But you cannot single out any one of them, and say what it costs.

The conditions might be entirely different today from what they will be tomorrow. We might handle 10,000 tons one mile today and tomorrow 100 tons 10,000 miles.

There might be five times as much of a given commodity one day as another.

It takes the total tonnage, with the total cost of operation, to arrive at what it does cost you to handle all of it.

But you cannot select one article and say what it costs to handle it.

No man has ever yet been able to figure it out.

Q. Then you would make it upon the total tonnage and the total cost of operation, wouldn't you?

A. The total cost of operation unquestionably must govern.

Q. And the relation of your total tonnage to that, I
894 presume?

A. Oh, yes, sir. If you did not handle tons it would not cost you anything.

Q. You do not establish your rates, then, on the relation that the revenue from one rate would bear to that of another?

A. Oh, yes. Classification is made up that way.

Q. Classification is made up that way?

A. Yes, sir, and that is the way the rates are made, with respect to classification.

Certain articles are susceptible to damage; its bulkiness or lack of density, if you please; and the character of the equipment that is required to handle it; and the expedition that is sometimes required. All those things are factors that enter into that.

Q. Those are the factors that determine the rate so far as classification is concerned?

A. Yes, sir, one article compared with another. For instance we would not haul feathers at the same rate we would pig-iron.

Q. You would fix a rate to compensate you for the difference in the weight, the difference in the liability, the difference in the cost of handling, and many other elements of that kind?

A. Yes, sir, according to our best judgment, having in mind that the total result is remunerative.

895 Q. Then the rate is more a relative proposition than it is one of cost of operation, isn't it?

A. No, sir, you cannot say that. You must bear in mind the cost of *of* operation, or you would not be making the rate.

The rate is the price at which we sell transportation; and you must bear in mind, according to the best judgment and experience of men who know, what it costs, otherwise we would not be making a rate. You would not last long if you made it without regard to that.

Q. That would be as to total rates. But I am speaking of the relation of one rate to another.

Take your illustration of iron and feathers: the relation of those would be determined very largely by those other factors rather than by the cost of operation?

A. Oh, yes, there are so many factors that enter into it that it is very difficult to differentiate to a nicety.

Q. Have there been any changes in what you might call the trans-state rates affecting Arkansas, by reason of the tariff of November 2nd, The Pacific Coast and Texas common point rates, and practically all those long haul rates?

A. You mean by "trans-state" rates one state only, say Arkansas, or across the state of Arkansas?

Q. I mean by "trans-state" those that just cross the state and enter only incidentally into these calculations. Take oranges
896 from the Pacific coast that might pass through Arkansas.

A. I don't know that the Arkansas adjustment would have any direct influence upon those rates.

But, for instance, lemons from California to New York, the rate has been advanced 15 cents per hundred pounds. I don't know whether that is due to the adjustment of the Arkansas rate, but I don't think it is. But it is due to just an adjustment in that article.

Q. Take the Texas common point rates: there are many of those shipments passing through Arkansas.

A. Yes, sir, those rates have all been advanced.

Q. But this tariff of November 2, 1908, did not cause any advancement of those rates, did it?

A. Except in the simple influence it might have in answering the desire on the part of the carrier to get more revenue, which they thought necessary for their existence.

Q. In arranging the tariff of November 2, 1908 you did not, then, re-adjust these trans-continental rates, did you?

A. Some of them were re-adjusted. For instance, the rate across the state of Arkansas from Memphis is influenced by your state adjustment.

Q. You are speaking of the rate from Memphis into Arkansas?

A. Yes, sir, and I want to show the influence that has on the rates into Texas.

The rate from Memphis into Arkansas is made from Mem-
897 phis to Texarkana. Texarkana is a base point for Texas.

The rate from Memphis is made arbitrarily, the bridge arbitrary if you please, over the state rate and, therefore, that fixes the rate to Texas. And fixing the rate from Memphis to Texarkana, predicted upon the Arkansas state adjustment, indirectly affects the interstate adjustment into Texas. That is an absolute fact.

Q. Did we not find in the hearing down there in Little Rock that the rates from Memphis into Arkansas are much lower for the same distance, than the rates to Arkansas points?

A. I don't think so. Not so far as the Iron Mountain is concerned.

Q. Did not you admit that in your affidavit there, that in many instances it was true?

A. I do not recall it at the present moment.

Q. Did not you promise to re-adjust a great many of those rates and say that they had been overlooked?

A. Yes, sir, and I will say here, for the benefit of the record, that there was an inordinately low basis of rates from Memphis into Arkansas points, predicated upon a contract and lawsuit brought by the city of Memphis to evict the St. Louis Iron Mountain & Southern Railway from Memphis, and cancel that charter, on account of an alleged discrimination against Memphis in favor of Arkansas jobbing points.

Unfortunately our people at that time did make an adjustment that was favorable to Memphis, because of this unusually
898 low state Commission rate within the State of Arkansas.

That is the history of that.

Q. Then when you raised the Arkansas rates you did not raise those Memphis rates?

A. Just as soon as we could, observing the usual, customary, statutory limit.

Q. I will call your attention to the fact, Mr. Flippen that that limit is 30 days. And this hearing we had in Little Rock was some four or five months after that, and those matters had not been adjusted then.

A. I do not agree with you. They were not adjusted within 30 days, because it requires an interminable amount of work, in checking out combinations, and then the compilation of pen and ink figures, and the submission of that to the printer and the checking of the printer's proof, so that it takes at least 35 or 40 days in order to get it filed down in Washington and in your stations 30 days before its effetcive date.

Sometimes three months will elapse before you can get out a tariff, an ordinary tariff for that matter.

Q. You put in the Arkansas rates without re-adjusting your in- before its effective date.

A. Just as soon as the Arkansas rate was put in effect, the machinery was put in motion to re-adjust the interstate rates.

Q. It takes you a great many months to do that?

899 A. Unquestionably.

Mr. MOORE: I would like him to state in that connection if the inter-line adjustment between carriers had any effect in retarding that work?

A. Naturally. The Interstate Commerce Commission require that we secure the concurrence of our connections, and sometimes an interminable amount of correspondence ensues before we can get that line to file a specific concurrence, as is required by the Interstate Commerce Commission in a joint tariff. And that will sometimes delay the interstate publication.

Mr. HILL:

Q. The practical effect of that was that you put in the tariff of

the Arkansas increased rates on the 2nd of November, 1908 and did not adjust the interstate rates for many months thereafter?

A. I do not say many months. I say it was accomplished as soon as we could get the machinery into motion to bring about that result, because we needed money and we got it as quickly as we could.

Q. I am not standing on the time: the point I am getting at is this: you did put into effect in Arkansas on November 2, 1908, a tariff increasing your rates at least 42%, without at that time any adjustment or re-adjustment of the interstate rates?

A. At that time we put into effect the Arkansas state rates you refer to, I repeat we started our efforts as quickly as possible
900 to re-adjust our interstate rates. And that is the best answer I can make.

Q. You are getting away from my question.

A. I state it was done as quickly as possible.

Q. As a matter of fact, when you did put in the Arkansas rate there was no adjustment or re-adjustment made of the interstate rates at that time?

A. Not co-incident with them. It was impossible to be done then, because of the Interstate Commerce Commission's requirements.

Q. Then, as a matter of fact, there was an increase of the state rates put in without any corresponding increase of interstate rates, even if it were not but for one day?

A. That is admitted in my testimony.

Q. What proportion of the state rates do you consider competitive?

A. Well, that is a most difficult question to answer. I do not know that I could even give you an idea.

Q. I mean, on your line.

A. Nearly every point of any consequence in the state is competitive.

Q. What are you competitive with?

A. What are we competitive with?

Q. What roads?

A. The Rock Island, the Frisco, the Cotton Belt, the L. & A., and some of those minor lines, if you please, some lumber lines
901 for instance.

Q. You would regard all the great lines, like the Rock Island, the Frisco and the Cotton Belt as your competitors in fixing rates?

A. Naturally, it is an influence we cannot ignore.

Q. What do you mean in rate making parlance by "a competitive point?"

A. One served by two or more railroads, or water. In other words, competitive transportation facilities—sometimes it is a wagon.

Q. You have all kinds of competition?

A. Yes, sir.

Q. I believe we showed up in the hearing that there was some wagon competition over in Arkansas County?

A. Yes, sir.

Q. You have had some wagon competition in your coal business in Fort Smith?

A. I do not recall that. There might have been.

Q. Mr. Flippen, when you put into effect this tariff of November 2, 1908, you made it very much higher, did you not, than the tariff that had been in force before the Commission made a tariff?

A. Oh, yes, that speaks for itself.

Q. That tariff that was put in on Nov. 2, 1908 was put in by all of the other roads that got a similar injunction, I believe?

902 A. I don't know just whether they put it in at the same time or not.

Q. The point I am getting — is, it was substantially the same?

A. Yes, sir.

Q. It was put in by the Frisco and the Rock Island and by the Cotton Belt: now is not the relative cost of conducting transportation on each of those roads different?

A. I do not know as to that.

Q. Do you know as a practical traffic man, that the cost on one road is not identical with the cost on the others?

A. It may vary some. I do not know.

Q. Did you not testify a while ago that the conditions on the Cotton Belt might be different and very different from those on the Iron Mountain?

A. I did.

Q. But the rates put in were the same, weren't they?

A. I don't know. We did not check with the Cotton Belt but I presume they were about the same.

Q. It was a uniform scale which all you roads that got the injunction, put in?

A. That is my impression.

Q. And it was issued finally as a joint tariff, wasn't it?

A. I don't know whether it was issued as a joint tariff or not. We got out an individual tariff.

903 Q. That is true, for November 2, 1908; but sometime later, there was a joint tariff issued, is my memory of it: isn't that right?

A. I do not recall whether a joint tariff was put in or not. It may have been.

Q. But whether separate or joint tariffs were put in, uniform rates were gotten out by these different roads, weren't they?

A. That is my impression.

Q. Did these other roads take into consideration the relative rates as you did?

A. I do not know what influences were applied to the making of those rates. I am speaking only of the St. Louis, Iron Mountain & Southern.

Q. You made the tariff so far as the St. Louis Iron Mountain is concerned?

A. I had a good deal to do with it. I did not make the figures in every case.

Q. It was done by sub-ordinates under you?

A. Yes, sir.

Q. Those figures were checked over with the other roads?

A. I think so.

Q. And where agreed upon by all the roads to be the rate to be put into effect——

A. I don't know that there was any agreement.

Q. They were checked over and in effect agreed to be put in
904 by the other roads. That being true, I want to know how you took into consideration the cost of the service?

A. That is as a general proposition, as I thought I had previously explained, it is one you cannot figure out to an actual dollar and cent per ton per hundred pound-. You must go by your knowledge and your intuition and your consideration of the commercial conditions, the service, and by comparison with what the rates are in other states, and what your general results and returns are.

Now a rate of itself on any particular commodity as I previously explained, you cannot tell just whether it is going to be a profitable one to you of itself or not. You must make what you consider a whole schedule of rates, and that according to your best judgment. And as I say, by comparison the cost of the service will bring proper results.

Q. Take your coal schedule; you and the Rock Island are both large coal haulers. When you put in this tariff of November 2, 1908, you and the Rock Island put in the same rates and checked them over with each other. Now did not the question come up between you and the Rock Island as to the relative cost of your road hauling coal or of that road hauling coal?

A. I do not know as to that feature of it. It certainly had considerable consideration in some form or other, but in just what particular form, I do not know.

Q. You have many more coal mines on your lines than the
905 Rock Island Company: could not you naturally haul coal cheaper into Little Rock than the Rock Island could?

A. I don't know that we could.

Q. If you had the volume of traffic you could.

A. We might.

Q. You are taking that cost of service into consideration, you say, as one of the principal elements in fixing rates: how could you with the St. Louis San Francisco and the Rock Island and other roads agree upon the same rates when the relative cost of the service on these roads is different?

A. As I stated, there is nobody we have ever found in the world who can figure what it costs to haul any particular commodity, in reference to the whole traffic we handle.

It is largely a guess as to what it costs to handle any particular commodity. We might be handling coal at a loss and the Rock Island might be handling it at a profit. We must take the whole fabric.

Q. How did the Rock Island and your road reach the same figure for handling coal, when you might be handling it at less profit.

A. From the fact of competitive conditions. We might haul it

110 miles and the Rock Island might haul it only 85 miles, and yet we have a blanket adjustment, because it is a question of living and let live.

906 If this mine over here is 90 miles from the market and this one here is 150 miles from the market, and both of them selling their coal in the same market, there must necessarily be an adjustment of rates that will come pretty near placing one on a parity with the other, or one is going to suffer seriously.

It is not particularly the result from the handling of that coal itself that brings us the return, but it is the development and the perpetuity of this industry, in its consumption of food products, grain and clothes and all those sorts of things. You have men there who will use all those things. It is an endless source of revenue to you, and you must keep it on a parity with the other fellow.

Q. Your road and the Rock Island agreed on a parity of rates so to speak, in the handling of that coal?

A. Not necessarily agreed on it. One fellow would fix the peg and say, "My mine will pay $1.00 a ton." Then I would say, "All right, my mine must pay that amount on my line and I will fix my rate at $1.00 because my mine must live."

Q. That was all figured out before that tariff was issued?

A. Our rates are not all the same by any means. Some one line fixes it and the other line has to meet it. It does not necessarily mean an agreement as to the rate.

Q. Weren't your rates all fixed in this tariff of November 2nd? There was no difference in them, was there?

907 A. That tariff speaks for itself. If they got the same figures in their tariff as we have in our tariff, he might have set the peg and we followed it, or vice versa.

Q. Those pegs were set before the tariff was issued?

A. Sure.

Q. That is the point I am getting at: in the setting of those pegs I want to know what consideration you gave, or the Rock Island gave, to the cost of that service?

A. As I previously explained, general conditions. You cannot tell what it is going to cost on any particular commodity. You must know the whole situation and know you are not making money and, therefore, you have got to get higher rates, and now how high will the business stand. That is the whole story.

Q. That is the way you fix rates?

A. Yes, sir.

Q. How much the traffic will bear?

A. Yes, sir.

Q. That is the real basis of rate making?

A. Unquestionably so, the world over, just as the price of selling goods is fixed.

Q. And the cost of the service has little to do with it

A. It has a great deal to do with it, because if you fix prices at less than it costs to produce it, you make no profit whatever.

Q. I understood you to say you were doing that?

908 A. No sir.

Q. Didn't you say the rates before November 2, 1908 were unremunerative?

A. I thought they were unfair and not altogether remunerative; and they were unfair with reference to competitive conditions.

Q. I took coal to illustrate the point; now take the whole traffic; when you were considering the whole traffic of the Rock Island, and the Rock Island was considering the whole traffic of the St. Louis Iron Mountain & Southern, and you put in those rates of November 2, 1908, what consideration did you give to the cost of the service, and what consideration did the Rock Island give to the cost of the service?

A. They must have considered their returns were so much, and that they handled a certain class and kind of business and the service was so and so; and the preponderance of tons is sometimes one way——

Mr. MOORE: Are you speaking of the Rock Island?

A. I mean the St. Louis Iron Mountain & Southern. Of course I cannot testify as to the Rock Island. There is such an indefinite consideration, as it were, of all of these factors, that you cannot lose sight of any one of them. You cannot, as I have repeatedly said, pick out any one commodity and figure what would be the whole cost of handling that.

909 Q. I understand that. We passed from the coal, which I used as an illustration, to the entire traffic; here is an entire set of rates which you say you and the Rock Island and other roads put out together: how did you arrive at the cost of the service on that, when the cost of the service on these other roads must necessarily vary from the cost of the service on your road?

A. We may have, as I previously stated, set the peg in that case and figured the cost of our service, and being the biggest railroad in the state of Arkansas, say it shall be so and so; and they followed it. That explains that feature of it.

Q. That was all done before the tariffs were put out? That was all considered?

A. You must make your figures before you can issue a tariff.

Q. You and these other railroads I referred to, you did do that? You had your traffic men get together and discuss these figures?

A. We did discuss it. There is no question about that.

Q. It was finally agreed between you and the traffic men controlling that, to put out that tariff of November 2, 1908?

A. I cannot say there was any agreement. Here was the figure we are going to make and the other fellow says, "I will use these figures"—and there you are.

Q. Who set them?

910 A. In certain classes or commodities one man might fix it and then the other fellow may have to meet it. We may have to meet the coal rate on the Jenny Lind, they may have to meet it from Mansfield or some other competitive point on their line.

Redirect examination of B. M. FLIPPEN continued as follows:

By Mr. MOORE:

Q. How soon after the change in the freight rates in November 1908, local to the state of Aransas, did you begin to re-adjust your interstate rates?

A. We began immediately, but a considerable time elapsed before the effective date of the re-adjustment, because of the reasons I stated this morning—the difficulties of the compilation and the delay in publication and the checking of proof, and then the observation of the statutory limit required by the Interstate Commerce Commission. Ordinarily we figure on about 45 to 60 days.

Q. How soon after the change in the state rates did your re-adjustment of interstate rates begin to take effect?

A. Possibly in some cases, from some base points, in two months and some in three months and others a little later.

Q. Just depending, I suppose, upon the amount of preparation that was necessary, and all the correspondence and negotia-
911 tions with your connections?

A. Yes sir. The clerical work and the negotiations with connections for their concurrence and the time for publication, etc.; and checking the figures to see if they were correctly compiled, and so on.

Q. In speaking of the cost of transportation a while ago, on cross examination, you stated that in many instances it would be based on what the traffic would bear; please state what you mean by that statement, and in what sense you used it?

A. I meant by saying that the rates were made upon just what the traffic could bear, considering the competitive conditions. Certain traffic will only bear a certain measure of rate in competition with a similar article or commodity produced in some other state or some other section of the country directly competing with this particular article in a common market of purchase,

For instance, a man making hickory spokes in Arkansas, if you please, is competing with a similar production in Tennessee or perhaps Georgia or possibly Mississippi. Such articles find common market in the points of vehicle manufacture if you please, like South Bend, Indiana, and Chicago, Ill., and Detroit Michigan, or Racine, Wisconsin, and other big wagon and vehicle manufacturing centers.

Now that traffic will only bear a certain rate to enable this industry to thrive on the St. Louis Iron Mountain and South-
912 ern Railway if you please, in competition with similar production in some other section or territory of the country in which the Iron Mountain Railway has no interest; and, therefore, the traffic will only bear so much.

Q. In your efforts you tried to avoid making rates that will be prohibitive to some of the industries upon your line?

A. Absolutely so. If rates were made so as to restrict or prohibit the movement of certain articles, then the general effect upon the development of your traffic and your earnings which is not confined to

that particular product, as it were, but it is the general development of the country in which it is produced, and the contingent qualities or features which bear upon the production of this particular article.

If a man is getting out spokes or hubs or stave bolts, it means wagon haul; it means men in the woods with axes; it means the consumption of grain to feed the oxen; and the teams and all that sort of things.

That is what I mean by "contingent features," all of which contributes to the earnings of the railroad, if not directly then indirectly.

Q. Is the average cost of handling business any indication of the cost of handling any particular commodity or kind of business?

A. That is simply one element. There are various elements that enter into the question of rate making. There is competi-
913 tion; the amount of tonnage involved; the movement of traffic in one direction versus the empty car movement in the other direction. And all those sort of things.

Q. I am not speaking so much about rate making but what I am speaking about is the proposition of cost. The question is, is the average cost of handling the business any indication of the cost of handling any particular commodity or kind of business.

A. As I said this morning, it is absolutely impossible to figure what it costs exactly to handle any particular commodity or article.

It may be figured in its relation to the whole. You cannot segregate it. You may handle feathers and pig-iron or merchandise or groceries or grain or lumber, etc., all of them on the same train. They all pay different rates. One is a very light and bulky article and another is dense. You may haul one car that will carry perhaps 100,000 pounds of revenue paying tonnage, where it might take 3 or 4 cars to carry the same amount of revenue paying tonnage of another article or commodity. Therefore, it is impossible to figure it.

Recross-examination.

By Mr. HILL:

Q. Mr. Flippen, don't you recall that in the affidavit you filed in support of this very tariff of November 2, 1908, in Judge Trieber's court, that in a great many instances where complaint had been made against your rates as discriminating against the state,
914 that you stated or promised that those rates would be remedied by May 1st?

A. Perhaps I did, Judge Hill. I recall that a very strenuous effort was being made to so re-adjust and advance our interstate rates to conform in their relation to the re-adjustment of the state rates, and to get the advance and to get money as quickly as we could.

Q. You do remember that promise, that quite a large number of interstate rates that were complained of, it was promised would be re-adjusted by May 1st?

A. Some of them were adjusted, yes. Some of them were ad-

justed probably thereafter. I remember particularly the rate on cotton seed, if you please, within the state, that complaint was made that the rates interstate were not made relatively with the change in the state rates.

Q. I recall that, but I am speaking of the interstate rates.

A. Therefore, we advanced them 30 to 40%, as soon as we could get to them.

Q. I am speaking of the interstate rates.

A. I am speaking of interstate rates. In the cotton seed rates Little Rock to East St. Louis, an advance of 30 to 40% was made.

Q. I think there was an advance on your intrastate cotton movement after November 2nd.

A. The cotton movement is really not a state proposition, because very little if any of the cotton produced in Arkansas
915 finds ultimate lodgment or destination within the state. It is interstate.

It is generally handled on what we call "milling in transit" or "in transit privilege" adjustment—concentration if you please.

It pays a certain rate in and then when it moves out to its ultimate destination it is refunded back to a normal basis, protecting through rate from the point of origin to ultimate destination, Boston, Liverpool, or otherwise.

Q. You do know that up to May 1st, following the adjustment of state rates in November, the interstate rates were not adjusted?

A. A great many of them, perhaps, were not. For instance, if you change the rates to Memphis it carries with it automatically a re-adjustment from Cairo and St. Louis. And the rates from New Orleans into Arkansas are the same as from St. Louis into Arkansas. The rates from Kansas City, if you please, into Arkansas are made with relation to the rates from the Mississippi River basing points, or the Mississippi River crossings.

The whole fabric is involved; and, therefore, there is a world of work and millions of figures sometimes involved; and it takes months to do this work.

At times you cannot get the necessary clerical help. We are handicapped in that respect today, to re-adjust and fix these
916 figures in their adjustment, so as to preserve the parity as between one community and another doing business into that state.

Q. I stated that it is claimed by your side that the rates of November 2, 1908 are about 42% higher than the Commission's rates: I will ask you if in re-adjusting the interstate rates you raised them 42% higher than the pre-existing rates.

A. I do not think the measure of the advance in the interstate rates was the same percentage, because of the fact that the adjustment relatively was already very much higher.

The rates within the state of Arkansas under the Commission's tariff were inordinately low; and, therefore, when we came to the point of advancing the interstate rates with relation to the state rates we did not have to observe the same percentage.

Q. About what percentage of increase did you put upon the interstate rates?

A. It varied according to the commodity involved.

Q. Of course, it always does that, but I am speaking generally of about what would be the average increase?

A. I should say from 10 to 15%, sir.

Q. In making that estimated percentage you are not taking into consideration the trans-state schedule of which we were speaking this morning?

A. I am speaking about interstate rates with origin and destination in the state of Arkansas.

917 Q. Origin or destination, I suppose you mean?

A. Not necessarily. Both directions. For instance, we raised our lumber rates interstate from Arkansas to all interstate destinations, from 2 to 7 cents per hundred pounds, which we have been able to sustain as reasonable before the Interstate Commerce Commission.

Q. Isn't it a fact that many of these re-adjustments of interstate rates were produced by complaints of shippers in a number of affidavits filed in the Federal courts down there, complaining that your rates were discriminating against the state?

A. Pardon me, but if I understand your question you say a great many of the interstate rates were reduced?

Q. No, I said re-adjusted, following the tariff of November 2, 1908, this re-adjustment of the state and the interstate rates we have been speaking of, is what I am calling attention to.

Now, isn't it a fact that the re-adjustment of the interstate rates was largely brought about by the complaints of shippers, who complained that your interstate rates were discriminatory, and that many of those complaints were in the form of affidavits so charging, and filed in the Federal court at Little Rock?

A. No, sir, the adjustment, with one or two exceptions, I recall particularly the cotton seed re-adjustment of the interstate
918 rates, was from Arkansas to East St. Louis, that had been overlooked by us.

There was a blanket rate in there and it was pointed out in one of the affidavits, that it was discriminatory against the state adjustment; we had lost sight of that.

We have from 7,000 to 8,000 live tariffs on our system. It is a vast amount of work to investigate and analyze and keep in touch with these various adjustments.

Until that affidavit was filed with respect to that particular commodity, and one or two others I recall, those were not re-adjusted. Otherwise the general re-adjustment was made to preserve the parity between the state and the interstate rates.

Q. Were not many of these re-adjustments brought about by that situation?

A. No, sir, I stated that I did not recall but two or three.

Q. What do you recall besides the cotton seed?

A. I recall the re-adjustment of rates from Springfield, Missouri to Local points on the so-called White River branch.

Q. Don't you recall the rates were re-adjusted from Shreveport and Monroe, Louisiana, brought about in the same way?

A. No, sir, I do not. We have no interest in Shreveport. Our rails do not reach that point. They do reach Monroe.

919 Wasn't there a serious complaint about your discrimination in rates to Monroe, and didn't you promise in your affidavit to re-adjust those?

A. Yes, sir, and it has been done. The advance from Monroe to Arkansas points is predicated on a certain percentage, mileage considered, then your present court rate in the state of Arkansas, which we considered fair as between the two communities serving a common purchasing interest.

Q. You adjusted your lumber rate on account of the affidavit and complaint filed?

A. I think so.

Q. And on canned goods also, didn't you?

A. There was one canned goods rate from one point of production, I think on the Kansas City Southern, which was shown to be higher from that point to Little Rock than from that point to Memphis, and we re-adjusted that.

Q. You re-adjusted the brick rates so far as it affected Coffeyville.

A. We advanced the Coffeyville rates very materially.

Q. That was not done until the affidavits were filed, was it, Mr. Flippen?

A. That is perhaps another instance where the affidavit called to our attention the alleged discrimination as between the state and the interstate rates.

Q. Was the hay rate another one re-adjusted? Do you recall that?

920 A. I do not know that it was. I don't think it was.

Q. Do you recall the rice rates from Cotton Belt points were shut out from all points on your line?

A. I do not recall there was any re-adjustment made, although there was some complaint made of them.

Q. Didn't you promise in your affidavit that you would so re-adjust the rates as to let the rice come in there?

A. I don't think so. We do not originate the rice on our line.

Q. I know, it is on the Cotton Belt.

A. Yes, sir, and the proposition would naturally come from them.

Q. None of these various adjustments I have spoken of, that originated in the complaints filed in the court there, were brought about until May or later, were they?

A. I do not recall the date effective. The tariff will show that. I know it was done just as soon as possible.

Q. Before you put into effect the tariff of November 2, 1908 you had no data as between the intrastate and interstate freight costs, had you, upon which to base that tariff?

A. We had the evidence as our guide, that had been submitted in the proceedings in the court at St. Paul.

Q. Did you try to arrange that tariff of November 2, 1908 upon the basis that the state freight should bear at 100% additional extra cost?

A. As near as we could, according to our judgment, yes—and yet it did not do it, as shown by subsequent results.

921 Q. There is a difference of opinion about that, how much it did do, Mr. Flippen:

You had no separation of expenses, state and interstate, actual separation I mean, as your guide in framing that tariff?

A. Except as I say, the general conditions, and the basis we have there as our guide.

We cannot tell what it is going to cost us to handle a pound of freight until we have handled it.

Redirect examination.

By Mr. J. M. MOORE:

Q. Mr. Flippen, were these re-adjustments Judge Hill refers to, in connection with the affidavits filed in the hearing mentioned by him, in line with the policy under which the railroad was acting in making re-adjustments of interstate rates?

A. Unquestionably so.

Q. Would they have been made as soon as discovered, if complaints had not been made?

A. There is no question about that. The re-adjustment of rates is continued from time to time. They are made to promote the commercial conditions and competitive conditions and all that sort of thing.

922 While it is pointed out by one interest that he cannot live, in some other section or locality the question arises in the traffic man's mind, whether he can engage in this business and enable that man to live, and what will be the direct benefit to the traffic, and if it can enable him to live and benefit the locality, it is perhaps followed up by a re-adjustment; sometimes up and sometimes down.

The witness is here excused.

923 CHARLES L. STONE, a witness of lawful age being duly produced, sworn and examined on the part of the Complainant, testified as follows:

Direct examination.

By Mr. J. M. MOORE:

Q. Please state your full name, residence and occupation.

A. Charles L. Stone. My residence is here in St. Louis. My occupation is Passenger Traffic Manager of the Missouri Pacific and St. Louis, Iron Mountain & Southern Railway.

Q. How long have you occupied that position?

A. Since August 1, 1907.

Q. How long have you been in that department of work?

A. Twenty-five years.

Q. Do you recall that time when the statutory passenger rate of two cents per mile went into effect in Arkansas?

A. Yes, sir.

Q. About what date was that?

A. April 9, 1907.

Q. Was any action taken by your department in regard to interstate rates following the change in the local rates under the statute?

A. When the local rate in Arkansas was reduced from three cents to two cents a mile, as soon as the two cents tariffs were prepared within the state our rate force immediately began to work on
924 the interstate tariffs and put them in effect as soon as possible, using the two cent rate as the basis in the state of Arkansas.

Q. Now when was the rate of two cents on the statute abandoned and another rate put in effect?

A. It was abandoned on Oct. 19, 1908.

Q. What rate was put in then?

A. Three cents; wherever we could and at points where we had to meet the competition of other lines which had less rates in, if it was to the interest of the company to meet those rates we did so. We viewed that as a business proposition.

Q. I was going to ask you if you took any action looking to the re-adjustment of the interstate rates after you had resumed the three cent local rates in Arkansas?

A. After the tariffs were compiled and checked on the three cent rate in Arkansas our rate force immediately commenced to compile the interstate tariffs, using the three cent basis in Arkansas.

Q. The St. Louis, Iron Mountain & Southern Railway Company maintains commercial foreign agencies outside of the state of Arkansas, doesn't it?

A. Yes, sir.

Q. Does the work that is performed by those agents have any effect upon the intrastate passenger business of the state of Arkansas?

A. Yes, sir.

Q. Please state what effect it has.

925 A. These outside men of ours are posted as to the local conditions in all of the states through which the St. Louis, Iron Mountain & Southern run and naturally having that information before them they know all about Arkansas.

It is their business not only to solicit competitive traffic between any two points we can touch, but it is also their duty to build up our local traffic wherever they can, and our representatives at all points where we can handle traffic to or through Arkansas make just as much effort to get that traffic as they do any other.

They will frequently make arrangements in New York, for instance, for the movement of intrastate traffic in Arkansas, nothwithstanding it may not be competitive.

Cross-examination.

By Mr. HILL:

Q. I wish you would explain how they make arrangements in New York for the movement of intrastate traffic in Arkansas?

A. Judge, we handle quite a good many theatrical parties that are contracted in New York. Our representative- there call upon these

people who control this traffic and solicit it over our own line, the same as do the representatives of the other lines that are competitive with us.

Our people in New York are given by these theatrical people what is known as an "Itinerary", showing their movements. For instance, a company may jump from Memphis to Little Rock.
926 They buy their tickets in Memphis for Little Rock. When they are ready to leave Little Rock they purchase their ticket to Pine Bluff and at Pine Bluff they purchase their ticket to Hot Springs, via Little Rock, and they may go from Hot Springs to Fort Smith or they may go from Hot Springs to Texarkana, Arkansas.

Q. With the exception of those movements from Little Rock to Pine Bluff and from Pine Bluff to Hot Springs, those are all interstate movements that you have been giving instances of?

A. The only interstate movement I gave an instance of, was the movement from Memphis to Little Rock. It is not an interstate movement from Pine Bluff or from Little Rock to Hot Springs or from Hot Springs to Fort Smith. Or from Little Rock to Texarakana.

Q. How about Fort Smith? Don't you carry them there as to an interstate point?

A. Fort Smith is an interstate point with us on some of our trains. But on others it is not.

Q. You cannot go from Fort Smith to Texarkana without it being an interstate movement, can you?

A. It just depends on how we handle the traffic over the Fort Smith road, yes, sir.

Q. Give us some other instances besides theatrical troupes where these outside commercial agencies affected intrastate passenger traffic.

A. Our representative in New York today is negotiating
927 with the manufacturers club of Philadelphia, for a trip from Philadelphia to the City of Mexico. They will use our road from St. Louis to Texarkana and return. He is endeavoring at the present time to arrange for a side trip from Benton over to Hot Springs and return.

Q. Would that be an intrastate trip from Benton to Hot Springs.

A. Yes, sir, I consider that an intrastate trip from Benton to Hot Springs and return.

Q. Is that the way that traffic would be handled? Would not they sell a coupon in New York for that as a side trip?

A. No, sir, that would not be handled that way at all.

Q. How would it be handled?

A. It would be handled at Benton. We would instruct our agent to have so many tickets ready on the arrival of that train at Benton and they would pay for them there.

Q. Making it an intrastate movement at Benton?

A. Yes, sir. All our representatives solicit intrastate business in Arkansas, as well as all other states through which we pass. They are instructed to do that. It is to our interest to do that.

We issue and distribute a book called "The Arkansas Home

Builder." That book is sent to every agent and every outside representative of the Missouri Pacific and St. Louis, Iron Mountain & Southern system. They are supposed to be thoroughly posted on everything in that book. And if people come to them for information with reference to anything in Arkansas they are supposed to be able to give it to them—and I think they are.

928

Q. Isn't it a fact that the great bulk of business produced by these commercial agencies is interstate business?

A. Yes, sir, the majority of it is.

Q. Very much more than the majority, isn't it? What percentage, would you say.

A. That would be rather hard to say. I cannot tell you that off-hand.

Q. The amount of intrastate business directly affected by them would be extremely small, wouldn't it from the very nature of it?

A. No, sir, I would not say it would be extremely small but I would not say it would be as large as the interstate movement.

Redirect examination.

By Mr. MOORE:

Q. Do your outside agencies promote immigration into Arkansas, and the organization of parties to visit the state?

A. Yes, sir, we have an immigration agent whose sole duty is to do everything he possibly can to promote immigration to all of the states through which we pass.

Q. These agents you spoke of in your examination in chief, how do you denominate them?

929

A. You mean our outside men?

Q. Yes, your outside men. Do they promote the formation of parties of that sort for the purpose of visiting the state?

A. Yes, sir.

Q. Do you know whether persons in parties of that sort do any local traveling when . get into the state, constituting intrastate business?

A. Of course they do. A man is not going to Arkansas to settle and buy land, and simply look at one piece of land.* He is going to go over the whole state. He is not a very good business man if he does not, and our people encourage that.

We are opening up for Mr. John C. Spry of Chicago, a tract of 35,000 acres of land at Arkansas City, Mr. Spry cannot sell that land very readily without the agency of the St. Louis Iron Mountain & Southern Railway Company. And the assistance that our outside men give him is without any cost to him. They pay their own expenses. We advertise his land and he does not pay us a copper red cent for it.

We are doing that because we want the unoccupied land on the line of our railroad in Arkansas, as well as in other states, occupied; thereby creating business as well as passenger traffic.

Q. And in that way you build up the local business?

A. Yes, sir, in that way we build up the local business.

Q. If an individual or a group of individuals should
930 go to that section for the purpose of looking at the land, with a view of determining after they looked at it whether they would want to migrate there or not, is it your experience that those people make intrastate trips—that is, trips within the state?

A. I cannot say after they have decided to locate at one place, but I do say positively——

Q. You did not understand my question: people going there to look at the country for the purpose of determining whether they will locate there or not, do they travel around locally and make intrastate trips for the purpose of determining whether they will locate there or not?

A. They most certainly do. We are very much interested in rice land in Arkansas. They go over our line and look at the land and they go upon the Cotton Belt—I do not know about them going on the Rock Island—but the Cotton Belt began to exploit the rice culture development in Arkansas before we did.

Recross-examination.

By Mr. HILL:

Q. One other matter, Mr. Stone: you testified that immediately upon going into effect of the 2 cent rate you ordered your interstate tariff prepared; and upon the going into effect of the three cent rate you did that: you mean you prepared the interstate tariff that affected the traffic in Arkansas, didn't you?

931 A. Yes, sir.

Q. That is, interstate points like Fort Smith?

A. Yes, sir, and Missouri and everything.

You understand, Judge, we cannot get out our interstate tariff as quickly as we can our intrastate tariff.

Q. I understand.

A. For the simple reason there are so many requirements of the Interstate Commerce Commission that we sometimes think are unnecessary, and do not do a particle of good; but it means a world of work.

You take for instance the Texas rate sheet, and I remember when that used to be just that size (indicating). And it was no hardship to compile it.

For instance, a rate was shown from Dallas, Texas, to St. Louis, Missouri; and it just read "St. Louis". Now we have to show in there, in order to comply with "the act to regulate commerce" every route over which that ticket can be sold; and if the route is not in there——

Q. I am not getting into that. That goes into the question of expenses, and your general expense account shows that?

But here is what I want to get at, that you did not increase your general interstate passenger rates otherwise than they were affected in Arkansas by the change in the laws there?

A. We changed them as soon as we could and changed the
932 interstate rates from all points that were affected by the law there as soon as we could.

Q. I mean, you did not change your interstate rate from the City of Mexico to the City of St. Louis, on account of this intrastate two cent rate in Arkansas?

A. Yes, sir.

Q. How did the change come in there?

A. That is a long story.

Q. Make it as short as you can, but explain it to us.

A. There is no use my going into this explanation unless you are going to listen, to it.

Q. I am listening to it.

A. Now, there is a map (witness here produces map) that shows the territory which is affected by the Arkansas Legislation.

The rate per mile in the state of Arkansas was reduced by legislative action from three cents to two cents per mile, on April 9, 1907.

This had the effect of making the following reductions between border points in the state of Arkansas:

Between Moark on the north and Texarkana on the south, the fare was reduced from $9.11 to $6.08; making a reduction of $3.03 in the intrastate fare.

Between Bridge Junction on the east and Fort Smith on the west, the fare was reduced from $8.60 to $5.73; or a reduction of $2.87.

933 Between Bridge Junction on the east and Texarkana on the southwest, the fare was reduced from $8.25 to $5.50; or a reduction of $2.75.

Between Bridge Junction on the east and Mammoth Springs on the north, the fare was reduced from $4.17 to $2.80; or a net reduction of $1.37.

These reductions had the effect of reducing interstate rates between the territory as outlined on this map, between the points located in the territory marked "1" and the points located in the territory marked "8" (that is Mexico); a reduction of the local fares between Moark and Texarkana made an average reduction of from $2.25 to $3.03 on each ticket passing over the lines of the lines of the St. Louis Iron Mountain & Southern Railway between Moark and Texarkana.

The territory marked "8" includes Texas and Mexico (it is marked blue on the map).

Between points located in territory marked "3" "4" and "5" on the map, that is routed through the Memphis gateway, the reduction of the fare on the Arkansas lines would average from $1.90 to $2.87 for each passenger carried across the state of Arkansas.

Between the points shown in the territories marked "2", "3" and "4" on the east and the territory marked "8" on the southwest, when routed via Memphis and Texarkana, the average reduction in the revenue accruing to the Arkansas lines was from $1.75 to

934 $2.75 for each passenger carried between Memphis and Texarkana.

Between the territory marked "4" and "5" on the southeast; and the territory marked "6" on the northwest, the average reduc-

tion brought about by the change in the fares in the State of Arkansas, was from $1 to $1.37 on each ticket.

In other words, to make this perfectly plain, all of this coloring (indicating map) shows the effect that the reduction in the local passenger fares in the state of Arkansas from three cents to two cents per mile, had on interstate traffic.

We cannot any more reduce the passenger fare in Arkansas from three cents to two cents per mile and not change our interstate rates—well, I don't know just how to express it, but we cannot do it. It is impracticable and almost an impossibility.

The map referred to is marked "Charles L. Stone Exhibit 24."

Said exhibit is in the words and figures following to-wit:

For Exhibit 24, see Volume 8, page 5333.

935 Q. When you put these rates back to three cents, did you increase all those interstate rates correspondingly?

A. If we had the absolute say of it we did, yes, sir.

But in this territory that is foreign to us, we have to call the attention of the other roads to the increase in the rates in Arkansas; and if that had the effect, which it did have of reducing the rates, of course when the rate was advanced they made a corresponding advance in their interstate fares. Have you that down?

Q. Yes. You have all the interstate rates restored to their former level?

A. Practically all of them.

Q. How about the California rates?

A. The California rates were not affected very much by the change of rates in Arkansas, because the Illinois Central carries the same rate from St. Louis and New Orleans and that, of course, affects everything on our road. And we have to carry the St. Louis rate down. In other words, Judge —— I don't know whether you understand this or not?

Q. No, I do not understand it.

A. I will try to explain it to you.

The Southern Pacific Railway says, we will have a certain rate out of New Orleans, and the Illinois Central Railway says, "we will have a certain rate out of St. Louis." And Illinois Central will sell a ticket out of New Orleans and then over the Southern Pacific to California common points.

936 Then the Illinois Central will sell a ticket from New Orleans via St. Louis to California common points.

You see they get the traffic both ways and having the same rate from St. Louis and New Orleans to the common points of California, that of course fixes the rates for us.

Mr. MOORE:

Q. That is competition?

A. Yes, sir, that is competition.

Mr. HILL:

Q. There has been no change then in your trans-continental rates by reason of the three cent or the two cent Arkansas fare?

A. No, sir, except as I have shown you.

Q. That is to the City of Mexico?

A. Yes, sir, to the City of Mexico and the Northwest.

Q. What do you include in the "northwest"? Do you mean north of San Francisco?

A. This territory up here (indicating on map) Montana, Idaho, Wyoming, Washington, Oregon, North Dakota, South Dakota, Minnesota and so on.

Q. The territory north of San Francisco. It would not include any California points?

A. No, sir, for the reasons I have just mentioned.

Q. On these long trans-continental tickets you have been talking about to Mexico and so on, what is the average price per mile on those tickets?

A. I think it figures a little over two cents a mile in each
937 direction.

Q. Aren't you advertising a $47 rate to the City of Mexico and return now?

A. I do not know whether we are or not, Judge. But if we are, it is the home seekers rate. Do you know what makes the rate from St. Louis to Mexico?

Q. No, sir, I do not.

A. I can tell you. It is the Ward line of steamers from New York to Vera Cruz, and from Vera Cruz via the Mexican Railway to the City of Mexico.

We compete for European travel out of the City of Mexico, and the Mexican Railway is the first start of the competition, and then the Ward line.

Q. What is the rate from the City of St. Louis to the city of Mexico?

A. Seventy odd dollars to City of Mexico and return. I can get that and give it to you exactly. I can get it as soon as I could get hold of a telephone.

Q. Aren't you in the habit of selling the $47 ticket from the City of St. Louis to the City of Mexico and return?

A. We have been doing it for about one and one-half years past only on Home Seeker excursion dates. But it was forced upon us. We did not want to do it.

Q. But you are doing it?

A. We are doing it to meet competition.

Q. How much would that amount to per mile?

938 —. That would be about one and one-half cents per mile.

Q. What is your California rate?

A. $102.00.

Q. Round trip?

A. Yes, sir.

Q. About what is that in cents per mile?

A. That figures I should say about one and one-half cents.

Q. Don't you have a much cheaper rate than that to California and return?

A. We have a colonist's rate, over there.

Q. I am not referring to that: I mean conventions, and excursions and things of that kind?

A. Yes, sir, they make special rates for them from time to time.

Q. They are in force practically all the time, aren't they out there?

A. Whenever they have a convention.

Q. That is perennial out there, isn't it?

A. You must remember that the Missouri & Pacific and the St. Louis Iron Mountain & Southern have nothing whatever to do with making those rates.

Q. I am not asking who made them, but I am asking what you are charging.

A. Yes, sir, we are charging the same as the other roads.
939 But if we do not meet the competition of the other roads we would not have any of the traffic.

Q. I should not think you would want any of it at that rate.

A. Well, we are not spending any great amount of money getting it.

Q. Do not your commercial agents get you any of that traffic?

A. We are not in a position to compete for California traffic.

Q. Don't you carry an "ad" in the magazines, about the beautiful route you have through Arkansas and down there, to attract California excursionists?

A. No, sir, we do not. If you will not put it in the record, I will tell you that we have not a beautiful route to California.

Q. If you have a big convention out there, don't you send your commercial agents to try to get that convention and try to carry those people out there.

A. Our men make an effort, but they have never been successful, Judge.

Q. You are spending a good deal of money you ought not to spend trying to do that?

A. No, sir, we are not spending a great deal of money. I wish to correct that impression in your mind right now.

We cannot compete for that California traffic: we have not the service. The service for California traffic is through the
940 Chicago gateway; our schedules are slower than the Chicago route and it is almost a hopeless task to try to get any of that traffic, and we do not try. If a man comes along and wants to ride we will sell him a ticket.

Mr. Moore:

Q. But you are not going after it?

A. No, sir, we are not going after it.

Mr. Hill:

Q. About all your interstate traffic across Arkansas is at about 1½ cents per mile, approximately, isn't it?

A. On what kind of traffic?

Q. Your interstate traffic?

A. No, sir.

Q. About what is it?

A. I cannot answer that off-hand. It would require some figuring.

Q. It would be less than two cents?

A. We have various kinds of traffic passing over that line. We have home seekers and we have tourists' rates to Texas, that is based on about 2 cents a mile.

Q. Isn't the average of interstate traffic over the state of Arkansas about two cents?

A. I should say it would average about two cents.

Q. Do you think your interstate passenger business makes you any money?

A. I would question very much if there is any money made by a railroad in the passenger traffic.

941 Q. How about interstate traffic as compared with state?

A. Are you referring to Arkansas?

Q. Yes, and generally.

A. Well, our intrastate traffic in Arkansas is much more than the interstate.

Q. Much more what?

A. We get much more revenue out of it.

Q. It is very much more profitable, isn't it?

A. I should say so, yes.

Q. It is much more profitable at two cents, isn't it?

A. No, sir.

Q. Are you sure about that?

A. I am pretty sure it is not.

Q. Did you ever compile any figures on that?

A. No, sir, we never compile any statistics on that in our office at all.

Q. What does your "Commissioner of statistics" do?

A. He compiles statistics on various subjects, as they are requested.

Q. Has he ever compiled any statistics on this subject?

A. No, sir, he has not.

Q. Now, Mr. Stone, you say the reduction from three cents to two cents per mile reduces the revenue on all traffic crossing the state of Arkansas to Mexico and those southern points from $3.00 to $4.00 a passenger—I believe those were your figures?

942 A. Yes, sir.

Q. If all your travel across there was at the rate of less than two cents a mile, how could that occur? You testify now that the average price was not exceeding two cents per mile, and when it gets down that the state rate is reduced only to that amount, how can you figure that?

A. There is a certain traffic that moves to Mexico that pays a higher rate. There is a lot of one-way traffic to Mexico, that pays a higher rate.

Q. It is that one-way traffic you are referring to where there was this increase, was it?

A. Yes, sir, the reduction in the rate through Arkansas—I am not sure—I would have to look that up to be positive about it to tell you what reduction it made in the cheap rates.

Q. It did not make any difference in the cheap rates where the level was two cents and under?

A. I don't know. I will have to look that up.

Q. It could not. You can see it would not make any reduction under your statement, if it were two cents and under.

A. It is pretty hard to say just what effect this reduction in the state rates would have on all classes of rates. I would rather look that up than answer you off-hand about it.

Q. If that through rate were more than two cents you would have the passengers stopping off on the border and buying other tickets.

943 A. If the combination were in their favor they would probably do that.

Q. Yes, if they knew it they probably would.

So I would like you to show how that has affected your revenue in that way. Where this through rate was 2 cents and less, how reducing it from three cents to two cents is going to cut it down from $3.00 to $4.00 on each ticket.

A. I can get that information for you and if you tell me exactly what you want I will tell you and get you the whole thing.

Q. I just want you to answer that one question.

A. I cannot answer it off-hand. I would have to look at the tariff and see what effect it had and why the rate was made.

Recross examination.

By Mr. MOORE:

Q. Mr. Stone, I believe you stated the interstate rates would average two cents through Arkansas; isn't that what you stated?

A. On certain classes of traffic, yes, sir.

Q. Aren't you mistaken about that? Is not the average of all business in excess of two cents?

A. In Arkansas?

Q. Yes.

944 A. Yes, sir, because as I explained just a minute ago, Judge, we have a lot of one-way business that moves at a higher rate; and the cases Judge Hill cited are for instance home seekers' excursions to points in Texas and to points in Mexico and we also sell a home seekers' excursion to points in Arkansas.

Q. When you spoke of the lower rate you are speaking of special rates according to trans-state travel?

A. Yes, sir, special rates like home seekers' rate in effect on the first and third Tuesday- in each month.

Q. But you do not mean to say that the average interstate rate is lower than two cents?

A. No, sir. The special business I referred to, the rates he asked me about.

Q. Do you know or are you able to state what the average rate is on interstate business in Arkansas?

A. In Arkansas, no, sir. I have never seen the figures.

Q. But you will say it is above two cents. Isn't it considerably above two cents?
A. Yes, sir, I think it is.

Recross examination.

By Mr. HILL:

Q. I see from statement 3 to Exhibit 3 to Mr. Johnson's testimony that all passengers carried in Arkansas yielded a revenue of $1,405,-012.41; and that you carried 73,842,620 passengers one mile.

Now computation will show that that was at the rate of 1.8
945 cents I think; isn't that a fact?

Mr. MOORE: Judge, for what date is that?
Mr. HILL: It is your six months' period.
Mr. MOORE: That is for the last half of 1907, when the two cent rate was in effect?
Mr. HILL: Yes. When you are carrying them for 1.8 cents.

Q. Isn't that correct Mr. Stone?
A. I have never seen that figure but I suppose it is correct.
Mr. HILL: I will ask Mr. Johnson if that is not correct?
Mr. JOHNSON: Those are the figures and it is less than two cents. It is 1.865 cents.
Mr. MOORE: That is during the time the two cent rate was in effect?
A. Mr. JOHNSON: Yes, sir.

946 CHARLTON MESSICK, a witness of lawful age being duly produced, sworn and examined on the part of the complainants, testified as follows:

Direct examination.

By Mr. J. M. MOORE:

Q. What is your name?
A. Charlton Messick.
Q. What is your position?
947 A. Freight and passenger accountant of the St. Louis, Southwestern Railway Company.
Q. Have you a time card of the St. Louis, Southwestern Railway Company, which was in force in October, 1908?
A. Yes, sir.
Q. Will you file it as an exhibit to your testimony?
A. Yes, sir.

Time-card referred to is marked "Charlton Messick Exhibit 25." Said exhibit is in the words and figures following to-wit:
For Exhibit 25, see Volume 8, page 5335.

948 F. P. JOHNSON, a witness of lawful age, was recalled and testified as follows:

Direct examination.

By Mr. MOORE:

Q. You testified on a former examination as to the manner of entering the price of cross ties in the account called "Cross Tie Account," and also as to the manner of charging the cross ties out as they were used:

Please state if you have made any examination since you testified and if the statement you then gave was correct and if not correct it, please.

A. I will say that we have made further examination of the subject of cross ties and I would like to correct the testimony in connection with the pooling arrangement.

I find that the ties are delivered to the company on the right of way, just as they are purchased and these ties are billed against the various operating divisions upon the actual cost of the tie.

The pooling arrangement statement in the original testimony is only so far as the incidental expense of the tie department is concerned.

By that I mean, that the operating divisions in Arkansas are charged with the actual cost of the tie plus an arbitrary percentage of the tie department expense.

Q. You were mistaken, then, in stating that the pooling arrangement is the average price?

A. It is not an average price of all the ties purchased; but
949 the ties used in Arkansas are charged out at the actual cost of the tie to the company.

Cross-examination.

By Mr. J. M. HILL:

Q. You testified heretofore as follows:

"The cost of these ties is determined without regard to where they are purchased. What I mean by that is, if we buy ties in Arkansas those ties may be used in Missouri. If we buy ties in Missouri they may be used in Arkansas. Now, the cost of all ties is figured to an average cost."

As I understand your statement today, that is incorrect?

A. Yes, sir.

Q. You further testified that:

"The average price, for instance of white oak ties, which were principally used at that particular time (October 1907) was fixed at 54 cents. To that was added the various items of expenses incurred by the Company in handling those ties, such as inspection, cost of loading, salaries of our tie and timber department, are all added to the cost of this tie. The result was that on the Arkansas Division in 1907 the average cost was 59 cents per tie. Now, that average cost might vary slightly from month to month during any of those six months."

Now that is incorrect, is it?

A. No, sir, the average price per tie on the Arkansas Division in October, 1907, was 54 cents, and the incidental expense in that particular month, that is, the Arkansas Division's proportion of the system expenses, brought that price up to 59 cents. So far as the price is concerned, it is correct.

950 Q. The price you have given here is correct, but the method of arriving at that price is incorrect; is that it?

A. Yes, sir. I will say this: ties for the Missouri Pacific System are handled by our maintenance of way department, and a sub-department in that operating department, called the cross tie department.

In making the investigation they said, that was the way they arrived at that price; that it was an average price; and that the cross-tie department expense was pooled among the various departments and added to the actual cost of ties.

In going into the matter further we found the actual cost of the ties was billed against the various departments, and the cost of the ties is not pooled. It is merely a miscellaneous expense, that is pooled.

In the month of October, 1907, the price of 54c. was what the Arkansas Division actually paid for the ties that were delivered to them.

Q. And with this added expense it made it 59c.

A. Yes, sir.

Q. You stick to your figures as being right, but it is merely a wrong method of arriving at it?

A. That is it. Well, the figures were quoted to us and they are still correct; but the basis of arriving at the 54c., as explained in the original testimony, is wrong. That 54c. is the actual cost of the tie; it is not the average price.

951 Q. Do you mean that all the ties on the Arkansas Division were 54c. or 59c.?

A. I mean the ties used on the Arkansas Division——

Q. What is the Arkansas Division?

A. That is an operating division, and it happens to be located entirely in the state of Arkansas. It runs from Hoxie to Texarkana; McGehee to Little Rock; and from Gurdon to El Durado.

Q. You made this statement about the prices of 54c., as I understand it here, was a general price in Arkansas; and later you made the 59c. as applicable to the Arkansas Division. "The average price, for instance of white oak ties, which were principally used at that particular time (October, 1907) was fixed at 54 cents. To that was added the various items of expenses incurred by the Company in handling those ties, such as inspection, cost of loading, salaries of our tie and timber department, are all added to the cost of this tie. The result was that on the Arkansas Division in 1907 the average cost was 59 cents per tie. Now, that average cost might vary slightly from month to month during any of those six months."

Now what was the cost per tie in Arkansas during that month?

A. That I cannot tell you. We were simply making an investigation of the Arkansas Division and I got that item of 59c., just for that one month. The price in the state of Arkansas would vary upon

the different operating divisions and during the different months of that period.

952 Redirect examination.

By Mr. MOORE:

Q. And 54c. was the average price during the period covered by your statement?

A. No, sir, 54c. was the actual price for the Arkansas Division for the month of October.

Q. What I mean is this: if there was any fluctuation during the month, that covers the actual average price?

A. Yes, sir.

953 HUBERT ROTH, recalled, testified as follows:

Direct examination.

By Mr. MOORE:

Q. I hand you a paper which is marked "statement of transtate, interstate and intrastate freight, handled during the month of October, 1907:"

Was that statement compiled by you or under your directions?

A. Yes, sir.

Q. And is it a correct statement of the operations represented on the statement, during that period?

A. Yes, sir, I think it is as correct as figures of that kind can possibly be. It is correct with the exception of possibly clerical errors.

Q. Will you file that statement as Exhibit 26 to your testimony?

A. Yes, sir.

The paper referred to is marked "Hubert Roth Exhibit 26."

Said exhibit is in the words and figures following to-wit:

For Exhibit 26, see Volume 8, page 5350.

954 Cross-examination.

By Mr. HILL:

Q. You compiled this statement yourself?

A. It was compiled under my direction.

Q. Will you vouch for it as being absolutely correct?

A. No, sir. It is reasonably correct.

Q. What do you mean by that?

A. I mean that I cannot vouch for clerical errors. Every care was taken to have those figures correct.

Q. Did you have a competent force under you?

A. Yes, sir, I had a competent force, men accustomed to that class of work.

Q. And you gave that work your careful, personal supervision?

A. Yes, sir.

Q. You are thoroughly satisfied it is correct?

A. I am satisfied it is correct.

Q. In every particular.

A. Yes, sir.

955 C. J. McPHERSON, a witness of lawful age, being duly produced, sworn and examined on the part of the complainants, testified as follows:

Direct examination.

By Mr. MOORE:

Q. Please state your name in full and your residence and occupation.

A. Chester J. McPherson; St. Louis, Mo., Assistant to the General Manager of the Missouri Pacific and Iron Mountain Railway System.

Q. How long have you occupied that position?

A. Five years.

Q. What experience did you have in railroad operation prior to the time you took that position?

A. I have had a little more than 32 years' continuous experience in railroad service, ranging from telegraph operator, station agent, general yard master, master of transportation, chief clerk to the General Manager, and my present position.

Q. How long have you been connected with the operation of the St. Louis, Iron Mountain & Southern Railway Company?

A. Five years.

Q. During that time have you been in active control and management as assistant to the General Manager, and supervision of the general operation of the road?

A. I have.

956 Q. The statements filed in this case include the earnings and expenses of the line into the City of Memphis, and a part of this expense has been charged to intrastate traffic; I wish you would state if in your opinion that is correct, and if any of the terminal expenses of the Arkansas lines entering the city of Memphis, should be charged with intrastate traffic?

A. For the purpose of ascertaining the true expenses of Arkansas, in my opinion it should.

Q. Give your reasons, please, for that view, Mr. McPherson.

A. There must of necessity be a terminal on the Memphis Division; and it is immaterial whether it is on the east or on the west side of the Mississippi River. The fact that it is on the east side of the river is an accident of convenience.

If there were no terminal on the east side of the river there would of necessity have to be a terminal on the west side.

The expense of the bridge transportation and of the interchange of cars, with other railroads at Memphis, is not an operating expense; it is an expense that traffic bears directly.

It costs no more to operate the terminal on the east side of the river than it does on the west side. And if no part of the expense of the Memphis terminal were charged to state traffic—or intrastate traffic—then, the expense of caring for locomotives and

957 cars, supplies, fuel, would not follow the local work that was done by the trains on the Memphis Division.

The trains between Bald Knob and Memphis handle a great deal

of local freight, and unless a part of the expenses were chargeable to intrastate traffic no expense for handling that freight would appear in the operating accounts, as a charge against them.

The expense of handling the intrastate freight should be a charge to that freight, regardless of where the terminal may be.

Q. In the exhibits filed by the St. Louis, Iron Mountain & Southern Railway Company the extra cost of intrastate freight and passengers is ascertained by increasing the revenue percentage on intrastate traffic and reducing the percentage on both interstate and miscellaneous traffic.

I understand this method was adopted by the accountants on the theory that the miscellaneous traffic, which includes such items as mail, express, rent on buildings, and other miscellaneous items, should bear relatively the same proportion of cost as interstate traffic.

Do you regard this method as a sound one, or do you think the revenue percentage fairly represents the cost of handling the miscellaneous traffic, and the difference caused by the added cost of the intrastate traffic accrues to the benefit of the interstate traffic only?

A. In my opinion, based on the character and effort
958 necessary to acquire miscellaneous earnings, that is a proper method.

The major part of this revenue is derived from the transportation of the United States mails, and those mails are both interstate, intrastate and trans-state. The trans-state mail is made up of mail passing to and from St. Louis, Texas, Louisiana and the republic of Mexico. The entire European mail for Mexico is handled on our No. 7 fast mail train, and this is a very important part of the entire mail that we handle.

This trans-state mail that passes through Arkansas, the railway company is at no expense for the labor necessary to handle it.

With the mail to and from points in Arkansas to other points in Arkansas, and in the interstate mail to and from points in Arkansas and points outside of the state, the railway company effects the interchange to and from the depot and the postoffice with its own employés; or contracts with others to perform the service. That applies where the post office is within eighty rods of the station.

At the end of the post office routes the railway company is paid by the government up to the Post Office door, and it is compensated on the mileage basis for the service.

In turn, however, we arrange either by contract, or with our own employés under such circumstances, to perform the service.
959 This mail is in the custody of the postal clerk, and it is not charged with the responsibility that we have for its care after it is unloaded by the postal clerk, or after it is loaded into the postal cars.

Mr. HILL: Is Mr. McPherson testifying as to the contents of the contract? If so, I desire to object to that unless the contracts are produced.

Mr. MOORE: I do not think there is any objection to discussing the method of handling the mail.

Mr. HILL: If you go into the revenue derived from it, I would like to have the contracts.

Mr. MOORE: That is not involved in this case.

Mr. HILL: He is testifying as to the contents of those contracts.

Mr. MOORE: No, sir, he is describing the method of handling the mail.

If they were suing on a contract it would be a different proposition.

Mr. HARROD: He is testifying they were paid for taking it up to the post office door.

Mr. HILL: I specifically object to the contents of the contracts. Let them prove themselves.

Mr. MOORE: If you insist, we could produce the contracts. But Mr. McPherson is not endeavoring to state the contents of the contracts, but is merely describing the method of handling the
960 mail by the railway company.

Mr. HILL: I do not so understand his testimony.

Mr. MOORE: I do not see how it could be otherwise. At the same time, if you call for it, I presume the contracts can be produced. But please do not consider that I am attempting to prove the contents of the contracts.

Mr. HILL: We want them, because I think he is trying to prove the contents. I did not care about them before, but if he is going into it I would prefer to have them.

THE MASTER: Do not try to state anything that is in the contracts, except as Col. Moore may wish you to do that.

A. I am making an effort to show the actual physical work we did in connection with handling business.

Mr. MOORE: Proceed, Mr. McPherson.

A. Express matter also consists of packages handled to and from points in Arkansas and packages handled from points outside to Arkansas and from Arkansas points to other states. And also trans-state packages; that is, packages that pass through the states without any handling in the state.

The trans-state express imposes no cost on the railway company beyond maintaining, cleaning, heating and the lighting of the cars.

This express is also in the custody of the employés of the express company. And such of the state express, strictly intrastate or interstate express matter, as is handled at the stations, is done so
961 by the agents of the railway company. But they are agents of the express company while they are doing that work, and we pay them nothing for that part of the service.

There is an expense, however, attached to express matter put on and off trains in Arkansas, which is covered by the general arrangement with the express company and that is the use of the stationary facilities.

Mr. HILL: He seems to be going into the express contract there. If it is covered by the general arrangement with the company, I want to know what that is.

Mr. MOORE: He is simply describing how it is handled. I take the same view about that that I did about the mail matter.

THE MASTER: He is stating that as an expert?

Mr. MOORE: He is stating that as a matter of fact, how it is handled.

Mr. HILL: I understand him to say "pursuant to arrangement with the express company? You have a written arrangement with them. Let it speak and not the witness.

THE MASTER: Go on, Mr. McPherson. We will have the contracts produced if the witness refers to anything important in the contract.

Mr. MOORE: Confine yourself, Mr. McPherson, to the description of how it is handled.

A. The station facilities, such as platforms, trucks, drive-ways, and all the other fixed facilities which the express company
962 would necessarily have to use around the station in order that the business might be received and delivered to the trains which would also include any office room or station room.

Again, the loading and unloading of express matter is one of the prolific sources of delay to passenger trains and it must be made up by higher speed between stations, and the result is to often delay freight trains and cause overtime.

This would apply alike to the intrastate and interstate express traffic; but would not apply to the trans-state.

For that reason I believe the method followed by the accountants with respect to the express earnings is correct.

Miscellaneous earnings are credited also with the rents of buildings which the company own, and the work is attended with but little cost.

These miscellaneous earnings are to my mind analogous to interstate earnings and comparatively should follow that basis.

Q. Exhibit 3 shows that $294,000 was charged to Arkansas, for cross ties during the six months ending Dec. 31, 1907, and that this amount was 53% of the total expenses on the St. Louis, Iron Mountain & Southern Railway for cross ties during that period.

Taking into consideration the fact that 53% of the St. Louis, Iron Mountain & Southern track mileage is located in Arkansas
963 and that 54% of the total train mileage was made in that state, do you think that charge is reasonable?

A. Yes, sir, I think the charge is reasonable and to represent no more than the standard maintenance for that period of time.

It should be borne in mind that the life of a cross tie in the state of Arkansas is somewhat less than it is in other states. Our experience is, that the life of a crosstie in Arkansas is but five years while in the neighboring state of Missouri it is seven years.

The main track of the St. Louis, Iron Mountain & Southern in Arkansas, including the second track is 1331.5 miles, substantially (there is a small fraction) and the side track mileage is 509.41 miles. Of this side track mileage 114 miles consists of passing tracks, which are maintained on the same basis or standard as the main track mileage. And this would aggregate fourteen hundred

and forty-five miles the standard of which requires two thousand, eight hundred and eighty ties to the mile.

The other part of the side tracks, representing 395.41 miles requires 2,560 ties to the mile.

A renewal is necessary of all these ties represented by this mileage, every five years. This makes 576 ties to each mile of main and passing tracks every year; and 512 ties to each mile of side track each year.

The requirement is in gross 1,035,000 in a year, or one-half of that, 567,500 ties for each six months.

964 This is what we regard as standard maintenance in the state of Arkansas.

The charge for the six months of 1907, July to December inclusive, also includes crossing timbers, for which we paid at that time 12¢ per lineal foot; and those are used at all highway crossings, all crossings in the state over tracks. Not only on the main track but every side track. In fact, all of the company's railroad tracks in the state.

This charge would also include cost of switch ties.

The switch ties are sawed ties and they are on the timber basis of cost.

A main set switch ties—that is, a set for the turn out from the main track, consists of 57 pieces of sawed timber. And at that time and now the cost for those ties is $59.97 per set, excluding the cost of loading and inspection. Adding this cost the expense for each set of main line switch ties would be $63.61.

The set for a turn-out from the side tracks as contrasted with a turnout from the main track, consists of 44 sawed pieces or 496 lineal feet.

The delivering cost of these ties is $45.39 a set, the cost of inspection, loading, etc., raises this cost to $49.03 per set.

The life of these switch ties is substantially the same as the life of the cross ties, five years.

And taking into consideration the miles of side track that we have in the state of Arkansas, 509.41 miles, and the com-

965 parative length of those tracks, which are short, it is not difficult to see what an important figure in expense would be caused in renewing these switch ties every five years.

The cost at which these ties are taken into account is the invoice price plus the cost of inspection, loading and supervision.

The ties are not all bought at the same price, or were not at that time.

They are consigned to the engineer in charge of the particular work, who made an average of the price per tie adding the cost of this inspection, loading and supervision for the months concerned, and charged to his expenses the number of ties replaced during that period.

Q. Statement No. 4, which is attached to Ex. No. 3, shows the percentage of total expenses under each account, chargeable to the state of Arkansas; and it shows that 54% of the total St. Louis Iron Mountain & Southern expense is assigned to the state of Arkansas:

I wish you would state from your judgment whether that is a normal charge, taking into consideration the proportion of the business handled in the state of Arkansas; and would you consider the fact that the charge to some of these accounts was in excess of 54% was a matter of any consequence.

A. In my opinion the charge for expenses, as shown in that Exhibit, is fair and normal, considering the business done
966 between that state, Missouri, Oklahoma, Louisiana and Illinois; and is as nearly correct as can be ascertained.

Naturally, the expense should follow the volume of business done, and this statement shows how closely this relation is maintained.

The expense of operation varies from month to month as to certain items or in various accounts, from various causes; and it would not be possible to find any particular month's business, or the business of any particular period, where the relation of one account to another would be exactly the same. Some of them would fluctuate more than others.

The period mentioned, however, may be fairly considered normal, and as maintaining a fair average, in my opinion.

Q. Would it be possible to select any period of operation in which all of the operating expense accounts—that is, the operating accounts referring to located expenses shown in the statement attached to Exhibit No. 3, would be absolutely uniform, or in which the proportion of expense chargeable to the state of Arkansas would run uniformly with any corresponding period of time in the same year or another?

A. No, sir, there would be different forces at work, different conditions, all of which would make a variation in some of the accounts.

Q. All rentals for the use of foreign lines tracks have been divided between freight and passenger traffic on the basis of the actual freight and passenger revenue, and then a portion of each
967 class assigned to intrastate traffic on the revenue basis:

Those rentals include, the Little Rock Junction Railway (used only for freight traffic); the Van Buren Bridge (used only for passenger traffic) and the St. Louis Southwestern Railway track from the Missouri and Arkansas state line to Paragould (a freight line): Do you consider this to be a fair basis for division?

A. I cannot conceive of any other way that a division of expense could be fairly made. That is to say, how the expense could be otherwise apportioned.

Taking the most important one of those items you mention, the road from the Missouri state line to Paragould, the railway company found from the enormous volume of traffic between Bald Knob and the state line, that it must make further provision to handle it expeditiously. There were two things that might be done: one was to build a double track and the other to ascertain if the track already existing could not be secured at a reasonable cost, to relieve the situation. And such an arrangement was made.

No local business is done on that line between Paragould and the state line. It is merely a through line.

After this arrangement had been completed, it was found as a practical business proposition that it would be better to use it for interstate traffic, and that is the present practice.

968 It results in expediting the traffic from Bald Knob and the state line over the main line of the St. Louis, Iron Mountain & Southern, and is to all intents and purposes the same as a double track.

Q. In view of the fact that it is used exclusively for interstate business, do you regard it as proper that any part of expenses should be charged into the intrastate traffic of Arkansas?

A. Yes, sir, because it is the same as a second track, or double track, located on our own right-of-way. And the purpose of that double track would be to expedite the business of that division.

An enormous amount of local business is handled between Bald Knob and Knobel, and the relief that it gives to the main line makes it one of the instruments of aiding transportation, making it possible in effect to conduct the transportation of the intrastate and interstate business, both freight and passenger.

Q. Have you given any attention——

A. Pardon me, Col. Moore, but I would like to speak of the Van Buren Bridge. I have not yet fully answered your question.

Q. Proceed with your answer.

A. Whatever aids in the facilities of the railway is a charge to the entire traffic that it handles. It may be that that added

969 facility would handle only freight business; or that would handle only passenger business. But a necessity existed for relieving the entire operation. Otherwise, the facility would not have been added to the railway company's development.

Now, the Van Buren Bridge adds to the general facilities of the company in that way. It expedites the movement of all traffic.

Likewise, the Little Rock Junction Railway. It may be used only for freight purposes but it is necessary in order to facilitate the handling of all trains.

Freight trains can go in there and get out of the way of passenger trains, thereby aiding the passenger trains.

They are the material aids to all of the traffic that the company would handle.

Q. Have you given any attention to the expense of railway operation, generally, say during the last ten years or say during the period since the year 1897: if so, I wish you would state if the cost of operation has increased any during that period and state fully the character and cause of such increase.

A. Yes, sir, I have given it a great deal of attention. In fact, I have given the major part of my attention to questions of economies, what can be done to keep the cost of operation down, and what could be done to neutralize the forces that were working toward an increase of operating cost.

To answer that, however, would involve considerable reference to figures.

Q. State all the figures and facts necessary to

970 elucidate and show what the increases if any had been and how they have been brought about.

A. The cost of operation has increased enormously since 1897 and that has been caused by various forces. The principal of which is the increase in wages paid to all classes of railway employés.

Second, the increased cost of material.

Third, the increase due to compliance with various laws.

Fourth, by the increase in taxation.

There has been an upward tendency in wages of all railway employés since 1897 and sharply so, since 1900.

The increase in wages paid to yard men and to train men and to engine men and to the various crafts can be segregated exactly, as these wages are of uniform establishment all over the system and apply everywhere alike, and are matters of understanding without employés in those classified services. With a large number of other employés it is impossible to ascertain exactly, prior to the increases made in the year 1907, just what they amount to, without a prohibitive amount of labor.

The increase, however, has been general along the entire period that I have mentioned.

Since 1897 the increase in wages that have been made to the train service employés is as folows:

971 Locomotive engineers, 32.6%.

Firemen, 31.5%.

Conductors, 31.8%

Brakemen, 27.5%.

Switchmen, 61.9%.

Since 1900 the various crafts have had a large increase in wages:

Blacksmiths, 23.9%.

Boilermakers, 26.3%.

Machinists, 26.3%.

Tinners and pipe fitters, 23.2%.

Carmen, 13.2%.

Since 1906:

Telegraphers, 13%.

Train porters, 12.5%.

Chair car porters, 14%.

Q. Have you those figures in the form of a statement you can file as an exhibit?

A. Yes, sir.

Q. File that as a part of your testimony, and we will ask that it be marked Exhibit 27.

The statement referred to is marked, "C. J. McPherson Exhibit 27."

Said exhibit is in the words and figures following to-wit:

For Exhibit 27, see Volume 8, page 5352.

972 A. (Continued.) The magnitude of this increase can be better shown by a comparison of the dollars it represents.

The amount paid to the ten classes of employés mentioned and which are covered by the first five in the exhibit and the second five in the exhibit; that is, excluding telegraphers, train porters and chair car porters on the entire system of the Missouri Pacific and St. Louis, Iron Mountain & Southern Railway Companies combined,

for their services in the fiscal year ending June 30, 1908, was $11,196,767.

Had the schedules prevailing prior to 1902 prevailed in the fiscal year ending June 30, 1908, this payment would have been only $7,803,951, a difference of $3,392,815 which represents the increase in that one year in wages of these ten classes of employés.

The scale of wages is uniform, as I said before, all over the system, and of this increase Arkansas would bear something more than her relative proportion, because of the third brakemen law.

The increase in wages has extended to all classes of employés, particularly since 1902.

But, as I said before, the amount in the unclassified service cannot be exactly stated, prior to 1907.

In that year, because of the increased cost of living, an advance of wages was made to many persons in the unclassified
973 service, which including the classified service I have referred to, averaged 6.7% of the entire labor roll for the fiscal year ending June 30, 1908.

This ratio of increase in wages does not show the increased cost to the railroad company of the services of all of those classes of employés.

Firemen formerly wiped their engines above the running board but since April 1, 1907 they have been relieved of that duty, making it necessary for the railroad company to employ others to perform the service. And this at, as near as we are able to approximate it, a cost of $60,000 per annum.

Switchmen formerly worked 12 hours a day as a unit of a day's work. They now receive 61.9% increase in wages and their hours of service has been reduced to ten hours as a unit of day's work.

Since 1900 the classification of railway employés has been sharply defined, and has resulted in a gradual increase in force.

Telegraph operators and station agents formerly delivered the mail to and from the post office, without extra compensation. Now the railway Company must hire others to *to* do this work or else pay the telegraphers or agents extra under their schedule for its performance.

The same is true of caring for switch lamps. Agents and operators who assist them formerly did that without extra compensation.
Now that work is either done by others or the railroad com-
974 pany adds a certain amount to the schedule of pay of the agent or operator who performs the work.

Great as has been the increased cost to the railway company by reason of labor advances, it is proportionately smaller than the increased cost brought about by the advance in price of materials entering into railway construction and operation and maintenance. This feature of the increased cost combined with that of wages, has augmented the cost of operation to almost an incredible extent.

One of the largest items in maintenance of way and structures is cross ties, the cost of which for those produced in Arkansas has increased 108 to 129% over the cost of 1897.

Up to 1900 this company paid 24 cents per tie for first class

cross ties in that state. This price increased to 26 cents per tie in 1900 or 8.3% and to 31½¢ per tie in 1904 or 31.5%. And to 55¢ per tie in 1908, or 129% for those ties delivered north of the Arkansas River; and to 50 cents per tie or 108% for ties delivered on the railway company's right-of-way south of the Arkansas River.

These are the prices that the company is paying today for first class cross ties, delivered on its right-of-way in Arkansas.

Now, applying those increases to a million or more ties per annum shows that this single element of expense has increased relatively $250,000 a year, due entirely to the advance in the cost of cross ties.

Other material entering into railroad operation and main-
975 tenance has likewise largely increased.

I give a comparison of prices paid in 1898 with prices paid during the current months of this year on some of the principal materials that the railway company uses.

Items of angle bars cost in 1898 $1.02½ per cwt.; in 1909, they cost $1.75 per cwt. or an increase of 71.5%.

Angle bars connect the joints of the rails.

Track bolts increased from $1.60 per cwt. in 1898 to $2.50 in 1909, or 56.2%.

These are the bolts that hold the angle bars in their place.

Tracks spikes increased from $1.60 in 1898 to $2.05 in 1909, or an increase of 28.1%.

Lime increased from 40¢ a barrel in 1898 to 75¢ a barrel in 1909, or 87.5%.

For the purpose of shortening this perhaps I can read the two items, one in 1898 and the other in 1909?

Mr. MOORE: Yes, do that, Mr. McPherson.

A. (continued). Cast pipe $14.60 to $28.50 or 95.2%.

Nails $1.33 per cwt. to $2.20 per cwt. or 65.4%.

Barbed wire $1.80 per cwt. to $2.05 per hundred or 13.9%.

Bridge stringers $20 a thousand to $28 a thousand or 40%.

Piling from 10 cents per lineal foot to 15½¢ per lineal foot or 55%.

976 Miscellaneous bridge timbers from $16 per thousand to $19.50 per thousand or 22%.

Dimension lumber from $12.50 per thousand to $17 per thousand or 36%.

Bar iron (the foundation of all our iron work) from $1.10 per cwt. to $2. per cwt., an increase of 81.8%.

Malleable journal boxes for cars and tanks from $1.60 each to $2.86 each or 78.7% increase.

White lead from $5.14 per cwt. to $7.00 per cwt. or 36.1%.

Freight car decking $13 per thousand to $14 per thousand or 7.7%.

Tank steel from $1.00 per hundred to $1.96 per hundred or 96% increase.

Car axles from $1.65 per hundred to $2.05 per hundred or 24%.

Malleable iron from $2.40 per hundred to $3.50 per hundred or 45.8%.

Waste 3.50 per cwt. to $5.50 per cwt. or 57%.

Chains from $1.90 per cwt. to $4.50 per cwt. or 136.8%.

Forgings from $1.95 per hundred to $3.25 per hundred or 66.6%.

Gray iron castings from $1.37½ per cwt. to $1.80 or 30.9%.

Brass tubing from 16 cents per foot to 21¾¢ per foot or 35.9%.

977 Brass shoes from 13½¢ per pound to 26½¢ per lb. or 96.3%.

Journal bearings from 11¢ per lb. to 16¢ per lb. or 45%.

Brass castings from 12½¢ per lb. to 18¢ or 44.4%.

Track switches from $29.40 each to $39.50 each or an increase of 34.3%.

Track frogs $30.25 each to $37.73 each or 24.8%.

Boiler tubes or flues from 6½¢ per foot to 16¢ per foot or 147.7%.

Boiler tubes or flues are an important item of expense.

Every locomotive has about a mile of flues. Take a standard locomotive with three hundred and fifty flues, 15 feet long, makes substantially a mile of flues in that locomotive. And the increase in the cost of renewing the flues in the locomotive is over $400 each over 1898.

I have used the figures of 1909 here as there was some recession in the prices in some of these articles in 1908 from the level of 1907. Particularly was that the case with lumber.

General- speaking, however, the prices of materials are regaining the level of 1907.

Here (indicating) is an exhibit of the prices to which I have just testified.

Q. Will you attach that as an exhibit to your testimony?

978 A. Yes, sir.

The paper referred to is marked "C. J. McPherson Exhibit 28." Said exhibit is in the words and figures following to-wit:

For Exhibit 28, see Volume 8, page 5354.

979 Bulletin No. 75 issued by the Department of Commerce and Labor in March 1908 exhibits the range in prices of some materials entering into railway maintenance and operation from 1897 to 1907.

Q. Will you attach that to your testimony?

A Yes, sir.

The paper referred to is marked "C. J. McPherson Exhibit 29." Said exhibit is in the words and figures following to-wit:

For Exhibit 29, see Volume 8, page 5356.

980 Mr. MOORE: These are different articles from — contained in your exhibit 28, are they?

A. Yes sir.

*A.* And, are these articles that enter largely into operation and maintenance of railways.

A. Very largely .

Q. Proceed, Mr. McPherson.

A. Particularly is that the case with hand tools. There are a few of those items that appear in both exhibits, but bar iron and lime are two of the articles. Also nails.

These figures are expressed decimally, and possibly it would add nothing to their force to read them.

The operating cost has been largely augmented in Arkansas by the enactment of laws imposing special duties and obligations upon the railway. Some of these laws became effective in 1907 and prior to that date, and others have become effective since that time.

These laws, in my opinion, impose unnecessary burdens and expense upon the Railway operation. In any event they largely increase the cost of operation? That is their effect.

The experience of many years in practical railway operation has not shown to me, nor has it shown to other railroad men, that the requirements of these laws would in any respect improve or increase the efficiency of the railway service.

981 The increase in the operating expenses in the State of Arkansas, which may be readily ascertained, which results from compliance with those laws, are, first the application of electric headlights to locomotives.

The original cost for the installation of these headlights on locomotives in Arkansas was $68,142.00.

The net annual cost of operation is $91,941.00.

The third brakeman on freight trains: The annual cost is $167,101.00.

The full crew law, affecting passenger trains, adds $11,326.00 to the annual — of operation in the State.

The semi-monthly pay-day law entails an added cost of $34,700.00 per annum.

Mr. HILL: He is going into some laws that were passed since our period of inquiry. This semi-monthly pay-day law was passed by the last legislature. I do not think we ought to encumber the record with matters subsequent to the issues of this case.

Mr. MOORE: I think it is material in this way: the effect of the rate is a matter for the future and it goes to determine whether the rates we are complaining of are confiscatory or non-confiscatory. We look to the future as well as to the period involved in our debits and in doing that the Court cannot determine its effect without having knowledge of the matters, which are fixed and established and beyond any doubt or question.

Now if it were a matter that might be changed, some extraneous matter that might be changed, might be operative one season

982 and not the next, that would be a different thing. But these laws are in force and presumably will be in force. I think the Court would be absolutely without the facts, which it should have before it, if we do not have this evidence.

Mr. HILL: I do not understand this is to determine rates, in the future, but whether the rates already fixed are compensatory.

Mr. MOORE: That is true. Those rates will be in effect in the future as well as in the past.

The MASTER: It may have some bearing on the case so I think the evidence may be admitted.

Mr. HILL: We suggest this, so as to clear the record: that Mr. McPherson indicate which laws were passed afterward and which before the period we are inquiring about, so as to save a lot of cross examination.

Mr. MOORE:

Q. Have you those dates Mr. McPherson?

A. I do not know that I have.

*A*. If you have the date, give it.

A. I can say that the semi-monthly pay day law was enacted I believe at the last term of the legislature; and the monthly claim agents' station visitation law also.

Q. I suggest in passing, that if you refer to any statute passed at the last session of the legislature call attention to it as you go along.

A. The last legislature passed what we have termed a monthly claim agents' station visitation law, which adds to the cost of
983 operation $12,000.00 per annum.

Sheds over freight repair tracks (which I believe was passed several years ago, if I mistake not it was in 1905) the cost for installation was $13,190.00; and the annual maintenance cost is $1,319.00.

The total of the expenses incident to complying with those laws, on the current volume of business and under current conditions, was $217,987.00 per annum.

The electric headlight bill was passed—I do not think I can give the dates when the statutes were passed but I think the law requiring the railway company to equip its locomotives with electric headlights was passed either at the session of 1907 or the preceding session.

The cost of oil headlights, which the railway company used for original installation was $25.00; while the electric headlight costs $242.50 each.

The oil headlight was maintained and operated at a cost of $198.72 per locomotive per annum.

The cost of maintaining and operating a 1500 candle power headlight, the degree of brilliancy required by the statute is $524.52 per locomotive per annum.

The increased headlight cost of maintenance and operation per locomotive per annum, therefore, is $325.80.

The figures used and referred to represent the net annual cost of operation and is derived by subtracting the cost of operating the oil headlight from the cost of maintaining and operating the electric headlight.

The cost of operating the electric headlight was determined by actual test that we had made to ascertain what the increased
984 cost would be, imposed upon the railway company, to comply with this act.

The electric headlight, in my judgment, adds nothing to the efficiency of the railway company's operation.

Q. You say the electric headlight, in your judgment, adds nothing to the efficiency of operation: have you ever given that matter any personal examination or test for the purpose of forming a judgment as to its efficiency?

A. Yes sir.

Q. State the facts, upon which you base your judgment in that respect.

A. A similar act passed the legislature of Missouri at its last session, and some officials of the railway companies and a number of engineers and firemen visited Jefferson City and interviewed Gov. Hadley.

These locomotive engineers represented to the Governor that the electric headlights——

Mr. HILL: That is objected to as hearsay.

A. I was present at that hearing.

They represented to Governor Hadley that the electric headlight was a detriment, in their opinion, to railway operation, because where an engine approached a station where a locomotice equipped with an electric headlight was standing, the approaching train could not see the different signals, that is, the fixed signals of the station and the switches. They could not tell whether the lights
985 on the switches were red, or danger, or yellow. The radiance of the headlight of the engine standing at the station was so much stronger than the other lights that their entire coloring and usefulness was lost.

Also that in running facing an electric headlight the injury to the eye, if one attempted to keep his eye on the track was great; and that they believed that it could be stated without contradiction that locomotive engineers would suffer in their visual power if electric headlights were continued to be used; that it was impossible to look into the headlight itself, without injury to the eyes; and that a man approaching the station must take his eyes off the track over which he was running, or drop his eyes below the radiance of the electric headlight.

Some illustrations were given of accidents that have occurred.

That evening we made a test of those particular points in our yard at Jefferson City. I cannot say what Gov. Hadley's views were, but we prepared the engines, standing them with fixed switch signals between, and the result was on the Railway Company's agreement to provide a satisfactory headlight the Bill would be vetoed, and it was.

There is very much that can be said about the electric headlight that will ultimately apply to Arkansas which does not perhaps apply now, because of the fact that there is so little double
986 track in the State. With the building of double tracks, however, the facing of an electric headlight will blind both engineers and they cannot tell what is between them.

It is a fact that the Pennsylvania Railway applied electric headlights, to many of their locomotives some years ago and because of that feature and the fact that they are so largely dependent upon

fixed signals in their operation they discontinued them, took them off.

Q. Are your impressions as to the inefficiency of the electric headlight derived from or confirmed by the investigation you made at Jefferson City on the occasion you speak of?

A. They were confirmed by that. We tried to reproduce as near as we could the exact conditions that the engineers complained of.

Q. Proceed Mr. McPherson.

A. The third brakeman law adds very heavily to the expense of operation in Arkansas. It increases the cost for labor on every through freight train fifteen per cent.

Q. Do you know when that law was passed?

A. I think it was passed at the same time as the electric headlight law. That was approved March 28th 1907 and the electric headlight laws approved May 28th, 1907.

987 Mr. HILL: Neither of them became effective at once, did they?

Mr. MOORE: I do not know about that.

A. (Continued.) The third brakeman law makes it unlawful, under heavy penalties, for the railway company to operate freight trains of more than twenty-four cars with less than three brakemen, regardless of any modern equipment and automatic couplers or air brakes.

The Railway Company has always provided three brakemen on their local freight trains. Those trains that do the switching at local stations, and which load and unload package freight.

The Railway Company, however, expended $4,748,231.00 to equip its locomotive- with air pumps, and driver brakes and its freight cars with automatic couplers and air brakes. And all its equipment today that is in active service is equipped with these safety appliances.

The cost of their maintenance on the system (I cannot segregate it to Arkansas) is approximately $50,000.00 per annum.

The trains are now controlled by the engineer on the locomotive. Prior to the introduction of these appliances trains having in excess of twenty-four cars employed but two brakemen to render all the service that is rendered today, and in addition those brakemen coupled and uncoupled the cars with links and pins, and controlled the train with hand brakes.

988 The duties of freight brakemen today are practically to protect the train. Under certain circumstances it becomes necessary to chain up a car, where the draw bar has pulled out, or pack a hot box. But these are emergencies and in such case it is the duty of the rear brakeman to go back and protect the rear of the train.

Q. You mean against approaching trains?

A. Yes sir, against approaching trains.

Under the rules it is the duty of the fireman (if it is necessary to protect in both directions), to go forward and protect the train from approaching trains.

That left the head brakeman to assist the conductor in whatever way this emergency work made necessary.

One of the reasons for the efficiency in railway operation in the train service is that every man has a fixed duty to perform, and it is necessary for him to discharge that duty; and his associates know whether he is discharging it or not. That is, the safety is in that there is no divided responsibility. The responsibility is exactly fixed, and the employé knows exactly what he has got to do. He knows that his position depends upon it, and oft-times his life depends upon the fidelity with which he does that work.

In the assignment of the through freight trains, it is the duty of one man to protect the rear of the train. It is the duty, in case of emergency, of the fireman to protect the head of the train. He has nothing else to do if the locomotive is standing. The con-
989 ductor has his added assigned duties.

With the assignment of three brakeman to a through freight train, one would ride on the locomotive and two would ride in the caboose with the conductor.

Such a condition as that is likely to bring about a divided responsibility. There is an unnecessary man on that train. There are more employees on that train than there are duties and for that reason the efficiency of the service is not increased. On the contrary, circumstances might make it such that the efficiency of the train service would positively decrease.

From any point of a view a divided responsibility, brought about by an unnecessary man in a service, so exacting as the train service of a railway, is a danger in railway operation.

Under the full crew law, as applied to passenger trains, and that act was passed at the last session of the Arkansas legislature, all trains operating three cars, or more, must have a porter and flagman or brakeman.

Generally speaking the main line trains are thus provided, but this law extends to branch lines, where the trains are few and it prevents the railway from utilizing the baggageman on the train for flagging purposes and that as all that would be required to give safety to the train operation.

The expenses incident to compliance with this law is
990 $11,326.00 per annum. And in my opinion this adds nothing whatever to the efficiency of railway operation.

The semi-monthly pay day law, which requires all railways in Arkansas, under a heavy penalty, to pay its employees twice each month, instead of once each month, certainly adds no efficiency to the service, but, to the contrary, for perhaps obvious reasons particularly is that true of the track labor.

And, furthermore, it is calculated to lead men to lay off more frequently than where they have but one monthly pay day. And that is in actual operation the result of that law.

The monthly claim agents' visitation law requires the claim agent to visit each station on the line, where notice has been given by the station agent of the killing or injuring of live stock, once every thirty

days, under severe penalty running not only against the railway company but against the claim agent himself.

To comply with this law the railway company has been obliged to divide the line into shorter districts and employ more men, at greater expense, to cover the service.

Many special laws have been passed requiring the railway company to erect stations and maintain agencies and operators at points where in the opinion of the company no necessity existed and where the revenue was very small.

Increase in taxes paid to the State of Arkansas by the St. Louis, Iron Mountain and Southern Railway Co. is shown in the in-
991 crease of one hundred per cent of the assessed valuation of the property between the years 1900 and 1908 inclusive.

While the increase in the mileage during that period was but twenty-five per cent.

In 1900 the St. Louis, Iron Mountain & Southern Railway Co. had 1033.77 miles of main track in Arkansas. The assessed valuation was $10,283,305.00.

In 1907 the mileage was 1299.9 miles the assessed valuation $20,158,032.00 or $15,517.00 per mile.

The taxes paid in 1900 amounted to $182,388.11 or $176.00 per mile. While the taxes in 1907 were $432,637.42 or $333.00 per mile; an increase per mile of $157.00.

In 1908 the mileage was 1297.21 miles and the assessment was $20,626,170.00.

The amount of taxes paid was $448,527.49 or $346.00 per mile. An increase per mile for taxes of 96.6% in 9 years.

Q. Have you a diagram or representation showing the comparative prices of material during the period covered by your statement?

A. Yes sir, I have an illustration made in graphic form to cover the points to which I have testified.

992 Q. Will you attach that diagram to your testimony as an Exhibit?

A. I will.

The paper referred to is marked "C. J. McPherson, Exhibit 30." Said Exhibit is in the words and figures following, to-wit:

For Exhibit 30, see Volume 8, page 5358.

993 Q. Will you please explain your Exhibit 30?

A. The base line, which is an imaginary line in this case, is established at 100%. That is the unit in each case, the point at which the rise or fall shown in the statement begins.

For example, train labor (the mauve colored line) begins in 1897 at 100% and at the year 1909 reaches a little more than 37% elevation. Each of the small blicks is 1%.

Train labor, therefore, on the average, has increased in the period from 1897 to 1909 a little more than 37%.

Shop labor is the yellow line, starting at the year 1900 and shows an increase to 123, or 23% above the base line in 1909.

Cross ties begin with 1898, showing no change in the price until 1899, when the advance begins and continues up to 229, which is

129% above the base line, for cross ties north of the Arkansas River; and to 208 or 108% above the base line for cross ties south of the Arkansas River.

Q. What was the increase in 1908?

A. From 1908 to 1909 is substantially 3%.

Q. What is the increase in the year 1908 above the year 1898?

A. The increase is 129% for cross ties north of the Arkansas River and 108% for cross ties delivered south of the Arkansas River.

Q. And what is the per cent of increase in the year 1907 as shown on that graphic exhibit?

A. About 117%.

994 Taxes, represented by the red line, starting at 1900 and advancing to 197 in the year 1908.

Materials, represented by the green line, do not show any fluctuation in the twenty-nine other materials represented by Exhibit 28. That is because we have not the intermediate prices. We have the two extremes. We know the prices that were paid in 1898 for those articles, and the prices that are paid in 1909. There undoubtedly have been recessions and increases, that have occurred in some of them in the meantime. But that is a matter to develop which would take a great deal of labor,—too much to be profitable.

The lower red line, going below the base line, represents the ton mile return to the Company for the service it does; in other words, the revenue per ton per mile received by the St. Louis, Iron Mountain & Southern Railway Company.

Q. You mean throughout that period?

A. Yes, sir; during the period from 1897 to 1909. This shows a general downward tendency, equivalent to 12% reduction in that period.

Q. Do the conditions described in your statement concerning the increase in the cost of operation apply generally to railroads operated in the State of Arkansas?

A. Yes, sir, generally speaking they do. They could buy materials probably at no less cost than we; and labor conditions are generally the same.

At this point recess was taken until two o'clock.

995 C. J. McPherson.

Direct examination resumed by Mr. Moore:

Q. I understand that the reduction in receipts, per ton mile, shown in the diagram filed by you as Exhibit 30, applies to all traffic. Is that correct?

A. All freight traffic.

Q. All the freight traffic?

A. Yes, freight traffic.

Q. Does it apply to the traffic in the State of Arkansas, or the entire St. Louis Iron Mountain Road?

A. On the St. Louis Iron Mountain Southern Railway, which includes, of course, Arkansas.

Q. What effect do the facts that are illustrated on that Exhibit, show as to the revenue producing capacity of the Railroad, during the period covered by it?

A. This diagram shows that the producing power of the Railway has decreased, relatively, for the volume of business done. That is to say: Its transportation, which is its only purchasing power; while everything that the Railway purchases, has increased.

The decrease in its purchasing power, for the same volume of business, is approximately twelve per cent, while the increase in all of the things that the Railway Company has to buy; its
996 labor and material, and what it has to pay as its taxes, has increased.

Q. Exhibit number 6, filed in this case, shows that it costs $64.34 to earn $100.00 of revenue, in Group 8, during the fiscal year ending June 30, 1907, and that it cost $73.88 to earn the same amount of revenue in the State of Arkansas, during the six months ending December 31, 1907. How do you account for this difference in the ratio of cost?

A. That is, the ratio of expense to gross earnings?

Q. Yes sir.

A. Broadly speaking, the ratio of expense to gross earnings is not an index of very much value for comparative purposes. It is dependent on several factors.

It is dependent on the conditions, favorable or otherwise, that may permanently differ as between railroads; conditions that may come about in the same year, and different years, on the same railroads.

It depends on traffic and it depends on expenses.

It also depends on the standard of maintenance observed by the different railroads, compared; or upon the same railroad in different years.

It is entirely possible for that ratio to vary between railroads, as much as ten per cent, from the maintenance put upon the property by the different roads, or upon the same railroad in two given years.

Taken independently, without the analysis of its factors for comparison to determine the efficiency of operation, the road that expended less than a sum sufficient to preserve its standard
997 maintenance, would apparently be better operated and more favorably conducted than a road that preserved its standard of maintenance by expending a larger sum.

The comparison of Exhibit 6 is between two different periods. One is a fiscal year ending June 30, 1907, and the other for a six months' period ending December 31, 1907.

The conditions that existed during those periods were unlike. The cost of operation during the latter period were increased largely, for various reasons; increase in the cost of labor; increase in the cost of material, and for other reasons.

Late in 1906 all of the organizations connected with the train service, formulated demands on Railroad Companies—all of the Companies, in fact, west of the Mississippi River, and north and northwest from Chicago—for a very radical change in the labor status.

This demand was for a reduction in the unit time of labor to eight hours, with an effort to substitute the shifts of work from ten or twelve hour periods to eight hour periods. And also for an increase in the rate of wages.

This would have reduced—had it been granted—the potentiality of the day's work to eight hours, in the train service, instead of ten hours, which is now the established minimum.

A conference of the representatives of the labor organizations and forty-eight or forty-nine railroads, followed, and continued something like ten weeks, at which a compromise was effected.

998 The labor organizations withdrew their demand for the reduction in hours and were given an increase in wages, amounting, for engineers and firemen, to 8.2 per cent; 10.2 per cent for trainmen.

The yardmen had been increased on the first of the preceding November in their wages, 13.4 per cent.

These increases in wages took effect, for the engineers on February 1, and for the firemen and trainmen on April 1, 1907.

In the meantime, all of the crafts, the shopmen, boiler makers, machinists, blacksmiths, tinners, pipe-fitters and coppersmiths, had made demands, through their organizations, for an increase in wages, and these increases were also granted; to the machinists and boiler makers, 8.8 per cent; boiler makers' helpers, 8.3 per cent; blacksmiths and their helpers, 9.7 per cent; car department employés, 6.1 per cent; tinners, coppersmiths and pipe fitters, 4.8 per cent.

During the balance of the year 1907, it was necessary also to make increases in the wages of unskilled labor, because of the increased cost of living.

The total increases that were made, including the crafts and the train service men, affected 19,811 employés, of the approximately 37,000 employés in the service of the System. It amounted, during the six months' period, in Arkansas, to $215,204.00, or 6.7 per cent of the entire labor rolls.

Of the entire operating expenses in the state of Arkansas

999 65.9 per cent is for labor, and it was on this proportion of operating expenses, that this increase of 6.7 per cent was made.

During the same period the cost of all materials used by the railway in its operation and maintenance, made a substantial advance.

I quote from Bulletin No. 75, issued by the United States Department of Commerce and Labor, in March 1908, the articles as shown in that report, that enter into railway maintenance and operation:

| Item. | Price—1906. | | Price—1907. | |
|---|---|---|---|---|
| Coke | $2.67½ | per ton | $2.82½ | per ton |
| Crude oil | 1.5975 | " bbl. | 1.7342 | " bbl. |
| Refined oil | .0762 | " gal. | .0824 | " gal. |
| Augurs | .3567 | per doz. | .36 | " doz. |
| Axes | .6715 | each. | .68 | each. |
| Bar iron | 1.69 | per hundred | 1.75 | per hundred |
| Barb wire | 2.48 | " cwt. | 2.63 | " cwt. |

| Item. | Price—1906. | | Price—1907. | |
|---|---|---|---|---|
| Chisels | .418 | each. | .4438 | each. |
| Copper | .1961 | per lb. | .2125 | per lb. |
| Sheet copper | .2375 | " " | .2792 | " " |
| Copper wire | .2108 | " " | .2404 | " " |
| Lead pipe | 6.42 | hundred lb. | 6.70½ | " hund. |
| Mortise locks | .18 | each. | .20 | each. |
| Eight penny nails | 1.9313 | per cwt. | 2.1625 | per cwt. |
| Wire nails | 1.9583 | " " | 2.1167 | " " |
| Pig iron, Bessemer | 19.5442 | " ton. | 22.8417 | " ton. |
| " " gray forge | 16.5313 | " " | 20.9875 | " " |
| Steel billets | 27.4475 | " " | 29.2530 | " " |
| " sheets, black | .237 | " lb. | .250 | " lb. |
| Tin plates | 3.86 | " cwt. | 4.09 | " cwt. |
| Vises, solid | 4.528 | each. | 5.75 | each. |
| Wood screws | .1055 | per gro. | .1219 | per gro. |
| Zinc sheet | 7.1725 | " cwt. | 7.4815 | " cwt. |
| Lime (U. S. it is a little different from our price of lime) | .9471 | " bbl. | .9492 | " bbl. |
| Linseed oil | .405 | " gal. | .432 | " gal. |
| Plate glass | .2267 | " sq. ft. | .23 | " sq. ft. |
| Resin | 4.1461 | " bbl. | 4.3771 | " bbl. |
| Tar | 1.9583 | " " | 2.3292 | " " |
| Manila rope | .1252 | " lb. | .1290 | " lb. |

1000 These figures are quoted as showing the increase in cost of very many of the articles that enter into railroad consumption.

The relative increase on other articles I have not segregated as between 1906 and 1907, as these figures are accessible, and from the Government.

Again, the Interstate Commerce Commission, under the Hepburn Act, which became effective in August 1906, issued a new classification of operating expenses, and this classification introduced a new charge into railway operation, requiring the railroads to set aside each month, a charge to its operating expenses, for "depreciation of equipment."

It provided arbitrarily, for a similar charge for "renewals of equipment."

These two items alone increased the cost of operation in Arkansas, $48,053.00, during the six months in question.

During this period also, the Railway Company was required by the Legislature of Arkansas to increase the cost of operation of their through freight trains, to the extent of 15 per cent for labor, by the addition of another brakeman on all of these trains that drew in excess of twenty-four cars.

These brakemen were put on the first of May, 1907. The previous fiscal year showed but two months of that increased cost.

1001 This increased the cost of operation of the Iron Mountain, in Arkansas, $67,104.00 per annum, based on current operation.

The total of these expenses that have increased because of wages, because of these charges, and the increase in force, amounted to $296,818.00 for that six months, over the corresponding period of the previous year.

While it is not possible to ascertain accurately the contribution made to the increase in expenses, by the increased cost of material, this expense is, nevertheless, reflected in the various accounts making up the maintenance of way, maintenance of equipment, conducting transportation, and general expenses, and, with the other items that I have mentioned, make up the increase in ratio of expenses to the earnings for that period.

The ratio of expenses to earnings, on the Iron Mountain, as a System, for the fiscal year ending June 30, 1907, was 62.8 per cent.

This is the ratio of operating expenses to earnings, during the fiscal year, as shown by Exhibit 6, and the ratio for operation in the United States, was 67.53 per cent, and in Group 8, 64.34 per cent.

It was 4.73 per cent less on the Iron Mountain than the average of the railways in the United States, and 1.54 per cent less than the average in Group 8.

Comparing the operation of the Iron Mountain for relatively the same period, or a portion of it, with Group 8, shows, on the
1002 ratio of operating expenses to earnings, considerably better than that on the average of the United States, or the average of Group 8.

Bringing a comparison of those periods together, the ratio of the Iron Mountain is lower.

A comparison of the operating ratios of Railways touching Arkansas, and the Railways operated, perhaps, under similar conditions, for the fiscal years ending June 30, 1907, and June 30, 1908, as ascertained from their published annual reports, show that the increase in the ratio of operating expenses was not confined to the Iron Mountain alone.

The first figures for each Railroad will represent the fiscal year ending June 30, 1907, and the second, the fiscal year ending June 30, 1908:

| | | |
|---|---|---|
| St. Louis, Iron Mountain & Southern Ry. Co..... | 62.8% | 68.9% |
| St. Louis & San Francisco..... | 65 | 70.1 |
| St. Louis & Southwestern..... | 68.2 | 78.10 |
| Chicago, Rock Island & Pacific..... | 67.9 | 72.4 |
| Kansas City Southern..... | 59.2 | 72.4 |
| Missouri, Kansas City & Texas..... | 63.9 | 70.6 |
| Illinois Central ..... | 68.4 | 72.7 |
| Alabama-Vicksburg ..... | 70.5 | 78.8 |
| Vicksburg, Shreveport & Pacific ..... | 75 | 82.9 |
| Atchison, Topeka & Santa Fe..... | 62.2 | 67.1 |

Similar wage conditions affected all of the Railways above mentioned, as, with the exception of the Alabama & Vicksburg and the Vicksburg, Shreveport & Pacific, they were parties to what is known as the "Chicago Conference" which I mentioned a few mo-

ments ago, at which time the changes in the rate of pay of train, engine and yard men, were made.

Since Exhibit 6 was filed by our accountant, I wired the
1003 Interstate Commerce Commission, and have secured the advance bulletin of revenues and expenses of System roads in the United States, by months, for the first nine months of the fiscal year ending June 30, 1909, which gives a comparison of the same months of the previous year. This enables a comparison to be made of the six months from July to December, inclusive, 1907, as far as the United States is concerned, and with the various railroads; or, the more important ones.

It does not, however, group these railroads into the Interstate Commerce classifications, and it is not possible to make a comparison with Group 8 on that account.

From this advance bulletin I have made up a comparison, in parallel columns, showing the six months' operation, ending December 31, 1907, which I file as Exhibit 31.

(The paper was accordingly marked "C. J. McPherson Exhibit 31.")

Said exhibit is in the words and figures following, to-wit:

For Exhibit 31, see Volume 8, page 5360.

1004 In view of the fact that "hire of equipment" was not shown in these advance reports, I have omitted the "hire of equipment" from the expenses of operation, both on the Missouri Pacific System, and on the Iron Mountain in Arkansas, in order that the comparison may be made on the same basis.

It will be seen that the ratio of operating expenses to gross earnings, of all the roads in the United States, increased for that period 1.56 per cent over the fiscal year ending June 30, 1907.

The ratio, however, for roads similarly situated, in much the same territory and where similar conditions prevail, is greatly increased for that period.

| | | | | |
|---|---|---|---|---|
| The St. Louis & Southwestern, | from | 68.2% | to | 72.32%. |
| St. Louis & San Francisco, | " | 65 | " | 71.30 |
| Rock Island, | " | 67.9 | " | 71.30 |

The Rock Island and the St. Louis & San Francisco are combined in the Government figures.

Mr. HILL:

Q. What are you making that comparison with? What can we follow it with?

A. I am making a comparison with the previous fiscal year.

Q. Have you already put that in?

A. I have just testified to it. It is a part of what I read a moment ago.

Q. All right.

WITNESS: (Continuing.)The Kansas City Southern from 69.2% to 65.13%.

1005 Comparing the ratio of expenses with the earnings for the fiscal year ending June 30, 1907 (the comparison that is made with the Iron Mountain in Exhibit 6), with that of the ratio for the six months ending December 31, 1907, the ratios are as follows:

| | | | | | |
|---|---|---|---|---|---|
| St. Louis-Southwestern | increased | from | 68.2% | to | 72.32% |
| St. Louis & San Francisco | " | " | 65 | " | 71.30 |
| Kansas City Southern | " | " | 59.2 | " | 65.13 |
| Chicago, Rock Island & Pacific | " | " | 67.9 | " | 71.30 |
| Illinois Central | " | " | 68.4 | " | 74.39 |
| Alabama & Vicksburg | " | " | 70.6 | " | 77.69 |
| Atchison, Topeka & Santa Fe | " | " | 62.2 | " | 70.22 |

These ratios for the fiscal year were taken from the annual reports of those Companies.

It will also be seen, by examining this Exhibit, that the gross expenses per mile of road (that is the last line of the statement), in the United States, was $4,109.00.

On the St. Louis, Iron Mountain & Southern in Arkansas it was $3,512.06.

This statement perhaps shows as well as any statement that can be made, the value of the ratio of operating expenses to gross earnings, as an index of railway operation.

The Kansas City Southern expended in operation $3,788.74 per mile of road, during the six months, with an operating ratio of 65.13%, while the Southern Railway expended $822.00 per mile; less than the Kansas City Southern, but her ratio of operation is 74.68%.

The Seaboard Air Line expended $1,557.00 per mile in its operation, (Less than the Kansas City Southern), yet its ratio of operating expenses to the gross revenue is 77.8%.

1006 The St. Louis, Iron Mountain & Southern Railway Company expended $3,512.06 per mile, during the six months' period of operation, as against $2,964.00 per mile, expended by the Rock Island Frisco System; while the ratio of expenses to the earnings was about the same.

The Iron Mountain expended $576.00 per mile of road more, during the six months, for its operation, than the Frisco Rock Island, and yet the ratio of expenses to operation was practically the same.

The ratio of operating expenses of the Illinois Central Railroad was 74.39 per cent, while that of the Southern was substantially the same.

The Illinois Central Railroad, however, expended $4,380.00 per mile of road, in its operation, while the Southern Railway expended $2,966.21 per mile, or, $1,313.00 per mile of road, less. Yet their ratio of the expenses of operation to gross earnings is substantially the same.

Q. Is this cost of operation, growing out of the increased expenses, on account of the higher cost of labor and material, and the change affected by the regulation of the Interstate Commerce Commission as to the manner of keeping certain accounts, common to all the railroads in this country?

A. Yes, they are all subject to the same expenses.

Q. Is the increased cost to which you referred, as growing out of the increase in the price of labor and material, and the manner of keeping the accounts according to the change made by the
1007 Interstate Commerce Commission, temporary or permanent in its character?

A. So far as we know, it is permanent. The Commission has made no change, and presumably, their classification will continue.

Q. How is it as to the increase in the cost of labor?

A. The tendency in the cost of labor is for further increase. The railroads are confronted with further demands at the present time.

Q. Were the increases that you mentioned, the result of the demand of organized labor?

A. They were made at the demand of committees representing the Railway Companies' employés, in each branch of the classified service.

The organizations themselves do not deal with the Railway Companies, except on appeal.

Q. Do you mean that they do deal with them indirectly, through their committees?

A. I mean that each organization has a "Grievance Committee" which takes up these matters with the Railway Company. This Committee consists of employès of the railway concerned.

If this Committee is unable to agree with the officers of the Railway Company, their employers, then it becomes a matter of negotiation, on appeal, with the officers of those organizations.

Q. In your experience in railroad operation, what have you
1008 found to be the character, as to permanency, of increases in wages brought about in the manner as the increase in regard to which you have testified was brought about, in the years 1907 and 1908?

A. The increases in wages made by a railroad company are permanent.

Q. What is the tendency, judging from your experience in railroad operation during the last ten years, of prices of material used in maintenance and equipment?

A. Upward.

Q. In compiling Exhibit No. 3, I understand that the Accounting Department ascertained all the expense chargeable to the State of Arkansas, for both intrastate, interstate and miscellaneous traffic, on the basis of actual expenditures, as far as possible, and then assigned to the intrastate traffic a portion of the total expense of the State of Arkansas, based upon the percentage of intrastate revenue to the total revenue.

Discarding the fact that the basis used was "the revenue earned in each class of traffic" do you think the plan of assigning to intra-

state traffic a portion of all the operating expenses, is a correct basis; or is it possible to separate intra-tate and interstate expenses in detail, as freight and passenger expenses are separated?

A. No; the intrastate and interstate expenses are interwoven in every operating account and inseparable on any basis of keeping detailed accounts with which I am familiar, or of which I ever heard.

1009 Q. What units of measure run through railroad operation, and for what purpose are they useful? Can any of these units be employed to show the cost of transportation of any particular commodities, or the cost of service as between freight and passenger, or the cost as between intrastate and interstate traffic?

I wish you would state your views fully and give such illustrations and reasons as occur to you on this subject.

A. There are several measures that run through railway operation, of which a record is kept and which serve various purposes, useful in the analysis of railway operation and as testing the efficiency of railway operation.

The first is the measure of "train mileage."

Second, the measure of "car miles."

Third, the measure of the "number of tons."

Fourth, the measure of the "number of passengers."

Fifth, the measure of "ton miles."

Sixth, the measure of "passenger miles."

The "train mile" measure being divided between freight and passenger service, may be followed in dividing the common expenses as between freight and passenger traffic. That is: the expenses that are common to both, but it must be discarded in any consideration of division between intrastate and interstate traffic, for various reasons, among which are, that it represents trains carrying both classes of traffic, and it also represents empty cars, the ultimate assignment of which cannot be determined, and which, in themselves, yield no revenue.

1010 Then again: in conditions where the traffic of a railroad is not balanced in both directions, it may represent trains making no earnings whatever. That is: an engine and caboose, run from one end of the division to the other, to take a train or return a train.

It does serve in railway operation as one of the factors in determining operating efficiency, in showing the average train haul, and tons per train mile, as all of the freight train mileage must be taken into consideration in any statistics that are prepared for comparative purposes, or for the study of railway operation.

It is further useful in other statistics that the railway uses; in testing the efficiency of various divisions, or its operation generally.

The measure of "car miles" is as impracticable as the measure of "train miles," but this measure is used in determining car efficiency, and for many other statistical purposes.

As a measure of the cost of handling traffic generally, or as a basis for determining the relative cost of handling intrastate and interstate traffic, the measure of car miles is not practicable.

While the mileage of the loaded and empty cars is kept separately, the purposes to which the empty cars will be put cannot be determined, and with the loaded cars themselves, there is a varying degree of tonnage. Some may have a very small amount. Others may have a greater amount. Still others may contain the maximum tonnage of the capacity of the car.

1011 To use a car basis to determine cost generally, would put all loaded cars on the same basis: those containing a ton: those containing two tons, three, five, ten or forty.

A car with two tons would represent in the cost generally as much as a car containing forty tons.

Cars, like trains, also handle both intrastate and interstate freight, and in varying quantities. It would not be possible to determine what part of the car pertains to the State and what part to the interstate traffic; or the relative distance that either traveled, as a determining basis on the car lines.

The part of the load in the car that was intrastate might travel a fraction of the distance of the part of the load that was interstate. Yet the car would travel the whole distance and would be represented by car miles.

The third measure that the Railway Company keeps a measure of is "tons". But this measure is useful only for minor purposes.

Unless tons are combined with some other factors they do not represent transportation.

The minor uses for which tons are employed may be the quantity handled by the men employed, and for some other purposes of statistics generally, interesting to the Railway Company.

What is true of tons is also true of passengers.

The number of passengers must be combined with some other factor, to be of very much use to the Railway.

1012 And both of these measures must be discarded as available to determine cost of transportation, or for determining the relative cost as between intrastate and interstate traffic.

The measure of ton miles is useful to the Railway Company in determining its operating efficiency. It is made up of tons, multiplied by the miles they move.

The Railway Company establishes by accurate test, the hauling capacity of each locomotive, over a particular district or division to which it is assigned, and this establishes a measure that we designate as the "potential capacity" of the locomotive, and the number of tons that locomotive draws from day to day is recorded. to determine whether the operating officers in charge of the various divisions or districts, are securing the full measure of the efficiency of the power.

However, this operating efficiency is determined not on the net ton miles, but on the gross tonnage, which is reached by combining the weight of the cars themselves, with the weight of their contents. It would also include the weight of the empty cars which may constitute a portion of the train.

Under this method of operation the Railway is enabled to secure, or is more able to secure, the potentiality of its power; at least in

one direction—that of the heavy traffic, and run no more trains than are necessary to handle the tonnage offered.

In the ultimate statistics, the average ton miles of the freight itself, per train mile, will appear, and there is perhaps a relation,

months with each other, and years with each other, that
1013 is useful for comparative purposes, but we do not determine

the efficiency of our power, or our operation, by net ton miles, but by "gross ton miles," and taken in connection with the potentiality of the power assigned to the division or district.

The ton miles are not used in operation to ascertain cost of transportation of any class, of freight or of any commodity, but as determining the efficiency of operation, and the comparison is made by each district or division with itself, and not with another district or division where the conditions may be dissimilar, nor in different periods, where the conditions may be dissimilar. Not a preceding month with a following month, nor a summer month with a winter month; or a spring month with a fall month.

The effort is for comparative purposes, to see what has been done during the period, where the conditions of weather, traffic, etc., are similar.

The "ton mile" basis has been considered academically and discussed as available for the purposes of determining cost, but it will not bear the application of practical facts, nor stand an analysis from an operating standpoint.

It must assume, if it is to truthfully reflect the cost of operation, that all commodities can be reduced to a common basis of transportation cost.

Further, it must assume that all conditions on Railway Com-

panies are alike, and that the conditions on each Railway
1014 are alike in all of its parts, divisions and districts.

It must assume also, that a short haul and a long haul of traffic may be made at pro rata cost.

It must likewise assume that the efficiency of the cars in intrastate and interstate traffic is equal.

It must also assume that every ton mile moved over the Railway uses all the facilities that every ton mile moved over the Railway uses, and that every ton mile moved over the Railway uses all the facilities as provided by the Railway Company for its operation.

The first assumption: that all commodities are susceptible of reduction to a common basis of transportation cost, disregards the value, character and risk attached to their transportation, and whether the commodities are transported in carloads or in less than carloads. Whether the work of loading and unloading the car is performed by its own employés and at its own cost, or whether the cars are loaded and unloaded by the owners of the property, at their cost.

This is an important element of consideration, because the handling, loading and unloading of freight by the employés of the Railway Company entails a large cost, which extends all along the line of operation. It embraces the accounting features, the service

of agents, clerks, cashiers, checkers, inspectors, freight house foremen, truckmen and laborers.

The first assumption will place the transportation of live
1015 stock on the same basis as sand, and merchandise on the same level as coal or brick. Poultry on the level of cement and vegetables on the same basis as lumber, and other heavy articles. Arkansas fruits would be placed on a level with Batesville stone.

This assumption must blend all commodities in one common mass: livestock, merchandise, poultry, fruit, fresh meats, vegetables, coal, stone, sand, salt and lumber, regardless of the character, value, bulk and risk, and proceed on the theory that the cost of transportation of each one of these articles is equal.

The Railway is exposed to the payment of claims, in the transportation of poultry, fresh meats, fruits and vegetables, that would not attach to very many other articles, and which do not result from accident, rough handling or casualty.

These claims are for deterioration of the property itself and arise from delay.

This is a special risk that follows the transportation of the articles mentioned, and will result even when no other part of the freight in the trains handling them is subject to any claim.

For example, a train might consist of thirty cars, of which five are fruit and vegetables, poultry and fresh meats. A claim would arise for delay on one-sixth of the number of cars in the train, and possibly one-sixth of the ton miles made by that train, which must be paid.

No other claim would be presented for loss or damage, or
1016 other expense, to the five-sixths of the traffic represented either by tonnage or ton miles.

Again, uninterrupted movement must be given to this perishable freight, which means that the train containing it must have precedence over other freight trains moving in the same and in opposite directions. This occasions delay to the other trains and results in the payment of overtime.

What is true of fruits, vegetables, poultry and fresh meats, is also true of all other perishable freight.

The claims for loss and damage to sand, stone, coal, cement, lumber and other kindred commodities, are a small part of the Railway Company's "casualty account;" while the claims attaching to perishable freight and to merchandise, form a heavy element of such expense.

For illustration: A train may consist of thirty carloads of freight. Twenty-nine of these cars may be coal, stone, cement, sand and lumber, and one car of merchandise; the single car of merchandise representing, say five tons, and the other freight 1100 tons.

In the event of a wreck, the claim following the damage to the single car of merchandise, would be several times the claim that would follow for damage of the remaining twenty-nine cars.

In other words, one-half of one per cent of the tonnage of that train, and substantially, perhaps, a lesser amount of the ton miles,

would bear a greater cost for casualty than the other ninety-nine and one-half per cent, because of the indestructible character
1017 of the other traffic and the maximum of salvage.

The element of risk is of no small importance to a Railway Company, as may be seen from an examination of statement number 4, Exhibit number 3, "loss and damage to freight in transit" which in Arkansas, in a period of six months, amounted to $127,509.38.

Again: Merchandise is a class of traffic exposed to loss and damage generally, which does not apply to heavier and coarser freight, resulting in increasing what we term the "casualty account" or the "casualty expense."

For example: certain articles of merchandise are fragile. Their transportation may result, and frequently does result, in loss, where no casualty has occurred, or no rough handling has taken place while they were moving over the line.

These articles are eggs, window glass and mirrors, bottles, carboys and other glass receptacles containing acids, other fluids and chemicals; drugs, liquor and canned goods in glass; oils and other fluids in cans; electrical apparatus; china; glassware and chimneys; light furniture; sewing machines; show cases; signs; marble, and a large variety of other articles.

An application of the ton mile theory basis of consideration would assume that the risk attached to the transportation of these articles, and the ton mile average loss, would be no greater than on stone, coal and other like commodities.

Again: there is a risk of leakage of fluids that the Railway
1018 Company carries in any receptacle, barrels, glass carboys, etc., which the ton mile theory would regard on the same basis as solids, which are not exposed to this character of loss.

Merchandise is made up, to a very large extent, of packages of articles of wearing apparel, edibles and luxuries, clothing, furnishing goods, caps, shoes, dry goods, canned goods, crackers, candies and sweets of various kinds, cigars, tobaccos, liquors, beer, wines—all of which tempt theft and robbery, which is one of the considerable elements of loss that enter into the Railway's casualty account.

The risk of robbery attached to the transportation of articles of this character would be considered on the ton mile theory of dividing the expenses of operation, as no greater than on sand, stone and lumber.

Another element of loss that enters into the Railway Company's casualty account, is that of wet and waste. The damage and waste that is occasioned by water, which may be either at the loading or unloading point, or in transit.

This would apply particularly to flour and to grain. It may be true that a car has a leaky roof, or the water may beat in at the doors, and these articles be damaged. But the same car would have transported brick, sand, drain tile and a multitude of other articles, without causing any deterioration or injury to the property, or result in any claims being made upon the Railway Company.

1019 The ton mile theory of dividing operating expenses would put these articles subject to such damage, and which, in

practical operation are damaged on the same basis of risk and cost for claims, as the articles which could have been transported in the same car without damage from this cause.

Another part of the "casualty account" is made up of what is called "concealed losses."

These are shortages from packages, on being opened at their destination, and may have been caused by the package being opened in transit and the articles removed, or may have been caused by the articles never being packed.

The only action the Railway Company can take in such cases, however, is to pay the loss, after requiring an affidavit from the person who actually packed the goods, that they were placed in the packages at the time of delivery to the Railway Company.

This character of loss does not obtain on other articles than merchandise, and the ton mile basis of dividing operating expenses would apply to the line, stone, sand and other traffic, the element of "concealed losses."

One of the largest elements in making up the freight casualty account, arises from packages going astray.

A single ton of merchandise may and does consist of many separate packages, and each of these packages must be accounted for on delivery, exactly as a whole ton of some heavier single article.

The number of packages, say in forty tons of merchandise, must be accounted for with the same accuracy as a forty ton car-
1020 load of stone, sand, gravel and other commodities.

The transportation, however, of such a large number of packages, of itself creates a liability of loss, when compared with other freight that is going astray.

This is uncertain. It may arise from robbery, which the Company is unable to fix specifically at any point; or, it may occur through the error of the check clerk, or an inspector, or a truckman taking the packages to another car instead of the one to which it should properly go.

For example, a dozen packages for Little Rock may be, by mistake, loaded into a car for Colorado at St. Louis a dozen packages for Russellville or Conway, or Morrilton, may be loaded into a car at Little Rock which is destined to some remote point in Texas, and in neither case may the traffic ever be heard from.

In the multitude of packages that a railway company handles we cannot, of course, be perfect.

Reliance must be placed on a large number of people, and the illustrations that I have given are not extravagant.

The ton mile basis of dividing expenses would place the same hazard of loss on the handling of the several hundred packages that would go to make up forty tons of merchandise as a hazard upon a single car of stone, salt, lumber, saw-logs or cooperage.

1021 The ton mile basis must assume a good many things which analysis shows are not reasonable or true.

It must assume, first, that the conditions on all railroads are alike, if it is to be used for determining cost, and that the conditions on all of the divisions of the same railroad are similar; while in practical

operation the cost as represented by tons, and the items of expense divided and productive of ton miles, on one division of a railway as compared with another division may vary as much as 100%, in Arkansas say, as between the Memphis and the Arkansas Divisions, both wholly within the State of Arkansas.

Under conditions of traffic and weather the cost of operation ascertained on that basis might vary as much as 50% on a single division with itself.

The first general division of freight traffic handled by a railway is as between carload freight and less than carload freight.

Carload freight consists of commodities loaded as a rule to the full capacity of the car; at least to the minimum prescribed by the tariff, and is rated at so much per hundred pounds for the entire load.

1022 This freight is loaded by the shipper at his own expense and unloaded by the consignee at destination, at his expense, and the precedure for the handling of this traffic is the switching of this empty car to the mill, yard, warehouse or elevator or other point where the industry is located, or to a public team track, where the shipper loads it.

He goes to the station and gives directions for its billing. The car is billed by the agent as a single item and the car is taken up by a passing train and moved to its destination, where it is switched to a private track or a public or team track, where it is unloaded by the consignee at his own expense, the agent at destination collecting the charges as a single item, abstracting the way-bill and making his reports to the Auditor on the basis of a single item of one car load consisting of so many thousand pounds.

This car makes the full measure of the ton miles from the point of origin to its destination.

If it is an intrastate shipment the expense mentioned at both terminals is a charge to the operating expenses of the State of Arkansas and is reflected in the exhibit showing this expense.

If it is an interstate shipment the expense at one end is chargeable to Arkansas only. The other terminal expense is charged to the cost of operation in another State.

1023 If it is a trans-state shipment it has neither of these terminal expenses and no charge appears in the expense of Arkansas as shown in these exhibits therefor.

The other broad distinction, less than car load freight, does not necessarily mean less than a car load of freight or less than a car will hold.

It may be a full car load of merchandise consigned to one party, or to various parties, at one point, or to various parties living at different points.

It is a package freight as distinguished from a car load freight, which I have described.

There may be as many consignees as there are packages or all of the packages may belong to one consignee. This package freight is the lightest loading of any traffic that a railway company handles.

That is to say, that it loads less per car, the average not exceeding 5 tons, while frequently it is much less.

The contrast with the work falling upon the station in billing the one car alone that I have just described, with the handling of less than car load freight, may be illustrated by a test made by our agent at Little Rock under my direction taking five cars of freight of less than car load freight each day for five days, making 25 cars.

The first five cars representing one day required 24 way bills and consisted of 70 consignments.

The second 5 cars required the making of 24 way bills and
1024 consisted of 64 consignments.

The third 5 cars required 27 way bills and consisted of 85 consignments.

The fourth 5 cars required 20 way bills and consisted of 59 consignments.

While the fifth 5 cars required 25 way bills and consisted of 110 consignments.

These 25 cars required 120 way bills and covered 388 consignments. For the purpose of further illustration we will assume that the cars contained 5 tons each, or 125 tons, against 25 cars of car load freight containing the maximum of 40 tons each or 1000 tons.

The process or steps taken in handling this freight requires something more than the mere making of the additional way bills.

These way bills must show 388 separate items or consignments and must be reported as against 25 in the car load freight for a similar number of cars.

These 388 packages are received at the door of the freight house, checked, weighed, billed, and trucked to a car into which they are to be loaded, all of which steps are necessary in the orderly and secure handling of the traffic.

This variety of steps puts upon the Railway Company many times the cost for labor to secure but a fraction of the ton miles compared with the 25 cars of car load freight through which the maxi-
1025 mum ton miles are secured and which I have used comparatively in this illustration.

This less than car load freight on arrival at its destination must be unloaded by labor employed by the Railway Company and each individual package be accounted for. It involves largely a repetition of the steps observed in its loading, the collection of the freight charges checking of the freight, its trucking to the warehouse, the making of the reports to the Auditor, etc.

This process of handling less than car load freight is the same whether it is interstate, intrastate or trans-state.

If it is intra-state freight it bears the cost of the handling at both loading point and destination.

If it is interstate freight either the loading cost or the unloading cost is borne by some other State.

If it is trans-state freight it has neither of these costs and no expense for such handling would attach to or is embraced in the exhibits of cost filed in this case.

The ton mile theory assumes that the cost of these various steps,

the large clerical work necessary, the physical labor employed in handling this package freight in these 25 cars, is no greater than the cost of the 25 cars of the car load freight.

All of the cost for labor of the handling of the less than car load freight has been performed by the employees of the Com-
1026 pany, while the car load freight has been handled at the cost of the owners.

As the average of package freight does not exceed five tons to the car the maximum of the ton miles accomplished in the same distance by the 25 cars of less than car load freight would be one eighth of the ton miles accomplished by the 25 cars of car load freight. But on the ton mile basis of dividing expenses the 25 cars of car load freight (assuming that the distance traveled is the same) would bear a cost eight times greater than the 25 cars of less than car load freight.

1027 C. J. McPHERSON.

Direct examination resumed.

By Mr. MOORE:

Q. Mr. McPherson, when we adjourned you were speaking about the ton mile basis for dividing expenses of operation. If there is anything further you wish to say on that you may proceed.

A. That a short haul and a long haul can be made at pro rata cost, it hardly seems should receive serious consideration. Yet the ton mile theory or basis of the division of expenses, must assume this to be true, or it fails as a basis for the purpose.

The ratio of the cost of transportation, whether of carload freight or less than carload freight, increases as the length of the haul diminishes, because of the increased terminal expense.

The distance between the point of origin and the destination, shortens, and the number of terminals used, multiply.
1028 This may be illustrated in various ways.

Take five cars of less than carload freight, loaded to the maximum, say five tons, from Little Rock to Malvern. This is 42 miles south of Little Rock.

These five cars would represent 1075 ton miles, in the ton mile account.

A single maximum carload of brick from Malvern to Little Rock, would represent 1720 ton miles, in the ton mile account.

The expense of the transportation of these six cars—that is, five cars of less than carload, and the one carload of brick, would, on the ton mile basis be divided—61 per cent for the carload of brick, and 39 per cent for the five cars of less than carload freight.

The five cars of merchandise handled by the Railway Company at its entire cost, in the laborious process that I have described, would bear, on the ton mile basis of division of expenses, but 39 per cent; while a single carload of brick that was loaded and unloaded by the owner, would bear 61 per cent of the cost of the transportation of the six cars.

The aggregate of the ton mile account is made up of shipments

weighing less than 100 pounds, to those weighing forty tons, and for every distance, from five miles to the extreme length of haul in the state.

Exhibit 26 gives an analysis of the tonnage for the month of October 1907, and shows that the average interstate haul is 218.16 miles; while the average intrastate haul is 72.21 miles.

1029 Exhibit number 5, however, shows that for the six months —July to December 1907, inclusive, the average of the interstate haul is 224 miles, while the average intrastate haul is 70 miles.

The distance from Texarkana to Nucells, Arkansas, happens to be exactly 224 miles, the average miles made by the interstate shipments.

And the distance from Corning to Nucells is 70 miles, the average distance made by intrastate shipments.

A maximum carload of freight originating in Texas, coming to the Iron Mountain at Texarkana, would make 8960 ton miles from Texarkana to Nucells.

Three cars, each of equal tonnage, loaded at Corning for Nucells, and one maximum car loaded at Tuckerman to Nucells, 14 miles, would make 8960 miles, or the same ton mile equivalent.

That is to say: the single car from Texarkana to Nucells compare with the three cars from Corning to Nucells, and the one from Tuckerman to Nucells, would make the same ton mile equivalent, 8960 ton miles.

But one car would be used for the interstate shipment and but one terminal expense would be involved, that of accounting for the car at Nucells; while four cars must be employed in obtaining the same ton mile equivalent in the intrastate traffic, from Corning and Tuckerman, to Nucells.

1030 And eight terminal expense- would attach—four at Corning and Tuckerman, and four at Nuckles. That is, a terminal expense would attach to each one of the cars at its loading point and to each one of the cars at its unloading point.

One car would be employed in the interstate shipment, and four cars in the intrastate shipment.

Under the prevailing custom, and the law of Arkansas, shippers are permitted to hold cars forty-eight hours in loading, and consignees are allowed to hold the cars a similar length of time, forty-eight hours, in unloading.

As a consequence, the Railway Company loses the use of the single car containing the interstate shipment, forty-eight hours; while it loses the use of the four cars in the intrastate shipments, forty-eight hours each, in loading, and forty-eight hours each in unloading.

Reducing this to days, the Railway is deprived of the use of the interstate car two days, and of the four intrastate cars sixteen days.

The Railway must provide, therefore, eight times the number of cars in intrastate freight that it provides to care for the interstate freight, and be put to expense in that relation in the maintenance and depreciation of equipment.

Even if the maximum allowance of forty-eight hours is not consumed in the average time of loading and unloading, the ratio would

still remain eight to one, whether it was one and one-half days instead of two days, or one and one-quarter days, or one day, the ratio of eight to one would still continue.

1031 A terminal expense attaching to any shipment, either carload or less than carload, is as great for five miles as it is for five hundred miles, and the multiples between will show the increasing expense that attaches to short hauls.

The terminal expense incident to shipping a ton of merchandise from Little Rock to Jacksonville, thirteen miles, is as great as shipping a ton of merchandise from Little Rock to Van Buren, 153 miles, and, as the terminal expense forms eighteen per cent of the total operating cost, the ton mile basis of division of expense would eliminate just that percentage of the cost from consideration.

The ton mile basis makes no provision for terminal expenses, because there are no ton miles at terminals that represent the expense. It only attaches as a unit of measurement between two given points, the beginning and the end of the journey, but does not consider the expense at either end. It cannot measure the expense at either end.

It is all the same, in the ton mile basis of dividing expenses, whether a train starting with thirty cars, running one hundred miles, sets out the entire thirty cars en route and picks up thirty additional cars, at thirty different stations; that is, picking up a car every time it sets one out.

It makes no allowance for the additional strain on the locomotive; on the switches; use of sidetracks, or additional fuel and other supplies, that would attend the handling of such a train. Nor for the expense of any of the intermediate stations, in preparing the

1032 thirty carloads for shipment, and in the delivery of the thirty carloads that were set out.

The ton mile basis of dividing expenses must assume, among other things, that every ton mile moved over the Railway uses all of the facilities that every ton mile uses, and there is, therefore, no general classification of traffic.

Furthermore, that every ton of freight moved over the Railway must use all of the facilities that the Railway provides for the conduct of its freight business.

It would impose as much cost per ton mile, upon traffic moving between adjoining and distant states, merely through the state on the Railway Company's line, and which did not use the facilities established for the handling of intrastate and interstate traffic, with as great a charge of the cost of the entire operation of the Railway, as the traffic that did make use of these facilities, and for whose use they were provided.

In Railway operation it is necessary to provide station and other buildings; house tracks; tracks on which freight is loaded and unloaded at freight houses; public and team tracks, where carload freight is loaded and unloaded; sidetracks to industries, such as mills, elevators, lumber yards, coal yards and manufacturing establishments, to enable the intrastate and interstate traffic to be handled in an economical way, both by the Railroad and by the public.

It is also necessary to have station organizations—agents, cashiers,

clerks, and laborers for handling freight. Also many other
1033 employés, incident to general operation.

Trans-state traffic—that is, freight passing through the state, would make no use of the facilities I have mentioned, and but a trifling use of the station organizations—only such as the car clerks and others who make car reports and keep the car records.

Many stations have more or less extensive yards at which switch engines are employed. These make it necessary to have a yard organization, as well.

At local stations where switch engines are used, they are required merely for switching the interstate and intrastate traffic to and from industries, freight houses, and the public or team tracks.

Classification yards are usually located at division points; as a rule, in the larger cities, and a large proportion of the yard organization in such cities is employed for the same class of switching as at local stations. That is, in handling cars to and from industries, freight houses, public and team tracks.

A certain part of the locomotives, however, are required in the classification yard, as is also a part of the yard organization, and it is in the classification yards where trains are broken up, classified and dispatched.

Strictly speaking, no part of the yard organization cost, nor of the service of switching engines, is chargeable to trans-state traffic.

1034 There is nothing to be done with trans-state traffic passing through the state but to give it straight away movement. The trains must be broken up at these division terminals, incidental to taking off the state and interstate traffic as may have its destination at such points, or, on lines radiating therefrom.

To increase the efficiency of operation and give the potential tonnage to locomotives, other cars must be added, and these may be intrastate, interstate or trans-state cars.

This brings about, of course, the physical handling of this trans-state traffic in these classification yards, and at times other trains may pick up trans-state traffic that has been set out because of blockade, embargo or some disarrangement of the orderly course of procedure, such as wrecks and washouts.

This, however, is not due to any requirement of the trans-state traffic. It arises from physical conditions in the state of Arkansas; either from floods, casualties, or other disturbances of the orderly movement of business.

Again: of the main track mileage in Arkansas, approximately eight per cent could not be used in making trans-state movements. So but ninety-two per cent of the main track could, under any circumstances, be used by that class of traffic.

Exhibit number 26 shows, that of the entire freight traffic of Arkansas—that is, the entire freight traffic touching Arkansas, 51.61 per cent, measured by ton miles, consists of this independent traffic.

1035 This is traffic that passes over the Railway through the state of Arkansas, which originates in a neighboring or distant state and terminates in a neighboring or distant state.

More than one-half of the entire freight traffic is of this character and makes no use of the facilities I have described, and could make use of but ninety-two per cent of the main track mileage in the state.

Of the station organization, it would make use of eight and one-half per cent, and, even assuming that a portion of yard organization and expense should be charged to this class of traffic for the physical handling given to the traffic (for which it is not responsible, and which, in my opinion, would not be equitable) fifteen per cent would be a liberal allowance.

More than one-half, therefore, of all of the freight traffic represented by ton miles, touching Arkansas, could make use, under any circumstances, of but ninety-two per cent of the entire main track mileage; eight and one-half per cent of expense of station organization, and, on the most liberal basis, fifteen per cent of the cost of yard organization, operation and maintenance of yards and locomotives; while 48.84 per cent of the entire traffic is chargeable with 100 per cent of the Railway Company's main track mileage; 91½ per cent of station organization, and, on the basis given 85 per cent of yard organization, maintenance and operation, and should be charged with all the maintenance of industrial tracks, of
1036 freight station buildings, and the other buildings which are used only by traffic representing this portion of the whole. That is, the intrastate and the strictly interstate.

The ton mile theory of dividing the expenses of operation would ignore the largest primary features of the traffic, and would impose upon the trans-state traffic an equal burden of expense and operation as upon intrastate and interstate traffic, charging its transportation with the maintenance and operation of main line track which it did not touch; with facilities that it did not and could not use, and with the wages of men whose duties have no connection with it; with the maintenance of buildings and tracks, without the existence of which this freight could move with equal facility; with taxes on facilities the use of which it did not need or enjoy; and other expenses incidental to traffic having its origin or destination, or both, in the state.

The ton mile theory must, therefore, in respect to trans-state traffic, assume that this class of traffic does make use of these facilities, in proportion to the other traffic of the state; otherwise the ton mile basis of the division of operating expenses would be unsound.

It must assume as true something that is not true, to give it even academic consideration.

Ton miles measure distance as applied to efficiency; they do not measure the objective points which carry with them, in railway operation, a large part of the expense, because the objective
1037 points have no ton miles; and the ton mile theory applied to a division of the expenses of railway operation, considers one factor only—that of the rolling expense, and not the stationary or terminal expense.

The stationary or terminal expense, which is a very large part of the cost of railway operation, cannot be measured by ton miles.

The ton mile basis of dividing expenses cannot even measure properly the rolling expense, because the length of haul is an insurmountable obstacle.

Ton miles measure only efficiency for the purposes of the Railway Company. The efficiency of its operation. That is: to see whether the locomotive is started from its initial point with a tonnage it is capable of handling; and whether, if it has set out tonnage, it has picked up other tonnage to preserve the potential average between its objective points.

The average ton mile earnings have been used as a unit, and are used comparatively to ascertain the average result of all of the freight traffic of the Railway, and its value for statistical purposes is much that of the ton mile standard of measuring efficiency; it is merely a statistical instrument, to show a general average of rates for the expenditure of energy involved.

It merely shows the general average of revenue derived from the transportation of different goods. It does not establish the rate.

1038 The unit of passenger miles, in my opinion, is not practicable for the purpose of dividing the expenses of operation between intrastate and interstate passenger traffic.

It would assume, as in the freight traffic, that a short journey and a long journey, should be made a pro rata cost to the Railway. It would asume that no greater expense attaches to several handlings of baggage, than to one handling.

It would assume that the accounting expenses for a large number of tickets sold, is no greater than for a smaller number, and would fail to consider the exposure to danger, and consequent claims for injury, due to the relative number of passengers in boarding and leaving trains.

That there was no greater danger from personal injuries, and no greater number of claims made, or amounts paid, where the relation exists of eight passengers in the state traffic boarding and leaving trains, to one in the interstate traffic.

Exhibit 5, filed in this case, shows that the average length of haul of an intrastate passenger, is thirty miles, while that of an interstate passenger is one hundred eighteen miles.

Four times the number of local passengers must be hauled to equal the passenger miles of an interstate passenger, and this results in eight times the terminal expense for the local passenger traffic to that which follows interstate.

That is to say: three passengers travel thirty miles, and a fourth twenty-eight miles; while an interstate passenger makes an uninterupted journey of one hundred eighteen miles.

1039 The Railway Company must provide labor to handle its baggage at the stations; baggage trucks and other facilities, all of which are a charge to the operation of passenger traffic.

It is the number of times that these facilities are used that makes the expense large or small.

Again: where it is necessary to enlarge the depots, build additions and make other changes, it is because of the number of passengers using such waiting-rooms or buildings.

Exhibit number 5, shows that 257,950 interstate passengers were transported during the six months covered in this analysis, and that 1,444,540 intrastate passengers were transported during the same period; or, nearly six to one; while the passenger miles made by the 257,950 interstate passengers was 30,486,624, and by the 1,444,540 intra-state passengers 43,355,996.

The 257,950 interstate passengers (which was but 15 per cent of the total number of passengers) made 41.29 per cent of the passenger miles; while the 1,444,540 intrastate passengers (which was 85 per cent of the total number of passengers) made 58.71 per cent of the total passenger miles.

This is illustrative of the length of haul.

The occupation and use of the station facilities, and use of station force, was, therefore, eight per cent for interstate passengers, and ninety-two per cent for intrastate passengers.

On the basis of using passenger miles to determine the relative expenses of use of facilities, in Arkansas, would be 41.29%
1040 for interstate, instead of eight per cent (which actually used them), and 58.71 per cent of intrastate passengers, instead of ninety-two per cent (which actually made use of them).

The through passenger trains, which carry the larger part of the interstate passengers, make an average stop between Moark—the Missouri-Arkansas state line, and Texarkana, at intervals of thirty-five miles; while the local trains between these points average a stop every five miles.

The local trains, therefore, stop seven times as frequently, in local service as in through passenger service, on that portion of the road on which the greatest number of interstate passengers are carried.

The passenger mile division of expense would fail to consider the expense incident to the operation of trains which run thirty-five miles between stops, and those that average but five miles between stops, while the expense incident to the frequent stoppage is relatively seven times greater.

The strain to equipment is largely incident to the starting and stopping of trains, and deterioration and more frequent repairs arise from this cause; while greater energy is required to start and stop the trains than for through movement after they attain their momentum.

On the other divisions of the road in Arkansas, all the passenger trains make the local stops.

There is an exception on the Central division, the night train between Little Rock and Van Buren, where the average stop
1041 is at intervals of seventeen miles. But the other trains, the local trains generally in Arkansas, make an average stop every five miles.

The failure of the passenger mile basis of dividing expenses to consider these elements of manifest difference in cost of operation, to which the Railway Company must be put, and, as I have ex-

plained, in the handling of intrastate passenger traffic and interstate passenger traffic, that basis, in my opinion, would not express a truthful result.

These are the measures that run through the operation of a Railway and of which record is kept for the many purposes explained, and which form to a very considerable extent, the statistical basis of the Railway operating department.

In my opinion, none of them, for the reasons which I have given, can be used for the purpose of dividing the expense of operation between intrastate and interstate traffic.

Q. State what, in your opinion, is the best basis upon which to divide the expenses of operation, as between intrastate and interstate traffic.

A. The natural basis for dividing the cost of intrastate and interstate business, respectively, would, in my opinion, be the proportionate revenue derived from each.

This may be designated as the "revenue basis."

To this basis as a fundamental one, should be added such additional cost as may attach to the handling of intrastate business, over that of the interstate.

1042 My reasons for this opinion are that the revenues of the Railway are derived from different sources: the transportation of passengers and freight, and from miscellaneous services rendered; rentals, etc.

A division of these earnings can be exactly ascertained and naturally, they reflect the value to the Railway of each class of the service it performs.

The passenger and freight revenue consist of both intrastate and interstate traffic; the revenue from each of which can also be exactly ascertained.

Moreover, the "revenue basis" is reflective of the efforts of the traffic men who make the rates, to consider, in a measure, the value and character of commodities, and the risk and distance attached to their transportation.

This is apparent in the classification of commodities into classes and the different rates established for their carriage.

The revenue derived represents the well established and generally recognized elements considered in fixing rates of the Railway for the service it performs.

The rates on first-class freight are higher than on second-class. On second-class higher than on third class, and so on through the general classification and established schedule of rates.

Differentiation in the commodities and rates is recognized by the Railways; by the public for whom the commodities are transported, and by all of the Railway Commissions.

1043 Q. You mean the officials of the State

A. State and Interstate Railway Commissions.

The revenue, therefore, expresses value, character, risk and distance, rather than quantity; and likewise considers, to no little extent, the question of cost, as it is obvious that it costs more to transport some commodities, and commodities in small quantities, than it does other commodities, and commodities in larger quantities.

A consideration, therefore, of cost on the mere basis of quantity, would mean the blending of all classes of freight; a reduction of all classes of freight to a common unit, and the assumption that the cost of their transportation was equal. Also, that the length of haul and other conditions affecting the cost were equal or the same.

For these reasons, in my opinion, the revenue basis is a proper basis on which to apportion the cost, or to divide the cost of operation as between intrastate and interstate traffic.

Q. Does that apply to both kind of traffic: that is to say, to freight and passenger freight?

A. Yes, it would apply to both classes of traffic.

Q. You referred in your last answer to the difference in cost. Have you given the subject of difference of cost of transportation, as between state and interstate, any consideration?

A. Yes.

Q. I wish you would state, if you have, what the elements
1044 of difference are, and what you regard as the difference in the cost of transportation as between the two kinds of traffic.

A. In my opinion, the cost of handling intrastate freight traffic is several times greater than the cost of handling interstate freight traffic.

The elements of this additional cost are:

First, there is a greater use of the Railway facilities, in proportion to tonnage, by the intrastate freight traffic; a greater cost of maintenance and a heavier terminal cost, than for interstate freight traffic.

The Railway secures less efficiency from its cars used in intrastate freight traffic, in proportion to the relative tonnage, than in the interstate freight traffic; the greater investment in cars that is necessary, and the larger cost for maintenance of cars in intrastate traffic than in interstate traffic, in proportion to the respective tonnage.

My opinion is formed from an application of the facts, to the exhibits in this case; from years of personal observation; from reports made periodically in my office, which I study and compare.

It will be necessary for me to perhaps repeat, to a certain extent, a part of the matter that I have gone over, in discussing the question of other measures of operation.

Q. I wish you would state it just as fully as necessary; the impressions you have and the reasons for them.

1045 A. Exhibit number 26 shows that 51.16 per cent of all the ton miles of freight traffic moved by this Railway, in the State of Arkansas, in the period named, consisted of trans-state traffic—traffic that originated outside of Arkansas and passed through that state into another state.

This is more than one-half of the entire freight traffic, on the ton mile basis, that the Railway moved during the period.

The trans-state traffic merely pass- through the state and use- but a part of the facilities provided by the Railway for handling its business.

This trans-state traffic does not require or use the station organization, the agents, cashiers, collectors, bill clerks, check clerks, and

the numerous other classes of station labor, except yard clerks, who record car numbers and make out car reports; and the callers who call the men that man the trains.

It makes no use of station buildings, except the portion assigned for telegraph purposes; nor of house tracks, where cars are loaded and unloaded; nor of team and public tracks, where carload freight is received and delivered; nor of tracks to elevators and to industries, such as mills, warehouses, coal and lumber yards, storage yards and manufacturing establishments; nor of many buildings and other facilities which are provided to care for traffic, either originating in or destined to points within the state.

This trans-state traffic could be handled with equal dispatch without the facilities I have mentioned.

1046 This trans-state traffic is attended with a very small terminal cost.

The traffic is gathered, weighed, loaded, and billed, in another state through to destination, and requires no accounting nor station labor in Arkansas, except yard and car record clerks, as previously explained.

In the orderly handling of business there are no reasons for trans-state freight, which simply passes through the state, to incur but a minor expense at division yards and junctions; but in practical operation, both intrastate and interstate cars are added to trains in which this traffic is moved, to secure the full efficiency, as far as possible, of the locomotives.

The making up of trains is but a part of the yard work, the engines engaged in such service in classification yards handling cars in large cuts and without extended movements, while in the other yard work, that of switching the house and team tracks, and the delivery of cars to and taking them from industries, mills and warehouses widely scattered, with but a few cars to a trip (sometimes only one) consumes time in both the gathering and distribution of this traffic, which is wholly intrastate and interstate, and none of it trans-state.

Assuming that such physical handling as is given in these yards to trans-state traffic, should be a charge against such traffic (which is not, in my opinion equitable or proper), fifteen per cent of

1047 the yard service in Arkansas would be a liberal allowance therefor.

That is to say: not more than fifteen per cent of the entire cost for yard service and general yard expenses would attach to 51.16 per cent of the freight traffic.

Eighty-five per cent of the entire yard cost and expense would attach to 48.84 per cent, which comprised the intrastate and the interstate freight traffic.

The yard expense amounts to thirteen per cent of the total expense of operation in Arkansas, or $398,806.00 for the six months, July to December 1907.

Of the station expense, which forms five per cent of the entire expense of operation in Arkansas, or, $165,258.00, in the six months, this 51.16 per cent of traffic would make use of only the yard clerks

and car record clerks to the points where records of trans-state traffic were taken.

The total expense for these clerks at such points, amounts to 8.5 per cent of station expense, and but a part of these clerks perform duties incident to such traffic.

The trans-state freight traffic forming more than one-half of the entire traffic of the state, as aforesaid by ton miles, could, under most liberal construction, make use of but fifteen per cent of yard service as against 48.84 per cent constituting the intra and interstate traffic, making use of eighty-five per cent of yard service, and but a part of eight and one-half per cent of station expenses.

Measured by ton miles, the freight traffic touching Ar-
1048 kansas in the month of October, 1907, the month analyzed was; trans-state 51.16 per cent; interstate 40.69 per cent; intra-state 8.15 per cent.

Of this traffic the interstate and intrastate formed 48.84 per cent, and used all of the facilities.

Eliminating the trans-state from consideration, the relation between the interstate and intrastate traffic becomes 83.3 per cent interstate and 16.7 intrastate.

The relative use of all facilities, therefore. made by intrastate traffic 16.7 per cent instead of 8.15 per cent. As 48.84 per cent of the traffic uses all of these facilities, the relation of the intrastate traffic to the 48.84 per cent the interstate and intrastate combined, is 16.7 per cent.

Let me explain here that the term or expression "terminal expense" or "terminal cost" is used in a broad sense, and means the station yard expense, not only at district and division, but at all stations; it also embraces the cost of maintenance of switch engines and side tracks, other than passing tracks, as every station is a terminal for the traffic that it originates or receives.

Every shipment of freight, big and little, regardless of the length of haul, must have two terminal expenses.

Trans-state freight has no terminal expense within the state. The expense at the starting point and at the destination is a part of the expense of operation of other states, and in the exhibits of cost filed in this case none of those expenses are contained for trans-state freight.

1049 Strictly interstate freight, that which originates or terminates in the state of Arkansas has but one of these terminal expenses. The other terminal expense is a charge to the operation of some other state.

Every intrastate shipment in Arkansas has two terminal expenses within the state.

This does not necessarily mean that the relation of terminal expenses of intrastate business is two to one. The average length of haul must be taken to ascertain what that relation really is.

Exhibit #5 shows that for the six months ending Dec. 31, 1907, the average length of haul of all intrastate freight was 70 miles; while the average length of haul of all interstate freight in Arkansas was 224 miles.

This means that each shipment of interstate freight moves on an average of 224 miles with but one terminal expense, either that of forwarding or delivering.

Each intrastate shipment moves on an average of but 70 miles and incurs two terminal costs for that distance.

It follows that to attain the same average length of haul as the interstate that eight terminal costs must be incurred by intrastate freight. That is, eight times the use of the terminal facilities must be made by intrastate freight as compared with one use of the facilities by interstate freight.

The interstate shipment goes 224 miles for one terminal
1050 expense.

The intrastate shipment goes but 70 miles and has two terminal expenses.

Therefore, say for example, 10 tons of interstate freight is moved 224 miles with but one gathering or distributing cost; and ten tons of intrastate freight goes but 70 miles with both the gathering and distributing expenses.

The intrastate ten ton shipment goes 70 miles, with two terminal expenses, another ten tons goes 70 miles further, with two more terminal expenses; a third ten tons goes another 70 miles more with two more terminal expenses; and a fourth ten tons the balance of the distance with two more terminal costs to equal the single interstate shipment.

Ten tons of freight have been loaded four times and unloaded four times, making eight handlings of the intrastate movement of ten tons while it is going 224 miles. While ten tons of interstate freight has been loaded or unloaded but once in moving this same distance.

For the purpose of further illustration, we will take the exact distance that we used before, as that represents the average length of haul of the interstate and intrastate freight.

The distance from Texarkana to Nuckles, Arkansas, is 224 miles, the same distance as the average miles moved by every interstate shipment, in Arkansas.

Mr. HILL:

1051 Q. In referring to interstate in this connection, are you including the trans-state, in making this illustration? You have been using three terms, interstate, intrastate, and trans-state: are you keeping those three terms up in using this illustration or are you merely using interstate? What I believe you call "second class interstate."

A. In a general way, but I have taken the average length of the total interstate and the average length of the total intrastate haul.

Q. The two hundred and twenty-four miles includes the trans-state?

A. Yes, sir, in the 224 miles.

Mr. MOORE:

Q. That includes only the part of the trans-state haul that is in the state of Arkansas.

A. That is all. The trans-state haul is much further as between the two extremes of its movement.

The trans-state haul and the interstate haul would both be very much longer in their average, if we should consider their two extremes.

Here we have confined the consideration to the movement in the state of Arkansas.

Mr. HILL:

Q. Before you make your illustration I simply wanted to know your use of terms.

A. (Continuing:) A car loaded with twenty tons of freight in Texas for Nuckles passes Texarkana and comes through to Nuckles, where it is put on a side track, unloaded, and charges collected
1052 by the agent and remitted, and the other accounting work incident to the transaction is completed.

The car makes 4,480 ton miles. That is, 20 tons multiplied by the distance 224 miles.

The distance from Corning to Nuckles is 70 miles the same distance as the average number of miles made by every intrastate shipment in Arkansas.

Three cars containing twenty tons are loaded at Corning and moved to Nuckles, making 4200 ton miles.

One car containing twenty tons is loaded at Tuckerman and moved to Nuckles, making two hundred and eighty ton miles.

The four cars making 4480 ton miles, the equivalent in that respect to the interstate shipment of one car 224 miles.

Four cars are required to take care of the average intrastate shipment, as against one car for the average interstate shipment. Three cars must be set at Corning and one at Tuckerman, or a total of four cars for loading.

These must be loaded, weighed, billed, and all of the accounting features observed at the loading station; and the same four cars must be set for unloading at Nuckles; unloaded, charges collected and remitted, and all accounting features incident to the transaction at that end of the journey completed.

Each of these four cars has borne a terminal expense at origin and at destination, making eight terminal expenses, as compared
1053 with a single terminal expense of the interstate shipment at Nuckles.

The other terminal expenses on that shipment, the setting the car for loading, its billing, weighing, and the other steps incident to its preparation for movement, are borne by the station at which the car was loaded, in Texas.

The cost of handling business is dependent upon the number of times the terminal is used.

The four intrastate shipments referred to require the services of the station and yard forces, and the use of facilities eight times, to move the twenty tons the same number of ton miles as the single interstate shipment which made the use of station and yard forces and other facilities in the state but once

The terminal cost of a shipment five miles is as great as on a shipment of 50 miles or 150 miles or, in fact, any distance; and the terminal cost to the St. Louis, Iron Mountain & Southern Railway in Arkansas for the six months July to December, 1907, inclusive, was 18% of the entire cost of operation, or $564,064.

In intrastate traffic a greater number of cars is required and a larger investment required in freight car equipment than is required in interstate traffic.

The average length of haul of interstate traffic in the state of Arkansas, as shown in Exhibit 5, is 224 miles; while the average length of every intrastate shipment occurring in the same exhibit is 70 miles.

1054 Even assuming that the average tons loading per car in interstate and intrastate traffic is equal; that is, that each car loaded in each class of traffic contains the same number of tons, four cars to one are necessary to be employed in handling the intrastate over interstate traffic, to secure the same number of ton miles.

This, however, as I have explained before, is not the true ratio. Under the railway practice, and under the laws of Arkansas, forty-eight hours are allowed the shipper for loading and forty-eight are allowed the consignee for unloading every car.

This means, in going back to the illustration just made, that the interstate shipment to Nuckles would result in the company being deprived of the use of one car for forty-eight hours, while in the four intrastate shipments the company would be deprived of four cars ninety-six hours each, or 384 hours.

Reducing this to days the railway company would lose the use of the car containing the interstate shipment two days; while it would be deprived of the use of the four cars in the intrastate shipment sixteen days. This makes the ratio eight to one.

Eight cars for the use of intrastate freight as against one car in interstate freight.

1055 As I have explained before, even though the full forty-eight hours were not used in every case, that is to say if the average were lower, if it were one and one-half days or one and one-quarter days or one day, the ratio would remain the same, eight to one.

The standard freight car of today cost $900 and the relative investment in freight cars in the illustration used, for the intrastate and interstate traffic, would be $7,200 for the intrastate cars and $900 for the interstate car.

This investment is a part of the cost of road and equipment and the larger investment places additional burden upon the railway company to earn the interest necessary to carry it, in the ratio of eight to one for intrastate over interstate traffic.

The cost of maintenance of cars is greater in the intrastate than in the interstate traffic.

As I have illustrated heretofore, eight cars must be provided to handle the same tonnage of intrastate traffic as can be handled with one car in interstate traffic.

This naturally increases the proportion of cost of freight car maintenance in intrastate traffic over interstate traffic.

Depreciation is also going on with eight cars as against one car equivalent in interstate traffic.

The maintenance of cars is a large item in the expense of operation, amounting to 12% of the entire freight cost in Arkansas during the six months July to December, 1907, inclusive.

1056 The depreciation would be eight times as great in the intrastate traffic as in the interstate traffic. And this depreciation on all cars for the purpose of complying with the requirements of classification prescribed by the Interstate Commerce Commission was established at 3% per annum or $27 per car per annum on the standard car of today.

The relative depreciation, therefore, would be $216 per annum for the eight cars in the intrastate traffic as against $27 per annum for the single car in the interstate traffic. The ratio would be eight to one.

The repairs to freight cars average $63.20 each in 1907, and this is fairly representative.

As the use of freight cars in intrastate traffic to reach the same ton mile equivalent is eight times that of interstate traffic, the maintenance would be at the ratio of $505.84 for eight cars per annum as against $63.23 for one car per annum for interstate traffic, in the ratio of eight to one.

From my practical experience in railway operation and for the reasons I have given, and for other reasons, in my opinion the cost of handling intrastate traffic is at least five times as great as that of handling interstate traffic, on the basis of quantity, or more than double the cost of the basis of revenue, as shown in these exhibits.

1057 Mr. MOORE: What would be the difference in the cost of conducting interstate and intrastate passenger traffic? But before I come to that, I want to ask you another question:

If the interstate and trans-state hauls were considered without regard to State lines what effect would it have upon the length of the haul, as to that character of traffic?

A. It would increase it very materially. It would increase it to the extent of the mileage made on the trans-state business in other states.

Q. The statement you have made in regard to extra cost of state business relates almost altogether to transporation of freight?

A. Yes, sir.

Q. I wish you would state now your views as to the extra cost, if there is extra cost (and I believe you have already stated there is) of conducting intrastate passenger traffic over interstate traffic of that character, and what elements you think enter into that additional cost?

A. The cost to the railway company of doing the intrastate passenger business is greater than that of doing the interstate passenger business. It is not relatively as great, however, in my opinion, in the passenger as it is in the freight traffic. Some of the elements are the same, the foremost of which is the length of haul. That is,

the average distance of the journey made by intrastate passengers and interstate passengers.

1058 Exhibit 5 shows that intrastate passengers made an average journey of 30 miles, while interstate passengers made an average of 118 miles; consequently four different persons making intrastate journeys would be required to equal the journey of one interstate passenger.

Every passenger is entitled, by usage and by law, to have in the state of Arkansas 150 pounds of baggage carried without extra charge; and the rate he pays for his own transportation covers the carriage of 150 pounds of his belongings, if he tenders them.

The railway company is responsible, as a common carrier, in Arkansas, for 48 hours, for all baggage amounting to 150 pounds and less, after it reaches its destination; instead of for twenty-four hours as is the case in other states. The railroad company cannot collect storage charges until the forty-eight hours have expired, and then only at the rate of 5¢ per day; while in other states the storage collection begins 24 hours after the arrival of the baggage; and is made at the rate of 25¢ per day.

The passenger may, in addition to the 150 pounds of baggage carried demand the carriage of any excess above that amount, at the rate of 12½% of a first class fare; or, in other words, the railway company is compelled by the laws of Arkansas, to carry such baggage as is tendered by the passenger, on its passenger trains under the same liabilities and conditions as other baggage, for which

1059 it would receive, on the two cents per mile basis, two and one-half mills per hundred pounds; and on the three cent basis, 3.7 mills per one hundred pounds, per mile.

Now, there are the terminal expenses as well in the passenger service as there are in the freight service. These terminal expenses consists of the sale of tickets, reports and other accountings, attending their sale. The checking, handling and reporting of baggage. The cost of heating, lighting, cleaning, repairing and policing stations, and many other station expenses, and the intrastate passenger imposes two terminal expenses upon the railway company; that is, one at the beginning of the journey and the other at the end.

The same is true of an interstate passenger; but one of the terminal expenses, either that at the beginning or at the end of the journey is incurred in another state and is a part of the expenses charged to the operation in that other state.

The railway company transports in Arkansas four different individuals making intrastate trips of 30 miles each, to one individual making an uninterrupted interstate journey of 118 miles. And the ratio is, therefore, eight terminal expenses for an intrastate passenger to one for the interstate passenger.

The interstate passenger purchases his ticket, has his bag-

1060 gage checked and loaded; seats himself in the train and rides 118 miles.

The intrastate passenger buys his ticket, has his baggage checked and loaded; boards the train and rides but 30 miles, when he alights and his baggage is put off the train with him.

Another passenger buys a ticket at that point, has his baggage checked and loaded and rides another thirty miles, where he leaves the train and his baggage is likewise put off.

Here again another passenger purchases a ticket and repeats the process in regard to the baggage, rides 30 miles further, where he leaves the train and his baggage is put off.

At that point a fourth passenger purchases a ticket and has his baggage checked and loaded and rides the remainder of the distance, where he leaves the train and his baggage is unloaded.

Here is the sale of four tickets to the intrastate passengers, who journey along with the interstate passenger whose trip involved but one.

The railway company has loaded four pieces of baggage for the intrastate passengers and unloaded four pieces, making eight handlings of the baggage. While the baggage of the Interstate passenger has been handled but once. In the accounting and auditing features of the expenses, there is the expense of
1061 checking four tickets or fares in the intrastate passenger service as against one in the interstate.

The ticket auditor of the Missouri Pacific System has about 130 clerks who are used for that purpose, and his pay-roll amounts to about $82,800 per annum.

The handling of baggage at most stations requires extra labor.

The number of interstate passengers transported during the six months covered by Exhibit 5 was 257,950, a large proportion of whom were trans-state passengers passing through the state of Arkansas to and from northern points, Texas, Louisiana and the Republic of Mexico, whose baggage required no handling whatever in that state.

1,444,540 intrastate passengers were transported during the same period. Or, about five to one.

The number of passengers of the two classes do not, of course, show the exact relation of the baggage expenses, but considering the activity of commercial travelers, with their heavy baggage, theatrical troupes, and other itinerants all of whom carry baggage to the full amount, or in excess of the minimum; and all of whom make short trips, drumming the cities and towns, it is a fair conclusion that the ratio of eight handlings of intrastate baggage to one handling of other baggage prevails.

With the intrastate passengers four persons board and four persons leave the trains, as compared with one person boarding or leaving the train in interstate travel.
1062 This makes eight exposures to accidents in the intrastate traffic against one in the interstate traffic; and the railway company annually settles claims to no inconsiderable amount for injuries to passengers in boarding and leaving trains.

The handling of baggage, the loading of four pieces and the unloading of an equal number makes eight handlings of baggae in intrastate to one in interstate traffic; and the exposure of this bagage to damage and loss, for which the railway company will be held, in the ratio of eight to one.

The through trains make fewer stops in a given distance than the local passenger trains.

On the main line between Texarkana and Moark the Missouri state line, a through or interstate passenger train averages one stop iin every thirty-five miles. While the local train averages a stop every five miles.

Local trains, therefore, stop seven times as often as through passenger trains on the heaviest carrying passenger line of the Company in Arkansas.

The starting and stopping of trains occasion the greatest wear and tear to equipment. And also a greater expenditure of energy than for the continued movement.

The running gear in the body of the cars is subject to greater strain in stopping and starting than in continued movement, and deterioration and more frequent repairs are necessary on this account.

1063 The greater expenditure of energy to start and stop a train, perhaps can be illustrated from the observation of anyone in watching a team of horses starting a loaded vagon. Every muscle will be strained in the effort to start the load, but after it is once under way the team will handle the load with ease and will even attain a considerable speed.

When it is necessary to stop the muscular action is reversed, and the horses put their weight and strength against the load and the momentum that the load has acquired. Both efforts are greater than are necessary in moving the wagon between the given points; and if the horses were confined to stopping and starting all the time, or making very short trips between those points, they naturally would wear out quicker than they would if the intervals were longer.

Take street cars that were formerly handled by horses. There was a strain and delay in starting and stopping the cars at each corner. We will presume that these street cars had two horse power. If that number were employed the electric lines when they took over those cars and reformed them into electric cars used two 7½ horse power motors. While these were found to give the necessary speed, they could attain the momentum between stops, the time lost in stopping and starting was considrable, so the power was increased to two fifteen horse power motors to each car.

The standard car of today, weighing say 50,000 pounds or 25 tons is equipped with four 40 horse power motors.

1064 The necessity for that is not for attaining speed between points but in starting and stopping cars quickly and getting quick acceleration.

As an illustration of that, if the cars in the City of St. Louis were moving at a speed of say fifteen miles an hour, but 30,000 horse power would be necessary to be maintained during the night at the power house, against 60,000 horse power which they do maintain, because of the necessity of the extra energy required in starting and stopping the cars.

On the other divisions of the road in Arkansas, all passenger trains practically make all local stops.

I make an exception of the Central Division between Little Rock and Van Buren, where those night trains make stops at little longer intervals, 17 miles an hour or approximately that. But the general average of the local trains is five miles between stops.

In my opinion, from a practical standpoint, the cost of handling intrastate passenger traffic exceeds that of handling interstate passenger traffic by 35%.

1065 C. J. McPHERSON.

Direct-examination.

By Mr. MOORE:

Q. What if anything has the Railway Company done to improve its efficiency of operation beginning with the year 1900?

A. The Railway Company has made extensive grade revisions and changes in its alignment; and purchased heavier equipment. That is, locomotives of greater tractive power and cars of larger capacity and made other improvements to increase the efficiency of its train service. The grade between Moark, near the State Line, between Missouri and Arkansas, a distance of 307 miles, is now six tenths of one per cent and this involved the reduction of the maximum grades between Moark and Little Rock, 35 feet to the mile, and between Little Rock and Texarkana, 26 feet to the mile, these reductions bringing the maximum grade to 31 feet to the mile of six tenths of one percent.

Between Knobel and Helena, a distance of 140 miles, the maximum grade was reduced from 91 feet to the mile, Southbound, to 62 feet to the mile. And Northbound to 83 feet, involving the cutting down of the maximum grade 28 feet to the mile Southbound and 8 feet Northbound.

Between East Little Rock and Pine Bluff, a distance of 42 miles,
the maximum grade has been reduced from 52 feet to the
1066 mile to 26 feet, which was a maximum grade reduction of
26 feet to the mile and leaves the present grade one half of one percent.

Between Little Rock and Van Buren a distance of 152 miles, the maximum grade prior to the revision was 85 feet to the mile East bound and 81 feet to the mile West bound.

These grades have both been reduced to 31 feet to the mile, or six tenths of one percent.

This involved a reduction of maximum grade 54 feet to the mile East bound and 50 feet to the mile West bound

This, with other work in the way of improvements, improving the efficiency of the property, caused an expenditure of $8,684,411.00 for the eight fiscal years, 1901 to 1908.

It does not embrace some of the expenses, however, as the figures chargeable in 1899 and the first half of 1900 were not accessible at the time that this compilation was prepared.

This reduction of grade increased the efficiency of the Railway in its tonnage road haul.

As a further improvement, the Company purchased during the period mentioned 323 locomotives of large tractive power and 6680 freight cars of large capacity at a cost of $9,660,372.00.

This heavier power likewise contributed to increasing the average tonange road haul and thus increased the efficiency of the service.

This increased efficiency of operation, however, has been
1067 overcome and far outrun by the forces working against it.

That is, the increased rate of wages and the increased cost of material, the burdens imposed by legislation and the increase in taxes.

Q. How were those expenditures to which you refer as improvements carried in the accounts of the Company, or do you know?

A. Those improvements were charged to betterments.

Q. They did not affect the operating accounts?

A. No they were not charged to the operating accounts.

Q. Mr. McPherson, from an operating standpoint what do you think of the year 1907 as a representative period for the purpose of testing and determining the reasonableness or unreasonableness of the rates that are in controversy in this case?

A. In my opinion the year 1907 was a fairly representative year.

Q. You have spoken in your previous examination of certain increases in the cost of labor and material in and during the year 1907; did those increases in any way affect that period as a representative period for the purpose of testing the rates referred to?

A. Not in the ratio of the increase they represent because they will continue in the future. They are permanent in their character and
would affect in the same way the operation of subsequent
1068 years.

Q. Did those increases change in any way the relation as between the rates or the earnings of the property during the year 1907 in your judgment?

A. I do not understand your question.

Q. Did the increase in the cost of labor and material which occurred in 1907 affect the relation as between the conduct or the cost of the interstate and intrastate traffic?

A. They are burdens on the whole traffic.

Q. Did they affect all of the traffic alike?

A. They would affect all of the traffic alike.

Q. When did the panic of 1907 first begin to be felt in the operating department of the Railroad?

A. The operating department felt it in December of 1907.

Q. When did it reach its height in its effect upon the operation of the Iron Mountain Railroad?

A. In the following summer I should say, from April to June it reached the high water mark of effect.

Q. How long did the conditions brought about by the panic continue?

A. Well they continued all through the fiscal year of 1909.

Q. You mean by that the fiscal year, 1908-1909?

A. The fiscal year ending June 30th, 1909.

1069 Q. Was that period, that is to say, the fiscal year of 1909, a representative period with regard to operations, business, and revenues of the Railroad?

A. I should not consider it a representative year,——

Q. Why not?

A. —until later. Possibly to make myself clear on that it would be necessary to take up the situation that followed the panic.

Q. Very well, do so.

A. And make an explanation of what the Railway Company did and what the effect of what they did at that time had upon the fiscal year ending June 30th, 1909.

After the recession of business began to be felt the Railroads were confronted with a very serious situation and one that required a good deal of thinking. In order that the expenses and the income might be brought somewhere into relation required that there must be an increase in the rates that the Railway received for handling its freight and passengers or there must be a decrease in the rate of wages paid to its employees.

The soundings in both directions showed that the first would be met with united opposition by the public, and the second would be resisted by the employees to the extremity of tying up business all over the country.

The only alternative was to reduce expenses wherever possible in force and in maintenanve.

The way that the Iron Mountain met this stiuation was by reducing the working hours in the locomotive and car shops and

1070 on the car repair track, followed by a further reduction of the number of men and a reduction in the working hours in the machinery department, and in some cases to twenty hours per week, and finally in the closing of the locomotive and car shops and discontinuing work on the heavy repair tracks (that is, where the larger car repairs were made altogether) deferring repairs to both cars and locomotives until the advent of better times when they would be needed.

In the maintenance of way department and in the engineering dept. a large reduction was made in both the outside and inside clerical forces and the regular maintenance work was deferred on roadway and structures so far as it could safely be done from that time forward.

All investigations, plans for improvements, and kindred work looking toward the future development was deferred and the force engaged in investigation were dropped.

The passenger trains were discontinued on the Iron Mountain where the same could be done without embarrassment to the public, and this amounted to 511,000 passenger train miles per annum.

Small local stations were closed and the number of telegraph operators was reduced by closing either night or day offices, without interfering with the handling of train miles to an unnecessary extent.

The clerical forces at all stations were cut down.

1071 The yard forces were reduced to the minimum and a reduction was made in the forces in the general offices equivalent to 30% of the pay rolls; deferring the collection and distribution of statistics and other accounting that could be deferred; increasing the amount of labor required from each individual and lengthening his hours of labor.

These methods so far of course as they pertained to maintenance of structures, road and equipment would under normal conditions be considered improvident, as the expense to regain normal conditions carries a heavy percentage of added cost as deferred work always does.

This, however, was the only alternative that would enable the Railway to survive.

The condition of the public mind was such that the rates of freight could not be advanced and the cost of living was so great that the organizations of labor in the railway service would have fought to the last extremity any decrease in the rate of wages.

This maintenance work to which I referred was deferred until perhaps the beginning of October——

Q. Yhat year?

A. —1908, when there was some revival of business making a demand for cars and locomotives, and the maintenance work was resumed to such an extent as the business justified.

With a gradual improvement in business conditions, this maintenance of work was undertaken on a heavy scale during the balance of the year; that is, beginning with November, and further
1072 increased in the early months of 1909, the present year. And the result reflected in the expenses of operation these deferred obligations of the previous year.

The normal probably was reached with the beginning of the current fiscal year, the month of July.

1073 Cross-examination of C. J. McPherson.

By Mr. Hill:

Q. Mr. McPherson, I believe that you stated that the use of the bridge at Van Buren for passenger trains facilitates the traffic on that line; and should benefit the interstate and intrastate traffic both: is that correct?

A. That is correct.

Q. Do you know how far it is from Van Buren to Fort Smith by way of Cherokee Junction?

A. About nine miles, I should say.

Q. It is five miles from Van Buren to Fort Smith over the bridge, isn't it?

A. I should say that was relatively the figure.

Q. You save four miles with two passenger trains, a day, do you not, by taking the bridge route?

A. Yes, sir.

Q. You pay $1,000 a month for that?

A. I have not got those figures. I cannot tell you what
1074 the payment made for that facility is.

Q. Mr. Johnson has already stated about that. Mr. Johnson will tell us.

Mr. JOHNSON: That is what the monthly rental is.

Q. The minimum?

Mr. JOHNSON: That is what we pay.

Q. Mr. McPherson, the travel to Fort Smith by way of Cherokee Junction is not so heavy that this route across the bridge is necessary, is it?

A. Whatever it may be and under whatever circumstances may exist, it relieves the rest of the traffic.

Q. Is it necessary for it to be relieved?

A. That would depend upon the condition of the traffic, yes.

Q. From your knowledge of the traffic, is it necessary to be relieved?

A. I should say it would be when traffic was heavy, under certain conditions.

Q. Take the traffic during the last half of 1907, the point of our inquiry; was it so heavy then that it was necessary to be relieved by diverting two trains a day over the Van Buren Bridge?

A. It facilitated the general operation of the road.

Q. That does not answer my question, Mr. McPherson.

A. Why, I think it does, Judge. My intention is to show that as a facility of operation it is calculated to afford dispatch
1075 under circumstances where the traffic was such that the trains would be otherwise delayed. And that is something that could occur in 1907, or any other year.

Q. How many trains make that trip from Van Buren to Fort Smith by way of Cherokee Junction, per day?

A. Trains No. 103 and No. 104, two passenger trains.

Q. How many freight?

A. Well, we do not schedule freight trains over that bridge, so far as I know. Whether it would be used temporarily under certain conditions, is a matter that might come up from day to day, but it is not a matter that would be brought to my attention.

Q. I am speaking of normal conditions: how many freight trains do you run over there a day?

A. Well, I do not know that we run any freight trains over the bridge.

Q. I am talking about Cherokee.

A. By way of Cherokee Junction?

Q. Yes. I believe your answer was what you ran over the bridge.

A. I understood you to ask about freight trains.

Q. I understood from Mr. Johnson that you did not run any freight trains over the bridge, except in emergencies; that you ran two passenger trains over that bridge: now I want to know how many trains you run from Van Buren to Fort Smith by way of Cherokee Junction?

1076 A. That would develop from day to day.

Q. Give us the normal operation.

A. Well, I would have to get those figures from the records. I could not give what would be the actual, normal operation.

Q. I would like to get just an approximation, if you know that; just about what it is.

A. I would be unable to say, because that would involve the

movement of switch engines, and there is no regular schedule of such trains and I would prefer to answer that a little later, and get some of those movements, say for a relatively average or normal day.

Q. During the period of inquiry, the last half of 1907?

A. Yes, sir.

Q. I believe you say the use of the Cotton Belt tracks from Paragould to the state line is necessary in order to relieve the traffic on the main line?

A. Yes, sir.

Q. I think you stated the local traffic on the main line between Bald Knob and state line was enormous: isn't it a fact that that track is used to relieve the interstate and trans-state traffic that comes up not from the main line but from the Helena Division.

A. No, sir. It is used to relieve all traffic. There is a contribution, of course, to the other traffic. The traffic from the
1077 Helena Division, as you will notice by looking at the time table, would come up to both Paragould and Knobel for movement.

Q. Would come up from where?

A. To Paragould and Knobel. Now the heavy main line traffic on the St. Louis Iron Mountain & Southern is between Bald Knob and Knobel.

Q. You mean local or interstate?

A. I mean all traffic. That is the heavy line of traffic, and that for which the necessity existed to afford facilities to move.

Q. Right north of the state line you have some pretty steep grades, haven't you?

A. Well, beginning at Piedmont there is the beginning of the heavy grades.

Q. And from there up to Bismarck or De Soto?

A. Yes, sir, from there well on to De Soto.

Q. The power of your locomotives is very much less there than it is from state line to Texarkana?

A. The power of the locomotives?

Q. The moving power?

A. Oh, yes.

Q. Very much less?

A. Yes, sir. That would be regulated by the grades.

Q. This line from Paragould of the Cotton Belt Railway that you use, goes up across the Mississippi River at Thebes and then
1078 connects with your Illinois Division, doesn't it?

A. Yes, sir.

Q. You have a low grade route that way?

A. Part of the traffic moves that way and part of it moves by way of Poplar Bluffs.

Q. I asked if you did not have a low grade route that way?

A. Yes, sir.

Q. Is not this route utilized in order to get the benefit of the low grade, to bring your freight up the river on the east side to the Illinois Division, and then into St. Louis that way, in order to avoid the heavy grades about Gads Hill and Tip Top?

A. That is the benefit of the movement we give to that traffic, and in doing so we relieve the main line just to the extent of the traffic that moves over that route. There is greater efficiency of the train service by going in that direction; we get the same efficiency of the train service that we get on the Arkansas line, as the grades would be relatively the same.

Q. That is largely the purpose of that movement, isn't it?

A. The purpose of the entire movement and arrangement is to relieve the line north of Little Rock.

Q. Owing to the physical difficulties about Gads Hill, and that section of the Missouri Division, isn't it?

1079 A. That is one of the reasons. I think I can explain that in this way: a train of freight moving over the line from Bald Knob to the state line can be moved over the territory you mention relatively with the same class of power, and the efficiency of that line is about equal to the efficiency of the locomotives on the line between Bald Knob and the state line, say Moark. However, the line from Bald Knob to the state line or from Little Rock practically to the state line would not be sufficient as a single line to handle the traffic, freight and passenger, expeditiously. The connection which we make with the Illinois Division, through the joint use of the Cotton Belt line, enables the traffic to be handled with success.

Q. If you had a choice of two routes, one a low grade and one a high grade, leading to a great market, as a practical operating man which would you use?

A. I would use the low grade line.

Q. That is exactly what you do here, with all the freight you get.

A. And in doing that we are getting relatively the same grade, and the same efficiency of power, that we do with the line from Bald Knob to the state line.

Q. You have your own ferry here in St. Louis? Ivory Ferry I believe it is called, connecting your Illinois Division with your terminals on the west side of the river, haven't you?

1080 A. Yes, sir.

Q. When you move your freight to St. Louis by this Illinois Division you can move it into the terminals in St. Louis on the west side?

A. Yes, sir, over that ferry.

Q. With your own ferry?

A. Yes, sir.

Q. You do move freight to the west side in that way, don't you?

A. Yes, sir, we move such traffic as is necessary to come to this side of the river in that way.

Q. There is no doubt that the primary consideration in that movement is to avoid the hills in the Missouri Division, isn't it, Mr. McPherson?

A. Judge, as a general proposition of operating efficiency, we must provide for the handling of traffic that is offered to the com-

pany. Now, the traffic was too great for this single line from Little Rock to Moark or to Piedmont, which is practically all the same grades. And the arrangement we made fortunately gave us connection with our Illinois Division, that we could use and still increase our efficiency of operation not only in Arkansas but in Missouri. And that is what was done. We did not confine the view, when this arrangement was made, to the exact effect in Arkansas,

1081 but we treated it as a general, broad proposition, to get the greatest efficiency and give the best service. That is the object of a railroad, to give good service.

Q. The local traffic from Bald Knob to state line is very small, isn't it?

A. Oh, no.

Q. Intrastate traffic?

A. Oh, no, there is a great deal of business there. We have very important cities. We have quite an important jobbing point there, New Port.

Q. About what proportion of the tonnage that passes over that line from Bald Knob to State line is intrastate.

A. I cannot say what proportion that represents of the tonnage. The statistics are not kept to cover such small districts.

Q. As an operating man you should have a pretty intelligent idea of what the proportion would be.

A. There is a great deal of local freight in there. It is quite a well settled territory, the towns are thriving, and in a general way they will average very fairly with the rest of the line north of Little Rock.

Q. It was not to relieve that traffic that this arrangement was made?

A. It was to relieve all of the traffic, Judge Hill. Whatever the delay might have been in a general way in operation would have been to all of the traffic.

Q. It was not to relieve this ten or fifteen per cent of

1082 traffic, that that arrangement was made with the Cotton Belt, road, was it?

A. As much, up to the percentage it represented of the whole.

Q. You think so?

A. Yes, sir, it was made to relieve the whole of the traffic and facilitate the movement of all the traffic.

We have had more trouble and more complaints in the delay to a box of goods, or a small package of freight, than we frequently do for a carload.

Q. Don't you bring a lot of trains from the Illinois Division, from Illinois down to Paragould and then up to Knobel and then on down the main line to Hoxie?

A. Oh, no. That is not the movement. The trains we would move down that way would come from Paragould, Wynne, Bald Knob and then down to Little Rock.

A. As a matter of fact, don't you have considerable movement as

I have indicated, the Illinois Division to Paragould, up to Knobel, then strike the main line and go south on it?

A. Oh, no, we would not do that, on account of the unfavorable grade.

Q. Don't you do that? I wish you would examine your wheel reports and give me an answer on that.

A. That would not be a natural movement. There might be a movement made that way in case of emergency or on account
1083 of particular conditions at a certain time; but it would not be a sensible movement to make if the rest of the line was open.

Q. I wish you would examine your wheel reports for some representative time during the period we have under inquiry and answer me further about that.

A. That would involve a great deal of work. I know as a physical proposition that is not a movement that under ordinary conditions the railroads would make and it would be made only provided there was some interference with the movement of the traffic in a straight forward way. I think I can illustrate that to you.

Q. I understand your reasoning now as against that movement. I am not asking whether it should or should not be made, but I am asking if it was made?

A. It would not be made under normal conditions.

Q. I believe you have put in some statistics for October, 1907, and I wish you would examine your wheel reports for that month, and then answer me about that movement.

A. That is a pretty large order, Judge, to examine the wheel reports for the month of October, 1907. It would probably require a number of clerks three or four months.

Q. Has not all that been worked up in your office?

A. Not in my office.

Q. In the office of the company?

A. It has not been worked up in any manner that would
1084 show any unusual movement.

Q. You have those wheel reports, haven't you?

A. We have the wheel reports.

Q. I wish you would look into that and by the time we meet again, give use your further report on that: I think you will find it not as difficult as you seem to think it is.

A. Well, do I understand that you desire me to examine these wheel reports for the month of October, 1907, to ascertain whether the traffic moved from Paragould up to Knobel?

Q. And the extent of the movement. Or for any other normal month. I just took October because I understood that was the one you were working up. (Your exhibit 26.)

A. The figures that have been made for that month would not cover information of that kind.

Q. They would not?

A. No, sir.

Q. But you can get it in your office?

A. I have explained about the amount of work that would be involved in doing it.

It is possible that some traffic moved that way, as I said before, under conditions of high water or a wreck or storms, or embargoes, or something of that sort. But it would not be a normal movement.

Q. There is very little intratsate movement from Paragould to Knobel, and then on up to the state line, isn't there?

1085 A. I should not think there was very much. There is some.

Q. This intrastate traffic there would not be seriously impeded by sending your trains from that Helena Division up that route, would it? I am referring to the intrastate traffic from Paragould up to Knobel and up to the state line?

A. Oh, no, I do not suppose you could single out the traffic. You would not deal with it as a single proposition but you would deal with all of the traffic. You could not segregate what would be delayed and what would not be delayed. It might all be moving in the same trains, and there would be less opportunity for delay under the present arrangement.

Q. You referred in your testimony to a number of laws that had been passed, which increased your operating expenses: the electric headlight law was one you dwelt upon considerably:

Isn't it a fact that none of the expenses incurred by reason of that law were incurred during the period of our inquiry? That is, the last half of 1907.

A. That is probably the case. That law was passed, or took effect, since that time. At least I think the headlights were not installed during those six months but after those six months.

Q. On your Fort Smith and Little Rock Divisions they have not been installed yet, have they?

A. Oh, yes.

Q. You have a lawsuit down there about them—or

1086 have you settled that?

A. Well, it was not possible to do all those things at once. We have been putting them on very rapidly. There is a good deal of work that attaches to it and a great deal of expense; and we arranged with the Commission to install so many headlights per month. They were satisfied if we would do that, until headlights had been put on all our locomotives.

Q. This Passenger Full Crew Law, was passed only in 1909?

A. Yes, sir.

Q. There was none of that expense which went into your statistics, when you got your injunction before Judge Van DeVanter?

A. No, sir, I do not think there was any of that expense.

Q. Wasn't that true, too, of the sheds over repair tracks?

A. That has been done since.

Q. That is also true of the Semi-monthly payday law?

A. That is also true of the Semi-monthly payday law.

Q. What about the full freight crew law?

A. We put on the third brakeman in May, 1907.

Q. Didn't you put on the extra brakeman before that law was passed?

A. No, sir.

1087 Aren't you mistaken about that Mr. McPherson?

A. No, sir. We had negotiations that same year with the labor organizations, during the preceding fall, who were trying to install the third brakeman on freight trains.

Q. It was testified in the contest you had with the Rock Island road, that you put the third brakeman on before the law was passed?

A. No, sir, we put them on to avoid the penalty of the law.

My impression is that the accrued penalties for failure to do so, in each case, would have amounted to something like $10,000,000 or $12,000,000, before the case could be decided. The penalties in that law were so severe.

Q. You do not think, then, that you put those on voluntarily prior to the passage of the act?

A. Oh, no, sir.

Q. Those people testified to that I know. But you ought to know accurately.

A. We made no addition to the number of brakemen employed on through trains.

Q. When was that law passed?

A. I think that law was approved March 28, 1907, and took effect in thirty days; that would make it April 28, 1907, and we put them on May 1, 1907.

Q. The expense incurred by that law is the only one of those laws you have referred to which had been incurred prior to your obtaining your injunction?

1088 A. I do not know whether that would be prior to our obtaining the injunction. That was obtained I believe in 1908.

Q. I have not stated my question correctly. I meant to say the period of time covered by you exhibits, on which you obtained your injunction, which I understand covered the last half of 1907.

A. The third brakeman expense would be the only one of those increases as to electric headlight, full crew bill, third brakeman law, semi-monthly pay day law, and the shed over repair tracks, and the monthly visitation law.

The third brakeman law was the only expense of those enumerated, that would come in the six months mentioned so far as force is concerned.

Q. So far as the expense is concerned?

A. The increase in wages I have testified to was in there.

Q. That is not caused by the operation of laws. I was speaking of just the laws.

A. I wanted to be clear, that the increase in wages pertained to that entire period.

Q. There are some laws of Congress that have affected materially your expenses, haven't they?

A. The classification of accounts to which I have referred in my testimony.

Q. How about the Safety Appliance Act?

A. Yes sir, the Safety Appliance Act was an act of Con-
1089 gress.

Q. That increased your expenses very materially didn't it?

A. The maintenance of Safety Appliances was a very heavy expense.

Q. Do you know about how much it is per annum?

A. I should say $250,000.00 on the System, the Missouri Pacific and Iron Mountain combined.

Q. About how much of that would be in Arkansas, just roughly speaking?

A. Well, that would be only a guess.

Q. I understand that. You could not make an accurate estimate off hand?

A. No sir.

Mr. MOORE:

Q. You mean the St. Louis, Iron Mountain & Southern or the Missouri Pacific?

A. I mean the Missouri Pacific System, about $250,000.00 per annum.

I would say in the vicinity of $60,000.00 a year.

Mr. HILL:

Q. There was a very heavy expense in equipping your trains with those devices, wasn't there?

A. Something over $4,700,000.

Q. Upon the whole system?

A. Yes sir.

Q. In round numbers five million dollars?

A. Nearly five million dollars.

Q. About what proportion of that would affect Arkansas?

1090 A. Well I could not tell that because of course that would be a betterment expense and a part of the capital account. That would not be charged to operation.

Q. That is true I expect.

That applied only to your interstate movement, that safety appliance device act?

A. Oh, no, that applies to everything. I do not know what the law is in the matter, but the attitude of the Commission is that any road that does an interstate business must have all of its cars equipped with these appliances.

Q. It is an expense attached to your interstate business?

A. I should not say so. It is an expense that attaches to all of the business.

Q. Congress did not attempt to legislate on the intrastate business in Arkansas, in that Safety Appliance law, did it?

A. In obedience to that law we have been obliged to take the rulings of the Interstate Commerce Commission, and that ruling is

that if a railroad is engaged in interstate commerce at all it must equip all of its equipment with these safety appliances, regardless of what particular business that equipment may be engaged in.

Q. That is right. And does not that answer my question that that is an expense which attaches to interstate commerce?

A. I do not think I would be qualified to answer that. It
1091 seems to me it would be more of a legal question than a practical operating one Judge.

Q. Well, we will leave it at that.

Haven't there been some other congressional legislation that has materially increased your operating expenses?

A. The hours of service law prohibits the railroad company from permitting their train employees to be on duty for a longer period than sixteen consecutive hours; and their operators and train dispatchers for a longer period than eight hours, or nine hours in the construction that we have given to the law; but that has created some additional expense?

Q. Have you any figures on how much?

A. I have not.

Q. It is a heavy item, isn't it?

A. I did make a memorandum here, that the telegraph operators and dispatchers, the extra expense since March 1908, when the law took effect, up to an- including October, was $22,027.00. That is about $1100.00 per month, in Arkansas.

As to the train service, it is pretty hard to figure out and I could not tell you just what that would amount to.

We have made some changes in operating arrangements to avoid as far as possible any expense incident to that law, by changing the runs in certain respects.

1092 Q. Is there any other congressional legislation which has materially increased your operating expenses?

A. I do not know of any, unless it might be the Employer's liability law.

Q. You have not hardly felt the force of that, I suppose, as yet.

A. No, I think perhaps there is practically the same legislation in the State lesislation of Arkansas.

Q. No.

A. Well, I do not know as to that. But I cannot say what effect that has.

Q. That is too recent. You could not forecast that.

Isn't it a fact, Mr. McPherson, that the legislation of congress has created heavy burdens upon your traffic, much heavier than the legislation of the State of Arkansas?

A. Oh, no. The Federal Safety Appliance Act was passed in 1893; that was sixteen years ago.

Q. It did not go into effect then, did it?

A. Yes sir, gradually. The Railroad Companies were given some extensions from time to time, but the application of the Safety appliances began at that time and continued until completed.

I think, as I recollect it now, some three years time was given.

Of course the Railroad Companies did receive efficiency in opera-

tion from the application of those safety appliances. It did
1093 add to the efficiency of the railroad service.

Now the laws to which I have referred in Arkansas have added nothing to the efficiency of the service.

Q. There is only one of those that is in our point of inquiry, the third brakeman act.

A. Our operating expenses today show very fully what the increases amount to.

Q. I am referring to the case as you made it before Judge Van Devanter. You have just testified that there was only one of those items of expense included in those statistics.

Now, keeping that in mind, is it a fact that the legislation congress had burdened your operation with expenses very much heavier than the State of Arkansas had?

A. I should say not. The expense occasioned by the federal legislation was in its major part the safety appliance act, that gives the railroad company added efficiency in its service.

The only cost of its maintenance in Arkansas might be somewhere in the same vicinity as the added cost on account of the third brakeman; but the third brakeman gave no added efficiency in operation.

Q. And the third brakeman law applies only to your interstate trains, over 24 cars I believe it is.

A. Well, it applies to all trains we handle even a work
1094 train.

Q. But in practical operation that would apply only to interstate trains, wouldn't it?

A. No sir, it would apply to all trains, as all trains possibly carry more or less both kinds of traffic.

Q. Your local trains that are engaged in purely intrastate business would not fall within the provisions of that law, would they?

A. They might.

Q. They might, but I am asking a practical question of whether they do or not.

A. So far as that is concerned, the local trains had a third brakeman before that law was passed. They had three brakemen always. I am not taking that into consideration in the analysis of this question.

Q. This really adds nothing to the situation, so far as the local trains are concerned, does it?

A. Not so far as the local trains are concerned, because they were provided with three brakemen before this law was passed.

Q. It is a burden which is put upon the interstate traffic?

A. It is placed upon every train in Arkansas that has over 24 cars.

Q. That would apply only to the interstate traffic.

A. Not necessarily.

Q. I am asking as to the practical effect. Of course there
1095 would be times when it would not; but I am asking about the practical operation of it.

A. In the practical operation, Judge, all freight trains are likely to have intrastate traffic. Arkansas is a large State and for long

movements intrastate carload freight is likely to be handled in through trains, over the long route.

Q. I believe you testified that the average haul was about fifty miles, wasn't it?

A. Seventy miles.

Q. The laws generally speaking then would apply to your through trains?

A. It would apply to through trains as distinguished from local trains, yes; still, local trains might have excess of 24 cars.

Q. But not very often, would they?

A. On level track and going into terminals, if there was traffic to move, they would probably be required to pick it up and take it into the end of their route.

Q. Of the three classes of traffic which you discussed yesterday—trans state, intrastate, interstate, from which do you receive the greatest revenue?

A. That would be an accounting proposition. That would be in the revenue account and I am not qualified to testify as to that.

Q. I will put it this way: which of those three classes of traffic is the most profitable?

A. That would involve the construing of which, after the
1096 expenses of conducting the traffic were deducted would yield the greatest net revenue?

Q. Yes.

A. That I would be unable to state.

Q. What is your opinion about it?

A. I do not believe I have ever given that matter consideration, Judge.

Q. You have given your reasons why it is more expensive to operate intrastate traffic: how could you give that without taking into consideration the question of profit from the two classes of traffic?

A. Well, to give an intelligent answer to that would involve a knowledge of the rates that each class of traffic bore; and that is something with which I am not acquainted.

Now as to which of the classes of traffic occasioned the greater expense to move, is something I could say, but I am not acquainted with the other factor.

Q. That is the other side of the question. Well, give your view about that.

A. As I have expressed it heretofore, the trans-state traffic is handled at lesser cost, because of the fact that it involves practically no stationary expenses.

Q. Do you consider that the least expenses of the three kinds of traffic.

A. To handle?

Q. Which would you consider the next?

A. The interstate traffic in which a portion of the station-
1097 ary expense only is handled in one State.

Now dealing with this question as applied to Arkansas, you mean?

Q. Yes.

A. In general?

Q. No I want to confine the inquiry to the conditions in Arkansas.

A. Manifestly the traffic that required only one half the stationary expense would be the next cheaper traffic to handle. That would be the interstate traffic.

And that which involved stationary expenses, or a double handling in the State would be the most expensive.

Q. Are those the reasons and the only reasons you have for so classifying the expenses?

A. No sir. I have given my reasons at a good deal of length in direct examination.

Q. As to intrastate, but I am now asking you as to a comparison of the three classes.

I understand the reason you gave as to burdening intrastate traffic with greater expense, but I am asking you now for a comparison of the three grades of traffic.

A. I should say that so far as expense in Arkansas is concerned, the relation would be something like this:

In the trans-state traffic there is no charge in the exhibits here for operation, for stationary service.

In the interstate traffic there would be one charge for stationary service.

In the intrastate traffic there would be two charges, in the
1098 exhibits filed here, showing the operating expenses of the road.

Q. Are these the only reasons you have for so grading these classes of traffic according to their expense?

A. Those are the principal reasons and the other reasons I have given would, of course, influence me in my answer to that question.

Q. What other reasons would influence you?

A. I believe I have spoken of the length of haul and of the elements that would enter into the variety of traffic.

Q. I don't quite follow you about the variety.

A. Well, the consideration of the character, value, risk, bulk, and so forth, of the freight or commodity.

Q. Does not that apply equally to all those classes of traffic except as to the length of the haul and the terminal expenses?

A. Yes sir.

Q. Your reasons reduce themselves to the terminal proposition and the length of the haul.

A. No sir, I cannot say that. I have analyzed my reasons thoroughly and if I should have to repeat them now it would mean repeating my analysis.

Q. I do not recall any other elements right now that you had in your evidence than those which I have mentioned. I do not care to have you repeat your evidence, but just call your attention to any other factors.

1099 A. Well, there are many more reasons that I have than those which I have given, that influence my opinion, influence this classification. I would not like to limit my reasons to the answer yes or no, that your question would require.

Q. I would like you to give the other factors that influence you in this opinion. So far as I can recall your testimony this is all. I may be in error about that.

Q. So far as the classification of the traffic is concerned those are the principal reasons, the fundamental reasons.

Q. You still say the "Principal" reasons, Mr. McPherson: now I would like to have any other factors you have.

A. That would require me to take up the three propositions given in my testimony, as to extra cost.

Q. Just mention those, without repeating your reasons for them.

A. I gave my reasons, that the intrastate traffic made a greater use of the railway facilities in proportion to the tonnage, and that a greater proportionate cost of maintenance was required than for interstate traffic.

That the railway company secured less efficiency from its cars in intrastate freight traffic in proportion to the relative tonnage than in interstate traffic.

That it required a greater investment in cars, and a larger
1100 cost for their maintenance, to conduct intrastate traffic than interstate.

Q. I understood you to make that distinction between intrastate and trans-state traffic.

A. I made it, or intended to make it if I did not do so, as between intrastate traffic and all other traffic.

Q. Did you not state that the interstate and intrastate traffic made use of all of the facilities of the railroad?

A. Yes, sir.

Q. And that the trans-state traffic did not?

A. The trans-state traffic does not.

Q. Then that reasoning would not apply, would it, Mr. McPherson?

A. Yes, it would. Do you mean in the classification?

Q. Yes.

A. Yes, it would apply, because the intrastate traffic makes use of them eight times while the interstate traffic makes use of them but once.

Q. That comes back to the proposition of the length of haul and use of terminals does it not?

A. Yes, sir.

Q. Aside from the use of terminals and length of haul, is there any greater cost for the intrastate than for the interstate traffic, for maintenance—disregarding the trans-state?

1101 Mr. MOORE: Do you mean the entire maintenance?

Mr. HILL: I was just taking what he said. I suppose he meant maintenance of way.

The WITNESS:

A. Yes, there would be a greater expense for maintenance of way that would follow the length of haul and the relative use of switches, sidetracks——

Q. That still comes back to the terminal and length of haul, does it not, Mr. McPherson?

A. Yes, if you want to divide it this way, but——

Q. Then you say——

A. I beg your pardon. I have not quite answered that question.

Q. All right. I did not mean to interrupt you.

A. In the average length of haul, 224 miles interstate and 70 miles intrastate, there is a greater use of sidetracks and all of the facilities at stations, and that would be relatively, as eight to one, in the maintenance of all of the facilities used. Not only the tracks, but buildings and whatever other structures were required in the intrastate and interstate operation.

Q. You say there would be greater efficiency of car service in interstate than in intrastate, and less cost for maintenance of equipment. That comes back to the same proposition of the length of haul and the use of terminals, does it not?

1102 A. I presume it would, fundamentally.

Q. Your reasoning, then, in its final analysis places the difference in these classes of traffic, intrastate, interstate and transstate, upon the difference in the length of haul and the use of the facilities—terminal facilities, I mean?

A. And the consequences.

Q. Well, that would be included in it, I take it.

There are no other factors now that have influenced your judgment in this matter?

A. Yes, there are many other factors that have influenced my judgment.

Q. I would like to have them.

A. I don't know that I can reduce them to figures. They are matters of observation.

Q. Is there any further answer you would like to give, Mr. McPherson, to that?

A. There are other matters that apply to the consideration of these questions, that might exist one month and might not another month. There is the handling of empty cars. The traffic—state traffic, is not well balanced and requires more empty cars to be handled to provide for its loading than is the case with interstate traffic.

Q. Anything else?

A. As I said before, this would be one of the additional reasons that I would have in mind. There are others, but they don't occur to me just now.

1103 Q. The fundamental and principal one are the terminals and length of haul?

A. The added equipment and the maintenance; the various results that are dependant on those factors and results that work out——

Q. Now, on the question of the two terminals: you have stated that the Memphis terminals should properly be charged to Arkansas, and I understand from the exhibits in this case that the operation is charged to that. Is not that a fact?

A. That is the case.

Q. And all interstate shipments from Memphis points——

A. Let me qualify that.

Q. All right.

A. The terminals are regarded in this case the same as though they were located——

Q. I understand that. You explained that.

Then all the shipments from Memphis to Arkansas points, and from points east of Memphis to Arkansas, passing through Memphis terminals, would be interstate shipments and chargeable to terminals, would they not?

A. That would be the effect of the charge as it is made in the exhibit.

Q. Fort Smith is an interstate point, is it not?

A. I don't know what its legal status is.

Q. You haul all your freight by Cherokee Junction and that is in Oklahoma——

A. Will you let me finish my answer to the Memphis ques-
1104 tion?

Q. Yes, sir; I thought you were through.

A. As to Memphis, there are substantially no earnings on that business in Tennessee that the Iron Mountain receives, and so far as the accident of location is concerned, it would be the same to the Railway Company whether delivery was made to it on the east side or the west side of the River.

Q. All your freight traffic at Fort Smith, in and out, except from Fort Smith to Greenwood, goes into Oklahoma. That would make all of your traffic in and out of Fort Smith interstate?

A. Technically.

Q. That is the way your accounts are divided.

A. I don't know how the revenue accounts are divided. That is something with which I am unacquainted.

Q. It is in your statement, this Exhibit number 26 that you filed.

A. I did not file Exhibit number 26; that was filed by the accountant.

Q. I wish you would ask Mr. Johnson or Mr. Roth, whichever one prepared it.

A. Mr. Roth.

Mr. ROTH: In the exhibit it is treated as interstate business.

Mr. HILL:

Q. All shipments in and out of Fort Smith, except the small traffic handled down to Greenwood, would have two terminal
1105 expenses in Arkansas, would it not?

A. I should object to saying "except the small traffic down to Greenwood;" except the traffic.

Q. You know that it is very small, don't you?

A. I would not say that; it was small comparatively, whatever traffic there is.

Q. Well, it would be only the traffic between Fort Smith and Greenwood, including the "Jenny Lind" mine?

A. That may mean considerable traffic.

Q. That would be only to Fort Smith. As soon as it went out of Fort Smith it would be interstate. Isn't that true?

A. That is the way I understand it. Technically, it would be. I don't understand what the law is, any more than the fact that if the traffic originates in one state and passes through another to get back into the state of its origin, it has been held to be interstate traffic.

Q. Your accounts are made that way.

A. Those complications of operation are very difficult for the operating man to separate in his mind. The state line as a distinction is an imaginary one.

Q. You handle a great deal of traffic in Arkansas from Memphis and from Fort Smith, do you not?

A. Oh yes, there is considerable traffic.

Q. Those two points are both large distributing centers, are they not?

A. Well, Memphis is a large distributing center. Fort Smith is somewhat smaller.

1106 Q. A good deal smaller than Memphis, but still it is a large distributing center as far as Arkansas is concerned?

A. It is an important city.

Q. I suppose it is the largest distributing center in Arkansas, outside of Memphis.

A. I would not like to measure it with Little Rock.

Q. They are the two largest distributing points on your line, are they not?

A. Located in Arkansas.

Q. Now, every bit of that traffic, interstate traffic, in and out of Memphis and in and out of Fort Smith, between Greenwood and Fort Smith, would have two terminal expenses in Arkansas?

A. Yes.

Q. What is the situation in Texarkana in regard to interstate traffic? Where are your yards there?

A. Our yards are all in Arkansas.

Q. They connect with the T. P. yards, do they not?

A. Yes.

Q. Don't they extend into Texas?

A. The Texas & Pacific yards are in Texas. We have no mileage in Texas.

Q. You don't own the title, I understand, in Texas, but there is no break in the yards themselves. They are continuous are they not, on both sides of the state line?

A. Well, there are several yards there. In their operation
1107 they are practically continuous yards. But the Iron Mountain has no property of any sort in Texas.

Q. I understand the title to the Iron Mountain property is confined to that in Arkansas?

A. Yes.

Q. But the yard which you use extends right on across the state line into Texas?

A. For operating purposes it is more available to use a yard of that character.

Q. You have an agent there in charge of those yards between the T. P. and Iron Mountain, have you not?

A. Yes.

Q. It is operated as one yard, is it not?

A. Well, the agent is the agent of the Iron Mountain and for the Texas & Pacific both, but of course, he owes the Iron Mountain no allegiance for his——

Q. I am not speaking of that. You get cars there in your yards that come out of Texas, all the time?

A. Oh yes, that is the only way we can get them.

Q. All your interstate business coming from Texas to any point in Arkansas, would be handled twice in Arkansas, would it not?

A. Be handled twice?

Q. Yes.

A. In Arkansas?

Q. Yes, in your Texarkana yard, or Little Rock, or whatever yard?

1108 A. So far as the switching is concerned, *of* yes, the physical handling of the cars moving, classification into trains.

Q. That would be handled twice in Arkansas?

A. It might be handled three times.

Q. I expect if it went very far it would be.

A. So far as the switching is concerned—that is, merely its movement, its classification expense. I did not embrace that in my opinion. I excluded that.

Q. I am not referring to that. I understand the difference you make, but I am trying to get at your freight that goes in there in your yard in Texas, and is handled in Arkansas——

A. The switching is done—the classification, but not any local switching or any station expense; merely the classification of the cars as made in the classification yards in all traffic.

Q. Of these three classes of traffic, you say the trans-state is the least expensive, for the reasons you have given. Of what does the trans-state traffic principally consist?

A. It consist- of all varieties of commodities that are interchanged between states. It would consist of merchandise, machinery and other manufactured articles, southbound, and northbound, of lumber, sugar, and of the products of the states in which the traffic originated. It would be a general traffic.

Q. What is the largest trans-state item, the largest single

1109 one?

A. The largest single items of trans-state traffic are grain and lumber.

Q. Only?

A. No; I think those are the two larger items.

Q. What was that—lumber and what else?

A. Grain and lumber.

Q. How about livestock and coal?

A. There is not very much livestock. We have not encouraged the livestock business. In fact, we withdrew all of our solicitation from

Texas. I think now we may have one or two men down there, sent down there within the last six months.

Q. You have considerable coal movement from Illinois?

A. Yes, considerable coal movement from Illinois.

Q. That is trans-state?

A. The destination of that is largely in Arkansas.

Q. It not a great deal of it in Louisiana and Texas?

A. No, not a very heavy movement. I should not regard it as heavy, comparatively speaking.

Q. Have you not a pretty heavy trans-state movement of vegetables, onions and citrous fruits?

A. Oh yes, such things as that, northbound.

Q. A pretty heavy movement northbound?

A. I should say that they formed a portion of the traffic, but not a principal part of the traffic.

Q. Is not your livestock movement, northbound, pretty
1110 heavy?

A. No, we do a small livestock business.

Q. But you do twelve or fifteen thousand cars——

A. What?

Q. About how much?

A. The fact is, we don't take any livestock from Texas if we can avoid it, Judge.

Q. I am not speaking of that. I am trying to get at the volume. Whether willing or unwilling about how much do you get?

A. I can't say. We occasionally have been the only line open, in cases of wash-outs, storms, etc., that have taken away the bridges, etc., on the Red River, and I think in one month—perhaps that might have been in 1907—that all the roads in Texas brought all their livestock to us to bring north. That was for a week or ten days, something of that sort.

As I said before, we have withdrawn our solicitation, practically, of livestock from Texas.

Q. What about your solicitation of fruits and vegetables; don't you handle a great deal of those?

A. We handle a good many onions on the Iron Mountain, that are raised down in the southern part of Texas on the International & Great Northern.

Q. How about potatoes in Texas? Is there not a pretty heavy movement of them?

1111 A. Yes.

Q. How about citrous fruits from California?

A. Well, we are not a principal line because we are not the short line. They naturally would not take the longer line. They form a part of our entire business.

Q. Don't you handle a great many spring vegetables out of Texas?

A. Yes, it would amount to considerable, but it is a small part of our general traffic. The articles I have referred to, lumber and grain, form the heavier part of the traffic.

Q. These various items you have just been mentioning—lumber, grain, livestock, fruit of all kinds, and vegetables; with the exception

of grain and lumber they are commodities that require fast movement, are they not?

A. Well, I don't know that onions do, but we give them efficient movement over the road. Yes—I should say that we give them preferred movement.

Q. Do they use your facilities to the utmost?

A. Oh no, there would be no terminal expense on any of that traffic in Arkansas.

Q. On none of it?

A. Not any.

Q. Would there be on your livestock?

A. No, not unless the stock was fed, watered and unloaded in transit.

Q. That would likely occur, would it not?

1112 A. It might possibly occur, yes.

Q. What is it, twenty-eight hours or twenty-four, that you have to——

A. The new law permits the livestock to be held in cars for thirty-six hours, on request of the party in charge, and very much of that stock moves on that thirty-six hour privilege.

Our feeding yards have been at Poplar Bluff and on that thirty-six hour privilege we were able to make the run.

Q. Well, that new law was not in effect in 1907, of which we are inquiring in this case, was it?

A. I don't know about that.

Q. Did you not feed in your Texarkana yards there any livestock?

A. That is a feeding-yard. Wherever the run could not be made to the next feeding-yard, they would be fed at Texarkana.

Q. That would require considerable terminal expense, would it not?

A. Not such a terminal expense, Judge, as you are referring to.

The feed is paid for by the party who owns the stock, or it is a charge against the party who owns the stock, and follows it to its destination. The care of the stock in the meantime is looked after by the parties who have charge of the yards.

There would be a switching movement of the cars to the stock pens; the unloading of the stock into the yards, and there
1113 would be the re-loading of the stock into the cars after they were fed; but there would be no billing of the stock and no accounting features, or anything of that sort.

The many steps that would be involved in what we regard as a terminal expense would not be attached to that particular traffic.

Q. Is not that livestock traffic very expensive?

A. Very expensive?

Q. Yes.

A. It is a kind of traffic that we don't encourage.

Q. Is it not the most expensive traffic you handle?

A. No, not the most expensive. It is not as expensive as merchandise. It has——

Q. You mean by merchandise, less than carload merchandise?

A. Wait a moment. I did not answer your question.

I do not mean to say that it is the most expensive, but I mean that it requires the greater care.

Mr. MOORE:

Q. You are speaking now of livestock?

A. Livestock. Merchandise is the most expensive traffic that we handle, whether it is carload or less-than-carload.

Q. Do you think a carload of merchandise is more expensive than livestock?

A. I should regard it so, for the reasons that I explained in my direct testimony. The exposures of merchandise to loss, and the——

Q. Is not that greater in livestock than it is in merchan-
1114 dise?

A. The exposure of merchandise to loss and the fact that its loading and unloading must be accomplished by the employees of the Railway Company, and being a character of traffic that is made up of such a multitude of packages that must all be accounted for separately and handled separately; we would have in a carload of merchandise as many perhaps as fifteen hundred to two thousand packages, while in a car of livestock we might have only twenty animals.

Q. Well, that is referring to the less than carload proposition:

A. No, merchandise in carloads would be the same. It would involve the same accounting for each individual package; the treating of each individual package as an entity, just the same.

Q. Are there not more claims against livestock than in any other class of traffic?

A. No, our principal claims are for merchandise.

Q. Don't your livestock require the loading to be lighter, and you get less efficiency out of your locomotives than any other class of traffic?

A. That is the train loading of livestock?

Q. Yes, train loading and carloading, both.

A. No, in the carload we do not exceed an average of five tons of merchandise for less than carload freight to the car.

There is a minimum on stock fixed by the tariff. I think
1115 it is 24,000 pounds, 22,000 or 24,000 pounds.

Q. You keep comparing this with the less than carload. There is a very small movement, only about four per cent in that state. I don't mean to make comparison with that. I mean with other carloads.

A. It has a minimum carload, provided for by the tariff, and there are something like six hundred, I think, other commodities that have a similar minimum.

Q. Don't you get less efficiency out of your locomotives on livestock than on other classes of traffic?

A. As to the locomotives, it is our general rule in the event that we have livestock, to load the locomotive to eighty-five per cent of its potentiality. That is a reduction of fifteen per cent.

Q. How about your intrastate trains: do you have any such reduction as that?

A. Well, we have no trains that handle only intrastate traffic. You refer to local trains?

Q. Yes.

A. They handle both classes of traffic.

Q. What efficiency do you get out of your locomotives on your local trains?

A. We get a larger efficiency in Arkansas than in some other States, because of the fact that the natural resources of lumber still continue, and in pretty near every part of the state.

I have not given that very much thought.

1116 Q. You don't get as much efficiency from locomotives in livestock traffic as you do in other ordinarily heavily loaded freight trains, do you?

A. The same rule would apply where we had perishable freight.

Q. I was just going to come to that.

A. Where we have, for instance, trains containing fruit, vegetables, and such kindred articles; where we make an effort to effect delivery within a certain time from the point of origin to destination.

Q. You have to run those trains faster and lose efficiency in your locomotive power, don't you?

A. We don't get the 100 per cent of efficiency out of locomotives that carry that class of traffic.

Q. That class of traffic is largely trans-state?

A. Oh no, we have a great deal of fruit and vegetables in Arkansas. Arkansas is a very important state.

Q. But your trans-state traffic is largely that which you have enumerated?

A. Oh no, I would not say so.

Q. Would you not say so?

A. No sir. I said that it formed a part of our trans-state traffic, but it also forms a part of our intrastate traffic.

Q. Getting back to your livestock: what capacity of your cars do you get in loading livestock?

1117 A. The minimum fixed by the tariff, I think, is 24,000 pounds, Judge.

Q. Do you get over sixty-five per cent of their capacity?

A. In our general average loading of all cars we reach about eighteen tons. I think it was seventeen and a fraction tons in 1907. That is a general average of the tons to the loaded car mile. That is, the general average tons per loaded car mile.

That takes in the merchandise that loads up to five tons and it would take in the several hundred articles of that minimum that are handled in carloads. We would get presumably the minimum of livestock, which would be about twelve tons.

Q. What about the movement of your freight cars in the livestock traffic: how much of that is empty?

A. I would have to refer to the papers in my office to give that, and then it would be on the System, as a System proposition, the Missouri Pacific and Iron Mountain combined. I have no separate figures for Arkansas, but in a general way I have the System figures and I can give you them tomorrow.

Q. There is a very large percentage of cattle cars returned empty, is there not?

A. Oh yes; those and coal cars, and other cars of special character like tanks.

Q. Don't you think, considering all of these matters, that your cattle traffic—trans-state—from Texas through Arkansas, is more expense than other dead weight traffic?

1118 A. Than other what?

Q. Dead weight traffic.

A. I should say yes, that it would be more expensive, and for that reason I am very glad to say that there is very little of it.

Q. Is it not twice as expensive?

A. I should say that it is twice as expensive as some other classes of freight.

Q. Is it not twice as expensive as the general run of freight?

A. No, I don't think it would be any more expensive than the general handling of perishable freight.

It would not be as expensive as merchandise and aside from feeding in transit and the fact that it keeps the organization on the ragged edge all the time; that has, in the operating man's mind, as much to do with his opinion on that traffic as the expense.

Q. You testified in the Cattle Raisers' case, did you not?

A. Yes.

Q. I have before me a copy of that and I want to read you this:

"A. It seems to me that considering the fact that you must have established facilities, immovable facilities at stations, special cars, lesser efficiency of cars in that traffic, lesser efficiency of your locomotives and the fact that you must return these cars empty approximately the same distance that you hauled them loaded;

1119 and the further fact that the maintenance of these cars is of a greater ratio than the ordinary traffic car; and the fact that these cars are of necessity idle certain times of the year tying up capital, in my opinion the cost approximates very closely twice as much in the cattle traffic as in the ordinary dead freight traffic."

Q. Is that correct?

A. Yes. I will explain that to you. I am willing to affirm all that I said there.

That largely applied to stock movements from Colorado and the southwest, as well as the south.

There are such things as striking an average with our traffic, between Kansas City and Pueblo, a distance of, I believe 612 miles. We have nothing for which those cars can be utilized; while I believe I did state in that testimony further on that we did use the cattle cars or stock cars for some coal loading to the south and for loading melons in southeastern Missouri.

So far as the average traffic is concerned, I was then taking, of course, the great number of the heavier and coarser commodities, and striking an average as on that basis.

The larger and heavier commodities form the greater part of the tonnage.

Between Kansas City and Pueblo, that long distance, the haul of

stock cars must be empty and they must be handled in a ratio because the shipments are made very frequently in a hurry to
1120 get the stock out of the ranges before the storms come on.

Treating the matter generally in that testimony, I did not apply it particularly to Arkansas, or to the southeast and south, where we do have a little better chance to equalize our tonnage.

Mr. MOORE: What line of the Missouri Pacific System participated in that traffic that you were testifying about in the Cattle Raisers' case?

A. That was the Missouri Pacific——

Q. The Iron Mountain was not a party?

A. I don't recall——

Q. Did it participate in traffic west of Kansas City?

A. Oh no, it is purely a Missouri Pacific proposition.

Q. Your testimony was with reference to that line out there?

A. Largely. That was the principal line of our livestock movement. The movement of livestock on the Iron Mountain was a very small fraction of our general livestock business.

Mr. HILL: I will call your attention to this, which I find in your testimony:

1121 "In describing the movement of that train of stock, illustrating the movement of a train of live stock from Texarkana to St. Louis, I believe I left off before I had quite finished, and if I may be allowed to conclude that——

Q. Certainly.

A. This train movement from Texarkana to the National Stock Yards has been given preference over all other freight trains, both in the same direction and in an opposite direction. And our experience is that that results in delays to other trains.

That means that these trains that are waiting on the side track for the stock trains are consuming coal and very frequently the employees are earning overtime.

Q. Has the character of traffic in love stock cars any effect on the life of the car, or duration of the car, or any part of it?

A. Yes, sir, the maintenance of stock cars is based, or is at a higher cost than that of any other freight cars. And this is due partially to the way it is necessary to construct the car, and partly to its use.

The deck of the car is constantly wet from the time it is used once until another time and that not only rots the deck of the car but also rots the timbers. Also rots the tendons which fasten the superstructure to the deck.

You take an open car, a coal car or a flat car, and that car will dry out because the sun can strike it, and a box car is not sub-
1122 jected to the same moisture from its use as a stock car.

So that we find that while the stock cars are constructed probably as well as they can be, as well as we know, by modern methods, at the same time they are harder to keep up and the repair account is greater, and that very heavy repairs become necessary at shorter intervals than with other classes of equipment.

Q. How does the loading of your cattle shipments compare with the loading of other freight?

A. You mean as per car?

Q. Yes, per car, in tonnage, in comparison with the weight.

A. The general average for the fiscal year ending June 1907 on the Missouri Pacific-Iron Mountain System was 17.6 tons per loaded car mile.

In 1908 that was a ton less, which was 16.6 tons per loaded car mile.

The minimum on cattle is 22,000 pounds to the car, or 11 tons.

We have substantially no cars in that traffic shorter than 36 feet, and we find in our general experience that the minimum is about realized in general operation.

So in the theory of the car we reach only about 65% of our general average of the theory of our cars in loading.

1123 Q. Does the average loading of the cars which you have given, of all classes, include all kinds of freight?

A. All kinds of freight and it also includes this stock, in getting at this general average. It includes stock and coal and every other kind of commodity.

Q. It includes less than car load shipments?

A. It includes everything.

Q. In other words, a car that has any freight in it is classed as a loaded car in those statistics; is that the rule on your road?

A. Yes, sir. We have no other way of reaching it. The wheel reports show "loaded" or "empty." It may be a pound or 100 pounds, or it may be 40 tons, as we have a load. The general average I have expressed here in tons.

Now right here, that should be carried a little further to show the situation:

Our average weight for a 36 foot stock car is 16 tons. It may vary a few hundred pounds. We have them running from 32,700 pounds down to perhaps 32,300 pounds. In order to secure 11 tons of live stock as paying freight, we are obliged to haul that car in both directions, in one direction loaded where the tare weight is 16 tons, and in the other direction empty, with the tare weight the same, making 32 tons of tare weight that is hauled to produce 11 tons of paying freight.

1124 Q. Considering the facts you have related and your experience in transportation matters, in your opinion how does the cost of transportation to a Railroad Company, in the reception and delivery of cattle, compare with the general average of other freight?

A. It is very much higher. I must take in an element on which I based that opinion, which I have not referred to thus far, and that is the matter of claims.

Q. Have you any statistics on the claim question?

A. I have not any statistics on claims but it is a matter which comes under my daily observation, and live stock is subject to claims for damages where had the freight been of any other character no claims would have been made; that is, a claim for delay and for shrinkage and for extra feed charges, if they have to hold over for another day's market, and a difference possibly in the sell-

ing price between the market of the day the live stock was due to arrive and the day on which it was actually sold; that is, a claim that would not arise on any other class of traffic, a claim for delay; and it is not necessary that that delay should be very much in order to have a claim presented.

We can delay passengers; we can bring passenger train into its destination 10 or 15 hours late, for some reason, and we are not obliged to pay those passengers for the delay.

But should live stock reach the market sometimes only
1125 three hours late or two and a half hours late, a claim would be filed against the Company, which it would be obliged to pay.

So that of all the business that the Railway Company does the most delicate in the way of claims is its live stock traffic.

Taking the cost and maintenance of special facilities at stations which are necessary, and of the intermediate facilities at feeding yards, the cost of bedding the cars, of loading and unloading the stock both at its final terminal and in transit at feeding points, the disinfecting and cleaning of the cars; the claims that arise, not only from delay but from transporting drovers, and the cost of transporting the drovers; the less efficiency that the Railway Company gets from the use of these cars as compared with the average efficiency of all cars; the less efficiency that it gets from its engines; the greater cost of operation arising from running at a higher rate of speed; the delay to other trains in order to give the live stock preference, are all elements that are directly connected with the transportation of live stock; and are, to the extent of these points I have enumerated a greater cost in the handling of that traffic than all the other traffic."

1126 Q. That is your testimony, is it not?

A. I testified in that case. I presume it is.

Q. You recognize it, don't you?

A. I recognize some parts of it there. I don't recognize all about the freight traffic, because I believe you will find there—at least in some other part of that testimony—that I applied the general elements that I referred to there to all perishable freight, and, as I said before, so far as the cattle traffic from Texas is concerned, it is a very small part of our freight business.

Q. Is not your cattle business more than all the less than carload business in Arkansas?

A. Why, I don't know the relation of it. It would not be in cars. I don't know whether it would be in ton miles or in tons.

Q. I am referring to your intrastate less than carload.

A. Intrastate?

Q. Yes.

A. Oh, I don't know what that is——

Mr. MOORE: Are you referring to the entire trans-state, or——

Mr. HILL: The trans-state cattle business that we are talking about, and asking him to compare it with the intrastate less than carload.

A. How does the trans-state cattle business compare with the less than carload business in volume?

1127 Q. Yes, intrastate less than carload business.

A. And the trans-state cattle?

Q. Yes.

A. Did you ask me a question after you read that testimony?

Q. Just this question about the intrastate——

Mr. MOORE: He asked you if that was your testimony.

A. We were dealing in that case, in the testimony which you have mentioned, with trans-state traffic, and my comparison was made with that traffic, generally speaking, the trans-state traffic.

I don't recall that any question in that case arose about any local livestock, or any local traffic of any other character.

We were dealing with a question that concerned the states of Texas, Colorado and Oklahoma, and feeders coming to us through Oklahoma into Kansas.

That testimony would pertain entirely to trans-state livestock, and it related particularly to livestock from Colorado and livestock from Texas. More directly, however, to the former. It dealt with the traffic entirely comparative with it.

In the trans-state traffic from Texas or to Texas, of a general character, none of those feeding or stopping elements would apply except as to livestock and perishable freight, and the same would be true as between Colorado and Kansas City.

1128 In that testimony I was dealing with a trans-state proposition both east and west, north and south, and making a comparison with the same objective points and not with traffic that would originate in Arkansas—livestock, I mean, that would originate in Arkansas for the National Yards, or that would originate and terminate in Arkansas.

That testimony I am willing to affirm and say that as to all of the trans-state traffic handled the cost is more than double the other trans-state traffic.

Mr. HILL:

Q. You limit that to the trans-state traffic?

A. I could not consider local traffic in a question of that kind, comparatively.

Q. You did not so state it in this testimony, did you, Mr. McPherson?

A. The range of inquiry gave me no opportunity to do that.

Q. In this case you were questioned about the state freights, less than carloads and carload freights, were you not?

A. There was some reference to it in a desultory way. I do not believe it was carried to any considerable extent. I don't recall what it was now. It is nearly a year ago.

Q. On that volume of traffic I want to call your attention to this statement in your testimony here:

1129 "Q. Do you know the volume of the tonnage you receive of cattle at Texarkana going to St. Louis? I suppose you get very few livestock or any other kind to amount to any-

thing, perhaps a few sheep that would come from Texas. And do you know the amount you take out through the northern gateway, Coffeyville? Those would, of course, come from Oklahoma. Do you have records that show the amount of that traffic?

A. I have a memorandum here (indicating). During the fiscal year June 30, 1908, we handled 1234 cars of Texas cattle in St. Louis.

Q. Have you it for the Coffeyville Line?

A. No sir, I haven't it for the Coffeyville line. I got these figures for another purpose and I had them at the time this matter came up.

Q. Do you know the volume of your traffic out of Colorado to Kansas City?

A. Of stock traffic?

Q. Yes.

A. I have two months' movement—that is, this pencil memorandum does not show the time or the date or the point of origin. It is merely the Colorado Division and embraces local and through stock. It shows that in the month of May, 1908, we moved 177 cars of live stock, while in the month of September, 1908, we moved 1049 cars."

Q. That would indicate you do a heavier volume from Texarkana over the Iron Mountain than to Colorado?

1130 A. If you will go through that testimony you will find that that 1200 cars of cattle or livestock we handled because of the fact that the other railroads were tied up, and they brought it to us, dumped it on to us in one month, I think.

Q. You did not say that in this testimony.

A. Yes, it is in there and you will find where I referred to the suits that grew out of the handling of that 1200 cars of stock.

Q. Did you connect it with this month?

A. I could not connect it with anything else because almost that entire traffic, the whole of that traffic, was delivered to us during that period.

Q. You don't think this was normal traffic, then, over the Texarkana Line?

A. No, that was not a normal traffic. It was not a traffic we would have had had the other lines been able to handle it.

Q. I would like you to get us the data of your livestock traffic from Texarkana north, during the six months ending December 31, 1907.

A. Wait a moment. I would like to explain that a little further. You will remember that in the spring of 1908 the Red River was very high and the M. K. & T., the Gulf, Colorado & Santa Fe, the Frisco and the T. P., were unable to get that stock north over their own line. It was hauled over Northern Texas, from one junction point to another, one gateway to another, and, in connection

1131 with the Cotton Belt, we handled it in a detour from Texarkana to Hope and from Hope to St. Louis, over our own line.

I don't know the exact number of cars, but as it occurs to me now it was 1150, and as it occurs to me now, they were all given to us

within ten consecutive days, and that formed the bulk of that transstate traffic during that fiscal year.

Q. Which fiscal year was that?

A. The year ending June 30, 1908.

1132 Re-cross examination of Mr. F. P. JOHNSON, recalled:

By Mr. HILL:

Q. Mr. McPherson has put in evidence statistics of the increased cost of labor and material on the Missouri Pacific system for the past few years. I do not remember just how far back he goes.

How far back do you *do*, Mr. McPherson, in your statistics on labor and material?

A. Part of it was for 1897 and part for 1898 and part for 1900.

Q. I believe you covered a ten year period.

A. Yes sir a ten year period. The extremes, 1897 and 1907.

Q. I do not want to go back that far.

I want this, Mr. Johnson: I want your statistics of the dividends that the St. Louis, Iron Mountain & Southern Railway Company has paid in the last few years.

A. For how many years?

Q. I do not want to put you to the labor of going back as far as Mr. McPherson went on this other matter, but I would like to have you go back far enough to be thoroughly representative. I

1133 suppose three or four years would be sufficient.

A. That is, just the amount of dividends?

Q. Yes. And I wish you would show (we are not able to get it—at least, I am not, from the annual reports) just what that is on; whether on the lines in this suit, or whether it covers the subsidiary lines that are not in this suit.

A. The St. Louis, Iron Mountain & Southern Railway Company's dividends would not cover any subsidiary lines.

Q. It would cover just what is in this suit?

A. Yes sir.

Q. That is what I want.

A. Some of these subsidiary lines were not in existence then.

Q. Of course that would carry with it the capitalization, the amount of dividends paid, and the rate of the dividends. Give us full statistics on that subject.

A. Very well.

Q. I will ask you to file that as an exhibit to your testimony, when it is prepared.

A. Very well.

Q. Go as far back as is convenient. I will not ask you to go back so far to be laborious, but please go back for three or four years or something like that.

A. Very well.

1134 Cross-examination of C. J. McPHERSON continued, as follows:

By Mr. HILL:

Q. The questions I asked you yesterday about the diversion of traffic from the leased line of the Cotton Belt on to the main line of the St. Louis, Iron Mountain & Southern were asked under a misapprehension of the points of diversion.

I predicated the question as if the traffic were diverted to Paragould. I find that is a mistake. I believe it was diverted to Dexter, Missouri, and carried from there to Poplar Bluff on the main line and from there down to Hoxie. And, going back the other way, it would be diverted at Poplar Bluff from the main line, then up to Dexter and then up on the leased line on the east side.

The matters as I now state them are the facts, aren't they?

A. Yesterday, I answered that question with great positiveness that such movement as that would not be made, and my reason for it was that there is a prohibitive grade northbound from Paragould to Knobel, which would not enable a locomotive to handle half its potential tonnage in that direction.

I started our force to work last night to examine the wheel reports, in order to get the information for you. Since Mr. Hamilton has stated to me, as I came into the courtroom this morning, that
1135 that would not be required, I sent word over to the office to discontinue the work.

Q. The point I was getting at is this, Mr. McPherson: There is a diversion of your traffic on the main line of the St. Louis, Iron Mountain & Southern Railway to the leased line of the Cotton Belt Railway: that diversion takes place at Poplar Bluff, and Dexter, instead of at Paragould and Knobel: isn't that a fact?

A. Part of the traffic goes that way and part goes by way of Paragould.

In 1907 there was more of that handled in that way, because we had not completed at that time our terminal facilities at Paragould, to enable us to handle the traffic that way.

We had not got our engine house completed and our yards were only partially constructed in those six months of 1907.

For that reason, at that time there was less of that traffic that went by way of Paragould than now.

Q. There was then a heavier diversion over your leased line than there is now?

A. No, sir. There was a heavier diversion by way of Poplar Bluff and Dexter than now.

Q. That is what I intended to ask.

A. Yes, sir, but not as a whole.

Q. That diversion, Poplar Bluff to Dexter, is primarily
1136 in order to avoid the grades just north of Poplar Bluff, isn't it?

A. That diversion, Judge, as I am glad you give me an opportunity to explain, is to give us in effect a double track from Bald Knob to St. Louis.

We want to get a double track clear through, and the effect of it

is that we do get a lower grade from Piedmont north, by leasing the track of the Cotton Belt than we would if we paralleled our main line from the Missouri state line north or from Bald Knob north.

It would be impossible to handle the traffic on a single line road today between Bald Knob and the Arkansas state line, or, in fact, from the Arkansas state line to St. Louis. The traffic is beyond the capacity of a single track.

Q. Mr. McPherson, have you found out the number of trains that you carry from Fort Smith to Van Buren by way of Cherokee Junction?

A. In order to get the exact reflection of that I have wired our Superintendent to make up several days at this period (which is a normal period) and let me know not only the scheduled train movement but the extra train movement and the switching train movement; and I will furnish that information as soon as I hear from him.

Mr. MOORE:

Q. Will you get that some time today?

A. Yes, sir, I expect to hear very shortly.

Mr. HILL:

Q. What was the other question I asked you yesterday?

1137 A. The other question you asked me, I believe was the number of carloads of stock from Texarkana north.

For the fiscal year ending June 30, 1907, there was in the vicinity of 300 cars from Texas.

In the fiscal year ending June 30, 1908, there was 1234 cars.

As I explained, those cars was the result of the washout of the bridges across the Red River, of the other lines; and that stock was practically delivered to us in ten consecutive days.

For the six months from July to December, 1907, I will be able to give that information sometime this afternoon. I am having it worked up now.

Q. In the year ending June ..., 1908, 1234 cars: they must all have been in the month of June?

A. They were, substantially, I think. I do not recall the exact date but that was at a time——

Q. My recollection is you testified before or in the month of June. But I may be in error. I will look that up.

A. I think you will find, Judge, that that was for the year.

Q. Perhaps so. That may be true.

A. You will find that on Page 3667 of the record in the Cattle Raisers Case. What I referred to by months was the live stock from Pueblo.

Q. I see that was "during the fiscal year ending June 30,

1138 1908, we handled 1234 cars of Texas cattle into St. Louis." That meant cattle from Texarkana?

A. Yes, sir, cattle from Texarkana, and that was on account of high water.

Q. On the next page you give us your figures from Kansas by months?

A. Yes. That shows the fact, as I explained yesterday, that our live stock traffic, for which we were most concerned, was the Colorado traffic, for the reason that is explained there, in the month of September, 1908, we moved 1049 cars in one month; and the illustration I used of the movement of stock from Texarkana to St. Louis was because of the fact that there is a greater loss on the east side—a greater terminal cost than there is on stock coming in from the west side.

And, in order to make both illustrations, it was necessary—or the lawyers believed, at least, that it was necessary to show that fact, that the terminal charge was greater on stock coming up the east side of the river than on the west side.

Q. Now, Mr. McPherson, in your exhibit No. 1 to your testimony in that Texas Cattle Raisers Case I see you gave the movement of stock trains from Texarkana to St. Louis, showing the time and the tonnage of the stock trains, and also the tonnage of trains of dead freight moved on the same date, March 1st to April 30th,
1139 1909; that showed 239 box cars in that period: do you recall that?

A. I would have to have that to refer to in order to explain it. It is a little complicated and I had to explain that in that testimony. If you will indulge me while I look it over—I have not seen it in nearly a year now (Mr. McPherson here examines copy of testimony referred to).

I think there is another exhibit that will have to be read in connection with this.

There were two exhibits on this and one was filed later on.

Yes, this (indicating paper) was an exhibit that was filed by me in that case.

Q. It shows in the period of sixty days a movement of 239 stock cars from Texarkana north?

A. Yes sir. This is from March 1, to April 30, 1909.

Q. Was that a representative period of your stock movement?

A. Well, for the year 1909, for the same months, I should say it would be.

However, as I explained on the stand yesterday, over the protest of the operating department our traffic people put some stock solicitors in Texas, at the beginning of 1909, I believe. I am not quite sure whether it was January or February. Up to that time we had not solicited stock from Texas for quite a number of years, and these two months are the only months I have examined under the new
1140 conditions. So it would be difficult for me to reply to that.

Q. I believe you stated yesterday *that* your testimony that it costs twice as much to move live stock as any other freight was intended to refer to other than trans-state freight.

A. No, sir, not necessarily that. I did not mean to convey exactly that meaning.

I meant this: that it was a comparison of the traffic to and from the same territory; and it was so understood, I think, by all concerned in that hearing.

Q. Have you read over your testimony since yesterday?
A. Not at any considerable length. I have not had time.
Q. Have you a copy of it there?
A. Yes, sir.
Q. I wish wou would turn to Page 3702. I wish you would begin at the bottom of that page and read the next two or three pages into the record. There is a question by Mr. Terry there:
A. "Question by Mr. Terry: Your testimony indicated that in preparing the cost of the cattle traffic it was fair to charge to that traffic the special facilities provided for its exclusive use, such as stock pens, etc.: Why do you think that is a fair proposition in view of the fact that you have to furnish facilities for handling freight generally?
A. Well, the stock traffic is but a small per cent of the aggregate traffic of the railway; and that small per cent requires special
1141 facilities. Whereas, the other facilities furnished by the railroad, for the handling of straight business are adequate for not only the freight business it has but they would be sufficient for an equal"——
There is a little difference there between the stenographer's record and the record as I corrected it. I will read them both—
"For an equal amount of tonnage."
As I have corrected it, it should read "for an additional amount of tonnage."
Q. When was that correction made in the original testimony?
A. That correction was made by me. I remember the circumstances very well and it was made as soon as this copy of the record was sent to me by Judge Terry. Then I wrote Judge Terry calling his attention to that fact.
Q. You do not know whether the original record was corrected or not?
A. No, sir, I do not know whether the original record was corrected or not but I believe it was because I made a special point of it.

(Witness continues to read as follows:)

"Or, at least, if any additional facilities were required on that account it would be comparatively small. It would be a very small expense to extend the facilities to take care of the general traffic of the road."

Q. There is some discussion there which you might omit.
1142 A. In order to make this clear it would perhaps be necessary to say that that was based on an assumption of a certain tonnage of traffic, that the facilities already provided by the railway would be able to handle, if it were anything but live stock.
Q. Now, turn to the top of page 3705, please.
A. May I answer a question now that you asked me yesterday, answer it definitely?
Q. Yes.
A. You asked me as to the proportion of live stock, generally.
Now, on the entire system (I cannot give it to you for the

St. Louis, Iron Mountain & Southern) for the six months July 1, 1907 to Dec. 31, 1907, it was 2.24% of the ton miles.

The bulk of that live stock traffic is handled between Pueblo and Kansas City, with the local traffic handled from Kansas and Missouri, northern Arkansas and such local movements as are made within those states themselves.

Q. You mean that is the percentage of the entire Missouri Pacific System?

A. Yes, sir, the entire system.

Q. You have not the percentage of the St. Louis, Iron Mountain & Southern?

A. No, sir, I have not that. That would require a division of our statistics that is not made.

1143 Mr. MOORE:

Q. Do you say the bulk of that was on the Missouri Pacific Railway?

A. Yes, sir.

Q. You mean as distinguished from the St. Louis Iron Mountain & Southern?

A. Yes, sir, as distinguished from the St. Louis Iron Mountain & Southern.

Mr. HILL:

Q. Now, come back to that page 3705, Mr. McPherson, please, and read that first question there.

A. Judge, where these are referred to, may I continue to read the entire explanation?

Q. Yes, I would be glad to have you do it. I did not want to burden you any more than is necessary but would like to put in evidence those pages 3706, 3707 and 3708.

Mr. MOORE: If there is any explanation you think should be gotten in, in order to explain your testimony, Judge Hill has no objection to your getting it in.

Mr. HILL: None at all.

A. There is some testimony in this connection that belongs properly with this (indicating) and that is I stated the fact that this trans-state merchandise loaded heavier per car than the local or state merchandise.

Q. That is a fact. You stated it. I do not recall the page of the record but I know you made that statement.

A. I think this (indicating record) would hardly be complete unless that were a part of the record.

Q. Very well. You can just take that as a fact, or you can look up the page and have that copied, whichever suits you. I re-

1144 member very well your testimony was to that effect.

A. I do not like to cut up my copy here. It is the only one I have. I got this at some trouble last night.

Q. Give it to Miss Eagan and have her copy it into the record. Probably it would be better to give her your copy so you may be sure it is an exact copy.

A. I cannot find it just now. I presume I can locate it later on.

That that trans-state merchandise was loaded much heavier than other merchandise.

That is due to the fact that there is only so many cars a week and the cars are held and loaded up with all the freight they will hold.

Q. That is referring to the less than carload?

A. That is referring to merchandise.

Q. Wasn't it less than carload merchandise?

A. It would be both.

What I mean by less than carload merchandise is, anything the classes—anything that takes the class rates.

Q. Then, Mr. McPherson, with that explanation I will ask you to put into the record pages 3705, 3706, 3707 and 3708 down to the last question at the bottom of that page.

These pages read as follows:

1145 Q. Which class of merchandise cars are loaded the heaviest; the interstate cars moving from St. Louis to Texas or the short distance movements?

A. They load heavier per train mile; that is to say, more tons per mile are secured from those long hauls than from the short hauls.

Q. You mean you do not think there is any actual difference in the loading of the cars themselves?

A. Just as between the loading one car of commodity for a local point, and one for Texas. On commodities that would not essentially vary.

On less than car load freight it would run higher on the long haul than it would on the short haul. You would secure more tons per mile out of the transaction because of the fact that if the car was loaded at St. Louis for Texas with seven tons of freight we would have that seven tons of freight for 497 miles.

Q. I understand that.

A. If the car was a local car in the State, where the unloading is done at various points as the car progresses, while it starts out with seven tons it might wind up with 100 pounds; it would diminish as it progressed.

So the tons per loaded car mile would be greater for the through shipment than for the State shipment.

Q. You expressed an opinion that taking the local Missouri shipments and comparing them with the car load movements,

1146 the cost per ton mile of the less than car load local Missouri shipments was about two or three or four times as much—I do not remember what figure you used.

A. Between 4 and 8 somewhere.

Q. One of the principal differences was the clerical work incident to the less than car load shipments. You have to have a way bill and billing, etc.

A. Yes, sir. You may have 25 way bills accompanying one car of less than car load freight while only one way bill would be necessary with a car of commodity freight. And there would be the weighing, the loading and checking and auditing of all that business, all of which would be almost as great an expense for each package as for a car load.

Q. So the clerical work on the less than car load shipment per ton is much greater than on the car load shipment?

A. Yes sir and there is another element in there that increases the cost of the State traffic and that is the fact that the local trains are run very light. In a part of the country where the natural resources have been exhaused the local trains, or the way freight trains, probably do not reach 50% of the potentiality of the engine.

Q. In addition to the question of clerical expense, which is manifest, what are the other principal items that lead you to the conclusion that handling less than car load shipments locally in Missouri is so much greater per ton or per ton mile than the expense of handling car load freight? You have mentioned one, the light
1147 loading of the train; that is, the light loading of the car is one of the factors.

A. The lighter loading of the car and the fact that the proportion of tare to traffic falls necessarily. The expenditure of energy must be as great in the haul of a pound of car as a pound of freight. These local freights have a small quantity of freight in the car but it is necessary to haul that car just the same, and that does not vary. You must expend the energy to haul that car regardless of what it contains.

Another thing is the fact that the controlling necessity for moving the train in the local freight service is an established schedule. It must run every day, while the through freight you can run when you have a train load?

Q. Don't all those reasons, except the clerical expense apply to carrying cattle as compared with other car load freight?

A. That would be only relieved or modified by your ability to supply dead freight to fill out the train.

Q. Still after you supply the dead freight you have to get your engine down to about 80% of its rating to make that time required by the cattle.

A. Yes sir.

Q. So the train loading in the case of cattle is light and the car loading is light?

A. The car loading is about 65% based on our average
1148 traffic tons per loaded car mile. The engine efficiency runs from eighty to eighty five percent.

Q. Having reached the conclusion that the cost per ton mile of this less than car load traffic is four times as much per ton mile as car load traffic, could you venture an opinion as to how much more the cattle traffic is per ton mile than other car load freight, considering the items you have mentioned and all others that enter into the proposition?

A. It seems to me that considering the fact that you must have established facilities, immovable facilities at stations, special cars, a lesser efficiency of your cars in that traffic, lesser efficiency of your locomotives, and the fact that you must return those cars empty approximately the same distance that you haul them loaded; and the further fact that the maintenance of these cars is of a greater ratio than the ordinary traffic car; and the further fact that these cars are

opinion the cost approximates very closely twice as much in the
of necessity idle certain times of the year, tying up capital, in my
cattle traffic as in the ordinary average dead freight traffic.

1149 Q. Now, McPherson, after calling your attention to this testimony, isn't it a fact that you made the statement in that hearing that it cost twice as much to handle the cattle traffic as it did the average dead weight traffic, and that you were referring to all classes of freight traffic?

A. You could not put that construction on that, Judge Hill. This is a traffic that was segregated, which is well known to be of a special character and needs special attention and comparing it with the average tonnage of another traffic of the same character—carload traffic.

Q. Does not this testimony show that you were comparing it with the intrastate traffic of Missouri?

A. No, sir, that never was my intention.

Q. And that you were comparing it with other interstate and intrastate traffic?

A. You mean less than carload traffic?

Q. I mean both classes.

A. No, sir, that would not be the intention. I do not think that would be a fair conclusion for me to give.

Q. What do you mean in this final conclusion there at page 3708 where you say:

"In my opinion the cost approximates very closely twice as much in the cattle traffic as in the ordinary, average, dead freight traffic?"

A. That, of course, would mean the same comparison of carload traffic. Necessarily and naturally I would not put less than carload traffic against carload traffic, for comparative purposes, and

1150 that was not understood for the prevailing view of that testimony at the time.

Q. Then your opinion that you expressed here means that it would cost twice as much as the ordinary dead freight carload traffic?

A. Yes, sir, that is what it would be. That would be the only possible comparison.

Q. By "the average dead freight carload traffic" you mean both interstate and intrastate?

A. Well, in comparison with the length of the haul, yes.

Q. What was the object of that inquiry, where you gave this testimony?

A. Of the less than carload?

Q. No, the object of this Cattle Raisers Case: what kind of a suit was it?

A. I do not know what you would call the suit. It was a suit brought by the Railway Companies, as I understand it, to enjoin the cattle rates named by the Interstate Commerce Commission. It was either that or—wait a moment, let me think. (Witness pauses.)

I think it took two or three phases. I don't think I could take the litigation from its beginning up to this particular stage. It was to secure——

Q. I don't care for the details. It was to secure higher rates for the cattle, wasn't it?

A. It was to prevent a reduction of the rates on cattle.

1151 Q. Your effort was to prevent a reduction from the then existing rates?

A. Yes, sir. We did not want the business at the rates before the new rates were made and we did not solicit it.

Then they made new rates which were lower, and we went out of the traffic altogether.

Q. Mr. McPherson, after going through your testimony here and the reasons you gave for it, don't you have to make an exception to your testimony given yesterday, where you said the trans-state traffic was the least expensive of all the traffic; you will except the trans-state cattle from that, will you not?

A. My testimony as I have given it will apply generally. The cattle traffic is so small that it is negligible with us.

Q. But, still, you have to except that from your general statement that the trans-state traffic is the least expensive traffic, will you not?

A. You might take out that commodity, yes. It was so insignificant that I did not take it into account.

Q. What about the trans-state fruit, and vegetable movement?

A. Well, the trans-state fruit and vegetable movement, as I have said before, is very small.

Q. You will have to take that out, will you not?

A. No, sir.

1152 Q. Didn't you testify regarding that, that it required much quicker movement and less potentiality of the engines and the other trains had to get out of the way of it?

A. That would be true also of the intrastate and interstate vegetable and fruit traffic as well as of the trans-state.

Q. That would put the intra-state fruit and vegetable traffic on a par with the trans-state?

A. I would. It would take the classes along relatively together in the various classes of traffic.

Q. Then you ought to class that by variety of commodities, rather than whether it is trans-state or intrastate, ought you not?

A. No, sir. I think the relation would continue generally between the various commodities and the various classes of the traffic.

Q. How about your trans-state movement of citrous fruits from California?

A. Well, Judge, for the six months from July to December, 1907, that amounted to only .18% of our traffic; and most of that traffic was handled between Kansas City and St. Louis. We got it from the regular roads engaged in that business.

Q. No matter what the amount of it, it is a more expensive traffic to handle, isn't it?

A. No, sir, I should not say the citrous fruit traffic was especially expensive. It would go through in our fast trains, our scheduled fast trains.

Q. You made the point in this Texas Cattle Raisers' Case
1153 that those fast trains were the expensive trains, did you not?

A. I testified in that case that trains containing cattle (I do not recall whether I embraced fruit or not) were usually run at 85% of the potential tonnage of the engine.

Now, if there were any trains northbound from Texarkana containing live stock or perishable freight, and it was of enough consequence to put it on the high speed basis, it would take probably 15% less than the drag or potential capacity of the locomotive.

Q. I have a note here of your testimony there, that you put fruit and vegetables from Texas, and citrous fruits from California, on the same class moving faster with less potentiality of the engine, and the other traffic had to get out of the way.

A. Yes, sir, we would do the same thing with fruit and vegetables from Arkansas. We would give them the same relative movement.

Q. And you would put them on the same extensive basis that you would put those from Texas and California?

A. Yes, sir. In other words, we work with the shipper. We try to get into market with his goods in first class condition, and we lose of course, in our operation, any viewpoint of whether the traffic is of any one of those three primary classes. We look at its individual character.

Q. I believe that one of the heavy expenses of the freight traffic is the hauling of empty cars, isn't it?

1154 A. Yes, sir, the hauling of empty cars requires the same expenditure of energy as loaded cars, so far as it reaches the tonnage equivalent.

Q. Does not the interstate traffic call for the hauling of more empty cars than the intrastate traffic?

A. No, sir, the intrastate traffic is a distributive traffic. It does not go to large markets. It is distributed from the producing points in the state to the local stations. And it is very rare that there is any return traffic from those stations back of the point of production.

Q. Do you think, relatively there is more empty car movement in intrastate than in interstate traffic?

A. Yes, sir, I have so stated. I know it to be a fact.

Q. What is the percentage of empty car movement in live stock?

A. Well, our percent of empty stock car movement to the 100% of stock car movement is about 47%.

Q. That would be about 3% only return loaded?

A. Yes, sir, that is about it.

Q. That is, so far as the St. Louis, Iron Mountain & Southern in Arkansas is concerned; it is purely a trans-state movement, isn't it?

A. That would hardly apply to the Iron Mountain to any extent, for the reason that we do not send our stock cars to Texas for live stock whenever we can avoid it. And when we do, we are
1155 peculiarly fortunate in the situation as relates to the St. Louis, Iron Mountain & Southern in putting those stock cars into the Illinois coal field and loading them up with our company's coal at the Illinois mines.

Now, it is true, to a very large extent of that mileage, as between Kansas City and Pueblo. That is where our stock traffic is.

Q. What is the percentage of empty car movement of coal cars?

A. I believe I testified to that in this Cattle Raisers Case.

Q. 35%, I believe you testified, Mr. McPherson, is my memory of it?

A. Yes, sir, 35% coal cars.

Q. That would mean 15% only return loaded?

A. That is all.

Q. You have a large interstate movement of coal from Illinois to Arkansas and into Louisiana and Texas, haven't you?

A. No, sir, not very much from Illinois to Louisiana or Texas. They cannot compete with the other markets. We cannot compete with Alabama or Oklahoma.

Q. You have a large movement from Illinois into Arkansas?

A. We have a large movement from Illinois into Arkansas and where we can induce the lumber man in Arkansas to load coal cars with lumber we get a return load.

Of course, when the supply of cars is short we are quite successful.

1156 Q. What is the percentage of empty car movement of lumber cars—cars used in the lumber traffic?

A. We have no special cars used in the lumber traffic. We use all kinds of cars.

Q. Lumber uses all kinds of cars?

A. Yes, sir.

Q. That would be very much slower. Cars loaded with lumber, you would get a return on that very much more readily than any kind of traffic?

Mr. MOORE: You mean return load?

Mr. HILL: Yes.

A. Return load of lumber?

Q. Return load of anything.

A. We use all kinds of cars for lumber: flat cars, coal cars, stock cars, and box cars. We put them all into the lumber district and endeavor to avoid as much as possible the handling of empty cars.

Q. How about the handling tank cars?

A. Tank cars are practically a 50 and 50% proposition.

Q. You do not get any return movement of those. That is all interstate movement, too, isn't it?

A. I do not know about that. I suppose there are some movements made within the state.

Q. Not in tank cars. I do not suppose there is. There is no oil produced in Arkansas.

1157 A. As a present condition I would say there is very little. There must be some. We find exceptions to every rule on a railroad.

Q. As a general proposition that movement is interstate and the cars all return empty?

A. Yes, sir, that is the general condition.

Q. What about refrigerator cars? What is the percentage of empty movement on those?

A. I do not know that I could say. We had to be somewhat arbitrary at times and put those into traffic service, too.

Q. I think you gave 40% on that in the Texas Cattle Raisers Case: isn't that correct?

A. Probably that would be the average on the system. It would be somewhat less, probably, in Arkansas, because when cars are scarce we use those cars for some varieties of other forest products, such as shingles and things like that.

Mr. MOORE:

Q. You mean in Arkansas?

A. Yes, sir, in Arkansas. We have had some troubles in that respect with the refrigerator car owners, who made a good deal of complaint about our taking their cars for that purpose.

However, the refrigerator car mileage and the tank car mileage is quite small. It occupied but a small part of our general mileage.

We use refrigerator cars for the shipment of Arkansas
1158 fruit, from your country, Judge Hill, from Van Buren.

Q. It is interstate when you ship it out of Van Buren, isn't it?

A. Part of it. We ship some of it to Little Rock.

Q. Very little isn't it?

A. Whatever the shipments are. I could not follow them in detail.

Q. You know that the fruit movement is practically all interstate, don't you, Mr. McPherson?

A. I would not like to say it is practically all interstate but I should say that the greater part of it is interstate.

Q. Would not you say that 99.9% of it was interstate?

A. It is about as negligible a quantity as our citrous fruit and our stock.

Q. I expect you will find it a little more negligible.

Don't you have to do more billing on your tank cars than on any other kind of car? Don't you have to keep a regular accounting system of them?

A. I don't know that we do. We keep an account of the movement of every car.

Q. How do you return the empty tank cars?

A. I don't know just what the understanding is about that, but it is on the basis that we return as many empty miles as we are given loaded miles, I believe.

Q. You have to keep a record of that, don't you?

1159 A. Oh, yes, but we do that with all our cars.

Q. You have to make a regular way-bill for the car?

A. I do not know about that. It is not a waybill with charges. There may be a memorandum bill for its movement. It does not require the consulting of tariffs and such things as that.

Q. What is the percentage of empty car movement of cars engaged in hauling merchandise?

A. I don't know that I could give you that separately. We have about a 17% empty movement of cars other than those special cars that I have been enumerating.

I wanted to mention about that empty coal car movement. I think you asked me a question before I was quite through.

Q. All right.

A. In the intrastate coal movement, which is largely produced in Arkansas, that is for local consumption, there is absolutely no return loading for those coal cars. They go to little towns and they have to come right back to the mines, empty; and so far as that is concerned we are substantially in a 50% empty mileage situation.

Q. Don't you ship Arkansas coal down to Louisiana to the lumber fields there?

A. Some of it goes down there.

Q. Don't they load up those cars with lumber when they get them?

A. If there is a return load in the direction of the mines, they would do that, provided they could get it. But we find
1160 that the Arkansas people are not willing—dealers are not willing to load the coal cars with lumber.

Now this is lumber that is shipped to local Arkansas points and is dressed on at least one side, and it has been through the drier for sometime; and they are not willing to have it in anything but a closed car.

Q. Don't they take mine props back in the coal cars?

A. Oh, yes, they take mine props back in the coal cars; but that is a very small tonnage.

Q. How many trains do you have in and out of the Memphis terminals, freight and passenger? I mean daily trains. How many per day?

A. I have to refer to the time tables. (After examining time tables) We have nine scheduled trains in each direction. That is, five passenger trains and four freight trains.

Q. How many of those are through and how many local?

A. There are two local trains, one in each direction.

There are two Cotton Belt passenger trains in each direction, which have rights over our tracks.

Q. Are those local or through trains?

A. Those would be their through trains.

They use our tracks from Bridge Junction to Fair Oaks, and there they take their own tracks.

I can follow them up on the map, if you wish?

Q. No, sir, that is all I want.

1161 A. There is one passenger train in each direction from and to St. Louis. (I may have to connect this up with two or three cards, and it is slow.)

There is one train from Memphis to Texarkana, a local passenger train.

There is one passenger train from Memphis to Little Rock.

There is one passenger train to Texarkana, local; and one to Little Rock, local.

In the other direction, into Memphis, there is one passenger train, local from Little Rock to Memphis.

Another local train from Little Rock to Memphis.

That is two in.

However, there may be some through sleeper on any one of those tra ns.

Mr. HILL:

Q. Isn't there a St. Louis-Memphis train?

A. Yes, sir, on the St. Louis-Memphis. And there might be one on the evening train out of——

Q. Did you mention the St. Louis-Memphis train?

A. Yes, sir, St. Louis-Memphis.

I think there is a Hot Springs sleeper out of Memphis on one of those trains.

Now of freight trains, there is the Little Rock "red ball" train out of Memphis.

Mr. MOORE:

Q. Is that through or local?

A. That takes up the merchandise that is loaded out of Memphis for any point south, beyond the local division to Bald
1162 Knob, that is covered by the local freight trains. That would take all the business out of Memphis. It may be for Little Rock or it may be for points south. It leaves Memphis about 8 o'clock in the evening.

That would handle a large local business because it would be the train that would take the shipments which were wanted for Little Rock delivery the next morning.

Mr. HILL:

Q. Is not that a through train?

A. Through to Little Rock you mean?

Q. I thought you designated it as a through train?

A. You can hardly designate those as through and local. Judge because those trains handle both interstate and intrastate freight.

Q. I am not talking about interstate and intrastate?

A. That train runs——

Q. Isn't it a solid train?

A. No, sir, that train would probably set off stuff at Wynne.

If there was enough freight to make it a solid train, it would be, but whenever there is not sufficient tonnage to move it is a solid train we put in freight for any point in between, that is, carload stuff, and avoid delay.

Q. Have you covered all that train movement now?

A. That train connects at Little Rock with trains diverging. They, however, take different numbers.
1163 The train runs right through to Little Rock and gets there the next morning. It is a twelve hour train from Memphis to Little Rock. When it reaches Little Rock it would go into the classification yard and the Little Rock freight would be

taken off and the train classified. Another train leaves Memphis in the morning, Train 253.

Mr. MOORE:

Q. Freight or passenger?

A. Freight. That train stops at Bald Knob. Another freight train leaves Memphis in the evening and goes north by way of Wynne and Paragould. In the other direction, into Memphis, No. 254 starts at Bald Knob. No. 256 starts at Little Rock and goes to Memphis. No. 272 is the corresponding train between St. Louis and Memphis by way of Paragould and Wynne. Then the trains No. 295 and No. 296, are the local trains. One leaves Memphis in the morning and goes as far as Bald Knob. The other leaves Bald Knob in the morning and gets to Memphis in the afternoon. That is the description of those trains.

Q. Mr. McPherson, in order that we may understand each other in regard to the terms employed, I wish you would define what is a "local train," and what is a "through train," freight trains I mean?

A. Local trains are those that are assigned to a certain
1164 district to handle merchandise over that district. Through trains are the trains that do not load or unload any less than carload freight. There is usually a local over every district in each direction.

Q. When you use these terms in the course of your testimony, you use them in the meaning which you have now defined?

A. Local and through?

Q. Yes.

A. Yes.

Q. Now give your definition of local and through passenger trains, please, Mr. McPherson.

A. A local and a through passenger train?

Q. Yes.

A. A local passenger train is one that makes the local stops and does the local business. A through passenger is one that originates at one or other of the terminals of the road, and handles through business and such local business as may apply, between points at which it is scheduled to stop. One is scheduled to take care of the business at all stations, and the other is scheduled to take care of the through business and business between points where it is regularly scheduled to stop.

Q. In your testimony yesterday I believe you stated that the local passenger trains stop every five miles and the through
1165 trains every thirty or thirty five miles, or something like that?

A. Thirty-five miles.

Q. Now, so we will understand what trains you were referring to, I wish you would file as an exhibit a statement showing the through and local passenger trains scheduled to run:

Take this period for which Mr. Roth filed his exhibit, October, 1907, and designate in that which one, so we will know how to understand your testimony in that respect.

A. That would apply to the main line of the St. Louis, Iron Mountain & Southern between St. Louis and Texarkana.

Q. I want it for the entire state, Mr. McPherson.

A. That was my testimony. That on the other divisions of the road, all of the trains made the local stops.

I believe you will find that was my testimony.

Q. It is just to avoid confusion on this, so we can all understand exactly what we are driving at.

I wish you would file the time card which was in force during that period, October, 1907, that Mr. Roth's statistics cover.

Better specify by numbers, I suppose the local and the through trains. I am referring to passenger trains now.

A. What date did you say you wanted that for?

Q. October, 1907, I think Mr. Roth's exhibit covers. It is the period covered by his exhibit.

1166 A. That would be, then, the time card of the Missouri & Arkansas divisions. Because the Missouri Division extends down to Hoxie. Now — there *is* any more than that?

Q. No I think that will be sufficient. I understand that includes Texarkana and Fort Smith and all your line that is embraced in this suit.

A. If it takes in Fort Smith I would have to have the Central Division.

Q. I stated so much of your line as is embraced in this suit.

1167 A. Mr. Johnson tells me that the only complete file of these time cards that we have for October, 1907, were given to Haskin & Sells, and they now have them.

Q. All we want of the time cards is an exhibit of them so we can designate what you mean by the "local" and what you mean by the "through" in view of the testimony you have given; so we will know what you are referring to.

I understand Mr. Wright, one of the employés of Haskins & Sells, has them down there now and you can get them at any time.

A. Time cards going back to such a date as that would be very scarce at this time, and it might take the last file that the Superintendent of Transportation had.

Q. Well, I don't want you to put in time cards, you understand, Mr. McPherson. I want you to put in your classification from the time card. You understand that, don't you, Mr. McPherson?

A. All right.

Q. Mr. McPherson, will you please describe the rights that the various trains have on the road, one over the other?

A. The trains are classified giving them rights, and then their direction carries further rights.

First-class trains are the passenger trains.

Second-class trains are the through freight trains, and third-class trains are local freight trains.

The trains going north and east, as a general rule have
1168 rights over the trains of the same classes going south and west.

Q. Don't they have it over all other cars?

A. Well, I said that; the same classes with each other, I meant. The first-class trains have rights over the second-class and third-class, and the second-class over third-class.

Q. That would be regardless of direction?

A. That would be regardless of direction as to classification. As between their own classes they are governed by direction.

Q. Coming back to the Memphis terminal, Mr. McPherson. Could you divide the terminal expense at Memphis fairly between local and through trains? Is there any basis that you could fairly divide the terminal expense there, between local and through trains?

Mr. MOORE: Terminal expenses?

Mr. HILL: Yes, this Memphis terminal I am talking about.

The WITNESS:

A. I know of no accounting method that could be adopted for that purpose. That is to say, taking the items of operation, I know of no method that could be applied.

Q. That would be fair?

A. That would be fair.

Q. You cannot devise any plan then, for dividing those terminal expenses there?

A. No, in no other way except as it is proposed in the Exhibit, a revenue basis, generally, of the two traffics, intrastate and interstate.

1169 Q. Speaking of interstate and intrastate as a traffic, in practical operation there is no such difference as that, is there?

A. Is what?

Q. As a practical operating proposition there is no such division as state and interstate, is there?

A. In practical operation we are regardful of the state lines because of the different regulations that prevail in the different states.

Q. That is, in one state you have to carry separate coaches for negroes and whites, such state regulations as that kind; but as a practical operation, you don't operate it according to states?

A. No, we would have very many of our divisions that run over the state line.

Q. You try in your operation of the road to obey the law in the various states; otherwise the state proposition does not enter into your proposition of operating at all, does it?

A. Very little.

Q. In that chart which you filed here, Exhibit number 30, I wish you would look at that, Mr. McPherson, and explain just what you mean by the red line marked "transportation" which you carry down to about eighty-eight per cent on your scale.

A. That represents the earnings per ton, per mile, of all of the

freight traffic of the St. Louis, Iron Mountain & Southern
1170 Railway.

Q. It does not represent any of the passenger earnings, does it?

A. It does not represent the passenger.

Q. Does that mean gross earnings or net earnings?

A. That means net earnings.

Q. That would really mean then the rates charged for freight?

A. No, it don't mean the rate charged for the freight. It means that taking the gross freight revenue and dividing it by the net ton miles, you get a statistical instrument here to show an average.

Q. Well, that is based on rates, is it not?

A. It would be based on the earnings, yes.

Q. The earnings are the rates, are they not?

A. But this don't mean a rate of itself.

Q. I understand that, but it is based on rates.

A. It is based on the earnings. The earnings, of course arise from the earnings on all of the freight taken together.

Q. Does that include "miscellaneous"?

A. That includes freight revenue.

Q. I understand you divide your revenue into three classes—passenger, freight and miscellaneous.

A. That would take what we take into our report as freight earnings. It would not take in there anything except to
1171 what it pertained, just the freight.

Q. It would not take in mail and express then?

A. Oh no, it just takes in the freight earnings.

Q. This appears to have been at its highest level in 1898. Then it fell in 1899. It remained level for 1900; then fell for 1901 and remained level until 1903. It rose in 1904; fell in 1906, and rose a trifle in 1907.

I will ask you if it is not a fact that from 1903 until 1907, there was no material change in the freight tariff of Arkansas?

A. From what time?

Q. 1903 to 1907—there was practically no change in the freight tariff, intrastate, in the state of Arkansas?

A. I have not those tariffs here. I have only the last one, number 3, here, but I have been cognizant that changes have been made from time to time, not only in rates, but in classification and in rules, all of which would operate to affect the revenue.

Q. Is that your information on the subject?

A. Yes, that is my general information, that those changes have been made from time to time.

Q. Do you know what has been shown at the hearing had at Little Rock, that while changes were made from time to time, there has been no material change since the general tariff was adopted in 1903?

A. I referred more particularly to the rules, the difference in minimums and such things.

Q. It was also shown that while there have been some
1172 changes, there have been no changes of any great extent.

I believe it was shown that there were only about twelve or fourteen changes altogether, in eight years, and most of them were very small items.

A. I have not gone into that feature well enough to discuss that, Judge. It is a little out of my line. Those things usually come to me when they are issued and I glance them over. With me it is a matter more of absorbing than of studying.

Q. Assuming, for the purpose of the question, that there have been no material changes in the revenue producing effect in the Commission tariff, from 1903 to 1907: would not the fall in that line be due to changes in interstate rates?

A. No doubt the fluctuation in rates of both classes of traffic, interstate and intrastate, are reflected in here.

Q. I am putting it to you. Assuming, for the purpose of my question, that the statement I have made is correct; this falling would necessarily be due to a lowering of the interstate rates, would it not?

A. I don't know that I can answer a question of that kind. In making this chart I have stated a fact that is demonstrated by mathematics, and why that is so, I have given no particular attention or study.

Q. Are those all the factors that go to produce that line?

A. The factors to go to produce that line are the ton miles and the freight earnings.

1173 Q. The freight earnings are determined by the tariffs, are they not?

A. My agency in this matter is merely one of working that out for the purpose of showing that decrease in the purchasing power of the railroad.

Q. I understand that, but you are an operating man.

A. The study of the rate question is one that I have never given any attention——

Q. But you know, necessarily, that——

A. (Continuing) —except—I don't want to say that I am stupid or ignorant, or anything of that sort.

Q. I was not accusing you of that Mr. McPherson.

A. But there are a good many things in the tariffs that directly affect operation, that we have to know, but so far as a relation of rates and matters of that character is concerned, I have not studied that.

The minimums and requirements of things that are published in the tariffs, that affect operation, those we know as well as the traffic people and often I have something to do with it myself, but as to the rates themselves, I am not qualified to answer.

Q. I am not asking you to go into a dissertation on rates I am just calling your attention to the fact that if, from 1903 to 1907, there was no material lowering of intrastate rates for Arkansas, that fall

in this line as displayed on your chart, would necessarily be due to the lowering of interstate rates?

1174 A. That sounds all right, but I don't know that I would commit myself to it.

Q. You only assent to the sound then.

Now, take these lines that run in leaps and bounds, representative of the increased cost of cross-ties, and the twenty-nine other materials—shop work, trains, taxes: are not those various elements that should be charged to the passenger and miscellaneous earnings, as well as to the freight earnings?

A. As I understand it, there is a proportion we provide for in this exhibit.

Q. I am not talking about that, I am talking about this chart.

A. This represents merely the figures that are in those exhibits, placed in graphic form.

A. That don't answer my question, Mr. McPherson.

Q. I did not grasp your question. The freight transportation was drawn here. I am sorry I did not show the passenger in the same way.

Q. Without showing the passenger and miscellaneous as a comparative charge, this is not of any value, is it?

A. Oh yes.

Q. Do you think so?

A. Yes, I do, indeed. The freight is the bulk of our earnings and it is that that is the most susceptible to fluctuation.

Q. It could not fluctuate a great deal under a fixed

1175 tariff for eight years, as far as the state is concerned, could it?

A. Well, I do not like to answer questions that do not come within the scope of my knowledge, even if I do appear a little unreasonable in not doing so.

I am willing to tell all that I do know. I have nothing to conceal, but I don't want to go into fields that I have not explored.

Q. Well, we will do with the chart then, if you think it has value.

Q. You testified yesterday that of the main track mileage in Arkansas, approximately eight per cent could not be used in making trans-state shipments, and that but ninety-two per cent of the main track could, under any circumstances, be used by that class of traffic: where do you get that eight per cent?

A. Have you a map there of the road? I have one here, but I thought you could follow me better, perhaps, if you had one.

Q. Yes, I have one.

A. That would be, from Latour to Helena 12.28 miles. The Cushman branch 9.81 miles. The Greenwood branch 23.12 miles.

Q. What do you include in the Greenwood branch?

A. Twenty-three miles of the Greenwood branch.

Q. That must be carried over to the Cherokee, because it cannot be twenty-three miles from Fort Smith to Greenwood.

1176 A. Trans-state traffic would not use that line.

Q. I want to know what you include in the Greenwood branch, physically.

A. That takes the Greenwood branch clear to the west head block

at Greenwood Junction. You have used the words "Cherokee Junction" and we used "Greenwood." It confused me a little yesterday. We have used it so long now that I have forgotten all about Cherokee Junction.

Q. What do you call it—Greenwood Junction?

A. Yes.

Q. And that twenty-three miles runs from the Junction through Fort Smith, into Greenwood. All right. Go ahead.

A. The Coal Hill branch 3.87 miles.

The Ouachita branch, from Trip Junction to Warren, 49.40 miles.

The line from Trip Junction to Arkansas City, 7.82 miles.

The Ouachita branch——

Q. That is a coal mine spur there?

A. Yes, that is .42 of a mile; that makes a total of 106.72 miles.

Q. Now take your Helena to Latour. You connect with the Illinois Central System at Helena, don't you?

A. Yes, we connect—that is, they are in the city of Helena; they have a transfer across from Trotter's Point.

Q. A shipment from some point in Mississippi, say Clarksdale, to St. Louis, delivered to you at Helena, would be trans-state, would it not?

A. That would not be a natural shipment.

1177 Q. I am not talking about natural ones. You testified it was not used and could not be.

A. Well, it could not be. The Illinois Central would not give us any traffic they could handle themselves.

Q. That is, on account of the disposition of the Illinois Central?

A. No, it would be an unnatural——

Q. There is no physical hindrance to it, is there, Mr. McPherson?

A. I should say if they wished to give us the shipment of freight from some point in Mississippi for St. Louis, that it would be a trans-state shipment, but it would be a most extraordinary transaction.

Q. Do they ever do it?

A. No.

Q. Well, take your Greenwood branch. The Midland Valley runs into Greenwood and it runs into Oklahoma. If you bring a shipment from Greenwood to Oklahoma and deliver it to any local point on the K. & A. P. in Kansas, or anywhere else, that would be a trans-state shipment?

A. There would not be any connection possible there. They might dray something over.

Q. Have you not a physical connection with the Midland Valley?

A. I don't think we have at Greenwood. I would not state positively.

Q. If not at Greenwood it is somewhere at the coal mines?

1178 A. There might be a possibility of swinging around between coal mine tracks.

Q. And there is a physical junction at Midland Valley.

A. There is no physical connection, as I remember it now, between our tracks and the Midland Valley. There may be some

tracks belonging to the coal mines down there, which in case of accident or emergency some detour could be made.

Q. I think you will find there is. I live in that country, but I may be mistaken. However, I think you will find that there is freight handled there.

Assuming that to be true, then there could be trans-state shipments over there, could there not?

A. It never has been used for that purpose, and just now, I cannot conceive how it would be.

Q. Well, if there was a physical connection between the two roads there—

A. There would be no deliveries by their road to us at Greenwood.

Q. There could be, could there not?

A. I don't even know that it could be done, physically. I do know that it certainly never would be done.

Q. The balance of this trackage that you have given here, is just odds and ends, spur tracks and things of that kind, except the Warren branch?

A. I don't know that the Warren branch would feel complimented at that.

1179 Q. That is a little different.

A. The Warren branch is pretty near one-half of that, you will notice, Judge. It is nearly fifty miles.

Q. These little odds and ends contribute very largely to your interstate traffic, don't they?

A. That brings up a question I would like to make a little explanation about that I did not do yesterday, because I did not have the data at hand, and without it I would not want to mention it, and that is the traffic down on the Greenwood branch being interstate.

We get no mileage of traffic from the "Jenny Lind" mine that is interstate. All of that traffic takes the mileage from Coal Hill under the Arkansas regulations and tariff arrangements.

Q. Let me correct you a little about that, if I may. That is not the Arkansas Commission's tariff that does that. It is your Interstate tariff that does that, I think you will find.

A. On the business from Fort Smith we are allowed five miles and it is wholly on the state rates of the Commission.

Q. That is true, but is it not also true that it was put in by an interstate tariff.

A. As I understand it—we put that tariff in a little later on.

Q. You are correct, that the rates are the same, but it is an interstate tariff under which they were changed. You will find that on investigation.

1180 A. For that reason I took the ground that it is purely technical, as related to its character; that it was interstate traffic technically, but it was controlled by the rates provided by the Arkansas Commission; all the traffic from Fort Smith through the state, and the traffic from the points south of Fort Smith, that comes north through Fort Smith; that it was the accident of travel-

ing a short distance on the outskirts of Oklahoma did not affect the fact that Fort Smith was covered and the Greenwood branch traffic (which includes the "Jenny Lind" coal mine), by the state Commission tariff and rules as to minimums and other things of that character.

Q. Mr. McPherson, if you will look into that after dinner, you will find you were mistaken. It is an interstate tariff.

The Commission has not attempted to fix your rates on that. You fixed it voluntarily after the court tariff was put in. Fort Smith had to have the high rates until you had your tariffs filed in thirty days. They did not give you permission to file it shorter than in thirty days.

A. I presumed that was an Interstate Commission requirement, but I am speaking of the fact that we treated it as state business, because it has taken state rates and has been governed by state rules, and in looking into the question of the revenue per ton mile, it struck me that the sixty-two miles that were clipped off of the haul from "Jenny Lind" to Coal Hill, was a matter of considerable consequence.

1181 Q. That was clipped off because the coal mines were grouped by the coal companies, on a fixed rate, was it not? Everything west of Coal Hill was placed on Coal Hill rate?

A. Well, if that was it, it certainly would be regarded then as a state traffic, and in my testimony as to terminal cost I certainly should consider it state traffic because of that very fact, it was state rates and it was Arkansas——

Q. But in your classifications here of state and interstate freight, all of that is carried as interstate.

A. That has been taken into the tonnage as interstate and into the revenues as interstate.

Q. It necessarily has two terminal expenses in Arkansas, has it not?

A. Well, that is a technical condition. I merely called attention to this for whatever value it might have.

Q. The fact remains that those two terminal expenses are incurred in Arkansas?

A. They are both incurred in Arkansas, and the origin and destination of the freight is in Arkansas.

Q. Well, coming back to the question I put to you: these little odds and ends and short lines produce a very considerable interstate traffic for you, do they not, whether they produce trans-state or not?

A. Oh yes, they produce interstate traffic. I don't know so much about the Cushman branch.

Q. That is very small is it not?

A. It is a part of the eight per cent.

1182 Q. How big a part of it?

A. It is close to ten per cent of it.

Q. Ten per cent of the eight per cent.

A. Ten per cent of the number of miles, 107 miles, approximately.

The Warren branch produces a good deal of interstate traffic and it produces a good deal of intrastate traffic.

Q. On yesterday you stated: "Of the station organization it would make use of eight and one-half per cent." Where do you get that eight and one-half per cent?

A. That is the car clerks and car record clerks at such stations who take the record of trans-state traffic under ordinary conditions.

Q. How do you get at that particular percentage?

A. That is a per cent of the wages of the yard clerks and car record clerks, to the total wages of the other employés at the station. That is excluding the labor itself. It means the clerical help at the station, and the agent.

Q. You mean then, you picked out the men who have something to do with trans-state freight—you have taken their wages and charged a percentage of their wages to all the wages at that station: is that it?

A. Putting it the other way, Judge. I have excluded all the men from the station who do not have anything to do with the trans-state freight.

Q. Who are they.

1183 And taken merely the yard clerks and the car record clerks who do get that proportion of the wages of the other employés at the station.

Q. Who are the others?

A. The other employés would be cashiers and bill clerks, revision clerks, tonnage and other statistical clerks; foremen at freight houses and all of that class of station organization.

Q. You mean that none of them have anything to do with trans-state movements?

A. None of them have anything to do with the trans-state movement.

Q. And for that reason you exclude them and get this eight and one-half per cent, by the exclusion of these employés who you think have nothing to do with trans-state movements?

A. Who have no duties connected with it. We have well defined classification of station employés. We have yard clerks and we have car record clerks, men who take the car numbers in the yards, and men who make out the reports from the lists of those car numbers.

Q. If you go into that segregation of your traffic, there are a good many facilities that you use for interstate business that the intra-state business does not use, is there not?

1184 A. There possibly might be, but I don't know what they would be.

Q. Well, take your stock pens and stock yards.

A. Well, are there not any shipments of stock between points in Arkansas?

Q. That is for you to answer. I should say very slight. As a chemist would say, "there might be a trace."

A. Even if the stock shipments between points in Arkansas were only twenty per cent of the total stock shipments out of Arkansas,

that would be relative use, possibly, if it were only on the ton mile basis, eight per cent.

Q. You know as a matter of fact that your stock facilities are all for interstate shipments, are they not?

A. No. I remember that we have a claim on our hands now, of about $2800.00, for some stock that was entirely an intrastate shipment.

Q. Where did that happen to be?

A. It happened to be, as I recall now, on horses from some point north of Little Rock, to Pine Bluff.

Q. I suppose they were very fine horses, if they were in the shape of a claim?

A. Yes sir, they were represented to be first-class, blooded stock.

Q. You have another percentage here about this trans-state shipment, which I would like to have you explain:

"Eight and one-half per cent of station organization, and, on the most liberal basis, fifteen per cent of the cost of yard organization, operation and maintenance of yards and locomotives."

—. How did you reach that fifteen per cent?

1185 A. At certain points in the state there are switching locomotives that devote their entire time to local switching and do no classification work. There is no trans-state freight at those stations.

I have excluded those switch engines from consideration. I took them up with the total on the yard cost and take them out of any consideration of trans-state cost. Then by actual investigation have ascertained how many locomotives and the number of hours they worked daily at each of the other stations, and how much of that time is put into the classification yard; how much is devoted to the switching of freight house tracks, team tracks and industries of that character. Then I have allowed for that switching in the classification yard, thirty-five per cent on account of empties that would be handled in those yards—empty cars, which, to the best of my judgment, is correct.

I have divided the balance equally between trans-state, interstate and intrastate traffic. That is a very liberal allowance. It is more liberal than I would have put in an estimate for this work for any other purpose than this suit.

I have endeavored to follow a consistent plan in assigning one-half of that (or 51.16 per cent of it) of all the classification yard work to the trans-state traffic.

Q. How did you get at that division of empties?

A. That division of empties is more or less the judgment that I have formed in my years of experience, of empties that will pass through a classification yard.

It would not be based on empty car mileage, or the relation of empty car mileage to loaded car mileage, but rather on empty cars.

1186 That would be particularly important at a station like Little Rock, where there are a great number of empty cars

made; what I mean by that is that cars go into Little Rock loaded and a good many of those are distributed empty from there.

Q. You have just taken your judgment of what is a proportion of empty cars handled in a yard?

A. In a classification yard, yes.

Q. Now, Mr. McPherson, as I understand it, the way you reached that conclusion and the percentage you have used, you have excluded everyone who "touches not, tastes not and handles not" the trans-state traffic, and just confined your investigation to the men who are necessary to handle it: is that right?

A. In this yard service?

Q. I mean generally, in this calculation that I am referring to.

A. I have excluded the persons who have nothing to do with it and taken account of the remainder, some of whom it is very doubtful whether they have any connection with the interstate traffic or not. For instance, the weigher, a man who combines the duties of a weigher and a car clerk. His car clerk obligations are to keep an account of the numbers of the cars that he weighs when he——

Q. I don't care about that, I just want your general idea.

None of this trans-state business is handled in unbroken trains through the state, is it?

1187 A. We have handled a good deal of the very heaviest tonnage in unbroken trains. We do that often by agreement; export grain through from Kansas City to New Orleans.

Q. How much of it in the six months that we are inquiring about, did you handle in unbroken trains?

A. I think we did rather more of it during those six months than any other time because of——

Q. How much of the percentage of your traffic was handled in that way; taking your fifty-one per cent as a basis of your trans-state traffic, how much of that fifty-one was handled in unbroken trains during that period?

A. That I could not say. It was thousands of trains and two years have passed. I do recollect this though, that at that time some of the shippers had difficulty, I believe, in getting bottoms at New Orleans, and after they secured their ships they had to provide the traffic within a given length of time and some of that traffic we sent (as my recollection is) by way of Texarkana and some by way of Alexandria, in solid trains. My recollection is that in December of that year we moved——

Q. I don't care anything about individual movements. I want to get at your general proposition. How much percentage of that fifty-one per cent of trans-state business; would you say ten per cent?

A. On a ton mile basis it would be very high because that traffic would make a very large ton mileage. It represents eighty-eight——

1188 Q. Of course you have to use the revenue basis, I presume. On a revenue basis what per cent would it be?

A. Pretty good.

Q. What percentage of that fifty-one per cent? I want to get at something tangible.

A. I couldn't fix a percentage on that. I was trying to give you as to what I recollect as to the number of cars in one month, December 1907.

Q. Well, if that is a representative month we might get at it.

A. A ship was waiting at New Orleans (or more than one, perhaps) involving the shipment, I believe, of three million bushels of wheat.

That wheat went through in solid train loads, three million bushels, and my recollection now is that it all left the rails of the Iron Mountain—the last train load, on the 31st day of December.

I never saw a claim come back for anything on that traffic.

Q. Would you say twenty-five per cent of your trans-state traffic moved in solid trains?

A. It might not go as high as that, or it might in certain months —months of exporting grain, and at other times it might run even higher.

Q. Say seventy-five per cent, for the purpose of getting something tangible.

The balance of your trans-state traffic moves with inter-
1189 state and intrastate?

A. Moves what?

Q. With interstate and intrastate.

A. All of the traffic that does not move in solid trains—all of the trans-state traffic that does not move in solid trains, whatever that may be, moves in trains containing both interstate and intrastate freight.

Q. Do you throw those freight cars together in all of your division and classification yards, so as to get the most economy in operation?

A. We would not observe any difference; that is to say, I mean our yard men would not observe any differences between these cars so far as their actual switching was concerned, unless they were in solid train loads.

The trans-state freight forms a nucleus of the trains. It is such a predominating part of the traffic that it naturally is the nucleus of the trains. To that nucleus is added the intrastate, as well as the interstate cars that may be ready to go; and in order to make the expense of all of the traffic as economical as possible, we fill those trains out to their tonnage capacities of the engine.

Q. Unless you had this intrastate and interstate traffic to attach to your nucleus of trans-state traffic, the movement of your trans-state traffic would be exceedingly expensive, would it not?

A. Well, the movement of all traffic would be exceed-
ingly——

1190 Q. The movement of the trans-state would be exceedingly expensive?

A. Possibly, proportioned with the interstate and the intrastate; it would just raise the percentage of all of those traffics.

Q. It would make the percentage much higher?

A. Of all of them?

Q. Yes.

—. ——.

Q. By economizing in this way you reduce the cost of operation on trans-state as well as upon the other?

A. I should say wherever you get the maximum of efficiency in your service, you economize on everything, all traffic.

Q. You have this intrastate and interstate traffic that is handled by facilities that you say do not go to the trans-state: If it was not for those facilities, then your trans-state would be that much more expensive because you would not have the union to make of the two on one train?

A. Well, that is hardly a supposable case.

Q. I rather thought that was hardly supposable, so we will let it go at that and go to dinner.

1191 Cross-examination of Mr. McPherson continued by Mr. Hill:

Q. Mr. McPherson, have you heard from your report on that Fort Smith and Van Buren trackage?

A. Not yet. I have on the number of Texas cattle moved from Texarkana north, in the six months from July to December 1907, inclusive. It was 78 cars.

Q. How much?

A. Seventy-eight cars.

Q. Seventy-eight cars in that six months period?

A. In that six months period and these seventy-eight cars were moved in five different trains.

Q. Is that all the livestock you moved out of Texas during that period? Over the Iron Mountain?

A. That is all the cattle, yes.

Q. Any other kind of livestock?

A. I don't think we get any other kind of livestock out of Texas.

Q. Sheep or hogs?

A. I don't think we get sheep or hogs out of there. I think those all go through the Denison gateway.

Q. Then that exhibit which you put in in the Interstate Commerce case, 239 cars for sixty days, was not fairly representative of your traffic there, was it?

A. That was in the two spring months, Judge, in Febru-

1192 ary and March, and this is in the last half of the year.

Q. Would that be fairly representative of the spring months?

A. Well, there would be somewhat different conditions prevailing now; as I explained before, at this time we did not solicit any stock in Texas, while, either in January or February, our traffic department commenced the solicitation of live stock in Texas.

Q. Which do you say would be representative of your livestock movement, the seventy-eight cars that you now produce, or the two hundred and thirty-nine that you produced before the Interstate Commerce Commission?

A. The livestock runs so uncertainly; that is, it does not run at all certain months of the year, and certain months it does run. I should say of the exhibit in the Interstate Commerce case that the two months would be fairly normal for that spring period.

Mr. MOORE:

Q. What year was that moved in, those 268 cars?

A. That was in 1909, in the months of February and March. I want to say with reference to those months, February and March, they were selected by the attorneys in the case; they were not my selection.

Mr. HILL:

Q. It was April and May, was it not?

A. It was March and April, the 28th of February to the 25th of April, inclusive.

1193 Q. I want to read you from page 3654:

"Q. I am not talking about during the cattle season when you were moving them back empty to get cattle to bring north, but I am speaking of the season when you are not moving cattle; how many days in the year would that be on the average? Have you any idea?

A. No sir, I have not. We move some stock every day. It is a matter of daily traffic. Some seasons, some months, it is heavier. We have a heavy movement in October and a heavy movement in the fall."

A. The traffic that we move every day is local traffic that keeps up the packing-house supply and originates in our own territory. The heavy stock movement to which I referred is that stock movement which we have from Colorado that must be made before the heavy snowfall takes place in the mountains. The stock must be driven out of the valleys and shipped at certain times for their safety.

Q. Did you not file in that Texas case an exhibit showing the total livestock movement on your line for a year?

A. You mean for all parts of the System?

Q. Yes.

A. I don't think I did, Judge. I think Judge Cowan afterward withdrew his request. He had talked with our general livestock agent, Mr. Harris, and I think Mr. Harris told him that he

1194 kept those figures in memorandum form in his pocket, but afterwards it seemed that they had misunderstood each other. Anyway, that was not worked out, not as to carloads. Of course we know what the entire ton miles of that traffic was, and the entire tons of that traffic, for that fiscal year.

Q. I wish you would file, for the fiscal year heretofore referred to, your exhibit—that is, I believe it is the calendar year of 1907, is it not, Mr. Johnson, those two exhibits?

Mr. JOHNSON: Yes.

Mr. HILL (to witness):

Q. I wish you would file a statement showing either the total tonnage, or the total cars, whichever is more convenient to you—on the Iron Mountain road.

A. Just of Texas cattle, on the Iron Mountain?

Q. I don't care whether it is Texas cattle or what cattle. All of

your interstate cattle; or, if you can separate them I would be glad to have the intrastate cattle shown too. I think that would be a negligible quantity, but it might not be.

A. I don't know how our statistics are kept. I rather think, though, that that would not be separated.

Q. That the intrastate could not be?

A. It would be——

Mr. MOORE (to Mr. Hill): Had you not better make that inquiry of Mr. Johnson?

1195 Mr. HILL (to Mr. Johnson):

Q. Mr. Johnson, will you prepare it?

A. The number of tons of cattle or livestock?

Q. I would prefer to get cars, if you can, Mr. Johnson.

A. We can divide that by eleven to get the cars.

Q. I suppose so. I want your livestock tonnage, on the Iron Mountain. I have no concern with the Missouri Pacific, and if you can make your intrastate separate from it, I would like you to do that.

A. That would take the whole force six months.

Q. I would not ask anything like that of you.

A. But we can give you the total number of tons of cattle, or of livestock, either one.

Q. I would like for you to prepare that. You understand I want it for the calendar year—for the same period that you have heretofore covered in your statistics.

Mr. HILL (to Mr. Johnson):

Q. Turn to your chart again, Mr. McPherson, please, your Exhibit 30.

Q. I think you have testified that while these various prices of labor and material have gone up, there has been an increased efficiency of locomotives; increased car capacity and a reduction of grades on your line, have you not?

A. Yes, I have testified as to the forces that the Railway
1196 Company put into action to increase its efficiency, as well as to the increased cost.

Q. This chart would not reflect the actual condition of affairs without illustrating the increased efficiency of locomotive, car capacity, and of the improvement of the line, would it?

A. No, it is not intended for that purpose, and it would probably be difficult for any graphic illustration to be made that would embody all those elements.

The purpose of the chart is to show that the Railway Company's purchasing power has decreased, while the cost of all of the things that it must purchase, has increased.

It would be difficult, if not impossible, to show operating efficiency on a chart.

Q. It gets more efficiency for its purchasing power now than it had at the beginning of your statistical period there, does it not?

A. No, it does not. It is doubtful if the Railway today secures the

labor efficiency that it formerly did. The Railway Company's form of government years ago was rather of a paternal character; while now, on account of the extent and the conditions surrounding operation, and its relations to the public, it has become a constitutional form of government, if I may put it that way; that naturally has brought about a little less of the idea that this is "our railroad," among the boys, as it naturally would with the young man emerging from his minority into manhood.

1197 It is doubtful if the Railway Company today gets the same efficiency from its expenditure for labor that it formerly did.

Q. You have increased the efficiency of your locomotives at least twice, have you not?

A. No.

Q. How much?

A. Measured by the average tons of revenue freight per ton mile, the increased efficiency of 1909 over 1900, is substantially twenty-six per cent.

Q. What is the increased car capacity?

A. Just a moment, Judge. I am looking for that—I haven't got it.

With this increase of twenty-six per cent, however, of the efficiency, there comes a heavier expenditure for maintenance. The maintenance of the present day locomotive is very much greater than of the average locomotive of the year 1900; the average increase of tractive power of locomotives, as between 1902 and 1908 (I have not the figures for 1900) is substantially the same, twenty-six per cent.

The increase in the average capacity of the cars is about forty-three per cent.

Q. What is the increased efficiency produced by the movement on the line of the Iron Mountain, in Arkansas?

A. That would be rather a difficult thing to put into the shape of figures, beyond what I have given.

We get a twenty-five to twenty-six per cent larger train haul than we formerly did, but the increased capacity of cars has not

1198 helped us very much, because, while it has been forty-three per cent, the increased use of those cars has been only about twenty per cent, that is, the average tons per loaded car mile.

Q. Was that because sufficient traffic was not offering?

A. That is due to various reasons. I think the Arkansas Commission tariff will be one of the explanations, in the low minimum.

Our freight cars have an average tonnage capacity of 33.62 tons. Their minimums on very many articles are not one-half of that amount, and my recollection is that there is no minimum in Arkansas that is higher than 30,000 pounds. We have those difficulties to contend with.

Q. No minimum higher than what?

A. Thirty thousand pounds.

Q. You had better look at that, Mr. McPherson.

A. I said I thought that would show that. I still think that—

perhaps coal and lumber would be the heavy commodities, and they, I think, are fixed at thirty thousand pounds.

Q. Well, I don't care about running into too much detail. The point I am getting at is this:

Your chart has not taken into consideration, in attempting to describe graphically the situation, the opposing forces—the increased locomotive efficiency, increased car capacity, and the reduction of grades on your line, has it?

A. No, it has taken in only the forces that are working against economical operation, and not those that are working in
1199 favor of it.

Q. Without both forces being shown the chart would not be of any true value, would it?

A. Yes, the chart would be of its one hundred per cent value, for the purpose for which it was filed, and that is to show the increasing trend of the articles the Railway must buy and the decrease in the trend of its purchasing power.

Q. In other words, it tells one-half the story, but not the whole story.

A. It tells all of this story.

I can illustate that perhaps, by taking the year, say, of 1906. We will say that there has been no purchase of power since that period, and there has been no cutting of grades since that time, notwithstanding which, the trend of the cost of the things which the Railway Company must buy is upward, while the trend of the purchasing power of the Railway Company continues to be downward.

Q. That is as to freights only. Is it downward as to passengers?

A. When I considered the passenger phase originally in this matter it was a fixed unit of one thing; it was either three cents a mile or two cents a mile (or something in between there) and for that reason I did not think it of much importance to put it in, because it was such a continuing factor.

Now, of course, it would have shown a very heavy reduction when the two cent rate law took effect, and probably up to
1200 that time it would have traveled a base line; then it would show, with the restoration of rates, a return to near the base line.

Q. What about your miscellaneous income from mail, express and other miscellaneous sources: has there been any decrease in that?

A. Well, there has been a small decrease in the mail, due to changing the divisor from six days to seven days.

Q. Changing what?

A. The divisor from six days to seven days. It is considerable, but in proportion to the entire earnings of the road it would, of course, be small.

Q. How about your express receipts?

A. Our express receipts figure in the calendar year of 1908—the express follows the freight usually, in its volume. That is to say, the conditions that make freight business active, make express business——

Q. 1907 is the year we have particularly under inquiry. How about that?

A. It was at its maximum.

Mr. HILL (to Mr. Moore): Mr. Moore, just a moment, while I think of it. I wish you would furnish me your express and mail contracts covering the period of 1907. I spoke of that once before

(To the Witness:)

Q. Mr. McPherson, in calculating according to your revenue theory, the practical effect of your division of mail and ex-
1201 press, is to charge these accounts with the same proportion of expense that the interstate business is charged with, is it not?

A. Somewhere there. Substantially in that relation, rather than in the intrastate relation.

Q. When you increase the expense of intrastate business you decrease proportionately the expense charged to mail and express on intrastate business also, don't you?

A. Yes, that would naturally follow.

Q. Do you deduct the expense of handling mail and express and other miscellaneous business, on a revenue basis, leaving the remainder of the expense to be divided between state and interstate?

A. Do we deduct the expenses? That would be a matter for the accountant to answer, but I believe I stated that both the express and the mail are in the custody of the Government employés, and the express employés, respectively.

There is some expense attending the handling of mail in its delivery to and from stations located within eighty rods of the depot, in whatever state that mail may be put off and taken on.

Q. I am not caring about those details, Mr. McPherson. You have gone into that before.

I am getting at the question of the way you handle mail and express in your accounts. What do you do with your mail and express when you go to add the extra cost that you have testified should be added to intrastate traffic?

1202 A. The process I think was explained by the accountant. That is a matter of making figures that I do not handle, and of which he is more competent to speak than I am.

Q. I am not speaking of actual figures. I am speaking of a basis. You have spoken of the revenue basis as a proper one for dividing expenses. I want to know what that basis is, the way you understand it. The actual figures are there and the accountant has explained the figures, but I am talking about the basis.

A. The miscellaneous expenses are made up of a number of items, and in order for me to explain the basis, it would be necessary for me to take the whole formula by which that is reached, and I have it before me here, just as it was explained by the accountant. It would probably be repeating his testimony in that respect.

Q. Go ahead.

A. I have got the figures that I made myself at my office—in figuring these for the new percents, but I don't think I have got them here.

Q. I don't care about the calculation. I just want to get your basis, your method.

Mr. MOORE (to the witness): If you wish to see Mr. Johnson's formula, if you wish to see the figures, — is on that exhibit (Indicating).

A. Yes, I worked it out myself. I worked it out in pencil. After the apportionment of the miscellaneous expense to the state, has been ascertained, which is reached (in the case of the mail
1203 service) by crediting the mail route (if it is located entirely in the state) to the state in its entirety; that is, where the route is located entirely within the state, and where the route runs between other states and divisions, it is made on the basis of actual mileage in each state.

The express companies give no details to the Railway Company, of their operation, and the division would go on the basis of the gross freight earnings.

With an exact division, adding the miscellaneous earnings to the principal traffic, the additional cost (whatever it may be) that we would assume the intrastate traffic should bear, is added to the actual percent of intrastate traffic to get a basis of new percents, which results in reducing more than 100 per cent.

I am, perhaps, not facile in explaining myself. That is not my particular business.

After this increased per cent is ascertained, the new percents are obtained for a division of the state, intrastate and miscellaneous traffic, which would result in increasing the proportion of the intrastate, and decreasing the proportion of the interstate and the miscellaneous. On this basis the miscellaneous earnings would bear less: the intrastate more and the interstate traffic less of the cost.

Q. That is the revenue basis method of calculating the effect of the miscellaneous revenue and miscellaneous expenses upon the intrastate business, as you understand it?

1204 A. That is my attempt to explain the formula, as I understand it. The revenue basis is, of course, a division of the expense of operation as between state and interstate traffic, on the basis of the revenue derived from the traffic, plus such additional cost as the intrastate should bear.

Q. You are acquainted with Mr. Kimbell, the assistant auditor of the Cotton Belt, are you not?

A. Mr. R. E. Kimbell? Oh, yes.

Q. You regard him as a competent accountant?

A. Why, yes, I never heard anything to the contrary, although I don't know that I have ever had up with him more than one or two matters.

Q. It would be more in his line of business to work out this problem, than it would be in yours, would it not?

A. It might be, in the details; I think I would know more about the generalities of it.

Q. I want to read to you from his testimony, page 251, and ask you how near, if at all, you agree with him:

"Q. Then you think the proper way is to just lay aside a proportion of miscellaneous revenue and make the calculation with the added cost for intrastate business as between state and interstate?

A. That is the theory laid down by Judge Vandevanter and it seems to be sound.

Q. That is the theory which you seek to present in this case, isn't it?

A. Yes sir.

1205 "Q. Under that theory the practical effect of the mail and express is to charge the expense of it in the same proportions that the interstate business is charged with, isn't it?

A. That would not be the same case after you had——

Q. I am speaking of before you take the added cost.

A. Yes, sir, on the straight revenue basis.

Q. On the straight revenue basis the mail, express and other miscellaneous items would stand the same proportion as the interstate business; and you want to leave it after that, and add what you take to be the extra cost of the state business?

A. Yes sir, deducing accordingly from the interstate."

A. No, I don't agree with it, because it makes no allowance for the larger cost of acquiring the state miscellaneous earnings than the interstate.

Q. You think there is a larger cost in acquiring the state miscellaneous earnings than there is in the interstate earnings?

A. Oh yes.

Mr. MOORE: Did you say interstate?

A. Intrastate, than interstate.

Mr. HILL:

Q. Have you any data to determine if mail and express are costing you more than the interstate business?

A. Is costing more in the interstate than the intrastate?

Q. No, have you any data to determine its relative cost to either?

1206 A. I have no figures. I know from my general experience and observation; going over the road; my knowledge of the business as it is done, and the expense to which the Company is put for handling the state mail, locally, in its delivery, that the cost of the state mail must be as much greater than the cost of the interstate as that expense represents.

That is due to very much the same reason that would affect our division of freight and passenger traffic; there is the delivery of the mail and the putting on and putting off of the mail, while with the trans-state mail there would be no physical handling by the Company; it would remain in the car, from St. Louis to Texarkana, on through to the ultimate end of the car's run.

Q. Is there any way to divide that mail service between state and interstate?

A. No, there would not be any way to divide it between state and interstate; it would require a knowledge of the volume of each class, which the Government would not furnish.

Q. Are you not paid in proportion to the service that you render on that?

A. We are paid by the pound, and for space, all of which would be shown in the contract. It is rather complex to attempt to recapitulate it.

Q. I have called for that contract and we will not go into that. I believe you stated in your testimony, that you estimated two to one, on a revenue basis, for the extra cost of intrastate traffic,
1207 and five to one on the ton mile basis. I wish you would explain that difference.

A. You wish I would explain—how, between quantity and revenue?

Q. Between two to one on the one basis, and five to one on the other.

A. Did I not say "more than two to one?"

Mr. MOORE: I think you said that.

A. I believe that I expressed myself not exactly that way. I believe I used the word "quantity."

Mr. HILL:

Q. Used the word what?

A. Quantity.

Q. Well, I am not so particular about the way you expressed yourself. I want you to explain why you put it at one figure on the revenue basis, and on the other on the other basis.

A. That is based on the statistics shown in this case—I don't know the number of the exhibit that contains that revenue basis—that answer applied to the freight and not to the passenger traffic.

Q. My question called for the freight traffic, not the passenger.

A. It was in looking for this that I lost the connection. I beg your pardon.

Q. You put thirty-five per cent on the passenger traffic, as I remember it?

A. Yes; in Exhibit number 3, and sheet number, the di-
1208 vision of expense as between interstate and intrastate, on the revenue basis would be 13.08 per cent for intrastate, and 86.92 per cent on interstate. If the expenses were divided directly on the basis of the relative revenue received from each class of freight traffic, that is, between intrastate and interstate, those would be the divisions. That deals with the revenue.

In dealing with quantity, I will have to turn to Exhibit number 26—well, here is Exhibit number 5; the percentage of total ton miles which would represent a quantity division, would be—intrastate 7.25 per cent; interstate 92.75 per cent.

I gave as my opinion that the division should be made as to quantity at least five times greater, proportionately, for the intrastate business, than the interstate, and it so happens that on the revenue basis the division of expense would, without any addition, be about two to one.

Therefore, in expressing my calculations, I have borne in mind that relation.

On a quantity basis the relation would become about thirty-six to sixty-four per cent.

On the revenue basis, as I expressed it, to more than two to one; the relation I intended to convey would be substantially the same.

Q. Where do you get your thirty-six and your sixty-four?

A. Well, I took that roughly, as representing the multiplication by those factors of the intrastate proportion of the traffic, both as to quantity and as to revenue, shown in the first column of Exhibit number 5.

1209 Figuring that over carefully might make a small change there, but it is only one of relation.

Q. I would like to have your formula for getting that portion out of that column of statistics.

A. If I were to do it I should have to go back and take the tonnage and figure it out.

Q. I don't mean your actual calculation. I want your formula so we can work it out.

A. I took the figures roughly, on the ton mile basis, and the division of expense would be, 7.25 per cent intrastate; 92.75 per cent interstate, and just roughly multiplied the seven by five.

Q. Why did you multiply that by five in answer to your question? Seven times the quantity?

A. Seven times the proportion.

Q. Five times, you mean?

A. Yes, five times the proportion.

Q. What is your basis for the five?

A. It is pretty hard for anyone to give exactly all of the reasons that lead to a conclusion.

Q. Mr. McPherson, here is the point I am getting at; is it your experience or is it some data that you have?

A. If you will allow me to finish, Judge, and be a little patient with me.

Q. All right, go ahead.

A. In the thirty-two years of experience I have had in transportation work and the work growing out of transportation, the best of my judgment is that the relation of between four and eight to one, exists in the intrastate freight traffic and the interstate freight traffic.

1210 That is, the difference is somewhere between four and eight. Probably no one can tell on the moment, exactly how he reaches a final conclusion, but my conclusion in this respect is reached the same as any other conclusion that I have ever reached, and that is the best of my judgment, from my experience.

Q. That comes to the point I am trying to develop: it is a question of experience with you and not a question of actual data.

A. There is nobody who can give actual data. It is not susceptible of division by any accounting process.

1211 Q. To sum up your reasons for your testimony it is this: you take the flat ton mile proportion of state and interstate traffic, namely, 7.25 per cent intrastate and 92.75 per cent interstate, as shown in exhibit 5, and multiply the state ton miles per cent by five,

and use the figure so arrived at as your factor in getting at the percentage to ascertain the cost of the state business?

A. No sir, no sir, I would not figure with the interstate to get it just that way. I merely gave it that way because the relation seemed to me as seven was to 92. And I was merely trying to express in figures what I had express- in five times and in more than double.

Q. Well, then, you were making your estimate irrespective of the exhibits and merely using the exhibit to illustrade your point: is that it?

A. It so happens that the relation between the revenue basis and the quantity basis was as two to one in favor of the revenue basis.

Now, in my opinion, five times the expense attended the intrastate traffic for the same ratio of relation of ton miles as the interstate traffic, it would obviously follow that more than double the revenue basis, and five times the ton mile basis, was somewhere in relation.

1212 In my analysis of the ton mile theory I developed some relations that were exact, or reasonably so.

And in my testimony as to extra cost I repeated that testimony to a considerable extent.

The application of it was just at random, from the fact that they happened two to one as between revenue and quantity.

Q. That was more an accidental incident than one which controlled your judgment, was it?

A. No sir, my judgment is controlled by the reasons I have given even without these figures; and in my explanation I assumed that I could have stopped with "more than twice the revenue basis." But, probably liking to hear myself talk I rounded out the general proposition.

Q. In making your calculation a few minutes ago that this relation was 36 to 64 you multiplied that 7.25, which is the percentage of total ton miles of intrastate traffic, by 5, didn't you?

A. Yes sir, I just made it mentally from glancing at the figures.

Q. That was your method of reaching that percentage?

A. Well, it would be immaterial what that relation was. It is as 5 to 1, whatever it would develop. And 5 to 1 is giving the benefit of the ratio of 8 to 1, or taking at least, the least benefit of the difference with due consideration to the trans-state traffic.

1213 My conclusions, however, were not based on that exhibit. I merely used these exhibits as illustrative of the relation of those quantities.

Q. I believe in the Missouri rate case that the percentage was 13 where this is 7.25: if that were the case would you use that multiple of 5 there?

A. In the Missouri rate case I testified that the difference was somewhere between 4 and 8.

That is, it was somewhere between 4 and 8 times as expensive to conduct intrastate traffic as interstate traffic. And of course I brought to bear in that conclusion my experience and the relation the trans-state, interstate, and intrastate traffic bear to each other and the several matters I gave in evidence, as well as the operation of

my mind upon that point, the same as it would in forming a conclusion or a judgment in any other matter in which I had a large experience.

Q. Still, I do not believe that is an answer to my question, Mr. McPherson.

A. I will answer your question that my conclusion was reached without anything in exhibit 5. I turned to exhibit 5 because there was a certain relation between quantity and revenue which I thought perhaps I could express. But possibly I did not do it mathematically correctly. I did it as one would do as he runs.

Q. Still, I do not think that is an answer to my question, do you, if that figure had been 13, as it was in the Missouri case, whether you would still multiply that by 5 in arriving at that conclusion.

1214 A. I don't know what I did then in arriving at that conclusion. It is a long time ago. And I doubt very much if I have the figures in mind. I do not recollect now what they were.

Q. I believe among the numerous offenses which you charge against the ton mile basis, that one of them is that it reduces to a common level the elements of bulk distance, weight and risk; isn't that true?

A. That is correct.

Q. In using the revenue basis or theory don't you reduce the rates or price for hauling the commodity to a common level?

A. Oh, no. The first class rate and the second class rate and the third class rate and all other class rates and commodity rates that have considered these difference in character, volume, risk, bulk and otherwise are taken as a result of the work, not as a measure of it. The revenue is the result.

Q. Does it bear the proper relation to the work done?

A. I never have said that I thought the revenue basis was an exact basis to use, but I believe it has less objections than any other basis, and that there are more reasons why it is logical than any other basis that has been suggested. And it expresses a result of the things that have been done, after they are done.

Q. I don't believe that is an answer to my question, Mr. McPherson.

1215 A. You do not believe it is?

Q. No.

A. Will you kindly read the question? I certainly mean to be responsive.

Previous question read as follows:

Q. Does it bear a proper relation to the work done?

A. I do not know that it bears an exact relation to the work done. That is doubtful. But it probably comes nearer doing so, considering all of the elements, than the other basis.

It, of course, does not deal with quantity. It deals with what has been paid for the quantity transported; and that has considered, undoubtedly, the elements of character, bulk, risk and distance.

Q. You mean by that the amount paid to the railroad company and not the cost of the transportation?

A. No sir, it is the amount paid to the Railroad Company for the transportation.

Q. Does it bear a proper relation to the cost of transportation?

A. Here again I will have to answer very much as I did before. It comes nearer a proper relation with the cost than with any quantity consideration, because of those elemental differences that I expressed in my last answer.

Q. Isn't it a fact that rates are largely based upon competitive conditions and not upon cost of the service?

A. I have not qualified as a rate man, but from my
1216 general knowledge of the railway service, business interests, even though located in different sections of the country must be considered; and in all probability competition must likewise be considered as between the railroads.

In other words, you have to deal with the competition between communities and the competition between the railroads. There is that element entering into rate making, no doubt to a considerable extent.

Q. Where that element enters into rate making, necessarily the revenue received does not bear a proper proportion to the cost of operation, does it?

A. I do not think that would necessarily follow.

Q. It would naturally follow, whether it necessarily followed or not, wouldn't it?

A. No sir I do not think it would naturally follow. It might follow but I do not think it would generally follow.

Q. Wouldn't it really be an accident if they did bear a proper relation to each other where the rates were fixed by competition and not by cost of service?

A. Now as to that I will get back to my other answer that of course the revenue basis is not perfect, but it possesses less objections.

Now, if the ton mile theory and distance were to prevail, communities would be put out of business.

Q. We are not arguing the ton mile now. We are arguing revenue. We will give you an opportunity on the ton mile
1217 theory later, but right now we are considering the revenue theory and I call your attention again to that last question of mine. I would like to get a more definite answer, if you can give it.

Previous question read:

A. Judge, I think that has been discussed so largely of late by people who are versed in traffic and rates, who are so much better able to answer that question (such as a rate making officer) that I ought to be excused from expressing an opinion, where I do not know the rates from here to New York even, on the classes.

Q. But, Mr. McPherson, you are put forward as an expert to speak for your Company on that matter and I think I am entitled to have your best judgment on these matters. You have given this as your best judgment on this theory and I want to find out the different elements and the different bases that constitute it.

A. I thank you for your compliment, Judge, but I have not qualified as an expert on rate making.

Q. You have on the revenue theory though.

Well, I will put this concrete proposition to you:

I believe you have testified that lumber is the largest single commodity handled by the St. Louis, Iron Mountain & Southern Railway, haven't you?

A. No sir, not the largest single one. I said that lumber and grain were the dominating commodities.

1218 Q. Well, lumber is one of the largest, at any rate, isn't it?

A. Oh yes.

Q. I believe the lumber rates are fixed from Southern Arkansas, Louisiana and Texas in a zone, with a rate of 18 cents from that zone, composed of that territory to St. Louis: do you know that to be a fact?

A. I do not know what the rate is. I know there is a zone consideration of territory in order to enable the various mills located at different points to compete with each other; but what the rate is I do not know.

Q. Assuming, for the purpose of my question, that I have correctly stated it, then your revenue derived from your lumber traffic would in each instance from that large territory represent a different cost of service, wouldn't it?

A. It would represent the result of the revenue we derive from the service.

Q. Well, if you take the revenue as a measure of the service it would represent differently upon each particular shipment from each particular point.

A. Oh no, as I said before, that is not an exact basis, but it has less objections than the other bases, for the reasons I have given.

Q. I am not arguing that with you now, but I am just coming down to the fact.

1219 A. In gathering together the income a company has received from all its freight traffic, it is more reflective of the value if you endeavor to separate the cost of operation as between the two classes of traffic.

Q. Well, there is a lumber plant at Farrell and another large lumber plant at Blissville, about one hundred miles further down the same line, and the shipments from those two plants into St. Louis would each pay the railroad company 18 cents per hundred. There would be a difference in the cost of the service of those two shipments?

A. Undoubtedly. That is a sacrifice that the Railway Company must make to enable the business interests to compete with each other on an equal basis.

Q. If there was a shipment, say from some Southern point in Louisiana to St. Louis, passing by Blissville and Farrell, it would still pay in eighteen cents per hundred revenue, and there would be a still greater increased cost of service, wouldn't there?

A. That again would be an act of the railroad company that was prompted by affording different localities an equal chance in any particular market—say in this case the St. Louis market.

Q. But the man at Farrell (just below Little Rock) would be paying the same as the man down on the Gulf coast, for a very

different cost of service; and you would take the revenue derived from those two shipments to measure that cost of service wouldn't you?

1220 A. The line from Farrell you say to Little Rock?

Q. No, I say from Farrell to St. Louis. Farrell is just below Little Rock.

A. Then I did not get your question. I did not understand you had illustrated a local shipment.

Q. I did not. I might have stated my question wrong.

The previous question is here read.

I am still speaking of a shipment from those points to St. Louis.

A. Yes sir, that would be the effect. There would be compensating elements, of course.

Q. That would be ignoring the element of distance and reducing to a common level those prices, wouldn't it?

A. Those rates?

Q. Yes. And cost of service.

A. Well, the distance does not control altogether in rate making.

Q. But that is a fact that I have stated to you, isn't it?

A. In your illustration the element of distance would be considered undoubtedly as between objective points, but as between Farrell and the other points you mention——

Q. Any Southern Louisiana point.

A. That distance would be ignored in order to give the two localities an equal chance at the market.

Q. I am not arguing the philanthrophy of the railroad in establishing those rates, but am merely trying to get the effect of

1221 that philanthropic purpose after they are established; and that would be to ignore the element of distance in the shipment I have instanced, wouldn't it?

A. In that particular case it would be.

Mr. MOORE:

Q. Do you know what the limits of that zone that you speak of are?

Mr. HILL: I think it is about Little Rock, but I do not know definitely.

Mr. MOORE: Do you know what the limit South is?

Mr. HILL: I think it is all the way to the Gulf.

Mr. MOORE: Do you know.

Mr. HILL: Not positively. I know the heavy shipments from Little Rock to Texas operate under those zone rates, but outside of that they do not.

Q. Mr. McPherson now take the shipments the other way: you know something of Texas common points, don't you?

A. I know there is a blanket in Texas, a large one.

Q. Just explain how a shipment from St. Louis would go down to Texas.

A. I do not know the area of that blanket exactly. I do not know the line.

Q. I have an interstate tariff here that would give it to you. I will not go into the details, but practically all the territory South of Texarkana, with the exception of El Paso and a few other points, is in it, isn't it?

1222 A. You mean it is the same all over Texas?

Q. Yes.

A. I do not know. I listened to some testimony in one case here, and my recollection is that the line was Colorado City.

Q. What is that?

A. My recollection is that the line was placed at Colorado City but I am not positive on that.

Q. I do not care anything about the detail. But it is a fact that a large portion of the Texas shipments go down there in the same rates, to the different points, and different distances in Texas: isn't that true?

A. Well, I don't know. I suppose it is. You are taking me beyond my depth, into the rate region.

Q. We will assume that to be true. Here is this tariff for the Southwestern line, tariff No. 1-A. You can look that up if you are not satisfied to assume that to be a fact.

I have an example here which Mr. Hamilton has kindly drawn off from that tariff, and we will assume his facts to be correct, and you can verify them if you desire:

Assuming three tons of first class less than car load freight exactly similar in character: one ton each consigned respectively to Marshall, Texas, on the T. & P.; Devine, Texas, on the I. & G. N.; Houston, Texas, on the I. & G. N.; all loaded at St. Louis

1223 and forwarded via the St. *St.* Louis, Iron Mountain & Southern Railway to Texarkana.

The first class rate from St. Louis to each of the points mentioned is $1.47 per hundred pounds, equivalent to $29.40 per ton.

Your current divisions with the Texas lines would allow the Iron Mountain for its haul from St. Louis to Texarkana, on the ton to Marshall, Texas, $20.58; on the ton to Devine, Texas, $14.77; on the ton to Houston, Texas, $19.31.

In each case you would have to perform exactly the same service in handling each ton on your road, and necessarily, incur the same actual expenses.

But if you use the gross revenue received by the Iron Mountain as the basis for apportioning the expense of these three shipments respectively, you would get a different expense for each shipment, wouldn't you?

A. That would be apparently true.

Q. That would be reducing the distance and the cost of operation to a common level pretty near as bad as the ton mile.

A. We will take the reverse of that; now, then, take your short distance. You are dealing with distance as a fairly good average, your five mile rate and your ten mile rate and your 25 or 50 mile rate are greater proportionately to the mile—that is to say, in one

case you have lengthened it out and in the other you have shortened it; and you are coming to a reasonably fair average in the end.

Q. But on those shorter rates you get more revenue,
1224 don't you?

A. That is true. That is exactly what I mean by saying that shortening the distance you get more revenue and in lengthening the distance you do not get proportionately the same revenue.

Q. But here in your shipment to Texas common points you get a different revenue and the same expense for each.

A. In this averaging of distances of course you have the length of the haul again to consider.

Q. Isn't all of your coal shipped on a blanket or zone rate?

A. No sir, I do not think it is. I think in Arkansas it is. It is shipped out of the coal district in Arkansas by making the zone a beginning; that is to say, all of the coal lines are located as at Coal Hill.

Q. Isn't that true of coal shipments generally throughout the country?

A. Well, the coal territory? I do not know that the coal territory is scattered quite as baldy as that.

Q. Isn't that true of all the coal that is shipped?

A. We have the Illinois coal territory, which is a comparatively small territory.

Q. Isn't it true that coal is shipped on the same rates out of practically the same zone?

A. Oh, yes, and it is the same doctrine there, to give all engaged in that business a common chance at the market.

1225 Q. I understand that in making your division you first locate all your revenue—you can locate all your revenue that you derive from Arkansas?

A. Oh, yes.

Q. That is a locatable factor?

A. That is, our freight and passenger revenue.

Q. And for the State as against the entire line?

A. Yes sir.

Q. Now where you have revenue from shipments where two or more States are interested, how do you allot that revenue?

A. That is divided on a straight pro-rata per mile basis.

Q. Is that the track miles that it travels over?

A. For freight it is a pro rata per mile basis; for passenger there is some constructive mileage used, where the rates are different in different States.

Q. If you had 100 miles of haul, 50 miles in Arkansas and 50 miles in Missouri, you would give half of that revenue to one State and half to the other?

A. In ascertaining that revenue, yes.

Q. Don't you know that the rates in Missouri and in Arkansas are quite different?

A. I have never made a comparison of them.

Q. Take the fourth class less than car load rate, and in Arkan-

sas it is 32 cents per hundred miles of haul, while in Mis-
1226 souri it is 24 cents per hundred miles of haul.

Mr. MOORE: Intrastate or interstate?

Mr. HILL: Intrastate.

Mr. MOORE: You are talking about interstate.

Mr. HILL: No sir I am talking about another thing now.

Mr. MOORE: You are trying to divide the revenue between Missouri and Arkansas. You cannot divide intrastate revenue when the intrastate and interstate rates are not the same.

Mr. HILL: I am not talking about that at all. I asked him how he divided that interstate shipment and now I am asking him if the rates are not very different in the two States.

Mr. MOORE: Do you mean interstate or intrastate rates?

Mr. HILL: Intrastate.

I have a question predicated on an example that I wish you to work out:

The fourth class rate from Carondelet, Mo., to Devine, Texas, via the St. Louis, Iron Mountain & Southern Railway to Texarkana, and the T. & P. and the I. & G. N. beyond, is $1.02 per hundred pounds. On this rate your current division would allot the Iron Mountain for its haul of 484 miles to Texarkana 50.4 cents per hundred pounds, or $10.08 per ton; or at the rate of 2.08 cents per ton per mile.

1227 As you in dividing revenue common to two States use a track mile basis, on shipments of this character, you would allot to Missouri and Arkansas the same revenue per ton per mile, wouldn't you?

Mr. MOORE: Do you mean in alloting the proportion that would go to the Iron Mountain as between Missouri and Arkansas?

Mr. HILL: In dividing the revenue between Missouri and Arkansas.

A. That seems to be the case.

Q. As you in dividing the revenue common to two states use the track mile basis, on a shipment of this character, you would allot to Missouri and Arkansas the same revenue per ton per mile, wouldn't you?

A. Yes sir because you would allot the relative mileage over which the shipment traveled over two States.

However, I want to say I am unacquainted with these divisions to the same extent I am unacquainted with the rates.

Q. On such a Texas shipment weighing one ton, a hundred mile haul in either Missouri or Arkansas would (on your basis of allotment) earn you gross $2.08 from Carondelet to Devine:

Your hundred mile fourth class rate in Missouri is 24 cents per hundred pounds, or $4.80 per ton:

Your hundred mile fourth class in Arkansas is 32 cents per hundred pounds or $6.40 per ton.

1228 Assuming a solid consignment of one ton of any fourth class commodity for Devine, Texas, loaded at Carondelet, Mo.; and also an exactly similar shipment of intrastate freight loaded in

the same car, destined to Funk, Mo., which is 100 miles South of Carondelet:

Assume that the car goes down to Funk, Mo., and that the shipment for that point is taken out there; and that the car goes on down the line to Little Rock, Ark. (the Texas shipment remaining in the car) and that at Little Rock an intrastate shipment exactly similar to that previously mentioned is put into the car, destined to Boliver, Ark., 100 miles further South. When the car reached Boliver, Ark., the shipment for that point is taken out there and the Texas shipment remains in the car and goes on toward its destination.

Now if the 100 miles in Missouri, which your two shipments (the interstate and the intrastate) traveled together, the interstate shipment earns gross $2.08 and the intrastate shipment earns gross $4.80. For the 100 miles the Texas shipment and the Arkansas shipment (interstate and intrastate) travel together in Arkansas, the interstate shipment earns gross $2.08 and the intrastate shipment earns gross $6.40.

Now take the coincident movement of the two shipments, the 100 miles in Missouri yields a revenue, interstate $2.08 and intrastate $4.80; assuming that there were no other shipments in the
1229 car and that it cost say $5.00 to move the car 100 miles (by "moving the car" I mean all the expense incurred by the Railroad Company) then on a revenue basis division of expenses you would assign of this expense $1.50 to the interstate shipment and $3.50 to the intrastate shipment.

Under the Arkansas illustration I have given you, following the Missouri illustration just given, and again assuming a cost of $5.00 for moving the car 100 miles, your revenue from the interstate shipment being $2.08 and from the intrastate shipment $6.40, your division of expense for the Arkansas movement on the revenue basis would result for the interstate $1.20, and intrastate $3.80.

So the mere accident of a higher State rate in Arkansas makes a similar shipment in that State cost more to handle than an exactly similar shipment in Missouri under similar conditions, isn't that a fact?

A. I do not remember that question. It is too long for me.

Q. Let the stenographer write it and you can answer it in the morning.

A. All right.

Q. Then I would like you to add 100% (which you say is the extra cost for intrastate movement) and see where you would land.

A. Very well.

Q. There is another effect of the revenue theory that I want to discuss with you:

1230 The more you increase your state rates, the higher you make them, the greater cost you apportion to the State on the revenue basis, don't you?

A. You do not increase your cost of operation. But if the revenue proportion of the State as against interstate increases, of course

there is a proportional increase in the apportionment of the expense to the State.

Q. You increased your passenger rates from two cents to three cents when you got the injunction, and if you make your calculation under the revenue theory after that increase was made, it would add approximately 50% to the cost of operation wouldn't it?

A. No sir there is nothing added to the cost of operation?

Q. Under the revenue theory?

A. The cost of operation is the same as it was formerly, but the division of that cost, whatever it might be, would be increased proportionately, but that does not apply to the State line? The rates were increased in Missouri to three cents a mile.

Q. I am speaking of——

A. The interstate rate was also increased.

Q. Was your intrastate passenger rate increased?

A. Yes sir. So the relations would not be disturbed.

Q. It was not increased concurrently with your passenger rate increase, was it?

A. I presume not, because it would require the period set
1231 by the law, for the filing of tariffs, before the change could be made.

Q. Then that period computed according to the revenue basis, you would be charging 50% more on operating expenses in Arkansas wouldn't you?

A. I do not think there would be that relation. I do not know how that would figure out. But whatever way the accountants would figure of course there would be some additional cost to Arkansas. That is, the proportion would not be the same.

Q. But the result of this inquiry, the determination of expense as between state and interstate, that increase of the State rate would carry an increase of the apportionment of State expenses, until such time as the interstate rates were correspondingly raised.

A. Yes sir it undoubtedly would.

Q. The interstate rates——

A. But they were both too low.

Q. I am not arguing that. I am talking about the revenue theory now and not whether they are too low or too high.

If the interstate rates were not increased and the State rate was increased, you would be burdening your intrastate operation with additional cost, according to your revenue theory, wouldn't you?

A. Yes sir. We think it is proper to do so, to bear its proportion.

1232 Q. There would not be any actual increase in the cost of operation?

A. No sir there would be no actual increase in the cost of operation, but the apportioned part of that to the State would be increased under those circumstances.

Q. It is in evidence here that you increased your intrastate freight rates very materially. There is a good deal of difference as to about how much you increased them. Your accountant figures they were increased 42%. There was some increase in the interstate rates,

some two or three months later, but not a proportionate increase, however.

During that interval, during the time your state freight rates were increased 42% until there was an increase in the interstate rates, according to your revenue theory you would be very largely increasing the cost assigned to the State, wouldn't you.

A. I do not know how the accountants handle that. I do not suppose that enters into the accounts in that way. I suppose this is an illustration.

I would have to ascertain from the accountants whether they handle it in that way, which I doubt.

Q. I am not speaking of their books they keep, but I am speaking of the exhibits they filed in this case, made up according to the revenue theory.

Mr. MOORE: You do not mean referring to the period we are inquiring into?

Mr. HILL: I say the accounts made up as these exhibits
1233 are made up.

Q. To illustrate, that change went into effect on November 2nd. Suppose you make up an exhibit of your business and charge against Arkansas and charge against the interstate business as of the first of January, before any interstate increases had taken effect: the mere fact of your increasing your state rates 42% would very largely increase the expenses you apportion to the State, wouldn't it?

A. It would if you were going to make an illustration of that sort to cover that period.

In point of fact, I do not understand there is anything of this sort taken into the accounting.

Q. It is to be hoped it was not.

I do not suppose you get your revenue theory on your books at all, do you?

A. I do not keep the books, Judge. The effect here is to get at the truth and we believe that the revenue theory comes nearer that than any other basis that has been proposed. This is not advanced here, as I understand it, as a matter of book-keeping, but a method of test of a question.

Q. I would not take it that it would be adopted as a method of book-keeping at all, Mr. McPherson. I do not want my question to imply that.

Your attitude about the revenue theory is something like this, "with all her faults I love her still"; the best you can work out of it—is that it?

1234 A. It is the nearest truthful unit to use, in my opinion. It is the result of the operation.

Q. Any increase in state rates that were not followed by a corresponding increase in interstate rates necessarily increases the amount of expense which you apportioned to the State under this theory.

A. Well, I do not know about that. I suppose the same might be true of a decrease.

Now if a decrease had taken place from a base line, and there had

not been corresponding changes made in interstate rates at that time, then necessarily you would have decreased the amount chargeable to the State traffic; and the subsequent illustrations would be merely to restore the status that was originally disturbed.

Q. It would be an increase or decrease of the expenses apportioned to the State, depending upon the increase or decrease of rates, and not upon the actual increase or decrease in the operating expenses.

A. Yes. I do not think there would be any increase or decrease (I do not see how there could be) in the operating expenses. But for the purpose of illustration, the effect you mention would result; and in my illustration the same would be true.

Q. Now, take the actual conditions in Arkansas: you operated under a standard distance tariff and you obtained an injunction: then you increased the rates, say 42% subsequently Judge Trieber ordered a reduction of those rates to an increase of

1235 33-1/3 percent above the standard distance tariff.

At the termination of this law suit there will necessarily be a new tariff, either higher or lower than the present one, I presume, according to the result of the lawsuit.

Unless the interstate rates are fixed to correspond with these changes in the state rates the allotment of expense to Arkansas, under your revenue theory, would vary materially according to all of these changes in the actual condition of affairs, without any change in the actual cost of operation: isn't that a fact?

A. As a matter of fact the operating expenses chargeable to Arkansas in the books of the company would continue as they are now. The application of the theory would be, that there would be an increase.

As I said before, however, there is no calculation that can be made, unless you go back to your starting point, that would have very much accuracy.

If you go back to the starting point of 1900, when the rates were first changed, the change of those rates undoubtedly brought about a lowering of the interstate rates.

And it seems to me that it would be necessary, in order to prove this theory, or to even show the effect of it, to start at the original line and work it out to a conclusion before you would ascertain correctly whether the theory would increase the operating por-

1236 tion of the expense to the State.

Q. Well, if you take those actual facts: take those facts and apply them to the actual conditions down there. Mr. Flippen testified that the rates you put in force on November 2nd were much higher than the original rates, before the Commission had made any rates? So you had an increase there that would increase your expenditures, under your revenue theory of allotment, without any actual increase, and that would be an increase over the base line which you had established yourself.

A. If that is the case there would be an increase, provided that the interstate relation was as it existed at the time of the base line.

Q. And the interstate relation is a matter that the State cannot control and that the railroads control absolutely, subject to the

supervision of the Interstate Commerce Commission: isn't that a fact?

A. I think that is correctly stated.

Mr. MOORE:

Q. Do you know anything about that matter Mr. McPherson?

A. I do not know.

May I clear up one matter before we adjourn?

Mr. HILL: Yes.

A. I have wired our Superintendent at Van Buren for the actual engine movements between Van Buren and Greenwood Junction.

1237 He wires me that this average movement is 14 trains each way, making a total of 28 trains: and, in addition, an average of three switch movements each way, or a total of 6; making 34 engine movements daily between those points.

Mr. MOORE: How many trains?

A. Three in each direction.

Mr. HILL:

Q. What date was that, Mr. McPherson?

A. This telegram is dated today.

Q. I mean, that is the present situation?

A. Yes sir, this a normal situation at this time.

1238 ST. LOUIS, *December* 11, 1909.

Pursuant to adjournment, the following proceedings were had on Saturday, December 11, 1909, at ten o'clock a. m.

Present: Same parties as heretofore.

Cross-examination of Mr. MCPHERSON continued by Mr. Hill:

Q. Mr. McPherson, have you examined the hypothetical question I put to you, illustrating the freight movement of Missouri, Arkansas and Texas?

A. I have not had time yet to give it the consideration I would like to do before replying to it.

Q. You would like to pass that to a later time?

A. I would be glad to.

Q. I believe you stated in your direct examination that you estimated the extra cost of doing state passenger service, at thirty-five per cent: is that correct?

A. That is correct.

Q. As I understand your testimony given generally, you base that upon the same elements—in a large way, I mean—that you do the freight traffic, and that it reduces itself to the question of the haul and the two terminals?

A. To what?

Q. The difference in the haul and the difference in terminals, if I understood you correctly on that.

A. Yes, those are two elements. Then there is the ad-

1239 ditional energy required in making the frequent stops; the additional cost of accounting, and the larger cost for mainte-

nance of equipment that is incident to the strain on the equipment from the greater number of these stops and starts.

Q. How do you divide up these different elements on that thirty-five per cent; what per cent do you assign to the one of those factors, and what per cent do you assign to the others?

A. I did not proceed in that direction in my calculation. My opinion was formed by taking all of the elements together which I have named. The relation, generally, in exposure as to accident, exposure as to damage and in terminal uses, was as eight to one; the more frequent stops were seven to one. My conclusion was based on this analysis, together with my observation generally, in the years of experience that I have had, and I probably could not say offhand, all of the influences that led me to the conclusion; but they are such influences that the experience of any man would bring to bear in forming his judgment in any matter of concern.

Q. You keep statistics of the relative cost of the passenger and freight traffic, do you not?

A. Of traffic or expenses?

Q. I mean in regard to the cost of the traffic.

A. No, we don't keep statistics in that way, because the accounts are not kept in that way. We have, perhaps, some methods of roughly reaching conclusions in our own ways, which are in the nature of a more or less arbitrary calculation.

1240 The Interstate Commerce Commission's classification of the accounts does not provide for a separation of the operation, as between freight and passenger, so far as the expenses are concerned.

Q. But you do make up statistics on the cost of freight and passenger traffic, do you not, for the orderly conduct of your affairs?

A. I don't know of any statistics we have on the cost of passenger operation or on the cost of freight operation. We keep some statistics to test our efficiency of freight operation, but I am not acquainted with any on the efficiency of our passenger operation.

Q. Mr. McPherson, I want to read you from page 3675 of your Texas testimony:

"A. We cannot make any general hard and fast rule for determining just the proportion of passenger cost and of freight cost. We have to look into that as a separate factor. Our statisticians and auditors may make figures by taking them off. We examine each figure starting from two points of view; the train mile on the passenger and the ton mile on the freight business."

Is not that a fact?

A. Judge, I would like to go back to the beginning of that discussion, if they are to be introduced, because the preliminary of that makes a positive statement I have just made here.

Q. All right, go back just as far as you want to. I want

1241 to know if that is not a fact that you have stated in that part of your answer that I have read.

A. That starts with a question by Judge Cowan, page 3672:

"Q. What would be the difference in the moving expense of the passenger train and the freight train, going in the same direction?

A. I do not believe it is possible for an operating man to consider

the proposition from employing only one or two factors. We have to take the whole organization as it exists and bring into it all the elements that are in that as to the cost of moving traffic.

Q. You cannot answer the question?

A. Not attempting to answer it without taking in all the elements.

Q. Now, let us take in all the elements:

Take the aggregate of the total expenses, and under any form you have estimated it, state the relative cost of handling the two trains of the sort I have named.

A. For years we attempted to divide that on the basis of 25% and 75% of the total expenses of the railroad.

Opinions differed so widely on that, that we were obliged, for the purpose of reaching a conclusion, when it comes to adding to or diminishing our passenger service, to make up our statistics on some basis that is more or less reasonable.

1242 As to final results I do not suppose any two roads would agree, or that the conditions could possibly make them agree.

We try to make that division as near as we can. So far as accounting is concerned that is one thing; and so far as statistics are concerned that is another thing. I am concerned only in the statistical part of it.

After we have separated the expenses we know pertain to each class of service, and that can be pretty definitely furnished to us by our Auditing Department and our Car Accountant, then we make use of more or less arbitrary division of the unlocated part of that expense.

Now, to give a conclusion on that, I can only give my own experience and my own conclusion I have reached, considering the adding and diminishing number of passenger trains on a certain division, or on a certain part of the road. That we would in round numbers take the cost of running that passenger train on a train mileage basis.

With our freight trains we would go to the ton mile basis, and we would have two different elements there which it would be very hard to reconcile. We are working to two different things. We cannot work with both on the train mileage basis and get any result.

While a passenger train is uniformly made up of a locomotive and certain number of cars, a freight train may have any number of cars, and we must go to the tons.

In determining this question from an operating standpoint it would be different on one division on the road and on another.

1243 Q. Just at that point I want you to explain why that would be so.

A. It would be so from the passenger service on a branch line of road, say, a line with light tonnage would handle a small engine. The expense of maintenance of that engine and the fewer cars, the expense for fuel would be less than on the main line.

We cannot make any general hard and fast rule for determining just the proportion of passenger cost and of freight cost. We have to look into that as a separate factor. Our statisticians and auditors

may make figures by taking them off. We examine each figure starting from two points of view; the train mile on the passenger and the ton mile on the freight business.

Q. Bear in mind the important question that the two trains of the sort that are run, the passenger train and the freight train, to Texarkana, what is your ultimate conclusion with respect to the difference in cost of those two trains?

A. If we could take those two trains, the passenger train from St. Louis to Texarkana, and the freight train from St. Louis to Texarkana, we would have to take every expense incident not only to the running of those trains, but to the preparation of those trains to make the journey, and also the preparations that would necessarily have to be made in taking care of that traffic after it reached its destination.

1244 It would not be possible to get one or two of these figures unless we could merely say there is so much labor for the actual service of the train men; so much coal; so much oil, and so many supplies. That can be determined by actual test.

I may not be making myself exactly clear to you. I am in my own mind, but when we come to determining the question of expense in dollars and cents on everything, we have to depend on two units and we cannot express it in dollars and cents. Shall I read any more?

Mr. HILL:

Q. I want you to put in so much of your testimony as relates your views, and ask you if those are not the facts, as stated in the testimony which you have just read?

A. For the purpose that I have stated, for considering the adding or diminishing of passenger service, and for the purpose of reaching a rough estimate on that service, particularly as to branch lines, I will say that those are the facts. Those are the methods that would be employed by an operating man, to roughly reach a conclusion.

Q. When you made your estimate of thirty-five per cent extra cost of intrastate passenger service, you examined the figures as indicated here, prepared by your statisticians and auditors, and made that estimate on the train mile on passenger traffic?

1245 A. No; the particular elements that I brought to mind in this case were not for the purpose of determining whether or not we should take off passenger trains, or put on passenger trains. I looked generally into the operation of those trains relatively.

Whatever my testimony was in the Texas case would apply to all trains engaged in the passenger service.

My analysis in this case has been in the effort to make a distinction between passenger trains, those engaged in through service and those in local service.

Q. You base your opinion as to this thirty-five per cent extra cost of intrastate traffic upon the distinction then, between through and local trains, rather than upon the distinction of intrastate and interstate?

A. Yes; on the length of haul and the other elements that I testified to in my direct examination.

Q. It is the local train—passenger train, that you consider the short haul passenger, that you have been referring to?

A. Certainly, the intrastate passenger is the short haul passenger.

Q. There is no magic in the state line. It has no effect on the cost of the operation. It is in the difference of the service, as I understand it?

A. I have not considered state lines. I have considered the greater effort the Railway Company must make in the operation of
1246 these local passenger trains; the greater exposure as to injury; greater terminal cost, on the short haul traffic.

So far as the long or short haul is concerned, I would not apply it particularly to intrastate or interstate, but I would apply it between or right over state lines, so far as that is concerned? It is the length of haul. By the statistics that we have we know that the intrastate passenger rides on an average of but seventy miles, while the interstate passenger rides one hundred and eighteen miles.

If interstate passengers were riding less distance than the intrastate passengers, the results would be reversed.

It is a question of the length of haul, where it occurs, and in what kind of traffic it occurs.

Q. That same thing is true in the freight traffic, is it not?

A. I should say that as a general proposition it is. It is the length of haul that creates the terminal cost, and if the haul is shorter the terminal costs are more numerous.

Q. I understand; that is a repetition. But I mean as between the state and interstate there is no difference. It is the difference in the service you are rendering in the different classes of freight?

A. The difference is the length of haul; as a general proposition that is it, so far as the terminal cost is concerned?

Q. You have spoken of the increased casualties due to the
1247 short haul in passenger traffic; loss and damage to baggage, etc.

I am furnished with these figures of loss and damage in Arkansas, for the six months ending December 31, 1907, showing that it was $1,653.31. That is a very insignificant item, is it not, compared with your total operating cost?

A. We probably were very fortunate during that period and I am glad it is so small. I wish it was less.

Q. We are all glad of that.

Is not that a fairly representative period?

A. In casualties I don't know that we can say that any period is not representative.

Q. This loss in damage, $1,653.31, which I have just given you and which I understand is found in your Exhibit 3, is loss and damage to all your passenger baggage in the state, both interstate and intrastate. I ask you to look at Exhibit 3, and see if that is not correct.

A. I presume so; I did not make these figures. This is the part

of the business that belongs to the Accounting Department. However, as to the relation in that account——

Q. I presume that takes in all of the baggage damaged during that period?

Mr. MOORE: Look at your exhibit there, item 83, the "total" column and the "Arkansas" column.

A. I presume it did.

1248 Mr. MOORE: Judge Hill wants to get it right. There is the "total" and there (indicating) for "Arkansas."

A. I could not state positively, but I presume it represents all the damage to baggage during that period. However, as I stated before, that would be in the relation.

Q. Would be what?

A. Probably in the relation of eight to one as between state and interstate baggage, because the relation of exposures to that loss and damage would be of that ratio.

Q. I see on that particular item, that the percentage of loss and damage to baggage, assigned to Arkansas, is seventy-five; whereas the average percentage assigned to Arkansas under that heading, is fifty-four.

Do you know why there should be any greater losses and damage to baggage in Arkansas than the balance of the Missouri Pacific System?

A. The balance of the Iron Mountain, you mean?

Q. The balance of the Iron Mountain.

A. The average length of haul of the local passengers in Arkansas is very short, thirty miles; shorter than any other part of the road.

Q. Is it not about the same in Missouri?

A. Thirty miles? I think not.

Q. My recollection is (I am not at all certain, however) that it is within one or two miles practically the same——

A. On the Iron Mountain in Missouri?

1249 Q. That is my recollection. I don't know as a fact. I am asking you. (To Mr. Johnson:) Do you know, Mr. Johnson——

Mr. MCPHERSON:

A. I know that when I had occasion to look into the matter, that Arkansas average local haul was the shortest that we had on any of the states through which the System runs.

Q. This item to which your attention was called, and to which you referred yesterday in your direct examination, is really insignificant, is it not?

A. It is one of the contributing factors. What it is now, and what it may be ten years hence, I don't know; but it is a contributing factor in the expense, and in the future it will continue in that same relation. In some casualty it might be very many times that.

Q. Is it not a matter of fact that the intrastate passenger, with the

short haul of thirty-two miles, carries very much less baggage than your interstate passenger does with a much longer haul?

A. Passenger for passenger, that would undoubtedly be true, but there are so many more intrastate passengers that in the aggregate, the baggage hauled would be very much more in the local service than in the interstate service.

Q. It is a matter of common knowledge, that a man or woman making a trip of thirty miles would not carry as much
1250 baggage as when making a longer trip.

A. I believe that our heaviest baggage carrying train is a local train, Judge.

Q. You base that on the drummer proposition, don't you, that a drummer carries more baggage?

A. I don't base it altogether on the drummer. Anyone who will ride these local trains between Texarkana and Poplar Bluff, and between Hoxie and St. Louis—these trains that make the stops—and between Little Rock and Memphis, will be surprised to see the amount of baggage that is handled.

These trains make all the stops and the baggage that they carry is drummers' baggage, and bundles, and all varieties of belongings that possibly can be given to the Railway Company under the guise of baggage to carry.

I presume that that would not be disputed by anybody who has any acquaintance with the facts from observation.

Q. You don't mean that all these people that you see carrying that baggage on those trains are intrastate passengers, do you?

A. The intrastate passengers, as a general rule, ride on those trains. We have this sort of an arrangement in Arkansas, that intrastate passengers can take the local trains at their stations, in the event they want to make a long trip—an interstate trip—and ride on that local train to the place where the first through train going in that direction, stops. Then they can alight and take the through
1251 train. They are given a transfer check.

There is a very mistaken idea as to the baggage that passengers take with them. If one would take the whole trip under his observation, he would be in a very much better position to judge of that than merely to watch the loading and unloading of baggage at any one particular point. Now, passengers riding from points south of Little Rock, would naturally get off the train at Little Rock if they were going to St. Louis, and take the through train northbound. The local trains are fairly representative of local baggage.

Q. The item of drummers' trunks is a very considerable factor in that baggage proposition, is it not?

A. It is a considerable factor, yes.

Q. You carry the drummers for two cents, don't you?

A. I don't know what rate they charge them, but the drummer is looked upon as necessary to promote business, and purchases his transportation in large quantities. He rides probably two hundred times in the year, while the average passenger would ride once. He is a large contributor.

Q. It is a proposition of the wholesale and retail business, is it not?

A. I don't know that anybody is deprived from availing himself of the same privilege of buying a mileage ticket. I think everybody has the same right alike.

Q. Everybody don't have the same necessity for making
1252 those frequent trips, do they?

A. No, that is the point I mean. The drummer might ride 300 times in a year and might ride five times a day, while the ordinary individual don't find it necessary to travel so much.

Q. Well, that is the wholesale and retail principle applied to your passenger traffic, is it not?

A. No, I don't think that that is a fair comparison. A private individual probably would not go to a wholesale house and buy goods at jobbers' rates. It would be only the man engaged in the retail business who could do that; but any individual can go to the railroad and buy his transportation at the same rates as anybody else could.

Q. The reason you sell these mileage books cheaper is because the purchasers of them are buying in wholesale quantities, is it not?

A. I don't know the underlying theory of that, Judge. I never have given it any attention, but I presume there are reasons that justify that as it has been the practice for many years, and one that is approved by all the lawfully constituted bodies.

Q. Your statement—Exhibit 3, I believe it is—shows injuries to persons to be $90,470.89. How much of that is chargeable to the passenger business, what per cent is that of your passenger transportation expenses?

A. Why, I don't know. That is a matter that would not
1253 be known except to the accountants.

Q. A large part of your advertisement expense charged to the passenger traffic, is incurred in the procuring of interstate passengers, is it not?

A. Interstate passengers?

Q. Yes.

A. Oh yes, there is a considerable portion of that that is for interstate purposes.

Q. The advertising expense is hardly necessary for the intrastate passenger traffic?

A. Hardly necessary? Oh, yes, every passenger who travels on the road and wants to do so, can go into the station and get a folder. I have one here. That forms one of the large elements of cost.

Q. You furnish those folders to passengers alike, of course?

A. Any passenger can go and get one.

There is the advertising in the local papers, and there is the advertising for excursions and state fairs.

Q. But much the larger portion of that is incurred to obtain interstate passengers, is it not?

A. I don't know. I am not in the advertising line.

Q. But you estimate the difference in cost. Is not that a factor that enters into the situation?

A. I did not especially consider the advertising. M
1254 opinion was based more particularly on the physical cond
tions surrounding that business; those that come to th
operating man.

Q. The Pullman car is part of the physical condition, is it not?

A. Yes, Pullman cars form part of the units of the train.

Q. That is a heavy expense to you, is it not?

A. In what respect?

Q. An respect.

A. We don't have to maintain the Pullman cars; we do not hav to stand the depreciation of them, nor do we have to renew then We pay no mileage on them. They are furnished to the compan and all we have to do is to haul them over the road and keep the cleaned and oiled.

Q. Don't you have to pay the Pullman Company for them?

A. No.

Q. I would like to have your contract with the Pullman Com pany.

A. Is that because the statement is disputed? There are a goo many points in the Pullman contract that possibly would not appl to this particular question. I will give you a certified copy, hov ever, of that part that applies to that point.

Q. I think that any part that relates to the traffi
1255 would be proper for us to examine in this conne
tion.

As I understand it, your Pullmans are an expense to you and w cannot tell definitely about that unless we get your contract. The we can question you about it. I mean the contract that covers th period we are inquiring about, 1907.

A. I don't know just when the Pullman contract took effec Under the present Pullman contract we pay no mileage and nothin for the use of the cars.

I don't know whether there is any matter in that contract that of confidential character or not.

Mr. MOORE: I believe we can arrange that.

A. I cannot say whether the Company would be willing to pr sent it.

The MASTER: It is not a question for the Company.

The order of the court requires that it be submitted if necessar in the examination, but the secrecy and confidence of those book and accounts is protected by the order of the court, and all are pr hibited from giving out any information that is contained in then

Mr. MOORE: That will all be arranged.

Mr. HILL: I will not inquire further about that until I get th contract. I have several other questions, but I cannot ask the intelligently until I get the contract.

Q. Right in that connection, however, do you own your dinin cars?

A. Yes, we own all the dining cars, I think, that w
1256 operate now. I don't think we have any in service that w
do not own.

Q. I know some of the roads own them and some do not.

A. I think we own all of them that are now in service. Some of the café or buffet cars may be Pullman cars.

Q. I will just ask you to look into that and see whether your Pullman contract covers any of your dining cars, as well as sleeping cars, that are in use. Of course, if you have none in use, I don't care anything about that.

Is there any considerable difference in the cost of maintenance of way, between trains?

A. That is coming back to this Texas rate case. I believe I stated there that that was a refinement of analysis that in reality an engineer should pass upon.

Q. I notice in your Texas case, this testimony—page 3668; probably we had better go back to page 3667, the bottom of the page:

"Q. All items of labor cost on the train are substantially the same whether it is a heavy or a light train, if it is a through train?

A. That is for labor wages, yes."

A. That was the question of Judge Cowan that you read there first.

Q. I don't know who propounded the question. I just read the question.

Now, going on:

1257 "Q. The expense of hauling the weight of the locomotive, the tender and the caboose, is also a constant factor in every train, whatever expenditure of coal must be made for that.

A. That is true.

Q. The amount of wear and tear on the track is certainly very much more considerable from the locomotive than it is from the car.

A. From one car as a unit. The locomotive would cause greater wear than a car as a unit.

Q. And the difference would be mainly made up between the heavily and the lightly loaded train, in the difference in the fuel consumption, wouldn't it?

A. Well, there would be the general maintenance.

Q. The maintenance for the most part would not depend on whether there were ten trains or fifteen trains run per day over the road; or whether there were 10 or 15 heavy trains or light trains; the difference in the cost of maintenance would not be very great, would it?

A. Well, I do not suppose that would be of any considerable importance, no."

Then you take up further detail and explanation of that. That is a correct statement of the facts, is it not?

A. I am not challenging this record, but I don't quite understand that I made such a reply. That a larger number of trains would not make a higher cost of maintenance, that does not seem to be reasonable.

1258 Q. That is your testimony as you find it in your record of it?

A. That is exactly as I find it here, but there must have been some confusion of the question, for the reason that the amount of

traffic over a line does contribute to its maintenance; it is a factor.

That is difficult to explain; I don't know just how to explain it, but either I did not understand the question—because it is not an answer that any railroad man of any experience would have made to the question, exactly as it is put.

Q. Well, that is amplified somewhat, I believe; but then that is a matter of detail.

A. As I understand this question it was as to whether there were ten or fifteen heavy trains, or ten or fifteen light trains. As to whether that was ten or fifteen heavy trains, or ten or fifteen light trains, causing the difference, my answer would have been germane to that question.

Mr. MOORE: If you want to explain just what it is, just read the question and the answer into the record, if you wish to do it. If you think your answer was to the latter part of the question, you can so state.

A. The question was:

"Q. The maintenance for the most part would not depend on whether there were ten trains or fifteen trains run per day over the road; or whether there were 10 or 15 heavy trains
1259 or light trains; the difference in the cost of maintenance would not be very great, would it?"

Mr. HILL:

Q. Let me ask you where you are reading?

A. Page 3668.

Q. All right, go ahead.

A. "A. Well, I do not suppose that would be of any considerable importance, no."

Now, that question could only reasonably apply to the question of the ten or fifteen heavy trains or light trains, because I had previously stated that the wear and tear to the track was greater from one locomotive as a unit than from one car as a unit. It would be unreasonable to apply that answer to the early part of the question. It was the latter part of the question to which that is an answer.

Q. Well, suppose you read from your copy and see if it is correct—the balance of that page and 3669:

A. "Q. The ties mainly deteriorate and are destroyed and have to be renewed, on account of the wood rotting and the destruction of the wood for the most part, as I understood you to say yesterday.

A. Apart from the cutting of the ties by the weight on the rail.

Q. The cutting of the ties is a comparatively small percent of the destruction, compared to the destruction by natural decay?

A. That is due to the fact that the life of ties in that coun-
1260 try is short, say five or six years. If the life of the tie was longer that cutting itself would require them to be renewed on that main line.

Q. Maintenance of bridges, of which you have a great many, does not depend very much upon the volume of the traffic going over them; that is, the sort of bridges you now have, does it?

A. What kind of traffic, or the volume of it?
Q. The volume of it.
A. Oh, yes, that has a great deal to do with it.
Q. What is the principal item of cost of maintenance of bridges?
A. Well, with wooden trestles there is the constant renewal of parts and the necessity of daily supervision as to certain places and an examination of the general condition of the structure.
Q. That has to be done whether you run 15 trains or 20 trains a day?
A. Well, it is done as a matter of precaution"—(that is referring to supervision again)—"but with the heavier traffic there would be greater distribution of that over the traffic itself."
(That is distribution of cost over a greater volume of traffic.)
"Q. I understand that. But I am speaking about actually going to the expense of doing that. It would not depend on the number of trains. It must be done anyway.
A. We might run a train for two days over part of the line and the birdges might be examined both days."

1261 Mr. HILL:

Q. The maintenance of embankments is a large item of maintenance expense, is it not?
A. The maintenance of sub-grade, you mean?
Q. I mean the bank that your tie lies on. I don't know whether it is subgrade or supergrade.
A. That depends on the part of the country you are inquiring into.
Q. We are inquiring into Arkansas.
A. The maintenance of the embankments is a considerable factor wherever the railway is subject to overflow; where the ground is swamp; where the natural conditions are unfavorable to maintaining the embankment.
Q. Is not erosion by the elements responsible for a large portion of this expense?
A. Yes, there is a considerable portion of it that is in the way of wash-outs. There would be erosion caused by the elements.
Q. This erosion would take place whether you ran a single car or twenty-five cars over your track?
A. The erosion is not dependent on the volume of traffic. It is dependent on the elements. I would like to qualify that by saying that it would be possible that in a swampy country there would be a greater necessity of renewing the embankments, because of the heavy passenger traffic—and the greater cost, probably, attaching to it.

1262 Those questions cover such a range that one is liable to answer offhand without considering the several conditions that may at times apply.

Mr. HILL: (to Mr. Moore):

Until we get answers to the various matters called for, we want to stop at this point.

Mr. MOORE: Do you recall what those are?

Mr. HILL: This hypothetical question, and the express, mail and Pullman contract; that is all I remember.

1263 Cross-examination of Mr. McPherson, continued by Mr. Hill:

Q. Mr. McPherson, in the discussion this morning of the passenger traffic (which I sought to liken to a wholesale proposition) a matter was developed which I intended to ask you about:

Isn't it a fact that your facilities for handling the passenger traffic are practically fixed quantities, and an increase of that traffic would tend to cheapen the expenses: that is, until the traffic grows so great that the facilities would have to be increased?

A. The facilities for handling passenger traffic are more of a fixed character, or, at least, do not cover as wide a range as the facilities for freight traffic. The volume of traffic, however, makes necessary the enlargement of those facilities from time to time, just as the traffic is enlarged.

We have to build stations, and enlarge stations, every year; and we have to furnish additional office capacity, additional tracks, and other miscellaneous expenses, that are governed wholly by the volume of the traffic.

Q. Take this illustration: suppose your trains were running from Little Rock to Fort Smith fifty per cent empty, and, either by the reduction of the passenger rate or some cause, those trains were filled seventy-five per cent of their capacity, without an increase of
1264 train or station facilities, that twenty-five per cent increased volume of traffic would be largely if not all a net increase of revenue, wouldn't it—I mean net revenue. In other words, it would cheapen the cost?

A. Well, if it required no more men, no more cars and no more station facilities, then there would be the element of hazard, and the element of the baggage handling, yet to be considered.

Q. Aside from those considerations it would cheapen the cost about in proportion to the increase in volume, wouldn't it?

A. There is, of course, the element of accounting to add to that.

All the elements that pertain to dealing with a number of passengers would, of course, pertain to the increased volume of traffic. That increase of 25% might likewise require an increase in station facilities.

Q. Now, to reduce your proposition to a simpler basis, take it this way: suppose a train running over a given piece of road (say from Little Rock to Fort Smith) the more passengers per car you handle the cheaper per car it is to handle that traffic, isn't it?

A. No sir, not cheaper per car.

Q. Cheaper per passenger, I should have said.

A. Undoubtedly the volume would contribute to the lessening of the expense per passenger: that is to say, you would enlarge
1265 your devisor. That would be a mathematical problem.

Q. Do you know where your heaviest volume of passenger traffic is—that is, the heaviest of passengers per car—I don't know

what your technical term for that is: in other words, I mean where your cars are best filled; on what part of your line in Arkansas?

A. I do not know that it would be the same the year around. It would probably vary here and there. That is what I believe is termed the greatest density of passenger traffic.

Q. I don't know your technical terms, but the idea I am getting at is, where are your cars best filled: on what part of your line?

Mr. MOORE:

Q. Do you know about that, Mr. McPherson?

A. I don't think we have any statistics on that, and I would not be able to tell you.

Q. How does the filling of your Pullmans compare with the filling of your day coaches on the local trains?

A. The Pullman cars have a limited capacity. They are designed for long distance travel, and to afford sleeping accommodations to those travelers. They will not hold as many people as a coach will hold; but the people they do hold will travel the entire distance, usually, that they run—or a large part of it.

Now, then, to make a comparison between sleeping car travel and coach travel would mean you would also consider the miles, so
1266 many passengers per mile that the car travels.

Q. You have already explained that. Now I want you to explain the difference in volume between the two.

A. That would be the only way to ascertain it, to get the number of passengers per mile in the car.

Q. Have you any statistics on that subject?

A. I have not any statistics on that, Judge.

Q. Has your road any statistics on it?

A. No sir, I don't know that we have. We don't keep them in the operating department. Mr. Johnson might tell you if they keep them in the traffic department.

Q. Your road has a commissioner of statistics, hasn't it?

A. Well, I don't know. We keep our own statistics on operation in our own office, in the operating department. The statistics that are kept outside of the operating department I am not familiar with, except as I ask for them.

Q. Do you know what statistics your Commissioner of Statistics keeps?

A. I do not.

Q. Did you ever have occasion to call for his statistics?

A. He is not connected with the department with which I am concerned; and what his statistics are, or what his duties are, I am not familiar with.

Q. You know you have such an official?

A. Well, in a general way, yes; as anybody else knows a thing by common knowledge. But it is none of my business and I
1267 have not inquired into it.

Q. You have not availed yourself of any of his statistics?

A. No sir, I have never had occasion to call for them.

1268 Cross-examination of Mr. C. J. McPherson, continued by Mr. Hill.

Q. Mr. McPherson, are you ready to answer the hypothetical question I put to you?

A. The operating part of the proposition is based on obsolete methods of operation. It is not a practical or representative illustration of the movement of traffic.

I am not acquainted with the rates and divisions. If they are stated correctly, the result would be as shown in the illustration.

I have not said that the revenue basis was exact and it would be possible, I presume, for a person of ingenuity to pick out a dozen or maybe more, individual illustrations that would show inequalities in the revenue basis.

Q. Did you say it was obsolete? I did not quite catch your word.

A. Yes, an obsolete method of operation.

Q. Just what do you mean by that?

A. I mean that in the modern day methods of moving traffic that would not be representative.

Q. Describe in modern day methods, just how you would handle such a shipment as is instanced in the hypothetical
1269 question?

A. If for any reason a trans-state shipment should be loaded into a car containing the local shipment (and that would be unusual), the car would be re-worked at the first point where it went to the freight house, and the traffic put into the orderly course for movement.

Q. In that instance a trans-state shipment would get the use of your terminals within the state, would it not?

A. In this particular case that car would be re-worked at either De Soto or Poplar Bluff.

Q. It would get the use, then, of the Missouri terminals and not of the Arkansas?

A. In that case it would get a physical re-handling at Poplar Bluff.

Q. Then trans-state shipments do get the use of state terminals, do they not?

A. Not as you understand the terminal expense. It would not get a re-billing or re-weighing or re-accounting. It would be merely a physical transfer to bring about an efficient and economical handling of the traffic.

Q. There would be a casualty risk to that re-handling would there not?

A. Oh, yes, there is a casualty risk for every re-handling that of breakage.

Q. The physical re-handling of it would be the heavy end
1270 of expense, rather than the accounting?

A. Not necessarily, Judge.

Q. Would it not, naturally?

A. No, the original preparation of that general less than carload traffic for movement would be the heaviest terminal cost.

Q. I understand, but I am speaking as between accounting handling and the physical handling at the two terminal points?

A. Why, yes, the physical re-handling.

Q. At Poplar Bluff?

A. Yes, but it would be a very unusual movement. I could not conceive that any such movement of traffic would be made.

Q. Mr. McPherson, Mr. Flippen has testified that prior to the tariff put in by the railroads, on November 2, that there had been an inordinately low interstate rate from Memphis to Arkansas points. I assume that to be the truth.

I will ask you if that fact would not, under the revenue theory, make the proportion of the expense charged to Arkansas greater than it should be, just in proportion as the Memphis interstate rates were inordinately low?

A. I could not answer that question without a knowledge of what the two rates were, which I don't possess.

Q. Well, I am assuming that Mr. Flippen has correctly stated the facts. His expression was that the rates from Memphis to

1271 Arkansas points (interstate rates) were inordinately low. Assuming that to be true, would it not follow that if the interstate rates were inordinately low, with as large a volume of traffic as moves from Memphis to Arkansas, that you would have a wrong proportion when you take revenue theory to apportion your intrastate expenses?

A. I would have to know what the interstate rates were and what the intrastate rates were. The intrastate rates might, under that statement made by Mr. Flippen, be still lower than the interstate rates; that I don't know.

Q. Well, as a matter of fact if they were not, I don't suppose it would be contended that they were.

A. However, as far as the actual expenses of operation are concerned, that would not cut a figure. That would only be used in an illustration in a cause like this.

Q. I am talking about dividing your expenses between state and interstate; in your exhibits here (that were made up while this inordinately low interstate rate prevailed), would not that necessarily make the proportion charged to Arkansas wrong—interstate traffic, I am referring to?

A. As I said before, Judge, I cannot answer. I don't know whether that question applied to the rates from Memphis proper, to Arkansas points, or whether it applied on business coming through Memphis to points in Arkansas.

I don't understand that it would have any effect on the revenue basis of apportioning the expense.

1272 Q. Why would it not?

A. As a probably exact relation does not exist between in trastate and interstate rates in every instance, and it would be difficult to say just what the exact relation should be. There is undoubtedly a relation, but it would be hard to define just what it is.

The prevailing condition for a short time may have disturbed the relation; that would not be illustrative of or affect the general revenue basis proposition; it would merely throw it out of line

temporarily, so long as there was not a proper relation, whatever that might be.

Q. It seems that this relation, temporary or permanent, between the interstate rates from Memphis to Arkansas, prevailed during the period that your exhibits cover: what would you say to its effect, then, upon your case as made in your own exhibits?

A. I would say that whatever the relation was, there might be a difference just as much the other way, in the relation between interstate and intrastate rates, somewhere else.

Q. We are not discussing that. You have not given us any illustration of it, and I am giving——

A. (Continuing:) —in consequence of which I doubt very much if we could segregate one illustration and make it of any value in determining or in questioning the averaging of the revenue basis.

Q. Is not the traffic from Memphis into Arkansas a very heavy traffic?

1273 A. It is undoubtedly a heavy traffic.

Q. Is it not of such a volume that it would necessarily affect the relation between the intrastate and interstate business?

A. I have not figured it out: I don't think it would, materially.

Q. If those were inordinately low rates you don't think it would materially affect the relation in expense, between the state and interstate?

A. It might be a circumstance that would disturb the relation for the time being, as I said before, in the general average. It is doubtful to my mind if it would cut any considerable figure.

Q. Well, during the time that that relation is disturbed?

A. I would say again that the revenue basis is not perfect. It is open to illustrations that would demonstrate that, but whatever the relations might be between state and interstate traffic rates, so far as my judgment is concerned, it would average up well, taking the whole into consideration, in its entirety.

Q. It levels up many inequalities, does it not?

A. It does, in my judgment.

Q. The ton mile theory levels up many inequalities, as I understand from your testimony?

A. The ton mile theory, as I have illustrated in my testimony, does not consider any difference in the character of traffic: it disregards the character of traffic and it disregards the rates

1274 on the traffic that are established, more or less, because of the character of the traffic.

Q. It seems that in these various illustrations that you have taken, that your revenue theory disregards both rates and cost: is not that a fact?

A. No, the revenue basis is the result of the operation. It is the revenue that is received from the traffic, intrastate and interstate. It is not the progress of it, but the result.

Q. But we are trying to divide now the cost of the result, between the interstate and intrastate, and these various inequalities that you have admitted go both to cost of service and to rates.

A. We have the result. We know what the result is in the earnings of interstate and the result of the earnings of intrastate, and I know of no way that would be better to follow in apportioning the cost than to take the results accomplished.

Q. Well, the practical effect of your revenue theory is, that the higher you make these state rates (unless you make a change in the interstate rates), the higher you make the proportion of expenses charged to the intrastate traffic, is it not?

A. In the book-keeping of the railroad that would not be true. The increase of rates does not increase expenses; expenses remain the same.

1275 Q. Do you think that is an answer to my question?

A. I have not completed it.

Q. Excuse me; go on.

A. For the purpose of illustration, as in this case, if the rates were made higher in Arkansas, yielding a larger revenue, then the apportionment on a revenue basis would be greater, but to fully consider your question would necessitate going back to the time that the relation between interstate and intrastate rates was first established.

I don't understand the traffic proposition well enough to say what the relation between intrastate and interstate rates is.

Q. Is not that a necessary factor in the development of your revenue theory?

A. Not necessarily, no. I must assume that it exists. I believe that it is generally assumed that it exists. If the state rates for any reason are lowered, the interstate rates are lowered, and that relation would doubtless continue under such circumstances. If the state rates are raised, I presume that the relation is still continued by a raise in the interstate rates.

Q. You interstate rates on the Iron Mountain, Missouri Pacific, and other railroads operating in the southwest, are a fixed quantity, are they not?

A. I don't know. I should say not. They are continually disturbing them by rulings of the Commission, by orders of various sorts, and I suppose, from the necessity of adjusting them

1276 because of the changes in state rates, but I know that only in a general way as every other person does who reads, and is not a great expert.

Q. Every time one of those rates is changed, then, it readjusts the relation between state and interstate, does it not, under your revenue theory of apportioning expenses?

A. Yes, but I would not regard that as of any consequence; it would probably be a negligible change.

Q. What establishes the relation between state and interstate rates?

A. I don't know.

Q. As a matter of fact, is there any fixed relation between them?

A. Well, that would have to be hearsay if I answered that question—it is not my own knowledge.

Q. Do not commercial conditions largely determine the interstate rates?

A. I have always understood, Judge, that commercial conditions govern not only interstate, but state rates, to a certain extent.

Q. But in determining the relation between them, do not commercial conditions enter into it?

A. All the conditions that would enter into rate-making at all, would apply alike to state and interstate rates.

Q. Suppose the interstate rates on the Iron Mountain were fixed for six months that would control both interstate move-
1277 ments in Arkansas and Missouri: whichever state gave you the most revenue—that is, the higher rates—that state would be charged with a greater proportion of intrastate expense?

A. I don't believe I got that.

(Question read.)

A. I don't know that I understand that question.

Q. I am assuming, of course, in this question, the same cost of service in both states.

A. I do not grasp it, even on the second reading.

Q. Well, take in this hypothetical question that you have studied over, and the illustration of Missouri fourth class rate, 24c. per hundred pounds; Arkansas fourth class rate, 32c., for the same distance. The fourth class rate for that same commodity, on the Iron Mountain, in the interstate traffic, is fixed and is the same in either state——

A. And that would embrace the trans-state.

Q. Possibly; leave out the trans-state for the purpose of this question. Now, owing to the fact that Arkansas gives you a better rate than Missouri does, Arkansas is charged with a greater proportion of the expense of moving that traffic, is it not?

A. Of the interstate traffic?

Q. No sir, the intrastate traffic.

Mr. MOORE: Do you mean the intrastate traffic in Missouri?

Mr. HILL: No sir, in Arkansas.

1278 Mr. MOORE: You must remember those are divided.

Mr. HILL: I understand.

(The WITNESS:)

A. I don't see how that would affect the revenue basis. The interstate traffic stands for itself in the division, and the intrastate traffic stands by itself in any state. There might be apparent differences, unless the rates were made exactly the same, all over the United States, and that would not be feasible because of the different conditions. It is cheaper, perhaps, to operate in one state that another. What would be reasonable rates in one state would be confiscatory in another. I don't see how it affects the revenue basis of division. The division that is made on the revenue basis, for illustrative purposes, does not affect the cost of handling the traffic.

Q. I will put this question to you in this way:

Assuming the interstate rates are unchanged, and are the same in both Arkansas and Missouri, for six months; that the cost of the

intrastate service is the same in Arkansas and Missouri. If the Arkansas intrastate freight rates are higher than those of Missouri, is it not true that under the revenue theory it increases the amount of expense apportioned to Arkansas to the relief of the interstate cost of service?

A. I would like to have that question written out, if I might.

Q. You say you want time on that?

A. No, I just want it written out, so I can have my eye as well as my ear to guide me.

1279 (The question is written out by the reporter and handed to the witness.)

A. In answer to this question I would say that a good many things here are assumed, that I don't understand anything about—the rates being the same in interstate traffic in Arkansas and Missouri, and whether those rates would continue for any fixed period. I don't see how this would affect the revenue basis of apportioning the expense, even if the assumption was correct that the interstate rates are the same in both Arkansas and Missouri. The revenue basis must necessarily give and take, in a great many ways, and no doubt illustrations could be multiplied showing where inequalities really would exist under the revenue basis of dividing expenses.

Q. Under your illustration of giving and taking, it gives unto the state which has low rates, and takes from the state which has high rates, does it not?

A. That is hardly a fair construction to put on my answer. My answer was giving and taking in all directions—for instance, interstate traffic contributes so materially to decreasing the expense of all traffic because of its large volume over which the overhead expense of railway operation is distributed.

Q. The practical effect, Mr. McPherson, as I understand it in your explanation of it, would be that it would give unto the state that has a high intrastate freight rate, an added cost, relatively,

1280 and it would take from the state that has a low intrastate freight rate the cost of operation, relatively, as between interstate and intrastate?

A. That was not my answer and that is not my understanding.

Q. Won't it operate to the disadvantage of Arkansas traffic in the cost of expenses—that is, the higher rate in Arkansas, over the lower rate of Missouri, in apportioning it on the revenue theory?

A. The cost of operation is greater in Arkansas than it is in Missouri. The cost of maintenance is much greater. I don't see why that should not be the case, even though the conclusion was made,—from the conclusion in your illustration.

Q. Do you want to admit that that is true, and then account for it on the different cost of operation in Arkansas?

A. I don't admit that it is true, but I said that even if it was true, the fact that it costs more for maintenance in Arkansas than it does in Missouri, relatively, might have some influence in the higher rates; that is all.

Q. You have a denser volume of traffic in Arkansas than you have in Missouri, have you not?

A. I will see if I have any statistics on that. (Making search among papers accordingly.)

That heavy density of traffic is contributed by the heavy trans-state business through Arkansas—(I don't know just the figures, I haven't got them with me at this time), and that is the contribution of which I spoke; that is the overhead expense of operation——

1281 Q. Did you not testify there were very steep grades from Poplar Bluff north, on the main line—from Piedmont north, that made the cost of operation of that division very heavy?

A. Yes, we have grades there that are higher than the average grades in Arkansas; parts of the Memphis division, and on the White River division.

Q. But on your main line you can handle your traffic cheaper in Arkansas than you can in Missouri?

A. No, because of the fact that we have a low grade line and substantially the same grade line, from Texarkana to St. Louis.

Q. That is, by taking the Illinois division?

A. Yes, that is the line that takes the trans-state.

Q. I was asking about your main line: you can handle that cheaper in Arkansas than you can in Missouri, can you not?

A. Well, we can take parts of the road and handle the traffic cheaper than we can on other parts; that is to say, we can get a greater efficiency from our engines.

Q. Can you not handle the traffic from Texarkana to Poplar Bluff, cheaper than from Poplar Bluff to St. Louis?

A. We might——

Q. Don't you, as a fact——

A. (Continuing:) —on the low grade line, be obliged to add the difference in the cost of moving the traffic that was bound

1282 for St. Louis, over the river. As against that, we would have to put the transfer of the traffic that came up the main line, across the river. The traffic that is handled over the main line in Missouri, is done so with less efficiency than on the line from the Arkansas state line to Texarkana.

Q. Is not the Iron Mountain road the best road west of the Mississippi River?

A. Those who are connected with it think it is, yes, sir.

Q. You are one of those?

A. I believe I am on the record.

Q. Mr. McPherson, here is a quotation I have taken from your testimony; see if it is correct.

"In my opinion, from a practical standpoint, the cost of handling intrastate passenger traffic exceeds that of handling interstate passenger traffic about thirty-five per cent." That is correct, is it?

A. That is correct.

Q. I want to call your attention to the affidavit made by you.

which was used before Judge Vandevanter, when the preliminary injunction in this case was granted—a paragraph of it.

(To Mr. Moore:) That is a copy that was furnished us, Mr. Moore; it is not the original.

Mr. MOORE: That is all right.

A. This affidavit was made in a general way, of my views
1283 of the operation, as a general proposition. Since making this affidavit, I have given it a good deal of study and I have increased my conclusion in this respect, at least ten per cent, as the result of that study.

Mr. HILL:

Q. Read that clause (indicating) into the record, please.

A. "I have no hesitancy in saying that it cost from four to five times as much to conduct intrastate freight business on the St. Louis, Iron Mountain & Southern Railway, in the state of Arkansas, as it does interstate business, on a basis of tonnage carried, as the cost of transporting local passengers between stations within the state is from twenty to twenty-five per cent greater than the cost of transporting interstate passengers."

Q. You were testifying then to the same period that you are testifying to now, were you not?

A. Yes, at any period; the period would not effect the cost.

Q. You had the statistics for this six months period before you then as you have them before you now, did you not?

A. No, I had not. I had before me at the time that was made, only my general knowledge of operating conditions.

Q. I believe you stated that you make up this opinion from thirty-one years' experience as a practical operating man?

A. I want the whole average, Judge; it is thirty-two years.

1284 Q. Well, up to thirty-one years, then, you thought it was twenty to twenty-five per cent, and in the last year you have raised it ten per cent; is not that a fact?

A. Well, Arkansas is somewhat peculiar in respect to the intrastate and interstate traffic.

One speaks generally, at the time, of a matter that he knows exists, and, on giving it further study he may modify that opinion because of some peculiar condition existing in one particular state.

The long and short haul expense would affect state traffic just as much as it does interstate, and the average length of the intrastate passenger haul in Arkansas is very short.

Q. Mr. McPherson, going to your express contracts that we called for, there are only certain portions of it that I desire to place in the record: (Reading from contract.)

"Settlements shall be made monthly and the party of the first part shall be entitled to receive fifty per cent of the total gross earnings of the party of the second part on the line of said first party's railway."

That is your contract with the Pacific Express Company, is it not?

A. That is the printed contract?

Q. Yes.

A. I believe that is correct; I don't go into that feature of the business myself.

Q. Here is another clause from the printed contract that I want to read:

1285 "The said second party, in consideration of this contract and the rights and privileges accorded by it, agrees to give to said party of the first part $2,400,000 of its capital stock, and the aggregate of capital stock, of the second party, shall not be increased above $6,000,000, without the consent of the first party."

Are you familiar with that?

A. No, that part of it I don't know anything about, Judge. Whatever it states there——

Q. Here is the contract (handing witness paper); see if that is correct.

A. I assume that you have read it correctly; that would be the only point.

Q. Then it appears, under this contract, that you get fifty per cent of the gross earnings of the Pacific Express Company, and that you would be owner of about forty per cent of its stock, in consideration of getting the contract?

A. I think that is wrongly stated.

Q. I did not mean to say fifty per cent of the gross earnings of the Pacific Express Company, but on your line?

A. Of the earnings on our line?

Q. Yes, I left out that; forty per cent of the entire stock, which would represent net earnings, I suppose, if it makes any net earnings?

A. I don't know anything about that feature of it. I don't know whether that is ever carried out or not.

Q. Do you know whether you are getting any dividends

1286 from that stock?

A. I don't know; not to my knowledge. That would be a matter for the Executive and the accounting department. It would not come into my department.

Q. (To Mr. Johnson): Do you know about that?

A. I don't know, Judge, whether we get any dividends from the Pacific Express Company or not, as a matter of record.

Q. You know you own that stock?

A. No, I don't know that, either; that contract evidently says we do.

Q. Is it shown on your books in any way?

A. It would be shown if we owned the stock.

Q. Has a dividend or income in any way, from the Pacific Express Company, gone into your accounts here?

A. The earnings from the express business have gone in there in the shape of "miscellaneous earnings."

Q. That is, under your gross fifty per cent on the line—what I am getting at is this: has any revenue under that stock holding, gone into your revenue?

A. No portion of the dividends of the Pacific Express Company went in there, that I know of.

Q. Well, I want to know about that. I don't know who the proper officer is to trace it up but I call on you, Mr. Moore, or Mr. Johnson, or Mr. Schuyler, or whoever is the proper one, to find out where that stock is.

(To Mr. Moore):

I have not had time to look at your Pullman con-
1287 tract. I think we can agree on a statement of what is material in regard to the Pullman's without putting all the contract in evidence.

I have these mail contracts and as soon as we look over them, I want to go into them.

That is all, with that exception.

Redirect examination.

By Mr. MOORE:

Q. Mr. McPherson, did you have the statistical figures before you, which you now have, at the time you made the affidavit to which your attention was called by Judge Hill, a moment ago?

A. No, I did not.

Q. Had you made as full an investigation in regard to the conditions upon which you based your testimony, as to the difference in the cost of conducting state and interstate business, both passenger and freight, at that time as you have now?

A. In a general way, applying it to all of my experience in various parts of the country, yes; but applying it particularly to Arkansas, no. Undoubtedly a man modifies his conclusions somewhat after giving any particular matter close and careful study, with the statistics before him.

Q. Did you know, for instance, at the time you made the affidavit, the length of haul of an interstate haul, as compared with the length of haul of an intrastate haul, in the state of Arkansas?

1288 A. I did not.

Q. Judge Hill asked you a while ago, what relation existed between state and interstate rates: is not the cost of the service the fundamental underlying principle upon which rates are fixed, and compelled to be fixed by railroads, and is that not the main thread of relation that exists between the rates, in the two classes of traffic? In other words, are not the rates primarily fixed with regard to the cost of conducting the business?

A. They must have that in view.

Q. Could a railroad, any more than any other industrial concern, do business unless it fixed the price for that which it had to sell, with reference to the cost of production?

A. It must keep that in view.

Q. Is it not true that the great fundamental chain, or relation that exists between rates, is based upon cost of the service?

Mr. HILL: Mr. Moore, Mr. McPherson objected to answering my questions, as a rate man, and said he was not a rate expert.

Mr. MOORE: I am speaking now just as a business man, and any man, I think, can answer that question in a way.

A. I was going to say, Judge, that I am not an expert rate man. My knowledge of rates is such a knowledge as a husband, perhaps, would have of the cooking in the house. He is not himself a cook, but he knows something about it, because he has seen it done——

Q. And enjoyed the fruits of it?

A. And has enjoyed the fruits of it.

1289 Q. Your attention was called to a statement which counsel assumed Mr. Flippen made, that the interstate rates (in reference to the state of Arkansas), are inordinately low: if that were true, and it were further true that the intrastate rates in the state of Arkansas, at the same time, were also inordinately low, would the low interstate rates affect the relation as between the two kinds of traffic? In other words, would they or would they not be upon the same basis as to the degree of the rates?

A. I believe I answered Judge Hill that I would have to know the rates and conditions, which I did not know. It would be true, if the conditions were disturbed all around, there would be only one answer to that question.

Q. What would that answer be?

A. If the conditions were disturbed all around, the revenue basis would be the only basis that we could look to for any hopeful solution of dividing the expense between intrastate and interstate operation.

Q. Would the fact that both classes of rates, state and interstate, were inordinately low, affect the relation for the purpose of dividing the cost upon revenue basis, any more than if they were both inordinately high?

A. No, I don't think that it would.

Mr. HILL: Would not that depend on the degree of inordination?

Mr. MOORE: It is a degree of co-ordination, I believe, Judge.

1290 Q. Referring to the hypothetical question propounded to you by Judge Hill, and which you answered this morning, relating to the shipment of a ton of trans-state freight from Carondelet, south, and with it a ton of local freight: you stated a while ago that under a condition of that sort you would re-work—I don't know whether you said the car or the——

A. The car.

Q. —car, at the destination of the local shipment: state a little more fully what you mean by "re-work." What would you do?

A. Well, if by any accident, those two shipments should have gotten into the same car at Carondelet and the car was taken out by a local freight train, by the time it got to Poplar Bluff it would either be made an empty car for delivery somewhere, by the transfer of that ton of freight into some other car; there are certain points on the railroad beyond which those small jags of freight do not go, under any circumstances; they are often transferred right at the

local station; sometimes they would not go ten miles before the car would be empty, and the freight loaded into a car that contained the same character of freight, for relatively the same distance, if they had such a car in the train.

Q. Are you speaking now of trans-state freight?

A. Trans-state or interstate, yes.

Q. Under your method of operation now and in 1907, is such condition as is assumed in the hypothetical question, liable to
1291 exist: that is to say, where there is a ton of trans-state freight and a ton of local freight from Carondelet, to a point 100 miles below, loaded into the same car?

A. No, such a condition as that has not existed for years on any well managed railroad.

Q. Suppose, instead of illustrating by a ton of freight, you have a trans-state train made up of forty cars, and you attach to that train one car containing local freight, to go to the point 100 miles below Carondelet, mentioned: what would be done when you reached the destination of the local freight?

A. The car would be set off.

Q. What would be necessary to set that car off?

A. It would require switching.

Q. There would be an expense incident to that switching?

A. Yes.

Q. Would that expense accrue from the trans-state shipment, or from the intrastate shipment?

A. From the intrastate shipment.

Q. An illustration was given you of an instance in which a higher intrastate rate was assumed to exist in Missouri than Arkansas, and you were asked if that were the case, and you should apportion the expense of state and interstate business upon the revenue basis, if you would not assign a larger share or portion of the expense, to intrastate in Arkansas than you would in Mis-
1292 souri: I want to ask you in connection with that proposition, if the rates are not adjusted (so far as the railroad company has power to adjust them), with reference to the local conditions which enter into and govern the cost of the service?

A. Well, I am not a rate expert, but in connection with the traffic department I have frequently urged that in some cases, where a rate had gotten (in my opinion) too low for the operating condition that prevailed, that the rate be raised.

Q. I will ask you if the cost of operation is uniform throughout the different territory traveled by the Iron Mountain Railroad?

A. No.

Q. How does the cost of the maintenance of way, for instance, compare in Arkansas and Missouri?

A. Well, it is much higher in Arkansas, for the reason that it is a more swampy country, and we have a much greater amount of bridging and waterways—the natural conditions of the country.

Q. You have testified to an extra cost, of five to one, with reference to the quantity of matter handled in conducting intrastate freight traffic transportation, above interstate: the statistics contained

in Exhibit 5, filed in this case, shows that the percentage of revenue from interstate is 13.41%; that the percentage of total ton miles is 7.25.

Suppose the revenue per ton mile, instead of being 13.41 was 26.82, growing out of a higher local rate.

1293 You would then assume that instead of five times the extra cost on the basis of quantity being two or two and one-half times as much on a revenue basis, if it was represented by a different figure, would you?

In other words, what I want to ask you is this:

Whether the relation of the tonnage to the revenue cuts any figure in determining the extra cost; whether the extra cost is not finally determined—by your judgment as an operating man—as to the conditions applying to each one, and that the basis upon which you make your statement that 2½ to one, on a revenue theory, grows out of the fact that the statistics in this case show that five to one of extra cost is equivalent, (stated with reference to the revenue basis) to the figure that you gave, of 2 or 2½ to one?

A. Yes, it so happened that the intrastate proportion of revenue per ton, per mile, was double that of the interstate, and on the basis of ton miles, I figured that in my judgment, the cost was at least five times as great in the intrastate traffic as in the interstate traffic. That naturally brings into one's mind the relation as to the average revenue per ton, per mile, which, being double in the intrastate than in the interstate, would be somewhere in the vicinity of 2½ times as great.

Q. Supposing the rates in Missouri were so adjusted that in that state the percentage of total ton miles was 13.41, the same, and the percentage of revenue the same: you would have in that case

1294 (in speaking of the difference upon the basis, or with reference to the revenue theory), to set a different ratio than you would in the state of Arkansas, would you not?

A. Yes, if they were different.

Q. That is what I mean; but would that affect the proposition that, in your judgment, it cost five to one to handle the intrastate business, speaking with reference to the quantity of the business?

A. No.

Q. Is there any distinction in the use of cars in the service of the St. Louis, Iron Mountain, or any other interstate railroad, as between the interstate and intrastate service?

A. No, the cars are likely to be in both kinds of service any day, or in intrastate one day and interstate the next. They are used in common, liable to be drafted for the purpose of either, or both, at any time.

Q. That fact requires you to comply with the provisions of the Act of Congress with reference to safety appliances, as to all your cars, does it not; those engaged in intrastate as well as those engaged in interstate?

A. Yes, all of the cars, because they must all be available for instant service.

Q. Is it then proper to charge that as an expense of intrastate, as well as interstate traffic?

A. That is, the maintenance of that equipment?

Q. Yes.

1295 A. Yes, it is a charge against all of the traffic.

Q. The benefit of the improvement that is made under the Act of Congress inures, does it not, equally to the benefit of intrastate as well as interstate traffic?

A. Yes, it increases the efficiency of operation, and that would apply to the handling of all traffic that the Railway Company moves.

Q. Now, referring to the Act of Congress limiting the hours of service of certain employés, including telegraph operators; do the same employés discharge duties with regard to both kinds of traffic?

A. Yes, the duties of all of them are incident to all of the traffic which the Railway Company handles.

Q. Does that Act, then, affect the expenses of intrastate as well as interstate traffic?

A. Why, yes, because it applies to all of the traffic that the Railway Company handles. An operator may be located at any local point in Arkansas and be subject to the same conditions as an operator located at Little Rock.

Q. How does your trans-state traffic compare, in volume and in bulk or masses in which it is carried, with interstate traffic that begins or ends in the state, and with intrastate traffic?

A. The trans-state traffic is the heaviest average loading per loaded car mile, that any railway handles; not only this road, but any other (except, perhaps, some of the coal carrying roads

1296 that handle nothing else); and the reason for that, Judge, is this: the business is largely an export business, and the units are crowded to their capacity because when they reach their destination they are loaded on to a ship that contains what a great many of these units would bring to it, and the traffic in the reverse direction is the same; it is going to markets, where it goes in large quantities, and is not merely for local distribution between the towns or cities in a particular state; it goes for concentration, and in consequence of that, the trans-state traffic is loaded, as a general rule, to the full capacity of the car.

Q. Then how is it with regard to the efficiency of your engines in trans-state traffic, as compared with the other two kinds mentioned in my question?

A. A good deal of this traffic, during the season of grain export, was moved in solid train loads, right through; that would be done to prevent its being scattered; to get it hauled through to its destination together, and prevent a delay of the ocean going vessel that would take it away.

Q. Out of which class of traffic do you get the largest potential capacity of your engines and cars?

A. We would get the largest potential capacity of our locomotives from the trans-state traffic, because of the fact that they are loaded to their capacity.

Q. Taking the trans-state traffic as a whole, in its entirety, how does the cost of handling that particular line of traffic compare with the intrastate traffic, and the interstate traffic that begins or ends in the state?

1297 A. It is less, because it has no terminal charges, and has greater efficiency of operation in connection with it.

Q. Your attention was called to the manner of handling trans-state cars at Texarkana: what is the difference in the manner of handling that class of cars in the yards and of ordinary terminal handling?

A. This trans-state traffic would only have to be set on a receiving track and the caboose attached: if there was not sufficient for a train, additional cars would have to be added to that, or would be added to that number, to make a full train. In the general switching in the yard, the interstate and state cars are gathered together from industries and mills, house tracks, etc., requiring a number of switching movements to get together those cars; while but one movement would be necessary in the classification yard with the trans-state freight.

In this particular case I testified that, even assuming that any charge at all for work in the classification yards was chargeable to that traffic, that fifteen per cent would be a large proportion, and such for instance as was referred to, at Texarkana, would some within that fifteen per cent.

Q. The service that you render there is what you call "yard" service, in your testimony?

A. It is what we call service in the classification yards, yes.

Q. In speaking of the expense assignable to different

1298 kinds of traffic, in your direct examination, I think you said you would assign to the trans-state traffic fifteen per cent of the expense of yard service: I am correct in that, am I?

A. I said I did not believe it would be equitable to charge any part of the yard service to trans-state traffic; but, assuming that the physical handling given it should be a charge to the trans-state traffic, then fifteen per cent would be a large allotment.

Q. In illustration of the elements entering into and constituting cost of the different kinds of traffic, and showing the relation of cost as between them, you stated that you assigned fifteen per cent to trans-state traffic on account of yard service?

A. Yes.

Q. I understand you now, that the kind of service that is referred to at Texarkana, and similar yards, is the yard service, to which that assignment applies?

A. Yes.

Q. In your judgment, is that fifteen per cent a full and adequate allowance for that purpose?

A. It is an excessive allowance, however, if I should have reached it in any other way than I explained in my direct testimony; it would have been said, perhaps, to have been intuition, rather than synthesis.

Q. State again how you did reach it in your direct testimony.

1299 A. I took the entire number of engines working in the yards in Arkansas; then I took the number of hours that we ascertained by actual test, that those engines worked in the classification yard, and the number of hours that they worked in other yard service. I reduced the proportion of engines working in classified service, by thirty-five per cent, to provide for the switching of empty cars, and assigned 51.16 per cent of the balance to trans-state, as that was the proportion of all of the tonnage touching Arkansas during that period.

Q. Trans-state tonnage, you mean?

A. Trans-state: that is, 51.16 per cent of all tonnage was trans-state. Now, I believe that is too much; it is more than I would use under any other circumstances than this.

Q. If you were dividing that expense for operating purposes, would you make such a large allowance?

A. I would not divide it for operating purposes, in the accounts, but sometimes, for the purpose of running down some particular thing, we go to considerable trouble in analyzing a matter, as to whether we will continue to do a thing or whether we will stop doing a thing, and if I were analyzing this case on that basis, I would not assign as much as fifteen per cent.

1300 Redirect examination of Mr. C. J. McPherson continued.

By Mr. Moore:

Q. Exhibit five shows that the average length of a journey for an intrastate passenger is 30 miles and for an interstate 118 miles: does that interstate journey include trans-state as well as other interstate traffic?

A. Yes, sir, that would include the trans-state.

Q. It shows that the average length of the haul of freight traffic is, intrastate 70 miles and interstate 224 miles: does that interstate also include trans-state?

A. It includes the trans-state in Arkansas only.

Q. Do those statistics include any mileage outside of the state of Arkansas?

A. No, sir.

Q. What is the average length of haul of trans-state traffic, taken separately from all other traffic?

A That is, from origin to destination?

Q. Yes.

A. It would be in excess of four hundred miles.

Q. I believe you have already stated that the average loading of trans-state cars is very much higher, generally, than other classes of traffic?

A. Yes, sir.

1301 Q. What proportion of the total traffic is fruits and vegetables—perishable stuff?

A. For the six months ending Dec. 31st, on the St. Louis Iron

Mountain & Southern, the California fruit was .10% of the entire traffic.

Q. When you say "St. Louis Iron Mountain & Southern" do you mean the Iron Mountain in Arkansas or the St. Louis Iron Mountain & Southern Railway System?

A. That is the Iron Mountain System.

Q. Go ahead.

A. Other fruits and vegetables 1.26%.

Q. Is that, again, on the Iron Mountain System or on the Iron Mountain in Arkansas?

A. That is on the Iron Mountain System.

Q. Go ahead.

A. Cattle, .58%.

Q. Is that on the Iron Mountain System or on the Missouri Pacific?

A. On the Iron Mountain System.

All other commodities would be 98.6% of the traffic.

Q. On the Iron Mountain System?

A. Yes, sir, on the Iron Mountain System.

Q. What do you include in "other commodities."

A. Everything but cattle and perishable freight. That is, perishable freight is represented by fruits and vegetables—green stuff.

1302 For the twelve months making up the calendar year of 1907, the California fruits would be..... .10%
Other fruits and vegetables..... 1.35%
Cattle ..... .55%
Other live stock..... .31%

And all other commodities except the four mentioned, would constitute 97.69%.

This is for the St. Louis Iron Mountain & Southern System.

Q. Is that a sufficient amount to affect the relation in the matter of cost between state and interstate traffic, to any appreciable extent?

A. In my judgment it would not have any effect that could be noticed, as between the cost of intrastate and interstate traffic.

Q. Refrigerator cars, I believe are used in transporting perishable fruits most largely, aren't they?

A. Well, they are used in transporting fresh fruits and some classes of merchandise; as for instance, candies in the summer time and sweets of that sort, and fresh meats.

Q. What proportion of the total traffic is represented by the red line on Exhibit 30, which shows the earnings for the change in the units per ton mile?

A. That is the red line on the graphic chart, below the state line?

Q. Yes.

1303 A. That would represent the freight earnings which constitutes something more than 70% of the entire gross earnings.

It would be 71.51% of the entire gross earnings of the railway. That is, the major part of the earnings of the company.

Q. What percent did you say?

A. 71.51%.

Q. You have already testified, I believe, to the increase in size of locomotives, rolling stock and so on; and you have shown that there has been an increase in the capacity of locomotives and cars.

What effect did that increase in capacity and efficiency have upon the expense of maintenance?

A. Well, those larger units require a greater original outlay than the smaller units. That is, they require a larger outlay of material and labor because of their increase in size.

With the increased cost of labor and with the increased cost of materials, the expense is largely increased.

The expense would be increased on units of smaller size, and there would be increased in a much larger ratio on the units of larger size.

Q. In speaking of the cost of conducting miscellaneous traffic you stated on your cross-examination as follows:

"With an exact division, adding the miscellaneous earnings to the principal traffic, the additional cost, whatever it may be, that we would assume the intrastate traffic should bear, is added to the actual percent of intrastate traffic to get a new basis of new percents, which results in reducing more than 100%."

1304

The meaning of that paragraph is not entirely clear to me and I would be glad if you would state just what meaning you intended to convey?

A. I naturally referred there to the intrastate and interstate passenger traffic, and the element of miscellaneous traffic; and to the fact that the largest part of the miscellaneous was taken into the passenger traffic.

The effort I made there was more an explanation of the way of arriving at extra cost, and was merely to arrive at the method of arriving at extra cost.

That word "reducing" should be changed to "producing."

For example, take 35%, my judgment of the added cost of intrastate over interstate passenger business; originally we would start out with the percents of intrastate, interstate and miscellaneous, as represented by the actual revenue derived from each.

In ascertaining the exact cost the 35% would be added to the intrastate passenger. And this would bring about a relation like this:

63.49% intrastate passengers.
31.96% interstate passengers.
21.01% miscellaneous.

1305

That would produce more than 100%.

Then adjusting these as they bear a ratio to 100% would bring, or produce, for the intrastate passenger traffic 34.52%.

Interstate .....
Miscellaneous .....

Making a difference in the interstate traffic an increase of 2.56%.

and a decrease in the interstate of 4.52% and in the miscellaneous of 2.79%.

That was the explanation that I intended to make, to show the formula used to ascertain the extra cost.

By increasing the cost of the intrastate traffic, the cost of the interstate passenger and the cost of the miscellaneous passenger traffic were reduced to the same extent that the intrastate cost was increased.

Q. I notice in the second answer that appears on Page 615 of your examination the phrase "Miscellaneous expenses" is used; and the same phrase is used on the last line of that page, speaking of the miscellaneous traffic:

Look at those answers and state if that was the phrase you intended to use in those two instances.

A. No, sir. In both cases the phrase should be "miscellaneous earnings."

Q. I believe you stated that there was a difference in the cost of conducting that part of the miscellaneous traffic which relates to mail and express, and which is local in its character, and has to be handled locally, and that which is through: and I believe you
1306 also stated that it would be impossible to make any division or apportionment of that: am I correct about that?

A. That is correct.

Q. I want to know your views as to how the cost of that traffic in its entirety compares with other kinds of cost, and whether you would treat it on a level with the cost of intrastate traffic or interstate traffic?

A. Taking the effort that is necessary to acquire these miscellaneous earnings, in my opinion, taken as an entirety the miscellaneous earnings are analogous to the interstate cost rather than to the intrastate.

Q. You spoke of that subject in your direct examination and does what you say there apply to the miscellaneous traffic in its entirety?

A. Yes, sir, in its entirety, because it is not susceptible of division.

Q. Mr. McPherson, does revenue basis of division represent the transportation of the different kinds of commodities and classes of traffic? Is it representative in a general way, I mean?

A. Not exactly, perhaps; but it is representative—or, in other words, it recognizes a distinction between the various characters of traffic which is represented in the classes; and the fact that different rates prevail for the transportation of the different classes of freight.

Q. In arranging the schedule of charges for transportation
1307 there are broad, general divisions made, aren't there, consisting of commodities of different sorts, and of various classes running one to four or five?

A. Yes, sir.

Q. Those classifications are made, as I understand, for the purpose of getting a rule or principle upon which to base the rates: am I correct in that?

A. Yes, sir, there really would be no other reason for making those classifications, except to make distinctions between these commodities.

Q. What I want you to tell me is, whether the revenue basis of division or apportionment represents these different classifications.

A. Yes, sir. The revenue would contain amounts differing on both weight and distance.

In the first class it would represent a certain amount of money received per hundred pounds.

In the second class another amount. In the third class another amount.

It would be a collection of all of the revenues of the Company derived from the transportation of many different articles, and of different character, and I know of no other basis that would recognize the classification of commodities or articles that appear in the classes.

Q. What is the practice of railroads generally in the matter of adapting the capacity of their passenger trains to the average
1308 volume of passenger traffic? To illustrate more clearly, what I mean is: suppose the average volume of passenger traffic between Little Rock and Fort Smith could be accommodated in a daily train carrying 5 cars, would any railroad operator put on a train of ten cars for the purpose of accommodating that traffic?

A. Oh no.

Q. What is the practice in that respect?

A. The practice of the Railway is to provide in its trains as near as it can for the maximum use that will be made of the cars from one end of the district or division to the other. It may be that in going into the larger towns, or for a short distance approaching the larger towns, that that maximum will be reached or even exceeded; and that may be true also in leaving these cities and towns, for a short distance. And then there might be ample seating space for more passengers than are using the train, until we approach another town of any consequence.

The general idea is to provide sufficient coach space for the maximum demand that would be made on the train from one end of the division to the other.

Q. Is the capacity of the train usually increased or diminished, as the case may be, in proportion as the volume of traffic changes, if there should be a change: how is a change of that sort effected?

A. If the increase in travel is permanent and gets beyond
1309 the maximum capacity provided by the railroad, then additional cars are added. If for any reason there should be a recession then the cars would be reduced in number.

Q. You were asked on cross-examination if it were not a fact that facilities for handling passenger traffic are practically fixed quantities: I want to ask you if that is a fact, where conditions are changing; or whether the facilities for accommodating the travel are so arranged as to be adapted at all times to the requirements of public travel.

A. The facilities afforded for conducting the passenger service are more fixed than the freight; but that is represented by the regular scheduled trains.

Q. I am speaking now of the facilities for handling the traffic; not

the service, but the facilities furnished for handling the traffic, coach and car accommodations, and matters of that sort.

A. That is what I am getting at.

Q. Go ahead.

A. That is represented by the regularly scheduled trains and provision that is made daily of about the same number of trains for the average traffic. This may fluctuate as between days when occasions may arise, when excess travel must be provided for. Whenever there is any addition to travel anywhere that must be provided for by providing additional cars. Sometimes it must be provided for by additional trains.

That is a matter that is gradual in its evolution.

1310 On some districts of the road the necessity for furnishing additional facilities may come upon the Company suddenly.

So far as the fixed facilities are concerned, stations, platforms, trucks and station organization, those are likewise nearer fixed than in the freight service, but they must be increased with any considerable increase in the volume of travel, or in the additional amount of baggage which follows the increased volume of traffic.

Recross-examination.

By Mr. HILL:

Q. I understood you to say in your re-direct examination that the cost of maintenance of way was much higher in Arkansas than in Missouri: is that right?

A. Relatively, yes.

Q. What do you mean by "relatively"?

A. I mean as a proposition in its entirety. It might vary in any one year.

Q. How does the cost of maintenance in Arkansas compare with the cost of maintenance over the entire line?

A. I am unable to give you the figures on that. We know that our tie maintenance is higher for the reason that the average life of a tie is less. And we know that much of the territory in Arkansas through which our road runs, particularly East of the main

1311 line, is low and swampy; and that makes the maintenance expense larger than where the contrary condition exists.

Q. A good part of your line in Arkansas is in the mountains, isn't it?

A. A part of it is in the mountains.

Q. Wouldn't that counter-balance what is in the swamps?

A. That would not reduce the cost of maintenance.

Q. Turn to your exhibit 3, statement 4: you say maintenance of way and structures as apportioned to Arkansas is 54%: I believe your mileage in Arkansas is 52%, is it not?

A. That is correct.

Q. The swamps were not as bad on you as you thought they were, were they?

A. It would depend on what the 2% was on. It shows an increase over the average.

Q. You have a swamp or two in Southeastern Missouri, haven't you?

A. There is some—I am not reflecting on the State of Arkansas Judge.

A. I would not assume you would do that for anything Mr. McPherson. Just loading it down, that is all.

Yesterday I was asking you something about your Pullmans and called for the contract and stopped my examination at that point:

I see from your testimony you pay no mileage on the Pullmans. But the point I was getting at there was whether it was not

1312 more expensive to carry Pullmans than it was to carry day coaches.

A. The expenses that would fall on the railroad correspondingly would be that on the Pullman cars we pay no part of the maintenance; while with the coaches we bear the maintenance as well as all the expenses of operation.

In eliminating any charge for maintenance for Pullman cars from our expenses, and any cost for mileage, we have gone far toward putting the cost as between the two, which would be represented by the difference in weight, on an equality.

Q. The effect on the track is more severe with a Pullman than a day coach isn't it?

A. The Pullman weighs more than the day coach, but I believe you have read into my testimony here that to which I testified in the cattle raisers' case, that the locomotives as units cause a greater wear on the tracks than cars. And the difference in maintenance between ten or fifteen heavy trains, or ten or fifteen light trains would not be especially material—assuming, of course, that the locomotives were alike.

There is a difference in weight but that is of course only of comparative friction.

Q. Don't you pay for all repairing and the restoring of Pullmans that are injured or destroyed in your operation?

A. If it is our fault. If we should break up their property we would have to pay for it.

1313 Q. Whether it was your fault or not—if it were your misfortune?

A. Yes, if it were our misfortune. But that is different from maintenance. It costs between $920.00 and $1,000.00 a year to maintain a coach.

Q. I was not assuming that was maintenance. I was asking if that is not a fact.

A. It is a fact that if the property was injured while in our possession it would be our duty to repair it.

Q. What revenue do you get out of a Pullman car?

A. We receive from the passengers who ride in the Pullman cars the regular established rates of railroad fare. We receive no part of the earnings that accrue from the sleeping apartments unless the same shall exceed the average of $7,500.00 per car per annum. In that event the Pullman Company pays the Railway Company one half of that excess.

Q. Don't you get any other revenue from your Pullman contract?

A. I do not know of any, Judge. I do not think we do. It is a couple of years since I read this contract over, but the impression is pretty firmly fixed in my mind that that is all.

Q. Don't you own a three fourths interest in the Pullman equipment that is used on your line?

A. No sir we own no interest in it at all.

1314 Q. You did under this former contract didn't you?

A. Yes sir under the contract in effect prior to July 1st, 1907 the cars were operated on the association plan, in which the Railway Company had a three fourths interest and the Sleeping Car Co. a one fourth interest.

Q. Then you got three fourths of the net revenue from the operation of the cars on your line during that period, didn't you?

A. I don't know whether it was net or gross. I assume it would be net. I never have read that part of the contract. That was not the working part of the contract with which the operating department was concerned.

Q. I think it says "net" here (indicating contract).

A. That contract has been out of date now since June 30th, 1907.

Q. I understand that. When that went out of date did the Pullman Company re-purchase that three fourths interest you owned in its cars?

A. I suppose they did. I do not know anything about the transaction.

Q. You get no revenue at all, then, from the Pullman Co. under your present contract, unless the revenue per car exceeds $7,500.00 per year?

A. No sir, we get no further revenue.

Q The statement you furnish from the Pullman Co. for the year ending June 30th, 1908 shows that the average gross earn-

1315 ings per year per annum was 5,818.65. It would, therefore, follow, under your present contract, that you would get nothing from the Pullmans at all.

A. That would be the result, if the cars did not earn an average above the minimum.

Q. You stated that this interest which your Company owned prior to June 30th, 1907 is not owned by them now in whole or in part.

A. No sir. We returned the cars to the Pullman Company.

Q. In what account would the money you receive from the resale to the Pullman Company appear?

A. I do not know, Judge. That is not in my jurisdiction.

Q. I understood you to state on re-direct examination that the average trans-state haul was 400 miles or more on freight: where did you get that? It does not so appear in your exhibits.

A. No sir, the exhibits, Judge, undertake to deal only with the mileage made in the State of Arkansas. You will notice that the trans-state haul in Arkansas is 285 miles. In order to be a trans-state shipment of course it must have a mileage on both ends of this 285 miles.

A large part of that trans-state business is grain from Kansas City by way of Alexandria to New Orleans, and the extremes between the

terminals in such a case as that would be close on to 1000
1316 miles.

Then there is the lumber business from Louisiana and Texas to St. Louis.

Q. What value have those hauls outside of Arkansas in this inquiry?

A. Only in a general way as showing that in the average haul that is given in these exhibits it does not necessarily mean to the Company that they represent terminal charges. The terminal charges would be extended in all probability more than 100 miles further.

Instead of dealing with two terminals on 290 miles we would be dealing with two terminals of 100 miles.

Q. You are straddling them out further.

A. Necessarily, and that would reduce the cost of operation.

Q. You testified about your miscellaneous earnings that by analogy they should follow the interstate rather than the intrastate expense, as I understood you?

A. Yes sir.

Q. Which intrastate traffic should they follow: the freight or passenger?

A. As they relate to either passenger or freight or as they are incidental to either service.

Q. To which do you relate the mail?

A. The mail and express to the passenger traffic.

Q. Both of them?

A. Yes.

1317 Q. Then you would add 35% instead of 100% increased extra cost to those items?

A. I don't understand you.

Q. On your passenger increased expenses for intrastate business you put 35% and on your freight at least 100%, as I understand you?

A. On freight at double the division on the revenue basis it would decrease the proportion of miscellaneous .52%.

Q. I am not talking about the extent of the thing, but I am talking about the basis on which you do it:

You say that these miscellaneous earnings should be classified with the interstate earnings: now I ask you which one of the interstate earnings they should be classified with, so far as mail and express are concerned.

A. I have not gone into the express because it is so small in proportion.

Mr. MOORE: You are asking him what additional cost he would assign to the miscellaneous.

Mr. HILL: I first got him to state where he puts it and I then asked him what additional cost he puts on it.

A. I haven't put any additional cost on either freight or passenger; by increasing the intrastate in both cases, freight and passenger, you decrease proportionately the interstate and miscellaneous.

1318 Q. That is getting around to it in another way. It is the same proposition.

A. I do not know that that is even an accounting proposition,

Judge. That is a formula that is here stated (indicating exhibits). I did not make it, but in my study of it, I believe it is correct.

Q. Mr. McPherson, has your experience with that been like that line about something:

"That to be hated needs but be seen;
Yet seen too oft, familiar with its face,
We first endure, then pity, then embrace."

A. I believe that requires no answer.

Q. At least, that you have "embraced it." You will admit that if you answer the question.

A. In my judgment when you have increased your intrastate cost, either freight or passenger, you should continue to take in all of the factors, in whatever relation they may each bear to the intrastate cost as found.

Mr. HILL: Mr. Moore I have not had time to read those mail contracts. When I have read those I may want to ask some questions about them, but with that exception I am through with Mr. McPherson.

Redirect examination.

By Mr. MOORE:

Q. I believe the White River Line of the St. Louis, Iron Mountain & Southern Railway in Arkansas is a part of your line in the mountains, isn't it?

1319 Yes sir.

Q. Is there any other part of the line in the mountains?

A. Not very much. I do not know. That is rather a hilly country on the line from Wynne North. It runs up into the Ozarks where it touches the main line at Knobel.

Q. What is the length of that part of the line in Arkansas called the Wynne Branch? What is the length of that part of it which you say runs into the Ozarks?

A. It is not all of that hilly character——

Q. I asked you what is the length of that part of the line?

A. —but the line which is from Wynne to Knobel is.

Q. It is a short distance, isn't it? I do not care about the exact mileage.

A. I should say it is under one hundred miles.

Q. What is the character of that White River Branch and the relative cost of maintenance on that line as compared with other parts of the line?

A. The cost of maintenance would average in the mountainous country——

Q. Maybe I am mistaken, but I had the impression it was a very expensive line in point of cost of maintenance.

A. It is of an average mountain maintenance.

Q. A large proportion of the rest of your main line is in low country, isn't it?

A. Yes sir, the greater part of the Arkansas line is not in
1320 the mountainous country.

Q. Is that Pullman contract that has been referred to, with the St. Louis, Iron Mountain & Southern Railway Co. or with the Missouri Pacific Railway Company?

A. I have always understood——

Q. Look at the contract and see.

A. Do you mean the new contract?

Q. I mean both of them.

A. The new contract effective June 30th 1907 deals with them as a system.

Q. I believe, Mr. McPherson, you have stated that the length of haul is a large factor in determining the relative cost of transportation.

A. Yes sir.

Q. Isn't that true without regard to State lines?

A. Yes sir that would be immaterial whether it were state traffic or interstate traffic.

Q. If you have a haul that is 1000 miles in length and runs across three or four States, the effect of the distance is the same on every part of that haul, isn't it, so far as it relates to cost?

A. So far as terminal cost is concerned that would affect only the two extremes. It would be just the loading at one point, the movement 1000 miles, and the unloading at the other point. That would affect your average in the State just the same as between a haul of one hundred miles and a haul of thirty miles.

W. B. DODDRIDGE, a witness of lawful age being duly pro-
1321 duced, sworn and examined on the part of the complainants testified as follows:

Direct examination.

By J. M. MOORE:

Q. State your name and where you reside.

A. W. B. Doddridge, St. Louis, Mo.

Q. Have you had any experience in the service of railroads?

A. Yes sir.

Q. State what your experience has been, what length of time you have been engaged in that kind of work.

A. I entered the railroad service in the State of Ohio in 1865, as a telegraph operator. In 1867——

Q. You need not go into any great detail, but state just in a general way.

A. I entered the service of the Union Pacific Railway Co., occupying various positions on that road, from telegraph operator to General Superintendent.

Q. How long were you in that service?

A. Until 1884.

Q. What departments of the service were you engaged in on that road?

A. As agent, station agent, general agent, superintendent
1322 and general superintendent.

Q. What were your railroad connections after you left that line?

A. In 1896 I entered the service of the Missouri Pacific Railway Company as Superintendent of their lines from Kansas City to Omaha.

In 1889 I became General Manager of what is now the St. Louis Southwestern Railway, continuing in that position until 1893.

I then became General Manager of the Missouri Pacific System, until the year 1900.

Since that date I have been engaged in other business.

Q. The St. Louis, Iron Mountain & Southern Railway in Missouri and Arkansas, the entire System, was under your jurisdiction as General Manager of the Missouri Pacific System, wasn't it?

A. Yes sir.

Q. Has your employment afforded you opportunity to investigate the various problems as they arise as to conditions of transportation, both state and interstate, and of the cost incident to the several kinds of traffic?

A. Yes sir. I think I have a very thorough general
1323 knowledge of all of the conditions surrounding the various classes of traffic incident to the operation of railroads under my charge.

Q. Did you become familiar, during the time of your connection with the St. Louis Southwestern Railway and with the St. Louis, Iron Mountain & Southern Railway Co., with the conditions that existed in the State of Arkansas affecting the various railroads and with the conditions that existed on the lines of those roads?

A. Yes sir. I was very familiar with the conditions in Arkansas during the time I had charge of the St. Louis Southwestern Railway and the St. Louis, Iron Mountain & Southern Railway Co.

Q. How does the cost of railroad operation in the State of Arkansas and in that part of Arkansas in which those lines are located compare, in your judgment, with what it is in other territories, other States, in that section of the country?

A. The railroads in the Southern country generally are more expensive to maintain than in sections of the country lying further North.

The reason for that is the character of the climate and the unstable condition of the soil in the low country, and the relatively large streams crossed by the railroads in the low country.

Q. What are the characteristics of the territory in which the St. Louis, Iron Mountain & Southern Railway and the
1324 St. Louis Southwestern Railway in the State of Arkansas are located?

A. A great deal of the mileage of the St. Louis, Iron Mountain & Southern Railway is in the low country. That is likewise true of the St. Louis Southwestern Railway. Of course there are parts of it that are in higher country where the drainage is better, and these bad conditions do not exist. However, the deterioration of

timber is more rapid in all parts of the country South of the State of Missouri.

Q. Do those roads cross large streams in the State of Arkansas?

A. Yes sir, the Arkansas River, the Red River, the White River, and some others in the southern part of the State are difficult and expensive streams to deal with.

Q. Do both those roads cross those streams?

A. Yes sir.

Q. Is there a large exposure to flood damage and to other incidental cost growing out of floods in those streams, in the operation of those roads?

A. Yes sir at certain times, in cases of extreme floods in those streams and in the Mississippi River, there is an extraordinary expense entailed from high water.

Q. Have you given any thought to the relative cost of conducting state and interstate transportation, freight and passenger.

1325 A. Yes sir. When I was actively engaged in railroad operation the question of relative cost as between state and interstate transportation was not given much, if any consideration; for the reason that the railroads were operated as a unit, and there were no state restrictions, making it necessary to investigate the differences of costs as applied to different States. We considered questions of that kind strictly upon the basis of the difference between the local and through traffic, without any reference to State lines.

Q. Have you since that time considered the question as to the difference between the two kinds of traffic you speak of, the local and the through?

A. Yes, sir, the principle underlaying the conditions as applied to States are quite similar to those that exist when the State is not considered.

The difficulty of the proposition is to make a division as applied to State lines. It is like cutting a section out of a long line of railroad, and undertaking to determine the elements as apportioned to that section.

Q. I will ask you, Mr. Doddridge, if as a result of your investigation and the consideration you have given to that subject, you think there is any difference in the cost of operation as between state and interstate traffic, considering the different manner in which the two kinds of traffic are handled.

A. Taking into consideration the fact that the state traffic is necessarily the short haul traffic of a railroad, it is necessary to

1326 compare it with what we call the interstate traffic of a like traffic density; and in order to supply the service required in handling it, and that it must be done under different circumstances and conditions from which the other traffic is handled, increases the cost of doing the service.

Q. Is there any way by which the expense of conducting the two kinds of traffic can be definitely separated and ascertained?

A. There is no method that I am aware of by which this separation can be definitely ascertained.

Q. The question arises in this case as to probably the best manner of arriving at the truth of dividing the expenses of these two kinds of traffic, for the purpose of ascertaining what the difference in cost of operation is: several bases have been spoken of, among them the ton mile basis and the revenue basis of division:

I want you to take them in the order I have stated them and tell us what your views are as to each method of division. First the ton mile basis, and then the revenue mile basis.

A. As a basis for dividing expenses between the different classes of traffic, the ton mile is useless for the following reasons:

It is a strictly mechanical unit. It deals with but two of the elements entering into the cost of transportation; namely, the weight and the distance. It brings all of the ton miles
1327 produced, to a common, average level; the short haul with the long. It averages commodity freight with class freight, and makes no allowance for the space occupied or for the value of the goods. It makes no distinction between car load and less than car load; a ton of live stock or a ton of merchandise.

The ton mile unit would charge the cost of transportation of a car load of coal, an article of prime necessity, the same as a car load of merchandise.

The ton mile deals with the net weight of freight only, and does not take into account the tare weight of the equipment necessary to be used to transport it; or of the empty car mileage required when the traffic is unevenly balanced.

The ton mile unit averages all terminal expenses regardless of the length of the haul.

The ton mile unit does not take into account all of the elements affecting expense, such as the direction and the kind of traffic; the character of traffic; the character of service.

The ton mile treats a railroad as a level plain, making through trains or local trains, fast time or slow time.

The ton mile as a unit is available for a limited number of comparisons, such as testing the efficiency of car loading, train loading, and average cost or revenue derived from certain commodi-
1328 ties, and the making of comparisons of one commodity with another upon the same railroad or upon different railroads.

The ton mile unit as applied to all freight traffic of a system of railroads, for the purpose of ascertaining the average revenue derived per ton per mile, or the average expense per ton per mile, is sometimes used. But the result thus obtained has only a very general significance until an analysis of the classification of the tonnage dealt with and the circumstances and conditions of its transportation is considered in connection with it.

The ton mile makes no allowance for difference in topographical conditions, which affect expenses.

The ton mile unit treats a railroad as a machine carrying a regular load, under uniform conditions.

Q. Mr. Doddridge, in view of the conditions which you have recited in your statement, do you think the ton mile can be used as a unit for determining or apportioning the expense of conducting the

two classes of traffic under consideration in this case—that is, the interstate and intrastate traffic?

A. No sir, not as a definite unit.

Q. What, in your judgment, is the value of the revenue or earnings as a basis for making that apportionment? I want you to state your views in regard to that now.

1329 A. There is no unit or basis that I am aware of by which such a separation or apportionment can be made with mathematical accuracy. For the reason that all classes of traffic are carried in the same cars, intermingled over the same rails, in the same trains, and handled by the same employees, using the same terminals, a definite separation of common expenses is impossible.

To be fair and equitable a unit must be used that will reflect all of the average conditions under which transportation is furnished and charge each ton mile or each passenger mile with its proper proportion of all of the expenses.

In the establishment of rates many elements are considered, such as the physical cost of the service, the weight, the distance, the competitive conditions, the space occupied, the character of the service, and the value of the service to the shipper. It is, therefore, necessary to use an arbitrary unit.

In my judgment the best method that has been suggested for this purpose is what is commonly known and called the "gross earnings basis." That is, the gross earnings derived from each class of traffic for the given period, being accurately known, the total expense for the same period being accurately known, the expenses between state and interstate traffic may then be divided and apportioned upon the percent each class of gross earnings bears to the whole.

1330 The aggregate of gross earnings is made up of thousands of small units, each of these units representing the amount received for the transportation of indvidual shipments. The sums charged for transportation bear some definite relation to the cost. These sums vary, being governed by circumstances and conditions; such as weight, distance, and classification, and the commercial conditions under which the transportation is furnished.

Q. What are the commercial conditions?

A. I refer to competition and other like conditions, which enter into and influence the rates charged on many classes of commodities and traffic.

For instance, the railroads charge a much higher rate on many articles where the value is large and liability great, than they do on other articles where the weight and bulk is similar, but they are of less value.

There are a great many considerations of this character that enter into and influence railroads in determining the proper rates to be charged for transportation.

The gross earnings reflect all of these conditions and by allotting the expenses in proportion to the amount which each shipment produces in the aggregate, seems to be the most reasonable and equitable method by which expenses can be apportioned between state and intersate traffic.

Q. Does the difference in the value of the articles transported and the liability incurred enter to any extent into the dif-
1331 ference in rates and affect the difference in cost?

A. Yes sir, these things are always taken into consideration as one of the factors to be considered in the establishment of rates. However, there are many other considerations that also affect the establishment of rates, such as competitive conditions between producing sections and consuming markets.

The following example illustrates the general theory which I have in mind:

The interstate rates upon the products of the forest, which constitute a large proportion of the tonnage of Arkansas, to the consuming markets in other States, are established mainly upon the value of the service to the shipper and to the consumer, based upon existing commercial conditions.

The physical cost of transportation in individual cases being a secondary consideration, as a whole the traffic yields a profit either directly or indirectly.

Changes in rates are necessary from time to time and would affect the allotment of expense as between state and interstate traffic to that extent, while it is not contended that the actual physical expense would be changed.

Interstate rates frequently extend across several States and if below normal by comparison with other rates, for the reasons
1332 stated each State would bear its prorata in the reduced expense thus alloted.

Other interstate rates as compared to the total may be abnormally high, which would tend to equalize the condition in the example pointed out.

Interstate rates into and out of Arkansas must be so adjusted as to enable its products to find markets in competition with other producing sections. This principle is essential to the prosperity of both state and the railroads. Intrastate traffic depends upon this condition being maintained.

Trans-state traffic as a whole being carried at a much lower cost than short haul traffic, low interstate rates applied to that class of traffic in some cases works no injustice to the intrastate traffic in the apportionment of expenses as a whole.

The gross earnings method of apportionment of expenses deals with all of the intrastate traffic as a single unit and with all of the interstate traffic as a single unit, upon a system of general averages, without reference to individual shipments or particular rates.

In the case of expense alloted to miscellaneous earnings, in my judgment the State has much the best of it, considered from the standpoint of actual, physical expense. And the reason is this:

If there were no miscellaneous earnings from mail and express the expense would not be very much reduced, as the necessity
1333 of running the passenger trains would still remain. The difference would be in one or two less cars to the train.

Q. In that respect the miscellaneous expense, so far as operation

is concerned, is more of an incident than a principle matter, isn't it?

A. Yes sir, the miscellaneous revenue considering the physical expense attached to it, in my judgment, is higher than other expenses.

1334 Direct examination of W. B. DONOHUE continued.

By Mr. MOORE:

Q. Is there any difference in your judgment in the cost of handling state and interstate traffic?

A. Yes, sir.

Q. I wish you would give your views as to that difference and the grounds upon which you base them?

A. The difference in cost cannot be accurately determined. Relatively but few of the expenses can be identified as directly attributable exclusively to either class of traffic. Under normal conditions the best that can be done is an approximation based upon a system of averages.

After ascertaining certain of the elements of cost, it can be approximated by applying the percents of expenses thus obtained to those items of expenses that are common to all classes of traffic.

Individual cases have but little bearing upon the subject as a whole.

In considering this question state lines are artificial and
1335 have no effect other than in a technical sense.

Under equal conditions as the haul shortens either in the freight or in the passenger service, the proportional cost increases.

As the density of an evenly balanced traffic increases within certain limits the ratio of cost decreases.

The reason for this is, that a large percentage of expenses is stationary and have nothing to do with the haul.

It is the circumstances and conditions under which the traffic is necessarily handled that affects its proportional cost.

Interstate freight is in two classes, each handled under somewhat dissimilar conditions.

That part of which is transported across the state, as upon a bridge, and that part which originates or has its destination within the state, and in that respect is local freight.

Trans-state freight has a small percentage of terminal expense within the state; and the interstate freight has but one terminal expense.

But for economical reasons both classes of freight are sometimes rehandled at divisional or junction points.

The great bulk of intrastate freight is carried upon local or way freight trains, in common with such interstate freight as there may be for distribution or collection.

This train is run daily, except Sundays and holidays, as
1336 nearly as practicable in daylight only. It does the local switching along the line and any other local work that may be required. The train crew local and unionl less than carload freight.

It is a special, arbitrary freight service, run without regard to the tonnage-load to be moved; and, therefore, as measured by its performance is a very expensive class of train.

Upon branch lines the local trains do all the business, as a rule.

The through trains are loaded with trans-state, interstate, and a small percentage of state freight. They are started from massing points and are not usually run unless there is a tonnage-load, or run for the purpose of balancing the power.

The intrastate freight traffic is the shortest haul business handled by the railroads in Arkansas; and for that reason, if for no other, is the most expensive.

It is true that quite a large amount of interstate freight is carried upon local trains, but the proportion of that class of interstate freight to the total of interstate freight is very small.

Q. Can you state approximately what proportion of the freight carried on local trains belong to each class of traffic; that is, intrastate and interstate?

A. I have no definite information upon that point; but, based upon my general knowledge and experience with railroads
1337 in Arkansas, I should judge that the greater proportion of the load of the local trains is interstate freight.

But, at the same time, the bulk of the state freight is carried upon local trains and but a small proportion of the total interstate freight is carried on local trains.

Q. What proportion of the intrastate freight is carried in local trains: that is the question I want you to answer.

A. On the St. Louis Southwestern Railway 8% of the interstate freight is carried upon local trains; and 92% is carried upon through trains—as shown by their test made in October, 1908.

I cannot state what the proportions are on the St. Louis, Iron Mountain & Southern Railway but the exhibits filed by that company show that a little less than 20% of the total tonnage is local or intrastate; and that something over 80% is interstate.

It is also shown in evidence that 51% of the traffic of that road in Arkansas is trans-state.

It would, therefore, follow that a very small proportion of the interstate freight is carried on local trains, but I cannot state what that percent is.

Q. If it is true that a small proportion of the interstate freight is carried on local trains, does it not follow that a very large proportion of that class of traffic is not subjected to the local train expense that accrues against local traffic, and to the increased expense growing out of the difference between the long and the short haul?

1338 A. That is true. Only a small percentage of the interstate traffic is subjected to the high cost of the local trains.

Q. In what manner does the terminal expense increase the expense of conducting local traffic?

A. All the terminal expenses are the same, without regard to the length of the haul; therefore, these expenses per ton per mile increase as the haul shortens.

What is meant by "terminal expense" is the point of shipment and point of delivery. The terminal expense includes labor at stations, supplies, and all the facilities used in the transaction of business, such as house tracks, team tracks, yard engines, switchmen, and the cost of the maintenance of these structures.

The average length of haul on the freight business handled by the St. Louis Southwestern Railway in Arkansas, as shown, is, interstate 231 miles; intrastate 44 miles.

The average interstate haul is 5.3 times greater than the state haul.

The average length of haul on the freight business handled by the St. Louis, Iron Mountain & Southern Railway in Arkansas, as shown in the exhibits filed by that railway are interstate 224 miles; intrastate 70 miles.

The average interstate haul is 3.2 times greater than the intrastate.

1339 Therefore, the terminal expense in the case of the St. Louis Southwestern Railway is 10.6 times greater than the terminal expense of the interstate freight.

In the case of the St. Louis, Iron Mountain & Southern Railway it is 6.4 times greater than the interstate freight carried by that company.

This estimate does not make any allowance for the absence of terminals in the trans-state freight by either company.

Q. Do the additional terminals involve a large element of additional expense in the transportation of the local or state freight?

A. Yes, sir. I am not advised of the exact percentage that the terminal expense bears to the whole expense of operating the railroads, but it is usually somewhere in the neighborhood of between 15 and 20%.

Q. Have you any knowledge of a test made on the St. Louis Southwestern Railway in October, 1908, for the purpose of ascertaining the difference in the cost of conducting the two kinds of traffic under consideration?

A. Yes, sir.

Q. What does that test show on that subject?

A. The test shows on the basis of gross earnings the intrastate freight train expense for labor and fuel costs 5.5 times greater than the interstate. It shows that the cost of service and fuel for running the local train per mile to have been 47% greater than the cost of running the through train per mile.

1340 It shows that the local train produces 129 ton miles of commercial freight for each mile run; and the through train produces 399 ton miles of commercial freight for each mile run.

The average number of loaded cars per train mile in through trains was 23; 72% of the total train.

And in the local trains 11, or 69% of the total train.

The average number of empty cars per mile in the through train was 9, or 28% of the total train.

And in the local trains 5, or 31% of the total train.

The average number of all cars per train mile in through trains was 32; and in the local 16.

78% of all intrastate business was handled on local trains.

The remaining state freight, 22%, was handled on the through trains.

92% of the total interstate business was handled on through trains.

8% of the total interstate freight was handled on local trains.

Of company freight, 49 tons to each mile run, was carried on through trains.

21 tons for each mile run was carried on local trains.

The average tons of all dead weight, (that is, non-revenue weight) which includes the weight of the locomotives, cabooses, company freight, and all cars, per train mile, was 734 tons on through
1341 trains; and 397 tons on local trains.

The through trains carried more than three times as much commercial business per mile run as the local trains, but required less than two times as much dead weight.

The average number of dead weight to a ton mile of commercial freight was, less than carload through trains 4.59 tons.

Local trains, 9.44 tons.

Carload, through trains, 1.62 tons.

Local trains, 1.90 tons.

Both, through trains, 1.84 tons.

Local trains, 4.09 tons.

The per cent of dead weight to gross weight on through trains was 65%.

On local trains, 76%.

The per cent of overtime to total wages of train and engine men was 5% on through trains; and 19% on local trains.

Q. What effect, in your op. n, based upon your knowledge and experience in railroad operation, would the figures you have just stated in connection with the test made by the St. Louis Southwestern Railway have upon the cost of handling intrastate freight traffic as compared with interstate freight traffic?

A. The elements of cost that affect the proportion as between interstate and intrastate freight traffic are based first, upon the circumstances and conditions under which the intrastate freight
1342 is necessarily handled as differentiated from the great bulk of the interstate trans-state freight traffic.

These circumstances consist of a relatively low traffic density——

Q. What do you mean by "relatively low traffic density."

A. The low intrastate traffic density—that is to say, the number of tons handled per mile of road as compared with the number of tons handled per mile of road in the interstate traffic.

Q. You speak of the relation of the density of traffic as related to interstate and intrastate traffic, do you?

A. Yes, sir.

Q. Do you mean you would assume that there is a greater density

of traffic of interstate business than of intrastate, and is that what you are referring to?

A. Yes, sir, there is a very great difference in Arkansas.

Q. Explain fully what you mean there, please?

A. The statistics show that the intrastate traffic density of the St. Louis Southwestern Railway was about 33,000 tons per mile of road during the year 1908.

The interstate traffic density was shown to be over 700,000 tons per mile of road during that year.

I believe that is included in the freight statistics on file here.

Mr. HILL:

Q. Do you mean tons or ton miles?

A. I mean tons. Tons represent density, not ton miles.

1343 The MASTER: Is the word "density" and "volume of freight" synonymous?

A. Yes, sir.

Mr. MOORE:

Q. What did you say represents the density of traffic?

A. The density represents the average volume of business.

Q. How is that shown?

A. By dividing the total number of ton miles by track miles.

Q. That shows the number of tons carried one mile?

A. No, sir.

Mr. HILL: Does not that really mean ton miles, then, Mr. Doddridge? I just want to catch your expressions as I go along.

A. No, sir, it does not mean the ton miles. It is the number of tons divided into the miles of road.

Mr. MOORE:

Q. And it means the number of tons hauled one mile?

A. Yes, sir. Or, in other words, it indicates the average volume of business.

Q. Go ahead.

A. The traffic density of the St. Louis Iron Mountain & Southern is greater than that of the Cotton Belt, but I do not know what the figures are.

Q. Continue with your answer, Mr. Doddridge.

1344 A. A business mainly of the collection of freight in small units from scattered stations, or a business of distribution from jobbing centers in relatively short hauls. And, generally, the absence of return loads or reciprocating tonnage.

Q. Tell me there, what is the relation between state and interstate traffic as to reciprocal tonnage.

A. The state traffic, so far as merchandise and supplies are concerned, is distributed from local jobbing points and there is no compensating freight of a like character returning to these centers from the various centers at which this freight is distributed.

Of course, I do not pretend to say there is no use for these cars that are carried out in the distribution of this freight, in other directions. There may be for lumber or for other things.

But the through business——

Q. Up to this point you have been speaking about intrastate business?

A. Yes, sir. Now, the through business, as a rule there is at least a certain percentage of return freight with which you load the cars that are carried long distances.

Q. Is the proportion of return freight larger in though traffic than in local traffic?

A. It is larger, yes, sir.

Q. Is there a material difference in that respect?

1345 A. Yes, sir, I should say there was.

The Cotton Belt has quite an evenly balanced north and southbound traffic, through business.

Q. Proceed with your answer, Mr. Doddridge.

A. The service is rendered daily, Sundays and holidays excepted.

The bulk of state freight being handled upon local trains this train stops at each station or siding to load or unload less than carload freight.

They do whatever necessary local switching may be required.

These trains are scheduled to run as nearly as practicable in daylight, on account of the character of their work.

They make relatively a short road mileage, and carry passengers.

The great bulk of interstate freight, which is of much greater density, is carried upon through trains. Upon the main lines it is usually handled in full train loads and move- continuously, day and night, covering from 250 to 300 miles in 24 hours.

Q. What effect does the speedy or rapid movement of this transstate freight have upon the cost of handling the traffic?

A. The effect is to reduce the number of cars and the number of locomotives, required to produce a given number of ton miles.

1346 Q. In what way is that brought about?

A. It is brought about by the additional miles covered within a certain fixed period of time.

For instance, any local train might, as shown by the Cotton Belt time-card, average 60 miles in 24 hours.

Q. The local train?

A. Yes, sir, the local train. But the through trains make say from 250 to 300 miles in the same period of time.

Q. I suppose those rapid moving trains perhaps consume more fuel and are of greater expense in that way: is there any compensating difficulty the other way?

What I want to get at is, on the whole what is the effect the rapid movement has upon the cost of handling the freight?

A. Taking into consideration the element of time, and measuring the cost of the train by the result in ton miles, it is more economical than the other class of trains.

Q. You mean the rapid trains?

A. Yes, sir, the rapid trains. The kind of trains we are talking about. Trains that carry the ordinary, daily, interstate, through freight.

Q. That class of train produces a larger return on the amount expended than the slower moving train: is that what you mean?

A. Yes, sir, the train that lays over nights and Sundays, and makes but a relatively short road mileage.

1347 Q. I am not asking you to compare those trains with the local trains; but I am asking you to compare the rapid moving trans-state freight trains with the slow moving trans-state freight trains. Is there any point of relation between the cost of service and the return produced by each?

A. What you mean is an especially fast moving through train as compared with an ordinary, heavy tonnage, through train?

Q. Yes, that is what I wish to call your attention to. State how they compare as to the return upon the cost involved in each kind of service, each kind of train, I mean.

A. The aggregate cost of a through fast freight train is greater than the fully loaded, heavy tonnage, freight trains, moving at a slower rate of speed. But as measured by the results——

Q. By the earnings, you mean?

A. The earnings and the time, which is one of the elements to be considered in the use of locomotives and equipment, the difference in the aggregate, increased cost of these fast trains is largely compensated for by the difference in the result.

Q. The element of time affects the question of labor employed, in handling those trains, as well as the use of the equipment, doesn't it?

A. The train employés are paid by the mile, so the element of time in their case would not be affected. But in the use of

1348 the equipment, in the ton miles produced, provided this train could be kept continuously running, as compared with the slow trains, with the larger tonnage, the difference in the cost of the train would be compensated for by the difference in the results.

Q. Which class of train would produce the larger return upon the amount expended in its operation—the slow or the fast moving through train?

A. This is only an opinion, but taking into consideration the earnings from a fast train, I think figured out that the product of the fast train would be found to at least equal that of the slow train.

Q. You think, then, there would be no material difference?

A. There would probably be no very material difference.

In considering a question of that kind you would have to take into account the gross earnings as well as the element of time.

Q. How are cars engaged in rapid movement loaded with reference to their capacity? Or, in other words, how does the loading of cars that are moved rapidly compare with the loading of cars that compose the slower moving train?

A. You mean the tonnage loading of the cars?

Q. Yes, I mean the tonnage loading of the cars.

A. I think it will be found that the cars that carry that class of freight requiring an especially fast train, are usually loaded

1349 lighter than the other cars, because they consist of cattle, fresh vegetables, packing house products, and light articles that load in lighter volume per carload.

Q. What, in your judgment, is the extra cost of conducting intrastate traffic over the interstate traffic?

A. In my judgment the physical extra cost will be found to be four to six times greater in the intrastate than in the interstate.

Q. I understand, Mr. Doddridge, you have been referring heretofore to the cost of conducting freight traffic?

A. Yes, sir.

Q. And this statement just made by you refers to the cost of conducting that class of traffic?

A. Yes, sir, freight traffic.

Q. Is there any difference in the cost of transporting state and interstate passengers?

A. Yes, sir.

Q. What are the reasons that constitute or cause that difference?

A. The general principles affecting the ratio of extra cost, short haul freight traffic, applies to the short haul passenger traffic; but not in so pronounced a degree, as the elements of weight and time are absent.

The length of the journey of each state passenger upon the St. Louis Southwestern Railway, for the year ending June 30, 1908, was 23 miles.

1350 The length of journey of each interstate passenger was 121 miles.

Therefore, to produce an equal number of passenger miles 5.3 state passengers were handled to one interstate passenger.

For the St. Louis Iron Mountain & Southern Railway the average journey was for a state passenger 30 miles.

And for an interstate passenger 118 miles.

To produce an equal number of passenger miles, 3.9 state passengers were handled to one interstate passenger.

The use of two terminals for each state passenger, which includes ticket sellers, baggage handlers, the maintenance of depots, yard service, light, heat, and in some cases extra daily train service upon the main line, run especially to accommodate local traffic, increases the cost of train service arising from the frequency of stops to receive and discharge the short haul passengers and baggage; which includes the wear and tear of equipment, and the increased road speed to make scheduled time; the constitutional requirements providing for separate depot accommodations in coaches.

The increased casualty cost arising from the increased number of passengers boarding and alighting from trains at stations.

The carrying of passengers upon mixed trains.

1351 Q. Those are all elements which you think enter into this increased cost?

A. Those are all elements upon which the extra cost is based.

Q. Are there any other elements that cause extra cost in the carriage of intrastate passengers, such as stations, yard service and things of that sort?

A. I have referred to those elements in a general way.

Q. What do you think is the difference in cost, Mr. Doddridge?

A. In my opinion the proportional extra cost in Arkansas will range from twenty to thirty per cent.

Q. Mr. Doddridge, in the statistics giving the difference in length

of haul as between intrastate and interstate traffic, I understand that the length of the interstate haul represents that part that is within the state of Arkansas:

I want to ask you if the length of haul in the trans-state and all interstate transportation would not be shown to have been greater, if it had been stated with reference to the entire haul from the point of origin to destination, including that part of it which lies without the state as well as that which is within the state?

A. Yes, sir, the length of haul of trans-state freight is, of course, much greater than the length stated in these statistics that
1352 have been filed in this case.

Q. Isn't that true of all interstate hauls?

A. Yes, sir.

Q. You have in your testimony in this case referred to the difference in length of haul as an important element in determining the difference in cost:

In order to get the full effect of that difference would not it be proper and necessary, so far as the interstate business is concerned, to consider the entire length of the haul from its beginning to its termination, in order to compare properly the relation of its cost with the relation to the local haul, all of which, from its beginning to its termination, is shown in the statistics in this case.

A. I believe that is true, but, of course, I would have to take into consideration the total expense of the entire length of haul.

Q. Is not the difference in cost of operation that grows out of the long and the short haul reflected as to every part of that haul, every mile of it, without regard to state lines?

A. Yes, sir.

1353 Q. How do you think the taxes assessed and collected in the State of Arkansas on the property of the Railroads, should be divided between State and interstate traffic, for the purpose of ascertaining the relative cost of those two classes of traffic?

A. I think the apportionment of the taxes should be based upon the relative amount of property used in the transaction of the different classes of traffic.

For instance, if the proportional use of locomotives to produce a given number of ton miles is found to be 4, 5 or 6 times the number of cars used to produce a given number of ton miles, ten or twelve, as indicated by the length of the hauls and the terminal use.

And in the use of the track, if two tons of tare weight is required to produce a commercial ton mile of state freight as to one-half that amount to produce a ton mile of interstate freight, it would seem to me that the taxes should be divided upon the average proportions made up by that method.

Q. The result of that method of division would be to divide the taxes in proportion to the expense of operation, wouldn't it?

A. Yes.

Q. That is the method adopted by Judge Van De Vanter in considering these questions, at the time application was made for an injunction, at St. Paul: in your opinion, is that the correct method?

A. Yes, sir.

Q. You base, as I understand it, upon the relative contribu-
1354 tion of the different facilities towards the service rendered?

A. Yes, sir, that is my general idea; the facilities that the circumstances and conditions of the traffic make necessary to use.

Cross-examination.

By Mr. HILL:

Q. Mr. Doddridge, when did you say you quit the railroad service?

A. I quit the service of the Missouri Pacific Railroad in the year 1900.

Q. Have you had any practical railroad operating experience since that time?

A. Yes; that is, I have not had a position of that character since then, but I have had more or less railroad work continuously since then.

Q. What was the nature of the work?

A. Well, I was connected with a Tennessee Railroad; I built a road over in Tennessee, about thirty miles long, and spent one year at that.

Q. That was not operation, that was construction, was it not?

A. It was both construction and operation. We were operating some railroad over there at the same time.

1355 Q. It bursted, did it not?

A. Yes, I believe it did. I left it, anyway, before it happened.

Q. Was the bursting on account of your leaving, Mr. Doddridge, or other causes?

A. I don't know; I can't tell you.

Q. What other railroad experience have you had since 1900?

A. Well, sir, I spent a couple of years surveying a trans-continental line to the Pacific Coast.

Q. That was not operation, was it?

A. No sir; and I made examinations for certain people of a number of railroad properties, and made reports on them. In other words, I have been engaged in special railroad work, but not direct operation.

Q. You were employed by the Missouri Pacific in the Missouri rate cases, were you not?

A. Yes.

Q. You attended practically all of the sessions of that hearing, did you not?

A. I attended a great many of them; I did not attend all of them, but a great many of them.

Q. You were in constant attendance at those hearings, though, whether in daily attendance or not?

A. Yes.

Q. You acted in an advisory capacity towards the counsel and the other expert witnesses in that case, did you not?

1356 A. I acted as an advisor to the counsel and discussed some of these questions with a good many of the witnesses.

Q. You have occupied the same relation in this case, have you not?

A. Well, yes, but I have not had any conferences with any witnesses in this case.

Q. You have attended all of the sessions of this hearing, I believe, have you not?

Mr. MOORE: He means before the Master, Mr. Doddridge.

A. Yes, in St. Louis, since you have been here.

Mr. HILL:

Q. You have followed very closely all the testimony given?

A. Yes.

Q. And taken notes of it?

A. No, I have not taken any notes, that I know of.

Q. Is not a good part of your testimony that you have been giving, a copy from your Missouri case testimony: have you not read from that here?

A. I have been engaged by the railroads (since the Van De Vanter injunction), more or less in this case; following it up and making examinations of statistics and figures, with a view of qualifying myself in the premises; and the general conditions underlying the handling of local and through business are the same, whether it is in the state of Missouri or Arkansas and so, of course, in testifying as an expert on that line, I would naturally use the same
1357 general expressions and reasons as in the Missouri case.

Q. I am not criticising you for using it; I am just asking if it is not a fact?

A. I did not copy this from anything in the Missouri case, because I haven't a copy of the testimony. It is my memory——

Q. It is substantially the same?

A. Yes, it is substantially the same.

Q. You have made various additions to your former testimony about matters that have been brought out in this hearing, have you not?

A. No, I don't know that they have been brought out—I say I have not followed the Missouri testimony. I have changed my views somewhat since that testimony was given, which is over a year ago.

Q. On what have you changed your views, Mr. Doddridge?

A. Well, for instance, in the Missouri case the preparation dealing with these various elements was not as clear as it is made now. While in our testimony in that case we covered the same ground, we did not state it in the same precise way.

I think in this case the elements of extra cost are more clearly expressed.

Q. Do you mean in fact, or in the languge of the witnesses?

1358 A. You asked me if I had improved or added to my testimony that I gave in the Missouri case, and I say that it is given after more consideration, and, I think, in better form.

Q. In other words, you are better satisfied with your testimony that you have given here, than you are with that given in the Missouri case?

A. Yes.

Q. You have also been employed by the railroads to represent them in this same capacity in the Oklahoma rate cases, have you not?

A. Yes, sir, but I haven't represented anybody——

Q. You haven't got to that point yet?

A. No sir.

Q. You expect to do so, under your employment?

A. I expect to do so.

Q. You made an affidavit before Judge Van De Vanter when this injunction was obtained, did you not?

A. Yes sir.

Q. I want to call your attention to this statement:

"The difference in the expense of conducting intrastate and intertsate passenger traffic is not so great as it is in freight traffic, but there is no doubt that the expense of carrying intrastate passengers is from fifteen to twenty-five per cent greater than the cost of carrying interstate. I say that fifteen to twenty-five per cent because I desire to be conservative in my estimate. My opinion is that the excess cost is not less than twenty-five per cent."

1359 I notice in your testimony this morning you have raised your sights a little, have you not?

A. Yes sir.

Q. Is that the result of your later investigation into——

A. Yes sir, giving the matter more careful attention.

Q. It has gone up above five per cent, then, in a year, according to your opinion?

A. No, I don't think it has gone up. I think it is the same as it was a year ago, but I don't think I understood it so well then. I think I am better qualified to say twenty to thirty per cent now, than I was at that time.

Q. You haven't done any operation since that time?

A. No, but I have had a chance to examine statistics. I understand what the statistics mean with reference to operation.

Q. I want to read you another statement from that affidavit:

"That class of business which I would term trans-state shipments is the least expensive of all the traffic conducted by railroads. The trains are made up to the full capacity of the locomotives and cars. As a rule, they make good time, having precedence over all other classes of freight trains, and the crews run, without break or interruption, the full length of the run allotted to them."

Is that a correct statement of the trans-state business?

A. I think it is correct as far as it goes, Judge.

Q. Is this particular statement that "the trains are
1360 made up to the full capacity of the locomotives and cars" a correct statement?

A. Not always.

Q. Not generally, either, is it?

A. Well, generally, in one direction at least.

The sense in which "trans-state" freight is used there means the interstate freight and through service and through trains.

Q. I think not, Mr. Doddridge. If you will look over this affidavit, you will see that it is making a distinction between trans-state and other interstate business, because it goes on——

A. Trans-state is interstate.

Q. Certainly it is, but you are distinguishing your interstate there into trans-state; by that I presume you mean interstate that has a terminal in the state, as contra-distinguished from the interstate that has no terminal in the state.

Mr. MOORE: What is the statement you made just now?

Mr. HILL:

Q. Do you think this statement that trans-state is loaded to the full capacity of the locomotives and cars, is a correct statement?

A. As I stated in answer to the previous question, as a general proposition, yes. Of course, there might be an unbalanced movement of the traffic that would load those trains light one way, which would make a difference.

Q. You heard Mr. McPherson's testimony that something like three per cent of the entire traffic of the Iron Mountain was live stock and perishable freights, did you not?

1361 A. I did not have livestock or perishable freight figures in mind when that affidavit was drawn, and——

Q. I believe it is a little under three per cent that he stated it, if I remember correctly.

A. (Continuing:) —while that class of trains are loaded, as Mr. McPherson stated, fifteen per cent under the potential capacity of the engine—taking into consideration the time that that train is expected to make, I should say that that train was really loaded to the potential capacity of the engine.

Q. The capacity of cars are loaded to about sixty-five per cent, are they not?

A. I don't remember about that.

Q. Is it not in the testimony from him, that about only three per cent of the stock cars are returned loaded?

A. About three per cent?

Q. Yes.

A. Returned loaded after moving another lot?

Q. Yes.

A. That is, there is 97 per cent empty car mileage?

Q. Forty-seven per cent, counting fifty per cent carrying load; three per cent returned loaded, and forty-seven per cent returned empty?

A. That varies under certain circumstances and conditions. I think I can give you an explanation that will give you what

1362 you are thinking about in the matter of the underloading of trains.

I notice that Mr. McPherson in his testimony left out the element of time in his calculations, which is an essential element in considering a question of that kind.

A train that is expected to make an average speed of 25 miles an hour pulling freight, as compared with another train that is expected to make an average speed of 15 miles an hour (which is the potential capacity that the locomotive stands), while the locomotive is underloaded fifteen per cent as against the 15 mile schedule, she is fully loaded as to the 25 mile an hour schedule.

Q. Let us talk about that time element a little bit.

A. That is an explanation, you know, of what is meant when we speak about a train being fully loaded——

Q. When you are handling this trans-state livestock and trans-state perishable stuff, don't you have much idle time of your engines, waiting for trains at the division points?

A. That depends entirely upon the management of the road, and the care with which those matters are adjusted and arranged.

Q. Did you not hear the testimony of Mr. McPherson, quoted from the Texas Cattle Dealers' case, to that effect?

A. No, I don't think I paid much attention to that; I did not notice, particularly.

1363 Q. That is a fact, though, that that occurs in that kind of traffic?

A. Sometimes I guess there is, in the cattle business.

Q. The same thing would be true in the perishable freight business, would it not, but possibly in a lesser degree?

A. I don't think it would be so great, because those fruit trains would probably——

Q. That enters into it, does it not?

A. To some extent, yes.

Q. Another element of time has been testified to by Mr. McPherson, in the Cattle Dealers' case: that these fast trans-state trains lay out the local trains and cause them to lose time, and for their employés to earn overtime; that is a fact, is it not?

A. Well, that depends entirely on the transportation management of the railroad; it may be a fact and it may not, on a well managed, good trunk line railroad——

Q. You heard Mr. McPherson's testimony to that effect, as quoted from the Texas case, did you not?

A. I may, in a general way, but I did not pay strict attention.

Q. He ought to know whether or not that is a fact on the Iron Mountain road?

A. I think so, yes, sir; if he said so I have no doubt in the world that it is so on the Iron Mountain Railroad.

Q. If you don't recall it I will give you the quotation

1364 from the testimony here.

A. I don't recall it in particular; I paid but very little attention to it.

Q. Well, we will assume that he stated that; the record shows. That would be a fact, then, that that is an element of lost time?

A. Yes.

Q. That would be charged to that trans-state train, at least partially, if not wholly, instead of being charged to the local train, would it not?

A. Yes, that would be part of the expense, really, of the fast train and chargeable to it.

Q. Reading from affidavit:

"As a rule, they make good time, having precedence over all other classes of freight trains, and the crews run, without break or interruption, the full length of the run allotted to them.

In that class of transportation the trains, as a rule, carry loads in both directions and those carrying revenue producing tonnage. The amount of dead tonnage, such as empty cars and partially loaded cars, is very small on that class of trains and which circumstances very materially reduce the cost of operation as compared with every other class of freight traffic."

Now, I ask you if it is not a fact that livestock, perishable
1365 goods (and by that I am including fresh meats, and things of that kind), coal and oil, are not large elements in trans-state shipments?

A. Well, if the livestock is but three per cent, I don't think there is a great deal of coal contemplated in that statement.

Q. Don't you handle a lot of coal from Illinois to Louisiana and Texas?

I did not say the livestock was three per cent; I said the livestock was a little short of three per cent——

A. It is a part of the trans-state business——

Q. Now I have added coal and oil to that.

A. I presume there is a large amount of that kind of business moving as trans-state freight, but——

Mr. MOORE: I want to call his attention to the fact—as you have called his attention to the percentage of the perishable goods—that, as I recall it, Mr McPherson said there was very little of that Illinois coal shipped on the Iron Mountain road, and gave the reason for it. I call attention to that now, to save going back to it on re-examination.

Mr. HILL:

Q. Is it not a fact that these various items we have mentioned, livestock, perishable goods, oil and coal, are shipped in cars where there is the least return movement of any other class of freight; filled movement, I mean, I don't know the technical term. Perhaps I should have said loaded movement.

1366 A. I think that is correct as to livestock, but I am not certain as to the coal cars that go down to that southern country. I think they are, partially at least, loaded back with products of the forest; oil cars, of course—if you refer to tank cars?

Q. That is what I mean.

A. They run one way empty, I presume, all the time; they make 100 per cent of empty car mileage.

Q. The refrigerator cars are very near the same?

A. During my administration, we loaded refrigerator cars when

we could, with certain kinds of freight, but in the movement of a refrigerator car it is necessary to return it to the shipping point within a specified time, and if we could not find a load for it, it went back empty.

Q. I believe Mr. McPherson put that about forty per cent empty. I suppose that would be correct?

A. I suppose the same system is in vogue now.

Q. I think he put the coal car movement at thirty-five per cent, empty.

A. I don't know; I was not paying attention. I know that the coal cars are loaded back, part of them, but——

Q. It would be something like that; would that be your judgment?

A. I should judge that was right.

Q. Taking that in connection with the matters to which I have called your attention, can you not state that these classes of
1367 trans-state freight that I have mentioned, have a larger empty return movement than any other class of freight?

A. I guess that is true, in a general way.

Q. That is a large factor in determining the cost of the different classes of freight, as between trans-state, interstate and intrastate, is it not?

A. Of course, it enters into it, but in determining the differences I, of course, do it by a general system of averages.

Now, you selected certain kinds of freight that are carried in cars for which there is no back loading; if there was, of course those cars would be loaded; but taken in its entirety, I don't believe it affects the grand result very much.

Q. It does affect it some, though, doesn't it?

A. It does some, yes, sir, as far as it reaches.

Q. I understand you predicate your judgment on the extra cost, largely upon the short haul in the state, and two terminals: is that correct?

A. I predicate it on the circumstances under which the business is handled; the relative length of the haul, and the double terminal cost; the necessary use of extra equipment; it produces an equivalent number of ton miles.

Q. That all goes to the length of haul; is it not included in that proposition?

A. It goes to the length of haul, yes; and then there is a corresponding additional use of motive power, on account of the circumstances under which the business is handled; the fact
1368 that the bulk of the state business is on the local train, and the local train engine and crew does the station switching along the line. That contracts the length of the daily run. Then, the character of the business requires it to be done in daylight. It cannot be done continuously, day and night, as the other business is handled.

It is all those elements (and perhaps some others, that I have not thought of), that go to make up the difference in the ratio of cost.

Q. What do you estimate the terminal cost per ton to be?

A. I cannot qualify on that, as I have no figures whatever.

Q. Did you not testify in the Missouri case that you put it at about ten cents per ton?

A. I don't remember; I might have; I filed in the Missouri case—I will make this statement, that I obtained certain information from tests which we made on that road, and filed an exhibit giving the results of that test, and if that is in my evidence, that is what it amounted to. That would be the station cost, I take it——

Q. Was not that yard expense this terminal, like Kansas City and St. Louis?

A. As I remember it we did not figure up——

Q. I will look that matter over. I may not have it right.

A. I was going to say that we did not figure up the total
1369 terminal expense.

Q. You have put in here, fifteen and twenty per cent: I presume you mean for operation?

A. Of the total expense of operation.

Q. What do you mean by your term "operation" in the technical sense?

Mr. MOORE: You are speaking of his statement, that the terminal expense was fifteen to twenty per cent?

Mr. HILL: Yes; I want him to define the term "operation."

A. The term used there—the sense which I give it, means the total expense of operation as shown as the operating expenses of the railroad in Arkansas.

Q. It does not mean transportation?

A. No.

Q. You mean a broader term than "transportation?"

A. Yes.

Mr. MOORE:

Q. Do you mean the total, or total freight expenses?

A. We are talking about the total expenses, because the passenger has terminals, as well as the freight.

Mr. HILL: We are talking about freight now. We will take up passenger later.

Q. I want to call your attention to the fact that this would necessarily differ in Missouri and Arkansas.

A. The conditions are very different, yes sir.

Q. There are no terminal expenses in Arkansas that would compare with those in St. Louis, Kansas City, and St. Joseph,
1370 are there?

A. The terminal expenses in the state of Missouri are much greater than they are in the state of Arkansas. As I remember, the terminal expense in Missouri is twenty-five per cent of the whole, as given in the testimony in the Missouri case.

Q. And you reduce your estimate here from fifteen to twenty?

A. I reduce it in Arkansas; I would say not more than fifteen or twenty. I don't know exactly; I am estimating it.

Q. I want to ask you about the physical condition in Arkansas: you have heard it developed here that all of the traffic going into Arkansas from Memphis is interstate, but it is charged up here as an operating expense of Arkansas.

You have also heard it brought up that Fort Smith is an interstate point.

I want to call your attention to that fact, and ask you if it is not a fact, if (owing to all the interstate traffic in and out of Memphis and in and out of Fort Smith having two terminal expenses incurred in Arkansas) there is a different situation presented on this question there, than there is elsewhere?

A. There is a different technical situation.

Q. Let us see if it is technical. You and Mr. McPherson both used that term.

1371 You have charged that as interstate business here. It is treated as interstate business and the earnings are carried into the interstate account. You have interstate freight here that you say has only one terminal, while as a matter of fact, all of your interstate freight entering Arkansas from Fort Smith and Memphis, has two terminals in the state.

A. I should say that if the earnings and expenses are treated in the accounts as you state, that that part of the interstate business—that that percentage of it, whatever it may be, would be chargeable to two terminals.

Q. You heard Mr. Roth and Mr. Johnson state here, that that was treated in the Iron Mountain, as I have stated, did you not?

A. Well, I don't suppose there is any question about it if you say so, because that is simply a question of bookkeeping, and under those circumstances it has——

Q. Their exhibits show that; there is no dispute about that, I take it, Mr. Moore, is there?

Mr. MOORE: I suppose not.

Mr. HILL: There is no use hanging on a point that is admitted by everybody.

Q. Taking that as settled, then, it is not a technical distinction as you and Mr. McPherson are seeking to make it?

A. What I mean by the word "technical" is this:

To all intents and purposes, Memphis is legally an interstate point, as I understand it; but practically, from a phys-

1372 ical operating standpoint, it has all the attributes of a local terminal to Arkansas, because there is no mileage connected—there is no railroad connected with it that makes any earnings, except the lines in Arkansas.

Q. To make that sort, I agree with you entirely, that it is technical as a legal proposition, but as a practical proposition you have treated that in your case here as interstate shipments, and necessarily so——

A. I did not understand that to be the case with the local Arkansas shipments.

Q. Every shipment in or out of Memphis, and in and out of Fort

Smith, except the shipment from Greenwood to Fort Smith, are interstate shipments in these exhibits.

A. I did not appreciate that.

Q. I did not suppose you did and that is the reason I want specifically to call your attention to it. If you are not satisfied with that, there is Mr. Johnson; ask him if that is not a fact.

A. I am perfectly satisfied with your statement, Judge, as to my answer; because if that is a fact, then of course that business, as far as it goes, has two terminals in the state, although it is an interstate movement.

Q. That is the point I am getting to: now with two terminals in Arkansas, on the volume of business passing through Memphis, and the volume of business in and out of Fort Smith (with the trifling exception of the Greenwood business), don't you have to
1373 modify your estimates on the comparative expense of interstate and intrastate business in Arkansas?

A. So far as it would be affected by that particular thing, but of course, I based my estimates on the figures and the lengths of hauls that have been submitted.

Q. I understand your general proposition. I don't think this interferes with your general proposition, except that we are meeting a practical situation and I want you to apply your views to a practical situation, not to theoretical ones.

A. I don't know what that would amount to, that traffic as applied to the whole traffic of the state of Arkansas, and my statement as to the extra cost has a varying limit, and it is only an approximation of general judgment, at best. Therefore, I don't think that that would affect it very much, unless on——

Q. Don't you know that the traffic from Memphis and Fort Smith to Arkansas, is a very large volume of traffic?

A. I judge it is; I suppose so.

Q. Isn't Memphis the largest distributing point for the state?

A. I don't know that.

Q. It was when you were operating over there, wasn't it?

A. No, I think not. I think Little Rock was a larger distributing point than Memphis. Of course, Memphis has grown very much since then, ten years ago.

1374 Q. You are familiar with Fort Smith, particularly as to the manufacturing industries there, in the last ten years? You see, I am from Fort Smith, Mr. Doddridge, and I can't omit putting in something about the growth of the city.

A. Well, the truth of the matter is that all of that country and all of the towns, have developed very much.

Q. Without knowing the exact percentage, you know there is a large tonnage out of Memphis and out of Fort Smith, do you not?

A. Yes sir, I suppose there is; there is no doubt about that.

Q. Is it not such a tonnage as would materially affect the traffic of the state?

A. Yes, I suppose it would.

Q As to the extent of that traffic, there are two terminal expenses

incurred in Arkansas, and as to that traffic, there can be no difference in respect to the terminal cost, than your intrastate traffic?
A. No, so far as the terminal expenses are concerned.

Mr. MOORE:

Q. Have you any idea of what the terminal expense on freight shipped out of Memphis is, Mr. Doddridge; have you any knowledge or idea of what the proportion is, to the ton?
A. No sir.

Mr. HILL:

Q. You say you made a test on the Cotton Belt—in October, 1908, was it?
A. The Cotton Belt Company made a test.
1375 Q. under your direction?
A. Well, no, under Mr. Kimbell's direction.
Q. You had a hand in it, didn't you?
A. Yes sir, I had something to do with it; I wanted the test made.

Mr. MOORE:

Q. What did you have to do with it?
A. I say, I simply wanted it made to determine——
Q. You mean you suggested it?
A. Yes.

Mr. HILL:

Q. Do you think the test of one month's operation would be fairly representative of the entire year?
A. I think in this case that it would be representative as to the relative proportions of the different kinds of business, for the reason that the month of October, 1908, was one of the heaviest months of the year, and considerably above the average twelve months, probably.
The main purpose in making this test was to determine the average relation that one class of business bore to the other, and if the business of the road was lighter in a subsequent month, the chances would be more than likely in favor that the relative proportions would remain pretty near the same.

1376 Cross examination of W. B. DODDRIDGE, continued as follows:

By Mr. HILL:

Q. Mr. Doddridge, you have spoken of the classification of freight; the classification made on account of the difference in the classes carried.
I will ask you if this is not a fact: that the classification of freight moving in all territory west of the Mississippi River is governed by the western classification unless otherwise provided?
A. Yes, sir, I so understand it.

Q. The exceptions to the general rule are always local, aren't they?

A. I think you are right, although I am not familiar specifically with the practices in that respect.

Q. The minimum weights of carloads are also fixed by classification, aren't they?

A. I think they are.

Q. Is not this classification reasonably stable and in the main it has been fixed for many years?

A. Yes, sir. It is a growth of 35 years, to my
1377 knowledge, in the western country.

Q. For the last ten years, you might say, the changes in the western classification have been minor, and to meet a local difficulty here and there: isn't that a fact?

A. It has been revised along from time to time. I remember to have used the western classification in the seventies, on the Union Pacific Railroad.

Q. But the part I am getting at is this: in its main features, the main classification, have been stable, say for the last ten years, with just sum minor exceptions as are necessary to meet some local conditions here and there: isn't that a fact?

A. As a general proposition, I think it is, although I am not sufficiently familiar with the changes that have taken place in the western classification to testify with exactness on a point of that kind.

Q. But what I have stated is the way you understand it.

A. Yes, sir, that is the way I understand it.

Q. The great bulk of the traffic is moved under the western classification, and under its minimum, isn't it? I mean the great bulk of the traffic west of the Mississippi River?

A. I so understand it, yes.

Q. The classification of commodities affect materially the rates, do they not?

A. Yes, sir.

1378 Q. And, necessarily, the revenue?

A. Yes, sir. It is a part, really, of one of the methods of making the rates.

Q. Suppose while the western classification as to interstate traffic is unchanged, the Arkansas Commission should take out of the western classification various articles and add them to the commodity list, thereby resulting in a reduction of revenue on the intrastate traffic, then, would it not follow under your revenue theory that there would be a proportionate decrease of expense charged to the intrastate traffic in the division of the expenses of traffic between intrastate and interstate?

A. That would be the effect, yes, sir.

Q. Suppose there was a decrease by the Commission of the minimums of carloads, it would have the same effect, wouldn't it?

A. Yes, sir.

Q. East of the Mississippi River there are several classifications in effect, aren't there, instead of all being governed by one classification?

A. There is at least one or two classifications east of the river.

Q. Aren't there several more than that?

A. There may be. I am not informed as to that.

Q. You have operated in Tennessee; what were you governed by there?

1379 A. The road I operated in Tennessee was a local property and was handled under the local classification; and I do not know whether it was——

Q. Was not that an adaptation of the southern classification to meet your local conditions?

A. I suppose so.

Q. Is not the official classification east of the river? Are you familiar with that?

A. No, sir.

Q. Applying in central association and trunk line territory?

A. I am not informed as to the particular details in that respect.

Q. Are you informed of the southern classification, south of the Ohio and the Potomac Rivers?

A. I know there is such a classification.

Q. Are you informed as to the Illinois classification applying in Illinois and Wisconsin?

A. No, sir.

Q. You do not know whether these have a fixed classification in all of them, or whether they vary materially?

A. I know the classification east of the river, the so-called southern classification, is different from the western classification, and it arises out of a necessity to meet the conditions that prevail in those sections of the country and the different character of the traffic handled.

1380 Mr. HILL: Mr. Flippen is here, Colonel Moore, and if you have no objection I would like to ask him what classifications prevail east of the Mississippi River. Just in this connection I would like to get that information.

Mr. MOORE: I have no objection to your asking Mr. Flippen.

Mr. HILL:

Q. Mr. Flippen, I wish you would explain what classifications exist east of the Mississippi River?

Mr. FLIPPEN: In the territory east of the Mississippi River and south of the Ohio, the southern classification prevails.

In the territory north of the Ohio River and east of the Mississippi River, on general interstate traffic, the so-called official classification prevails.

You have in the state of Illinois what is called the Illinois classification, which applies on strictly local traffic. It is approved by the Illinois Railroad and Warehouse Commission.

Q. That applies in Wisconsin too, doesn't it?

A. I don't think it does. Wisconsin may have a separate classification on intrastate traffic, but I am not informed definitely on that. I do not think the Illinois classification applies in Wisconsin. In fact, I am quite sure it does not.

The official classification is the one that generally prevails in the

territory north of the Ohio River and east of the Mississippi
1381 River. And the western classification prevails west of the Mississippi River to the Pacific Coast.

Q. These classifications differ widely?

A. Not necessarily.

Q. I am not asking about necessarily but as a matter of fact?

A. No, sir.

Q. They do not?

A. No, sir, they do not.

Mr. HILL:

Q. Mr. Doddridge, when the Iron Mountain road is one of several connecting carriers,, say is the middle carrier on trans-state freight, in its division of the earnings of that particular trans-state freight with its two connecting carriers, one at either end, is it charged with the terminal costs that are incurred by the other carriers at either end?

A. I am not qualified to answer that question definitely, as I do not know the method of divisions between the lines.

Q. Did you not testify in the Missouri Rate case that the rule was that it was not charged with it; but you thought it would only be fair if it was?

A. In some cases the terminal charge is first taken out of the rate, weher there are conditions that justify it; and I do not remember the testimony I gave on that point in the Missouri case; but I do remember the practice that existed.

1382 For instance, between Omaha and San Francisco, where a terminal charge was taken out at Omaha and a terminal charge taken out at San Francisco; as I recollect it, it was 5 cents a hundred pounds. And I think it was a proper charge in that case, and I presume I had that in mind, or something similar, if I testified on that point in the Missouri Case.

Q. It seems to be understood here, in both the question and the answer given in the Missouri Case, as I read it, that the middle road in the illustration I gave you would not bear any part of the terminal expense. But, you are testifying here that it would be only just to do it: is that correct?

A. That it would be only what?

Q. Only just to do so.

A. If the circumstances and conditions were such as to justify it. Where some extraordinary condition obtains, as in the case I cited, between Omaha and San Francisco, where there was a special expense in transportation, the railroads first took that out, for the purpose of compensation; and in such cases I would say it would be proper to do that.

Q. But, as a matter of fact, in such an illustration as I give you, there is no division made of terminal expense, is there? The rate would be divided on a mileage basis between the three roads.

A. That I understand to be the ordinary method.

Q. That is what I am getting at. I am speaking of the ordinary, general rule, and not of exceptions.

1383 A. Yes, but as to the exact practice prevailing on the Iron Mountain road in the division of its rates between connecting lines, I am not informed as to the details.

Q. I am asking as to the general proposition. That is what I am getting at, the general proposition. It is ordinarily divided, in the illustration I gave you, upon a mileage basis, without consideration of the terminals?

A. That is true, I think, as an ordinary proposition.

Q. Of course, we can wander into a great many exceptions to every-

A. I think you are right, as to the general practice.

Q. See if I state this proposition correctly:

The long and short haul clause of the interstate law, as construed by the Interstate Commerce Commission, permits cheaper rates at competitive points, like St. Louis and Memphis, while authorizing higher rates at intermediate points?

A. I so understand the proposition.

Q. Much traffic and travel is handled in that way, isn't it?

A. Yes, sir.

Q. In fact, a very considerable portion of the entire interstate traffic is handled upon that principle, as I have stated it, isn't it?

A. Yes, sir.

Q. This is particularly true in the Mississippi Valley, where they have competition with the Mississippi River, the Arkansas

1384 River, the Ohio River and other river points, isn't it?

A. Yes, sir, I so understand it.

Q. Does that traffic so handled reflect the cost of service, do you think?

A. I don't just understand what you mean.

Q. I mean, going back to your proposition, the different earnings from the traffics, where the tariffs are arranged in that way, do they reflect the cost of the service performed?

A. It does not reflect the cost of the service with exactness, or what I mean is the relative cost of the service, in a regular ratio.

The cost of the service, of course, is considered as one of the factors in the making of rates.

Q. It is not, when you meet river competition, is it?

A. It is one of the factors. There is compensation in some direction?

Q. But not in the rate?

A. That amount is the first or prime reason.

Q. I understand. For some commercial conditions or——

A. Other conditions are supposed to compensate in a measure; or what I mean to say is, the individual cost or the physical cost of a shipment is not the prime factor in the making of the rate.

Q. But that is especially true of competitive rates; it is a less factor there than anywhere else, isn't it?

1385 A. That is the reason why that condition exists. It is on account of the competitive conditions.

Q. When you come to fix competitive rates, particularly such as at Memphis and St. Louis, the cost of the service is really a negligible quantity, to use Mr. McPherson's word, isn't it?

A. Not to take the traffic as a whole.

Q. I understand your position, but I am speaking of fixing the rate itself.

A. That particular rate, of course, the physical cost of the transportation of that particular commodity or shipment is not the prime moving factor; it is a secondary consideration, but there is a compensation.

Q. You might say it is a negligible consideration, when you come to meet the competition at such points as I have named.

A. It depends upon what the word "negligible" means. I do not mean to say the cost is altogether ignored; that is what negligible would mean.

Q. I believe you stated in the Missouri Case that the cost between state and interstate traffic on the Missouri Pacific Railroad could not be accurately determined without using an arbitrary percentage, based on opinion and judgment: is that correct?

A. That is true, yes.

Q. You regard the revenue theory, then, as an arbitrary
1386 percentage based upon opinion and judgment, do you not?

A. Yes, sir.

Q. I believe you also stated in that case that it was not accurate: did you not?

A. Yes, sir.

Q. And you said it was not scientific?

A. No, sir. I do not think it is scientific.

Q. But still it is right?

A. It is the best method or plan, in my judgment, for the purpose, which has been suggested.

Q. Well, the only purpose I know of its being used for, so far as I have been able to discover, is a litigation purpose: it is not used for anything else, is it?

A. It has never been necessary to ascertain definitely or accurately the difference in the cost of transportation as between the state and interstate traffic, divided by state lines. It has been always considered as between the through and the local business. It has been figured in numerous ways, for practical purposes or for practical reasons.

For instance, suppose the question of reducing the grade lines of the railroads came up for consideration and an estimate was made as to the cost of bringing the potentiality of the railroad, say from a one and ½ per cent maximum grade to a .5 per cent grade. To know definitely whether an investment of a certain amount of
1387 capital would be justified in bringing about this changed condition, the effect that would be produced by such an investment would have to be known.

For purposes of that sort, and investigations as to the relative cost of the two classes of traffic have frequently been made.

They were made upon the St. Louis, Iron Mountain & Southern Railway by myself, prior to the rate reduction which took place in the last seven or eight years.

And then it is in the economies of operation, transportation officials necessarily keep track of these differences in conditions, where the traffic officials of railroads looking at the general results would

not pay very much attention to the differences in the physical cost, in the details. They deal with those questions more as looking to the aggregate results.

Q. I don't know that I follow you: do you mean to say you keep this revenue theory in the form of statistics?

A. No, sir, I did not say that. I said when it became necessary to ascertain the relative differences in the cost, divided by state lines, which grew out of the state regulation of railroads, then some plan or system was necessarily invented for arriving at the results.

Q. That is what I asked you, if this was not used purely for litigation purposes?

A. Yes, sir. This method was developed in consequence of litigation and state regulation.

Q. Probably I should have made my question a little
1388 broader and included state regulation. If I had done so, that would have been right?

A. I have answered the question at length and given it as I understand it.

Q. The revenue theory is used for no other purpose than that?

A. No, sir. I think it is used for other purposes under some circumstances, but in making a division of expenses or arriving at a division of expenses upon a railroad as a unit, I do not know that it is used.

Q. I want to call your attention to this statement in your testimony in the Missouri case, about the ton mile theory:

The question is "the ton mile theory is valuable and is used frequently, is it, as a method of comparison."

A. "It is used for the purpose of testing, perhaps, the efficiency of operation of a railroad. It deals only with the revenue part of the business, the freight. Of course, the freight carried produces a certain kind of product and when it is measured where there is no necessity for making a distinction between one kind of freight and another kind of freight, the ton mile does very well."

Is that correct?

A. I think that quotation is not exact as you read it.

Q. Look at it.

A. (The witness here examines the original record re-
1389 ferred to).

Q. You have read that? Is that correct?

A. Yes, sir.

Q. Is there any explanation you would like to make of it?

A. I believe I would like to have that before me. (Witness examines record referred to.)

This answer is correct with the exception of the word "revenue" part of the business means the freight. The answer I think is obscure as to just what it means.

Q. Read the whole sentence there. I think it is clear.

A. It reads: "Q. The ton mile theory is valuable and is used frequently, is it not, as a method of comparison?

"A. Yes, it is used for the purpose of testing perhaps the efficiency of operation of a railroad. It deals only with the revenue part of the business, the freight.

Of course the freight carried creates or produces a certain kind of product and when it is measured, where there is no necessity for making a distinction between one kind of freight and another kind of freight, the ton mile does very well."

Q. Here is another statement taken from your testimony given in the Missouri Case:

"Q. And that is why, Mr. Doddridge, the accountants and statisticians and railroad managers resort to average results on all business for a considerable period of time? If the expense was
1390 the same, and the revenue was the same, in every instance, there would be no necessity for averages, would there?

A. No, sir.

Q. Those statements of the average cost per ton mile, I believe were made up more for the purpose of testing the general prosperity of the railroads, or more for financial reasons than for operating reasons: is that correct?

A. Yes, sir."

You affirm the correctness of that statement of the use of the ton mile statistics, do you?

A. Yes, sir, as given there.

Q. Just what do you mean by "financial reasons."

A. I would take it in that case that I meant if a railroad reported last year that it earned a certain revenue per ton per mile, comparing that with the previous year, or several years, it would indicate the general trend of the business.

It would not necessarily indicate that the rates were higher or lower, but because this unit is affected by the classification of the tonnage which the railroad has handled.

And the revenue per ton per mile might be shown higher when, as a matter of fact, the general rates were lower; or vice versa.

The revenue per ton per mile depends not alone upon the volume of the business or of the rates charged but it depends largely upon the kind of business.

1391 Referring to the Arkansas railroads and to the statistics that have been filed in this case, the revenue per ton per mile for the Cotton Belt is entirely different in its figure from that of the Iron Mountain; and yet the two railroads traverse the same sections of country, in a large measure.

Q. The cost of operation of the two are different, aren't they?

A. Yes, sir. The same elements come in and affect the cost of operation, but there is a difference in the character of the tonnage of the two lines which creates the difference in the revenue or cost per ton per mile.

Mr. MOORE:

Q. Gross revenue, you mean?

A. Yes, sir, the gross revenue.

And the ton mile unit in that case, applied either to the revenue or to the expense, is the average unit and does not mean very much when it is applied to certain purposes.

Q. Applying this question of the volume of the traffic to your local and through trains, your intrastate and interstate traffic, take

it any way; isn't it a fact that they carry the same variety of traffic and, generally speaking, in the same relative proportion, the essential difference being in the length of haul, and the double terminal, as chargeable to the intrastate traffic?

A. Where the volume of traffic of the various commodities is about the same, the main difference arises from the length of the haul and the terminal expenses.

1392 Now, conditions, for instance, on the St. Louis Southwestern Railway and the Iron Mountain road——

Q. I am not comparing the difference between two roads. You take it now on the Iron Mountain road, the traffic, intrastate and interstate is practically the same—I mean the variety of traffic, the kinds of traffic. Whether it is divided into intrastate or interstate, it is still essentially the same kind of traffic.

A. In its general character it is the same kind of traffic.

Q. Of course, the traffic will differ on the Iron Mountain and the Cotton Belt in a measure. And take it on the Southern Pacific it would differ still more: but I am speaking of the Iron Mountain in Arkansas now. The character of its traffic is the same, whether that traffic is interstate or intrastate, isn't it?

A. Well, I would except the coal business on the St. Louis Iron Mountain & Southern, because you have no coal traffic on the St. Louis Southwestern, of any volume.

Q. I was telling you particularly not to compare one road with another. I am talking about the St. Louis, Iron Mountain & Southern Railway.

A. The general average of business conditions of both roads is quite similar, except as to volume and details.

Q. You evidently do not understand my question. It is this, Mr. Doddridge:

1393 Take the St. Louis Iron Mountain & Southern Railway alone, is not the traffic on that road the same kind of traffic, whether it is intrastate or interstate?

A. Yes, sir, it is the same kind of traffic.

Q. And take it on the Cotton Belt road, the traffic on that is the same whether it is interstate or intrastate: there is no difference in the traffic made by passing the state lines, is there?

A. Not a bit.

Q. That is the point.

A. That is correct.

Q. Your analysis of the different classes of freight, interstate and intrastate, is based on your experience and knowledge of the operation of the different kinds of trains, local and through, and the proportion of intrastate traffic carried on each, isn't it?

A. Well, the local train is simply one of the incidents of the extra cost. It is not the whole reason. It is one of the circumstances and conditions of the handling of the short haul business of the railroads.

Q. I think I have allowed for that in this question, if you will consider it more fully.

Previous question is here read.

A. Yes, sir.

Q. So we will understand terms correctly, Mr. Doddridge, in talking to each other, I will ask you if there is any such thing as an intrastate train: that is, an intrastate train which carries exclusively intrastate traffic?

1394

A. There is no such train that I have ever heard of.

Q. There may be an intrastate train, but for the purposes of our inquiry it carries interstate traffic, and has to be considered relatively as to the traffic that is upon it.

A. It carries all kinds of business.

Q. That is true also of all trains, isn't it?

A. Yes, sir.

Q. Intrastate or interstate or trans-state.

A. Yes, sir.

Q. It is a question of the proportion upon each?

A. It is a question of the proportion upon each.

Q. Can any one who has not operated the St. Louis Iron Mountain & Southern or familiarized himself with its physical operation, or who has not (like Mr. Johnson and yourself) studied it from a statistical viewpoint, give an intelligent opinion as to the cost of the intrastate business in Arkansas?

A. Well, an experienced transportation official who has a general knowledge of the conditions of traffic, can give an intelligent opinion as to the general relation in the classes of transportation, with the length of haul and the volume of business, and other things of that character being known.

As to an individual railroad, I should say his knowledge would be very limited, for the reasons that the operating conditions in detail are different upon every railroad. But the fundamental conditions are the same.

1395

Q. I believe there is a little difference between us. I wish you would listen while that question is read to you. I do not believe you quite grasped all of it.

Previous question is here read to the witness.

A. Without studying the statistics of the road, I do not think he could.

Q. I call your attention to this testimony in the Missouri Case which is right in line with that:

"In view of the complicated situation as between through and way points and division points and state lines as they run, isn't it almost necessary to have the judgment of somebody who has practically operated the property itself and is familiar with it?

"A. It would seem to me to be necessary to have that kind of judgment to get at anything like a close approximation."

A. I endorse that.

Q. Is not the only difference in cost of the intrastate and interstate freight carried on the same train, the one of the extra terminals.

A. There is no difference in the cost of one kind of freight or

another kind of freight, arising from a distinction in the terms "state" or "interstate."

If the conditions are the same there would be no difference in the cost.

1396 Q. Take freight carried on the same train?

A. Well, I say, if the conditions are the same; that is, the kind of freight, and all of the other elements that enter into it, there would be no difference arising from the terms "state" or "interstate."

But the conditions must be the same to say that there would be no difference in the cost, because there might be a difference in the conditions. The character of the freight, the weight, and other things.

Q. Take it, the same kind of freight and of the same character, carried on the same train, where is the difference, except in the terminals.

A. There would be no difference in the train cost.

Q. I want to read you your testimony in the Frisco Case: I wish to read this statement made in answer to a question:

"So far as the particular freight is concerned, carried on those particular trains, there would be no greater cost in transportation for interstate freight than state freight, except the terminal charge.

In order to ascertain the results correctly, you would have to take into consideration the amount of state freight that is carried upon that train, as applied to the total state freight carried on the other train.

In other words, what I mean to say is, we have to take into consideration all the trains and find out what relation the state

1397 freight bears to the whole." That is a correct analysis, isn't it?

A. Yes, sir, I think so.

Q. While we are on that point I want to digress a little and call attention to your testimony of yesterday on the one terminal charge on freight handled through Memphis and Fort Smith.

After going through that situation you stated that all of the interstate freight that was handled through Memphis and Fort Smith had two terminal charges in Arkansas, instead of one; as would have been the case but for the peculiar situation of those two cities.

I omitted to ask you if it was not also a fact that in that same freight which is interstate in your accounts here, and which would be intrastate but for the accident of the state line, but which incurs two terminal charges, is also freight which would have the same average length of haul of intrastate freight?

Mr. MOORE: I want to understand what is meant by that question before it is answered.

Do you mean it would, in fact as a matter of fact, have the same length of haul as the intrastate freight, or do you mean in the statistics filed here it is classed with interstate or intrastate length of haul?

Mr. HILL: I am asking as a matter of fact. To make it

1398 a little clearer, there is no difference in the jobbing freight that goes out of Memphis and Fort Smith, than that which

goes out of Little Rock or any other distributing point in Arkansas; that is the point I am calling attention to. That is, so far as length of haul is concerned.

A. Well I don't know how treating this freight as another, different class, would affect the average length of the haul.

I take it the freight out of Memphis and Fort Smith that distributes in the State of Arkansas, the length of haul would probably be the same as other intrastate freight moved under similar conditions.

Q. Then it would follow from your statement there and this statement of today, that so far as the interstate freight moves in and out of Memphis and Fort Smith, it would be as expensive as the intrastate freight of like volume that moved out of Little Rock?

A. Of like volume and conditions yes. The ratio of cost would be substantially the same.

Q. In your testimony of yesterday I find this statement (page 763):

"The use of two terminals for each State passenger, which includes ticket sellers, baggage handlers, maintenance of depots, yard service, light, heat and in some cases extra daily train service upon the main line, run especially to accommodate local traffic,
1399 increases the cost of the train service arising from the frequent stops to receive and discharge short haul passengers and baggage."

I want to ask you if ticket sellers is an expense that is incurred for a passenger at both terminals?

A. No sir. The ticket seller sells tickets at only one end, generally.

Q. That is a mistake when you included that as an item?

A. If I put it in and it reads that way, of course I did not mean it that way.

I mean in those terminals the general expense of the stations includes those various items as parts of the expense.

Q. You would have to have that ticket seller there for both intrastate and interstate passengers wouldn't you?

A. Yes sir.

Q. There would be no difference in the question of cost on the ticket seller part of the proposition would there?

A. Except for the Arkansas part of the general expense of the terminal.

Q. You have also in that quotation I have read you included the question of yard service charge as two terminals for each State passenger: there is not any yard service say between Morrillton and Plummerville is there?

1400 A. None that I know of.

Q. That is not a fair element to be included in this is it?

A. Yes sir, taking the State as a whole there is yard service in connection with passenger trains at the ends of the runs.

Q. At division points?

A. Yes sir at division points. And that yard service of course, that part of it which is attributable to passenger trains, is a part of

the terminal service and it should be included as a part of that expense.

Q. Is not that incurred by all passengers, both state and interstate?

A. Yes sir.

Q. If you did not run local trains you would have to stop your through trains to take up your local passengers, wouldn't you?

A. Yes sir, it would probably be impracticable, to make the time with the fast trains and do that business.

The reason why the local train is run, is for economical reasons.

Q. It is a feeder for the through train, isn't it?

A. Yes sir, it acts as a feeder for the through train.

Q. If you did not have local trains stopping at all the stations, you would have to devise something like a mail crane to take on and off your local passengers, wouldn't you?

1401 It is necessary to make these stops to do the business.

The stops, of course, are not made always for the purpose of taking on passengers or discharging passengers. The stops sometimes are for other purposes, such as to distribute mail and express, or to take on that character of stuff.

But the short haul business does entail numerous extra stops and these stops cost something.

Q. It is not right to charge all of that to the local train, is it, Mr. Doddridge?

A. No sir, it should be charged in proportion as the volume of business indicates. There is a proper method of doing that.

Q. It is not right to charge it all to the state passenger either, is it?

A. No sir.

Q. Such expenses as those are common in your operation, aren't they, that you stop a local train, say at Jacksonville, to pick up a passenger going to Texas, and you carry him on to Little Rock where he will catch the through train going to Texas?

A. Yes, that would be a common thing I suppose.

Q. The expenses attributable to stopping that train at Jacksonville to take up that lone fellow going to Texas, is not

1402 an expense properly chargeable to intrastate passenger traffic, is it?

A. Not in that individual case, because unless he bought a local ticket to Little Rock——

Q. Would he do that?

A. If he bought a local ticket to Little Rock, he would be properly classified as an intrastate passenger, so far as that part of the journey is concerned.

Q. I am speaking of a practical matter. He would not do that if he has his right senses, would he?

A. If he bought a through ticket to Texas, he would not.

Q. That stop would be made for that purpose, to take on that passenger to carry him to Little Rock?

A. That stop would be made for that purpose and would be properly charged against the interstate traffic.

Q. When you enumerate as one of the items of extra cost of intrastate passenger traffic these intrastate stops, it is really misleading, isn't it?

A. No sir, I do not think it is misleading because that is based upon actual statistics, actual business handled.

The statistics show that the average haul *if* the state passenger is so many miles and that the average haul of the interstate passenger is so many more miles. The difference between those two lengths of haul would seem to me to indicate the amount of extra stops necessary in the handling of the one class of business.

1403 Of course we are dealing with averages. Now the ques- would be——

Q. Isn't that getting away from my proposition there?

A. No sir, I think not.

Q. Go ahead then.

A. Now the question would be the number of additional stops required to accommodate a state traffic; and the cost of those additional stops would be the extra expense attributable to the short haul business. The exact money cost of making these stops is one of those indeterminable things which you cannot ascertain definitely:

Q. My point is this, Mr. Doddridge: the occasion of many of those stops is just such expenses as I gave you from Jacksonville to Little Rock, where the through train does not stop and the local train picks up this passenger who at some larger town takes the through train, and in that way it becomes a feeder for the through train, doesn't it?

A. Yes sir.

Q. And it is good railroading to so arrange it that way for the economical management of the through train, isn't it?

A. Yes sir.

Q. And because it is good railroading to do that, it is not right to charge up all of this to the local train, is it?

A. No sir and I do not understand, Judge, that it is so

1404 charged. Based upon passenger statistics——

Q. I understand it is charged in that way: you testified and so did Mr. McPherson, that that is one of the elements that goes to make up this extra cost.

A. That is one of the extra expenses of doing the short haul business.

Q. And I am calling your attention to the fact that there is another side to that—that is all.

A. There is, to a certain extent, and that would modify the amount charged, if you can ascertain the exact number of that kind of passengers in your local business it would reduce that expense correspondingly.

Q. You said something about the fact that there was an additional terminal expense for passengers in the State on account of a separate coach law: that applies to the interstate passenger as well as to the state passenger, doesn't it?

A. Yes sir and it should be, of course, in its application divided between the two classes of travel.

Q. Then your enumeration of this, as an additional item to charge up to State traffic with more expense, does not mean much, does it?

A. Well, yes, I think it means considerable.

The expense to provide these extra compartments in the coaches, and the expense to provide the additional accommodations
1405 at the depots in Arkansas, is quite a considerable sum.

The law requiring that was passed while I was in charge of The St. Louis, Iron Mountain & Southern Railway, as I remember it.

Q. I do not question it is quite an item of expense, both in Arkansas and Texas; but what I am getting at is this: that is an expense that applies alike to the intrastate and interstate passenger, doesn't it?

A. Yes sir, it applies to both.

Q. He is a nigger whether an intrastate or an interstate nigger, isn't he?

A. Yes sir, but that is a requirement of the State of Arkansas.

Q. And of the State of Texas also, isn't it?

A. Yes sir, I think it is in force in Texas and some other States.

Q. And in Tennessee and in all the surrounding States, isn't it?

But my point is simply this; that that negro is a negro and rides in a separate coach whether he is an interstate negro or an intrastate negro?

A. Yes sir it would apply to both classes.

Q. And hence, as an item of additional cost, it has no significance has it? We are talking about operating expenses now; we are not talking about State requirements.

1406 A. Well, in my enumerating it as one of the extra costs, I had in mind the fact that it was a local requirement and of course in other sections of the country where I have operated railroads it was not required.

Q. My point is this: that that local requirement has burdened the intrastate and interstate negro just alike, hasn't it?

A. Yes sir there is no question about that—there is no difference.

Q. "The leopard cannot change his spots" because he goes in an interstate train, can he?

A. I do not think a negro changes color.

Q. You talk about this increased casualty risk in the state traffic: what about some of your through trains having a wreck? That would be something of a casualty wouldn't it?

A. Yes sir.

Q. Very much more serious than any of your local ones, too, wouldn't it?

A. No sir, I would hardly agree to that. The increased casualty item of extra expense, as indicated in my list of extra costs, does not refer to the accidents which sometimes occur to trains while on the road. It has reference more particularly to the increased risk of handling a great number of people at and about stations.

Q. Then these casualty risks that attend the fast travel of your through trains is another side of the story that you have not measured, isn't it?

1407 A. The through trains carry of course both kinds of people, so we did not consider there was an extra risk.

Q. Don't your locals, too?

A. The locals I think carry more people.

Q. Both state and interstate?

A. Both state and interstate.

Q. Why isn't it just as right to consider these great casualties incurred by your fast trains as to consider these little wrecks on your local trains?

A. We consider that only as an element of cost that applies at and about stations, as I said before, in the number of people which are handled.

There is no difference so far as the people themselves are concerned whether they are state or interstate passengers, but it is in the number handled. If you handle five people a day you certainly have more casualties with the five than you would have with but one—the ratio.

Q. Talking about these short haul stops: what about your suburban traffic? Don't you carry them very cheap, and stop about every block or two blocks or something like that?

A. Yes, but then there is such a vast difference in the traffic density in local and suburban service.

Q. The more density you have the greater your casualty risk, isn't that true?

A. Yes sir, I think so.

Q. Then your casualty risk ought to make very high rates upon suburban travel, ought they not?

1408 A. No sir the increased density of the suburban travel is such that it is hardly comparable with the ordinary country travel.

Q. In other words, the increased density overcomes this casualty risk?

A. No sir not in the general diversified country business, it does not.

The suburban traffic in and out of a great city is carried under different circumstances and conditions from the general business throughout the country.

Q. That is getting down to details. I am talking about your proposition that the increased travel increases your casualty risk: You have an immense volume of traffic on your suburban trains, and still you carry them very much cheaper than you do any other travel at all, don't you?

A. Yes I think they do, per passenger mile.

Q. How do you square that with your theory that this increased casualty account is one of the items of intrastate extra expense?

A. Because in comparing the state local travel with the through travel you are comparing business that moves under a general similarity of conditions. When you compare that class of business with the suburban business about a large city, the conditions are very dissimilar.

1409 Mr. MOORE: Is there any suburban business in Arkansas?
A. There is no suburban business that I know of in Arkansas.

Mr. HILL:

Q. I was not referring to Arkansas, but I was trying you on the general proposition.

A. I have not got through making an explanation.

The suburban business in a large city, while it is great in number, the facilities and the protection which is thrown around that traffic to guard it against accident, and the fact that those people travel every day, and usually twice a day, educates them to the use of those trains and sets up and constitutes conditions that are entirely dissimilar.

The revenue from suburban trains—you speak of carrying them at a lower price—measured by passenger miles is low; but taking the enormous number of people that travel and considering the earnings in the aggregate, they are not as low as it appears on its face.

On account of these different conditions and circumstances, the two kinds of business are hardly comparable.

Q. Are they comparable on the casualty proposition; that is what I am asking you about?

A. No sir I do not think they are. The education which that class of travel has, and the facilities which are provided for handling it at the depots and stations where it gets on and off the trains, renders the class of casualties we are referring to remote.

1410 Q. You mean the farmer is more liable to get hurt than the city man?

A. The man who rides on a railroad only once in a great while is more apt to get into trouble and receive injuries than the man who rides every day.

Q. That is the force, then, of your casualty proposition?

A. That is one of the reasons.

Q. What about through travel to California, for instance: that is on a pretty low rate too, isn't it?

A. Yes sir the excursion rates to California are extremely low during certain seasons.

Q. About as low as the suburban rates, something like one cent a mile, aren't they?

A. Well I should say yes, and probably less than that sometimes.

Q. Doesn't the casualty risk follow the passenger all the way through?

A. Yes sir.

Q. It would be pretty heavy from here to Los Angeles, wouldn't it?

A. Well, he does not get on and off the train very often.

Q. But the train is running all the time?

A. Yes sir the train is running all the time, and that risk goes with him.

Q. You have made a statement here of the cost diminish-
1411 ing on this trans-state business: I presume that is chargeable to freight and passenger both? The cost diminishes with the length of the haul: isn't that a fact?

A. Yes sir.

Q. Suppose you take a passenger from New York to the City of Mexico: is the cost diminishing all the way?

A. Oh, it diminishes within certain limits, of course.

Q. What are those limits?

A. Well, take that part of the journey say over the main line of the Iron Mountain road, if he rides from one end of the line to the other, all of the fixed or stationary expenses connected with his transportation and to which his transportation would be charged, diminish with the length of the journey. If he traveled from New York to the City of Mexico that proportionately diminishing of cost would obtain on every line over which he traveled.

Q. Certainly.

A. Therefore, take the entire journey in the aggregate, as compared with the short distance, the ratio of cost would be found to be very much less.

Q. If he would go to the North Pole it would not be anything, would it?

A. No sir. It would never exhaust itself completely but the unit would keep going down.

Q. It would become rather attenuated by the time he got
1412 to the North Pole, wouldn't it?

A. Yes, it would get very thin.

Q. That limit is not reached in Arkansas, I presume?

A. In the State, no sir.

Q. How far does it go? You say it was so within certain limits?

A. Oh, the word "limits" as used there means limits to the decrease. I do not mean limits to the miles.

For instance, I can illustrate what I mean there by applying it in another way; I stated in my direct testimony that where the density of traffic of a railroad increases within certain limits, the cost of transportation decreases.

What I meant by limits in that case was this: that cost would not continue to decrease after the potential capacity of the line had been reached, and it would be necessary to build a double track to carry the increased traffic. But up to that point the ratio of cost would decrease up to the potential.

That is what I mean when I say "limits" because if it continued to decrease, after awhile it would not cost anything.

Q. There has been no practical change on the Iron Mountain in the last few years, has there?

A. I do not know much about the details. Of course the
1413 fundamental conditions are the same there now as they always have been. As to the changes in methods of operation since I had charge of the line, I am not informed.

Q. On this question of rates, these fast trains cause more wrecks

than your local trains, don't they—I am speaking of your passenger traffic.

A. You are speaking of passenger trains?

Q. Yes.

A. Well that depends on conditions. If the condition of a road was normal and the track standard is high, I do not think the casualty risk upon a fast train is much greater than upon a slow train.

Q. It is some greater isn't it?

A. Yes it is some greater due to increased velocity. Of course when an accident does occur to that kind of a train it is probably more severe.

Q I was just going to ask you that question. That is a fact?

A. Yes sir, that is true.

Q Take it on your freight trains: there is more of a casualty risk on those trains running at night than those running in the day time, isn't there?

A. No sir I do not think there is much difference between day and night.

Q. Do you think you can operate a freight train as safely at night as you can in the daylight?

A. Well, I don't think there is much difference in that respect.

1414 I remember in the early days of railroading on some roads the trains were laid up at night on account of a supposed danger arising out of the darkness; but after awhile they discovered they could run at night about as safely as they could in the day time.

Q. The electric headlight helps them do that, doesn't it?

A. That is an uncertain question. Some men favor the electric headlight and some do not.

Q. Don't you think it makes operation safer?

A. In some respects I would say unqualifiedly yes; and then again there are objectionable features to it.

Q. In your testimony yesterday I think you said you would apportion the taxes against the State in proportion to the expense incurred in the operation in that State: is that correct?

A. Yes, sir.

Q. But you obtain that expense by going back to your revenue percentage, don't you?

A. Yes.

Q. So it really resolves itself at last into the revenue basis of apportioning your taxes, doesn't it?

A. It is founded on that, yes.

Q. It is really that, isn't it, where you take your revenue percentages to get at your expenses?

A. Yes.

1415 Q. You have spoken about the facilities for doing business on the different kinds of traffic: I want to call your attention to the facilities that are in Arkansas for the live stock traffic: those are facilities that are enjoyed almost entirely by the interstate traffic, aren't they

A. I am not exactly advised as to what intrastate live stock traffic there is in Arkansas. I am under the impression that it is not very large in volume.

Q. That would be one of the "negligible quantities" wouldn't it?

A. Yes. The facilities, however, where there are any state shipments, or any interstate shipments of stock, the stock pen is usually required at all of the local stations.

Now that stock pen, of course, costs something and it costs something to maintain; and it is used in shipments of both classes of live stock business.

Then to accommodate the trans-state live stock business there are some large yards.

Q. There is a large yard in Texarkana particularly?

A. At Texarkana and at Argenta there were large yards when I was operating the road. I am not sure whether we had one at Poplar Bluff or in that vicinity. But, any way, of course those facilities are used almost exclusively in the trans-state stock shipments.

Q. I notice here from a statement Mr. Hamilton furnishes me, that there are accommodations in Arkansas, on the main line of the Iron Mountain Railway for 287 cars of live stock.

1416 You would probably not know those figures, but I suppose from your familiarity you would know that is reasonably accurate.

A. Yes sir I know we had a large yard at Texarkana and at Argenta .

1417 Q. I want to call your attention to cotton platforms: You have those at all your stations in Arkansas, have you not?

A. Generally speaking, I should answer yes.

Q. That is a facility for interstate business, is it not?

A. Well, I am of the opinion that that is for both state and interstate.

Q. Is it not a fact that the cotton is all—or probably all but a negligible quantity—all interstate?

A. So I understand.

Q. I believe it has been shown that probably a good deal less than one per cent is moved intrastate: that would be about your idea?

A. It is a very small amount, as I understand the method of moving the cotton.

Q. Practically speaking, that is a facility for interstate traffic, is it not?

A. Yes sir, as far as the percentage of traffic handled over those cotton platforms goes.

Q. There are two facilities that are used practically exclusively for interstate traffic, that you have been referring to?

A. The large stock yards and cotton platforms, yes.

Q. Well, there are small stockyards, too, I suppose, all around?

A. There must be some movement of intrastate stock in Arkansas.

Q. There is no considerable movement, though; I suppose you know that to be a fact; no packing houses?

1418 A. No, it would not be great in volume.

Q. Here is a statement from an affidavit made by Mr. McPherson, which was filed before Judge Van De Vanter at St. Paul. I did not have it when Mr. McPherson was on the stand. I will submit it to you and see if you agree with this statement:

"The cost of the movement of the train is the same whether the cars are loaded to their full capacity or carried empty. The crews consist of the same number of men without regard to whether the train is made up of full load, light load, or in part in empty cars."

A. That is correct in the aggregate, as to the cost of the labor of running the train, and that is probably what Mr. McPherson had in mind.

Q. That is all I was inquiring about.

A. There would be no difference in the wages, as to whether the train was loaded, or as to whether the car was loaded.

Q. Would there be none in the fuel?

A. Well, there would be less fuel if it was a light train; if it was under the potential power of the locomotive.

Q. I believe you stated in your Missouri case that it was infinitesimal?

A. Because it is not customary to run light trains except in certain conditions of emergency.

1419 Q. Broadly speaking, this is a correct statement, is it not?

A. I think so.

Q. You said something about that trans-state freight was transported across the state, as if it were upon a bridge: I believe that was your expression in illustrating the movement of trans-state shipment, was it not?

A. Yes.

Q. When it comes to a division point it alights from the bridge, doesn't it?

A. Well, it is on one of the piers.

Q. It has a good many piers, has it not?

A. Not very many.

Q. They have one in less than every hundred miles?

A. No, their divisions, as a rule, are longer than a hundred miles.

Q. How much longer on the Iron Mountain—the main line, I am talking about now?

A. I cannot tell you what the distances are. You know what they are, I think.

Q. Yes.

A. From Poplar Bluff to Hoxie, now, (it used to be Little Rock); I think that distance is in the neighborhood of 140 miles—no, it is more than that.

Then to Texarkana——

Q. Don't you stop at Newport? You have another pier at Newport?

1420 A. No, it is a junction point.

Q. No, it is a division point.

A. I don't know how they are operating that road now; I referred to the time when I was operating it.

Q. Ask Mr. Johnson there, he can tell you. Is Newport not a division point?

Mr. JOHNSON: That is not my understanding; not for through trains.

Mr. HILL:

Q. Your crews stop there, don't they?

The WITNESS:

A. On the through trains I don't understand that they do.

Q. At any rate, there are various piers through the state?

A. The average run of the through train, or an engine run, is over a hundred miles wherever it can be made so, for economical reasons in the payment of the men and in the efficient use of the locomotives; sometimes it is as high as 150 or 175 miles.

Q. Your bridge would not stand up without these local piers?

A. It is necessary in the operation of trains, to change locomotives and crews.

Q. Every time you change them you change the complexion of your train, don't you; not every time, but frequently?

A. You change the complexion of the train where you strike a change in the topographical conditions of the road. For instance,

1421 where there is a break in the grade line, or where you change the volume of business carried by the train. Now, ten years ago, the Iron Mountain would change the volume of the train at Little Rock, southbound, and northbound, as well. We also changed again at Piedmont, when we struck the rough grade line.

Q. Whenever the potential of the engine is changed, you change the complexion of the train?

A. Increase or dimish the tonnage of the train.

The road, south of Little Rock, has been improved, and the conditions are not so——

Q. Coming back to your illustration: this bridge that you carry it over is supported by state operation—local operation, is it not?

A. As far as the state business goes, yes, but the relative density of the two classes of traffic would indicate that the interstate traffic is the support.

Q. I thought you said that the piers were the support?

A. That is a figurative expression, you know, the piers.

Q. Well, you don't go over the state in a flying machine with any of your freight?

A. No sir.

Q. You have to have a physical connection with the state to get along at all?

A. The use of the word or term "bridge" is, of course, relative.

Q. When you get to Little Rock with that train on the

1422 bridge, you would strike some other through cars you would want to take to Texas or New Orleans, as the case might be, would you not?

A. Well, I rather think some of that train would be set off, rather than added to.

Q. It would probably be both, would it not?

A. It might be.

Q. You would not be on a flying machine when you got to Little Rock, you would have to make up another train?

A. No, not make up another train; not a through train for Texas.

Q. Are you not speaking of an ideal condition, more than you are of a practical situation, when you liken that trans-state shipment to a bridge?

A. No, I am not; I am speaking of a condition that prevails on most trunk line railroads. The trains at large massing points are made up with a view to their economical transportation over the line, and when they come to cross a state, the necessary yard work incident at division points, changing engines, adding to or diminishing the trains, occurs in different forms and in different amounts on different roads.

Q. Your local business creates the interstate business, does it not?

A. The local business, of course, is the foundation of the interstate business throughout the country generally.

Q. Is it not a fact that this business is so interwoven—
1423 interstate and state, with the local—take any division you please—that it is impossible to make any division of it on a theoretical line?

A. It is true.

Q. I want to give you an illustration about these local trains and your through trains:

Take the division that I know best about, Little Rock and Fort Smith; I believe it is in the testimony here that about twenty-five trains a day are run there: your local would meet only one of its own class during that day's run, wouldn't it? Probably there may be two locals on that, I would not be certain about it.

A. I should say there would be two locals between Fort Smith and Little Rock; I would not think they could make that run without two.

Q. I think that is right; take two locals, then.

A. Yes.

Q. Each of those two locals would meet two of its own class that day? Each would meet one train of its own class, and the two together would meet two locals?

A. Yes.

Q. It would meet twenty-one other trains, wouldn't it?

A. No, I don't think it would, if it is twenty-five trains a day; part of them would be running at night.

Q. They would either meet them, or be overtaken by them?

A. Either meet, be overtaken or passed, during the night.

1424 Q. They would have to get out of the way—the local, I mean?

Mr. MOORE:

Q. You mean the local would not run at night and the other would——

A. Yes.

Mr. HILL:

Q. Such of the 25 as would run in the day-time (which would be all except the one or two locals), would have to get out of the way of the other trains, the 21?

A. That is the general practice, that the local sidetrack for trains that it meets and passes. The local, however, has the rights of a freight train, and the direction in which it is running would indicate its right of track, whether east or west.

Q. It vacates the track for everything else?

A. As a general proposition it is customary for a local train to vacate the main line.

Q. That adds materially to the expense of the local?

A. In some places it might add to it, where it had to wait on a sidetrack, and if they do nothing with it—if it has nothing to do; but the local train practice is, when it reaches a station to proceed to do its work and it may clear the main line or not and be busy, maybe, at some point an hour, doing its work.

Q. Well, if it is out on the road it has to take a passing track, that is just adding to its expense——

A. It would add to its expense, if there was nothing else
1425 for it to do but wait.

Q. This item of expense has been brought into this case, of local trains lying on passing tracks, the use of the passing tracks: what I am getting at is this: that is an expense that should be attributed to the train that caused the local train to go on a side track, is it not?

A. If you were going to charge it up to anything (it is not charged, as a matter of fact), but if it were, it ought to be charged to the class of business that caused it.

Q. I think you testified yesterday about these fast freight trains: if you were going to charge it to any class, you would charge the class that causes it.

A. Yes.

Q. I believe you stated in the Missouri case, that if the intrastate rates were put on a compensatory basis, that they would be prohibitive?

A. I gave that as my opinion, Judge.

Q. That is true, is it not?

A. Yes sir, I believe so.

Q. With both the Arkansas and Missouri, is it not?

A. Yes, I think that would be the case in Arkansas.

Q. Then the practical result of putting state rates on a compensatory basis, to the railroad, is to injure, if not paralyze the industries of the state?

A. And the railroad as well.

Q. Yes, that is true; not so much so to railroad as it
1426 has got its traffic that goes over the state on a bridge; of course that would not be affected?

A. Yes, that would be affected if the same principle were applied in all states through which the railroad runs; ultimately you would——

Q. We are talking about conditions in Arkansas now, and the Iron Mountain: the result of that would be to throttle the Arkansas business, and allow the Iron Mountain to enjoy its traffic that it carries over the state on the bridge: is not that a fact?

A. It seems to me that that would not be—that is hardly a fair way to put it. My judgment is this: if the intrastate business (considered in its small volume and with all its relations), were put on a basis compensatory in itself, without reference to any other business, that it would be necessary to place the rates so high as to deprive the industries of the state of the benefit of competition, and thereby they would be throttled.

The facts are, that when the railroads were free to adopt any sort of rates they pleased, they so adjusted them as to prosper the industries, and at the same time prosper their own interests, and without reference to the physical cost in individual cases.

Q. Did you not testify in the Missouri case, that the rates in Arkansas, even before the Commission reduced the rates, had not been on a compensatory basis?

1427 A. In Arkansas?

Q. Yes.

A. I don't remember. I don't remember that I made any statement in the Missouri testimony about Arkansas.

Q. My recollection, Mr. Doddridge, is that that question was asked you generally, and you said you could not answer as to Missouri, but you could answer as to Arkansas, because you had been so intimately connected with the business in that state.

A. I will say, that regardless of the section of the country that I was testifying to at that time, I never have thought that the rates themselves were high enough to be profitable, taking everything into consideration, and eliminating several other conditions.

Q. That applied to the situation when the railroads were making the rates themselves, did it not?

A. Yes.

Q. Well, I will not bother looking up this question, as to what you said about Arkansas, because I think you have substantially stated the same proposition.

A. Yes.

Q. The practical result of that opinion would be this:

As state rates cannot be put on a compensatory basis, without destroying the industries of the state, then there can be no state regulation of them at all, can there?

A. I think there can be state regulation in some respects, but I think that it would be quite limited, putting it on that basis;
1428 that is to say, a strictly compensatory basis—that is, where that will yield a profit in itself.

Q. That is what I am speaking of.

A. It is a big question if you would discuss it to its conclusion. I will give one illustration of what I mean, as bearing upon it, to make it more clear:

In my experience, there are very few branch lines of railroads that have paid any profit whatever, unless there was some special feature connected with the business, such as a large coal tonnage or iron ore tonnage, or something of that kind, to make it profitable. On that kind of a line there is but very little traffic excepting the intrastate traffic, or local interstate traffic. That being the case, where the railroad companies derive a profit from that class of business, is after that traffic reaches the main line, and where there is a long haul; where there is a large traffic density and the cost of transportation, relatively, very low; that is where a profit is derived from the business, but it is not directly attributable to the line that produces it. So, if you have the same condition prevailing throughout a state, the business would not be profitable in itself.

Q. I believe this branch line proposition that we are discussing, so fas as the Iron Mountain in Arkansas is concerned, resolves itself, in Mr. McPherson's testimony, to eight per cent of mileage that cannot be used for trans-state business. You heard Mr. McPherson's testimony to that effect, did you not?

1429 A. Well, I was not viewing it in that way. I was trying to illustrate what I meant by state traffic taken by itself; that if you made a rate high enough to pay a profit without taking any other thing in consideration.

Q. That comes back to the fact that where the state cannot put rates of low compensation, that it is impossible to have any state regulation, under your view, of the cost of intrastate traffic?

A. I think the railroads themselves, for commercial reasons, would adopt tariffs that would be lower than the law would permit the state to make them.

Q. Is not that rather begging the question? I am not reflecting——

A. It means the same thing.

Q. The state cannot do it, but you think the railroads would be kindhearted and do it?

A. No, I don't think they would do it from any benevolent feeling, but from a selfish motive, to prosper their railroads and the section of the country through which their roads operate.

Q. You know that the railroads, after they got an injunction from Judge Van De Vanter, did increase the rates, don't you?

A. I so heard, yes sir.

Q. You heard that the lowest estimate that was made of that increase was forty-two per cent, didn't you?

A. Well, several stated it to be thirty-three, and some forty-two.

1430 Q. No, nobody stated it was as low as thirty-three when the railroads put in their rates. Later that proposition came up in the court tariff. Mr. Johnson will tell you that——

Mr. JOHNSON: As far as the Iron Mountain was concerned on two months' business——

Mr. HILL: Taking that as assumed—that the lowest increase on the rates was forty-two per cent, do you think the state would stand such an increase as that?

A. I don't believe I am qualified to answer that question, because it requires a man with a vast amount of detailed information to know what the effects of certain rates will be on the traffic; in fact, it requires the constant attention of able men, with a vast amount of detailed information at hand, to pass intelligently on questions of that sort.

Q. When traffic men go to fix rates, do they have the benefit of any accounting system that would show the cost of the traffic that they are about to fix rates on?

A. Of course the statistics—the detailed information is at hand if they call for it, or if they want it.

Q. Is there any detailed statistics to show the cost of any given traffic?

A. Not unless it is specially prepared.

Q. The Iron Mountain road has a Commissioner of Statistics, has it not?

A. I have heard him referred to in the evidence here. I
1431 am not familiar with his duties at all.

Q. Do you know whether he prepares any statistics on the cost of the movement of traffic?

A. I am not familiar with his duties.

Q. You don't know what he does?

A. I have no idea whatever.

Q. Did you have a Commissioner of Statistics when you were General Manager of the road?

A. No sir, I got my information either from the accounting department, or made it up myself on the road, by my own system.

Q. As a matter of fact, Mr. Doddridge, there is no system of accounting, on the Iron Mountain, or any road that you are familiar with, that shows the cost of the traffic?

A. Except in a general way, taking all the traffic into consideration, there is no systematic method——

Q. What is the unit they use in those statistics, in a general way?

A. What statistics do you refer to now?

Q. The same that you are referring to, that in a general way they might have an idea of the cost of the traffic?

A. The customary method of making up statistics is upon the basis of ton miles.

Q. You stated here somewhere, either in your testimony here or in the Missouri case—I don't remember which, that mail is
1432 paid for, relatively, higher than the express; that the Government was liberal in its payments, or something of that sort—or to that effect: that is true, is it not?

A. I stated that the revenues from the mail and express were comparatively high, as compared with the cost of the physical

service rendered, and that a division upon the basis of gross earnings of the expense, was favorable to the state, in my judgment.

Q. How so?

A. Because if the "Miscellaneous" earnings did not exist, and a railroad did not carry any mail or express, there would not be a corresponding reduction in the expenses, for the reason that this class of business, carried upon passenger trains—the probabilities are that the same number of passenger trains would be operated, and the difference would be largely in the number of cars carried; for instance, a passenger train might run one or two less cars if it did not have that class of business to handle, but the number of trains would remain the same.

Therefore, the expense that is set aside upon the gross earnings basis and attributed to that feature of the service is favorable to the other expenses charged to the state.

Q. If it shows favor either way, then it is far from being an exact and fair method?

A. It is one of those things where there is a certain element of "give and take" about it. I don't know of any way to ascertain the exact physical cost, definitely, of performing this service.

1433 Therefore, we simply attribute that much to the amount represented by its gross earnings.

Q. Is it not a fact that the best locomotive power is put on the through trains?

A. Yes, sir, I should think so; it generally is.

Q. Which runs the faster, the through freight or the local freight?

A. There are two ways of answering that question: the road speed of a local train is generally about as fast as they can wheel them, as between stations. The schedule time of the local train is slower, for the reason——

Q. I am speaking of the movement, not the schedule——

A. I should say the local is about the speediest.

Q. It runs faster; while its loss of time at stations would make it a slower train in the aggregate, yet its actual movement is faster?

A. Its actual movement is very rapid.

Q. We have had some discussion about "outside agencies"; these fellows that blow up your road, puff it up and brag about it, and get trade and custom, things of that kind—I don't know your technical terms, but you know the gentlemen I am referring to: do you think that item of expense is properly chargeable, in any large degree, at least, to intrastate traffic?

A. I think the intrastate traffic should bear its relative proportion, for a great many reasons. Among other reasons is this; that these men are agents, generally, in their character; they act

1434 in the nature of advisers, as well as solicitors, and it is the policy of the railroads (in Arkansas as well as in other states where there is undeveloped country), to advertise the country and do what they can to develop it, and they use these men for distributing information; for distributing advertising matter generally, and for inducing settlers to come into a country.

Q. I am not questioning the propriety of the railroad companies

in having these excellent gentlemen, but I am getting at that producing quantity, I believe, to use your term; do they produce, relatively, the same revenue for intrastate business, that they do for interstate?

A. Well, that is one of those indeterminable questions that cannot be solved; some of them I should say do a good deal more, and others not so much.

Q. That is one of your "give and take" propositions, where the giving is to the interstate, and the taking is from the state, is it not?

A. I would not want to qualify as saying that, exactly.

Q. That is substantially correct, leaving aside the jocular feature of it, is it not?

A. No; these agents look upon the railroad as a unit. Of course they are not instructed to discriminate as between states or state lines; they don't think about that.

Q. That is undoubtedly true, but I am talking about the effect of their efforts, Mr. Doddridge. Take the intrastate traffic of Arkansas: how much could that be affected by all these gentlemen going
1435 around with pretty cards; how much is the intrastate traffic of Arkansas affected by that?

A. I think it has a proportional effect.

Q. You think in proportion of the revenue derived from the interstate, with the——

A. I think so. If you will look up the figures of that portion of the business, and take into consideration——

Q. Did you not testify in the Missouri case, that their services did not redound in so great a degree to the intrastate, as it did to the interstate business?

A. I was considering it in the aggregate, but when you come to take into consideration the small percentage——

Q. That is getting back to the point that it is a little thing and don't hurt. I am not measuring its effect; I am trying to get at the true basis.

A. I cannot say what the difference would be.

Q. I want to read you this from page 275, in the Missouri case: "Those offices are maintained primarily for the solicitation of freight and passenger traffic for the entire system. Incidentally those officials advertise the country through which the railroads run. And in doing so they advertise the State of Missouri, as well as Kansas, and certainly a part of the expense would be attributable, I should say, to the state business of Missouri. Perhaps not in so great a degree as when you come to make a division between state and interstate traffic."

Is that correct?

1436 A. Well, yes.

Q. Now, Mr. Doddridge, you cannot insist that a revenue division of that item of expense (be it great or be it small), would really be fair, could you?

A. I don't know of any other way to——

Q. I know that you so testified. I am not asking you if you know another way. I am asking you if it is a fair way?

A. I would not say that it is not fair.

Q. You certainly would not say it is fair, would you?

A. I would not want to qualify as definitely expressing an opinion on that particular point. As a general proposition, I should say it is fair.

Q. Mr. Doddridge have you ever made an estimate on the terminal cost of passengers?

A. I never made a complete estimate, no sir. I made figures on part of the expenses. I think I did that in Missouri, and I think I figured on it somewhat in Arkansas.

Q. I want to know how you get at it, and what figure you put for the terminal cost of passengers.

A. I never had the date necessary to make up a thorough and complete statement of these expenses. I have never been able to obtain it; of course, you can; it is a very easy matter, from the railroad company's record, to ascertain the single element—we will say, of labor at stations; they have that on their pay rolls.

Q. Did you not in Missouri, take up one of the railroads—
1437 the Burlington or Wabash—all their passenger statistics, and work out a terminal cost of between four and five cents for each passenger?

A. As far as I went (I don't remember now what road, I think it was probably the Missouri Pacific), I figured out that of those elements that I could get hold of, it amounted to about four or five cents. It was impossible for me to get all of the information necessary to make an intelligent statement. For instance, I could not get the maintenance of structures, and things of that sort, that enter into that calculation.

Q. I want to call your attention to—I want to read——

Mr. MOORE: He just stated that he made a statement to that effect. Is it your purpose in reading that, to contradict him?

Mr. HILL: No, I want to call his attention to the statement made, and ask him if it is correct.

Mr. MOORE: I want to object to that, because that is interjecting into this case testimony that was introduced in another case, and I don't think it is competent—it is competent to contradict him, or to show that he made a statement elsewhere; unless you are using it for the purpose of contradicting——

Mr. HILL: I am asking the basis.

Mr. MOORE: I don't think that is proper——

Mr. HILL: I think it will refresh his memory.

Mr. MOORE: It is not competent, because the effect of that is to make that testimony in this case, and I don't think it is
1438 competent.

MASTER: We will follow the rule before adopted, a very liberal one. I will let anything go in that has a bearing on this case.

Mr. MOORE: That has a bearing on this case, but it is not competent to prove anything in this case. Judge Hill can ask him the same question he was asked then.

MASTER: It may explain or elucidate some of the testimony already given in the case.

Mr. HILL: That is it. Now, reading from this testimony:

"Q. How do you figure out it costs from four to five cents terminal expense, per passenger, per trip?

A. I take the total number of passengers that get on and off the train at the station, simply count them, no matter whether they are state or interstate, and divide the expense by the number.

Q. Have you done that?

A. It is in some of the railroad reports."

Is that a correct method of getting at it?

A. No, I dont think it is. Since I made that statement I, of course, have gone into the subject further, and I don't think that covers all of the elements—that is what I am getting at.

Q. What method have you got, that got at that terminal expense, if you cannot take this method?

A. I find among my memorandums a method that we
1439 designed for that purpose, or formula. I did not give it in my reasons, because the information necessary, upon which to predicate it, is absent, but I will read the example; it is self-explanatory:

Take the St. Louis Southwestern Railroad, for the year ending June 30, 1908; they carried 928,313 state passengers; double this number to compensate for two station handlings. The number then indicates ninety-two per cent of the total passengers handled.

The interstate passengers handled were 145,351; allowing one handling for each passenger, this constituted eight per cent of the terminal cost.

The intrastate passengers produced fifty-five per cent of the passenger miles and should be charged with ninety-two per cent of the terminal expense.

Now, if you know the terminal expense in dollars and cents, it is a very easy matter to arrive at the extra cost, on that account, per passenger—either class of passengers.

Q. You think that is a good, fair basis of ascertaining the extra terminal cost for passenger service?

A. It would be somewhat more than fair to the state, for the reason that there is a certain percentage of these 145,351 passengers that do not make any terminal expense at all in the state.

Q. It is the best method on the subject that you know of, isn't it, better than this Missouri method, or any other?

A. I think so; this is the result of reflection and con-
1440 sideration, and this shows it figured out to a conclusion, using hypothetical figures, that the state terminal cost upon this road, and, based upon these statistics, amounts to ten to one.

Q. Were those hypothetical figures? I thought you said they were actual figures.

A. No, these are actual figures, that I read, but I say, you would have to use some hypothetical figures to get at the amount, in dollars and cents——

Q. The only hypothesis you have made in that, is assuming two passengers for one, in order to get at your terminal——

A. Yes.

Mr. MOORE:

Q. Is that a hypothesis, or actual fact?

A. There might some case come in like we had in the freight business here at Fort Smith——

Mr. HILL:

Q. That same thing would apply?

A. That brings in an interstate condition.

Q. While we are on that, just a moment—on that interstate passenger feature of the physical situation in Arkansas: all passengers out of Memphis would be interstate passengers, with two terminals in Arkansas?

A. Yes, sir, the same as the freight.

Q. At Fort Smith, I believe the only difference would be that two of your passenger trains run across a bridge and keep in the state, and two run by a junction——

A. Yes, that——

1441 Now, on the Kansas City Southern——

Mr. MOORE: That would not be true with trans-state passengers that went across the state.

Mr. HILL: They would have one terminal, that would be the difference.

A. They might not have any in the state.

Q. If they came through Memphis they would; you have charged your terminals——

A. In that case, yes.

Q. Everybody, from Memphis, to California, would have one terminal expense in Arkansas?

A. Yes, sir.

Q. Just one other question right in that connection, on this Cotton Belt: I understand you got that from the Cotton Belt test?

A. These are the Cotton Belt statistics, the actual number of passengers.

Q. That reminds me of a statement I wanted to ask you about, on the Cotton Belt test: You stated in detail yesterday, the test that you had made of the expenses of the Cotton Belt for a given month, and took the percentages there from the exhibit that is on file, showing five to one, I believe, from five and one-half times to one; that was on the freight traffic.

I call your attention to that exhibit—I don't know the number of it there; I expect you know——

1442 Mr. MOORE: Exhibit number 19.

Mr. HILL: And also called your attention to Mr. Kimbells' testimony about it.

After taking the actual figures, he then used the average revenue, per ton, per mile, to make his calculations: is not that a fact?

A. I don't know how he made his calculations. He used, however, the revenue basis from each class of freight, upon which to make his calculations, as to the difference in the ratio of cost.

Q. What I am getting at is, that he used the revenue per ton, per mile, even after he got the actual facts to make those calculations: did he not?

A. I don't know; Mr. Kimbell is here, he can answer that question.

Mr. MOORE: You need not mind about that; if you don't know, say so.

A. I don't know.

Q. I want to call your attention to Mr. Kimbell's testimony on that.

1443 Cross-examination of Mr. Doddridge, continued.

By Mr. HILL:

Q. Mr. Doddridge since our recess have you informed yourself as to the question I asked you as to the method in which the Cotton Belt exhibit No. 19 was made up?

A. What was the question?

(LAST question of the morning session read as follows:)

Q. "What I am getting at is this: he used the revenue per ton per mile even after he got the actual facts to make those calculations, did he not."

A. Yes sir.

Q. That "yes" would apply to both of them?

A. To both questions.

Q. You had better make that more full.

A. I will explain this way: I have made inquiry and Mr. Kimbell ascertained the revenue upon the two classes of the trains by multiplying the number of ton miles carried upon each train by the average revenue derived from each class of the traffic per ton per mile, and then apportioned the expenses upon the percents which the two sums bore to the total.

Q. That is the percents of the revenue?

1444 A. Yes. In other words, the calculation is upon what we would call the "straight revenue basis."

Q. The result of that is that instead of using the actual results ascertained in the test, you take the revenue earned by each class of trains as your divisor and reach results dependent upon the revenue theory?

A. Yes sir.

Q. You testified before we adjourned as to the terminal cost on passenger traffic and the method of ascertaining the same. You stated that since you had given the Missouri testimony that you had studied the question further and had reached a conclusion that the method that you have outlined here was the best method of ascertaining that: I believe that is correct?

A. Yes sir.

Q. I will ask you if you have given further study and thought to the terminal expense in the freight traffic as well as the passenger traffic.

A. Yes sir. I have come to the conclusion that the proper method of ascertaining the correct terminal expense as to the freight would be substantially the same as that of the passenger.

Q. That is your judgment as to the best and fairest way of apportioning the terminal expense in freight traffics; that is, it would be substituting merely a ton for a passenger in making your estimates?

A. No it does not substitute a ton for a passenger. The
1445 difference between the freight proposition and the passenger proposition is that the passenger has no weight or bulk. The passenger mile is used as a unit in making the calculation.

Q. What unit do you use when making a division of freight?

A. In ascertaining the percentage of freight terminals we would take into consideration the lengths of the hauls.

Q. Is not that the multiple and not the unit? I am trying to get at your unit on the freight terminal expense. You have taken the passenger in the passenger traffic, now what is your unit in the freight traffic?

A. Well, we would divide the percentages on the same basis of calculation that we do passenger.

Q. Would not that be taking the ton as the unit?

A. The ton would be taken as a unit in the freight.

Q. That is what I am asking.

A. Yes.

Q. The only difference in your apportionment of terminal expense between freight and passenger is you take a passenger as the unit in the one traffic and a ton as a unit in the other traffic?

A. Yes sir.

Q. Mr. Doddridge I want to call your attention to this statement in your Missouri evidence and ask you if think this is true as applied to the situation in Arkansas:

1446 "We can demonstrate with mathematical accuracy the extra cost of train service and station service of the state freight over and above the through freight, by the through freight handled. The transportation expense of the railroad is about 50% of all. Now practically all the expenses in addition to the transportation expenses (transportation expense includes station service, yard service, switching and all these things) it is not practical or possible to divide these other expenses mathematically, with mathematical accuracy, because they are common. Now, while they are given, who is going to say which proportion is to be attributed to this or to the other."

Is that a correct summary of the situation?

A. It was a correct summary of the situation as far as my knowledge went at that time. Since then, of course, we have made some calculations and some investigations. For instance, with respect to the proportion of terminal expense where we have found a method I think of determining more accurately some additional expenses than stated in that answer.

Q. What are they?

A. Take the terminal service for instance; in that we have found a method I think of determining that with fair accuracy.

Q. That is the method that you have just described?

A. Yes, just described; that is one, and then we found, for
1447 instance, I think the maintenance of equipment expense can be determined closer than I indicated in that answer.

Q. Let us take up and consider that "maintenance of equipment"; I wish you would explain how you could get at that.

A. I do not pretend to say that I can get at it with mathematical accuracy, but I think that the number of locomotives required to produce an equivalent number of ton miles in the local freight service, can be ascertained accurately, as compared with the number of ton miles that an engine will produce in the through service.

Q. Then after getting these estimates on the local and through service you would apply your percentages of the traffic carried on each?

A. Yes, and from that you can deduct approximately, pretty closely, the amount or the quantity of engine service required to produce the two things.

Q. You mean deduce?

A. Yes, deduce. Now, that is one item. In the matter of car service the same information is "get-atable" as applied to the number of ton miles produced, of each class of business. Then, as to the amount that should be charged to maintenance of equipment on account of cars, of course, there is an element of uncertainty, but based upon the number of times the car is handled and the time that it is occupied in producing these ton miles, from those factors you can form a pretty fair estimate of the amount that should
1448 be charged against the equipment for its maintenance; but I will say, not with definite precision, because there are still some elements of uncertainty connected with it.

Q. But you mean that the methods you suggest would come nearer being an absolute method than any other possible method?

A. Than the former opinions expressed on this subject.

Q. That is the best thought that you have on that subject now?

A. Yes.

Q. Now taking up that subject "maintenance of cars": would you say that the hauling and loading of a car in a local freight train caused more wear and tear in hauling that car than a similar car containing the same commodity and the same through tonnage in a through freight train, the same distance, on the same piece of track?

A. No, so far as the train service is concerned I do not consider there would be very much difference, if any; but in the terminal service, cars are handled many more times at stations in switching. The question as to the amount of damage a car receives in handling or whether it receives its wear and tear from road use, is an uncertain quantity. The best judgment that I have on the subject, and the best that I have been able to obtain, has been that a car received 50% of its damage in handling in switching.

1449 Q. Where does it receive the other 50%?

A. It receives the other 50% in other ways, in road service, or in other ways. I am merely giving that as an approximation; the probabilities are that that is about right.

I had occasion to investigate that question with an idea of forming my own judgment, and the opinions of men who are qualified to give an opinion on that subject range all the way from 25 to 75 percent on that point, so that I would say, conservatively, that I do not believe 50% would be out of the way. The greatest damage the equipment receives, of course, is in the larger terminals, like St. Louis and Chicago.

Q. There is the longer haul on the through train element to be considered in that, is there not; an element to be considered in wear and tear if cars?

A. Yes, sir; the car of course receives more road wear the further it goes, than it does in the shorter haul; but when a car is loaded and under way, the percentage of wear is mainly to the running gear and is not very severe, so far as straight mileage is concerned.

Q. There is an element of wear in the terminal handling of local joined with the short haul as between that, is there not?

A. Of course in the short haul the car is handled many more times proportionately than it is in the long haul.

1450 Q. Everything considered, would a car mile basis be fair between these two classes of trains? I am speaking about this maintenance of equipment.

A. Well, a car mile basis, it seems to me would be very similar to the ton mile basis.

Q. I do not suppose there would be any practical difference.

A. It would be an average and it would not take into account the extra handling. It would simply measure the miles; the mile would be the unit the same as the ton mile.

Q. If you take the car miles as a basis would you add anything, and if so, how much for the local?

A. Yes, I would have to add this element of handling.

Q. I want to know how much you would add to that.

A. I believe that it is demonstrated in these statistics to be about 10 to 1.

Q. There would be 10 to 1 handling on that?

A. I think so. Take the average haul, the difference between the miles.

Q. We are taking the difference now, as I understand it, between local and through.

A. Take the difference in the miles in state and interstate freight, those are the only statistics we have.

Q. You are getting away from the question, unintentionally of course. As I understood it we are now discussing the question between local and through and you derive your intrastate and

1451 interstate by dividing the proportion on those. But the primary division must be the division between a local and a through train.

Mr. HILL (to the witness): I am asking you to devote your attention as between the local and through.

Mr. MOORE: You are speaking of the train or what the train hauls?

Mr. HILL: The train.

A. Judge, I do not know how to figure that out from the way you put the question. To ascertain the relative difference you would have to take the lengths of the hauls, that is the state and interstate haul.

Q. You are getting back to the state and interstate: I am asking you about local train and through train. We will get at the state and interstate from those.

A. I haven't any statistics that show differences in the length of the hauls as between the local business and the through business. We have statistics as between the lengths of the hauls for the two classes of trains, the length of the runs.

Q. That is what we are getting at, as I understand your question.

A. The Cotton Belt time table shows that the average length of their local haul is 60 miles, local train. The run of a through train in 24 hours, is between 250 and 300 miles.

Q. That is ignoring your division terminals entirely, is it not?

1452 A. Yes sir using the element of time.

Q. But now we are trying to get right down to the actual facts in the physical handling of that run; the difference in the haul of a through train and a local train. You have testified already about the trains breaking up in the divisions. Now I want to get at the difference in the haul and what apportionment, if any, you put against the local train on this particular item.

A. I haven't any statistics on that——

Q. You have some judgment about it as a practical operating man.

A. I do not want to make any wild statements on that point unless I have the number of the relative handlings that the cars receive; then my judgment would be predicated on that.

Q. The starting of a heavy train with the slack bunched, the stopping and reducing speed, with the train spread, is undoubtedly responsible for much damage to draft gear and other equipment is it not?

A. Yes sir.

Q. Is that an element that you have considered in this?

A. Yes sir.

Q. Is it not an element which off-sets at least in a degree, if not entirely, the yard damage?

A. In a degree, yes sir.

Q. Will you state approximately in what degree it would.

1453 A. No, you could not state that. It is one of those indeterminable things depending on conditions, depending on grades, water, the character of the road. For instance, take a train on a road running along, if it is a poorly built road with imperfections in the grade, line full of sags, and that sort of thing, that would produce this same character of equipment in a big train that the

starting from a station will produce, and frequently trains will part, break in two and three pieces, from that cause.

Considering the St. Louis Southwestern Railroad main line in Arkansas and the Iron Mountain line, those defects have been largely removed in the last ten years and the physical standard in that respect brought up so that does not obtain very much. Of course the starting of these heavy trains create some damage, but in my evidence I put the station handling at 50%.

Q. I am trying to get down to the actual facts, Mr. Doddridge, instead of theories. You have given us a definite percentage on that and I would like to know something definite about the other side, a counter-proposition there as against other trains. I would like you to give us your best judgment as a practical man.

A. I would say that the other 50% is done in these other ways.

Q. The through train also gets its yard handling in terminals and division points?

1454 A. There is no difference in that respect as to what kind of a train it is. Under the same circumstances and conditions it gets all this physical handling.

Q. If that is the case I do not understand why you object to the car mile division then.

A. Because in the case of the other freight, short haul freight, it gets more handling; the cars receive more handling, pro-rata.

Q. Is it not a fact that the average through division is very closely approximated in length, to the average haul of the state freight?

A. No, I think not. I should say it ought to average about three times the length of the haul on the Cotton Belt, and it averages a little less than twice, I should say, on the Iron Mountain.

Q. If those runs were approximately the same, without going into the detail about that, there would be no objection to dividing that on a car mile basis, would there?

A. In a train passing through a terminal the cars do not receive the handling that they receive at a station, or at a point where the car is switched out of the train and set on an industry track. It is a different kind of handling altogether. The through train at a division point frequently does not leave the main track and it does not receive any switching at all, perhaps, except to cut the engine off and change a caboose.

1455 Q. That is in cases unquestionably true, but as a practical proposition that is not the way the freight is handled is it?

A. I think it is unless there is some condition of congestion or something of that kind that changes the thing, or the train is increased or diminished. In that case the train is not reclassified on the road if it is a through train. What I mean by reclassified is, a train here and there—it is usually set out, a certain number of loads set off and thrown out, constitutes one switching, and then the train goes on; or, there are a certain number of loads added to the train. A through train does not receive the switching at the terminal point that a local does.

Q. Without going into all that detail—I am trying to get at

something definite as against a theoretical proposition. I asked about the car mile. Have you any other basis to suggest for it; you say you can locate these things with precision.

A. I did not say I could locate them with precision. I said we had figured out a method by which we thought we could get it more accurately than we could a year ago.

Q. What is your method on this proposition?

A. To get at the amount of damage that equipment would be charged with I should take into consideration the number of times the equipment is, proportionately, handled to produce a given number of ton miles, and then upon that proposition I should form my conclusion and estimate as to the amount that should be charged against that equipment for that purpose; that is, terminal handling.

Q. Suppose they were an approximately equal length of
1456 haul, that is, the average local haul with the division point?

A. We have an average length of haul, one was an interstate shipment and one was a state shipment——

Q. I am talking about the local and through.

A. If the haul and conditions were the same the charge would be the same against the equipment.

Q. Then you would come back to the car mile division if the car haul was the same?

A. If all the circumstances and conditions were the same I should say it would answer the purpose very well, as an average unit. If you want to divide it for some other purpose, that purpose would not meet the requirement.

Q. But it would be all right for maintenance of equipment under those conditions?

A. Considering the road as a unit, yes sir.

Q. Let us take up some of these other expenses according to this division of expenses made by the Interstate Commerce Commission: the transportation expense—the question of labor is one of the chief items in that I presume?

A. Transportation?

Q. Yes sir.

A. Yes it is one of the large items.

Q. I believe you have heretofore stated that the overtime
1457 on labor on local trains should be charged to the through train which caused it, for it is the usual road delay.

A. No sir I did not say that, in that sense.

Q. I understood you to say in the illustration I have put to you that where a fast train, a through train, causes a local to wait for it on passenger tracks, an overtime is earned on account of that; that that is an item that should be charged to the fast train instead of the local.

A. Yes sir, but that is not a parallel case with this line question which you put.

Q. I may not have formed my question correctly. That is the idea I want to get at.

A. That I should say would be all right because the delay caused

by that thing certainly should not be attributable to any fault of the local train.

Q. Fuel I presume is another one of the chief items as you worked that up in the Cotton Belt case. Would the actual figures you worked up on fuel cost between local and through trains on the Cotton Belt, apply generally on the Iron Mountain?

A. I presume that those proportions would be applicable in a general sense to the Iron Mountain, or it ought to be.

Q. That is, you mean the relation in the cost between the two classes of trains?

A. They ought to be unless there is some difference in conditions on the Iron Mountain that might change the relations.

1458 Q. Do you know any conditions between those two roads (you have been General Manager of both) that would change the relation of the fuel cost between them, as to the proportion consumed on the local as against the through, or the through as against the local?

A. I do not know of any conditions that would change those relations on the main line of the Iron Mountain as compared with the Cotton Belt—the Cotton Belt Railroad is mostly main line. The Iron Mountain main line is a very similar road through Arkansas, as to grades and other things—I guess the Iron Mountain is a little better than the Cotton Belt, some parts of it—and of course the Iron Mountain has other divisions, like your road from Little Rock to Fort Smith, that used to be very different from the Cotton Belt. I guess it has been improved now.

Q. It has all been improved. You must not indicate that anything going out of Fort Smith has not been improved or we will have a falling out.

A. In a general way the test on the Cotton Belt ought to reflect the general average conditions.

Q. That is all I am after. The detail may be different. You have taken that test on the Cotton Belt as a representative one and I want to know whether the proportions would be representative on the Iron Mountain.

A. Yes I used that largely as a basis for my calculation.

1459 Q. Now here are two other items that I find in the classification of what the expenses are: one is the water supply and the other is lubricants. I notice they are different so I will ask them separately.

Q. Is there any difference of expense of water supply on a local and on a through train? If there is, I would like to know what would be the difference, estimated on car or engine mile basis, or any other basis you could reach?

A. Well, my judgment is that a local train would use more water and more oil, per train mile, than the through train. In making that statement, I will explain the reason——

Q. I don't care about going into detail. I understand it is a small matter, but I would like to get at something definite; if more, how much more?

A. I can't say how much more, without data or figures on that subject.

Q. Give your judgment.

A. It ought to be considerable more on a local train, both in the consumption of water and oil, on account of the large amount of switching that a local engine performs on all of the heavy local divisions——

Q. I understand; there will be no dispute about that.

A. —but what the proportions are, I am not able to say.

Q. Would it be double?

A. I don't know; I could not answer that.

1460 Q. How about your lubricants?

Mr. MOORE: He included that in his statement.

Mr. HILL: I did not understand that.

Q. You say you could not give any estimate on either one of them?

A. I could not say, proportionately. It is a matter that is so insignificant or negligible, that I did not consider it worth looking into.

Q. Under the head of "other train supplies" and "other locomotive supplies", how would a train mile, for the train, and engine mile for the engine——

A. "Other supplies" you say—on other supplies?

Q. The other supplies, whatever they might be.

A. They would also be a very small item, the proportion as divided between the local and through freight; on a train mile basis it should be much larger to the local train, on account of the shorter mileage.

Q. I believe you say that is one of your infinitesimal items?

A. It is a small item.

Q. Now, there is the question of dispatching trains: there is a good deal more expense on that on the through, is there not?

A. In the aggregate, yes sir; but in detail, I should say that the dispatcher's duties ought to be divided as to the lengths of the runs of the respective trains.

1461 Q. That would be a train mile division of it, wouldn't it?

A. Yes.

Q. You think that could be fairly made?

A. That could be made, yes, sir.

Q. The same features, I presume, would belong to the superintendent and train master, as well as the dispatcher?

A. I think it would run all the way through the transportation, as far as the supervision went.

Q. That is on the train mile basis?

A. No, not on the train mile basis, but on the basis of the respective lengths of the hauls. I think there ought to be a greater ratio of expense charged for that service on account of the character of the service. Strictly speaking—on the basis of train miles—that does not mean what I mean.

Q. What do you mean?

A. I mean that there is as much additional effort and work per-

formed by the superintendent, and by the train dispatchers and their assistants, telegraph operators, etc., as the respective lengths of the hauls of the two classes of trains.

Q. Two classes of trains?

A. Yes sir; for instance, with the average state business, his length of haul is——

Q. You say "average state business"; that is getting away from our question. We are talking about through and local. You have made that division and I am trying to hold right down to
1462 it; I want to get at your——

A. That was in one respect; now you are considering the railroad as a unit.

Q. I am trying to consider two trains, one of local freight, and the other of through freight, according to your division made on the Cotton Belt test; that is what I am trying to hold this inquiry down to. You have given a certain way to get at your expenses and you have testified how you get at them; after you get that expense—local and through—you arrive at the state and interstate; I want to call your attention as to the local and through.

A. I would not want to give you a formula for making the division without giving the matter proper investigation and consideration, because I would be committing myself to something that I had not considered in that light.

Q. Let us consider that for a moment.

You take a dispatcher, he has to spend more time and effort in moving those through trains, than on the locals, does he not?

A. No sir; the business of a local train is at every other station along the line——

Q. Does it not move on through schedule? I tnink you have testified that.

A. Yes, it moves on schedule, but at the same time there is a great deal more detail connected with the transaction of the business at the different local stations along the line, than there is with the train that starts from one division point and simply has
1463 to be moved over the road to the other end of the division, as across a bridge; that is the difference.

Q. But your local is a fixed quantity?

A. The local gathers up all the business; stops at every station and does the work.

Q. You have testified that the other trains come through whenever they get ready. There is your fixed quantity, and you have to get the other trains to meet that fixed quantity?

A. No, sir, there are scheduled through trains.

I stated that the through trains ordinarily were not run unless there was an engine load, and in case there was not an engine load, the dispatcher or superintendent would annul or abandon the running of that train altogether until the time for the next train. Under other conditions of unequally balanced traffic the crews on the through train might be run in one direction alike, without any train. In that case there would be no tonnage for it and no load, but that would be done for the purpose of equalizing the power, or

balancing it, to get it back to the point where it would get the movement of traffic.

Q. What I am trying to get is the actual facts.

A. I am trying to give you the facts. The local train runs there regardless of the load to be moved from the terminal where it starts. It may start with one car, or ten or a dozen, and it stops at each
1464 station and does the work to be performed down there, switching. Sometimes it is delayed ten minutes and sometimes an hour and a half, and that train has to be cared for until it comes to the end of its run. While it is true that it keeps out of the way of these through trains, still it has to have the care of the superintendent and the dispatcher in the detail.

Q. Did you take the time on the road of these through trains, as a basis?

A. The basis would be somewhere in the relation to the performance of what the trains produce.

Q. What would the production of the trains have to do with the cost of the train dispatcher sending those up?

A. That would be simply a method of getting a factor upon which to make some apportionment or division.

Q. Is there any different relation in dispatching a train loaded with lumber, than a train loaded with coal?

A. No, there is not any difference in them.

Q. You don't want to put that on a revenue rate division, I presume, Mr. Doddridge?

A. I say that would not be any different, the different kinds of freight the trains carry, unless it is a fast stock train, it might take more attention; and yet, a fast train, after it has once started on its journey, if it makes its time it is very little trouble to the dispatcher, because he figures it all out beforehand; turns it loose and lets it go.

Q. Which is on that division the longest?

1465 A. Which is on the division the longest?

Q. Yes, the local or the through?

A. So far as the local run is concerned, it is on the run probably longer than any other train.

Q. Under the dispatcher's orders longer than the through?

A. For the number of train miles it makes, yes.

Q. Would that be a basis? I am trying to get at a basis.

A. I have not said that; that particular feature could be worked out on some theory or on some arbitrary basis.

Q. I want facts, I don't want something arbitrary or theoretical —some actual division of operating method.

A. I don't know that I can be of any assistance in getting at any specific method of making such a division, or arriving at any definite facts, except as to testify as to the conditions that prevail——

Q. Well, we will just pass up that proposition as something that you are not capable of making any division, per train, on.

A. It is a matter I have not given any thought to, and I don't care to go on record as to a definite rule by which to work it out, without doing so.

The local train is the train that does the peddling business at every station; it is on the road all day.

1466 Q. Let us see if you can work out anything on maintenance of way. I believe you testified about that, haven't you? I questioned you about a loaded car in a local freight train——

Mr. MOORE: You have been over that.

Mr. HILL: I was thinking so; I am not certain.

Q. What did you say?

A. I say, under equal conditions of load and speed, the wear and tear of the two cars would be substantially the same, there would be no difference; but I think I also testified as to the tare weight. In the case of a local train the tare weight that each ton mile produced was 4.09 tons——

Q. You are talking about interstate business now.

A. No, I am talking about a comparison—well, yes, I am, interstate——

Q. You have gone and made your division in the Cotton Belt on a basis of local and through, and that is what I am trying to question you about.

A. The two cars, under the same circumstances and conditions as to load and speed, the wear on the track would be the same.

Q. Mr. Doddridge, you have testified about a division of expenses in terminals; would that same basis apply to the facilities of the terminals, buildings, fixtures and grounds?

A. I don't remember what I testified to as to that.

1467 Q. You have given us your terminal method of getting a division of terminal expense: I am asking you if that same method would run through maintenance of buildings, fixtures and grounds?

A. It takes into consideration all of the facilities for the transportation of business.

Q. Maintenance, as well as operation?

A. Maintenance as well as operation——

Q. That is what I presumed, but I don't believe you have stated it fully before.

A. —which would include the tracks used for business purposes.

Q. What you have said about this division of expenses between local and through freight, would that apply to local and through passenger trains?

A. Not in the same proportions, exactly; a passenger train does not use the facilities to anywhere near the extent that the freight uses them——

Q. For maintenance of equipment, what basis would you put that on?

A. I don't know what I would say about passenger cars, without giving the matter some thought.

Q. Could you do it on a car mile basis?

A. I don't know whether that would be a fair average of it or not. There might be some difference of cost come in there that I haven't thought of.

In my testimony as to the elements of extra cost, I don't think I specified car maintenance as one of the elements. I don't think I did.

1468 There is an element of extra cost in the car maintenance, in the additional stops of the train doing the local business.

Q. You explained that about the freight. Would the same——

A. I was just thinking now what elements of extra cost might come in the maintenance of passenger train equipment you are talking about, and I say there is an element of extra cost in the maintenance of equipment, due to the extra stops, and there may be some other items I have not thought of.

Q. That would be practically the same proposition as the freight, minus the switching?

A. No, the freight service is considerably different in very many respects.

The equipment of passenger trains would receive its extra wear in stopping and from the friction of the brakes on the wheels and some other parts of the machine.

Q. You have that same friction on a freight train, don't you?

A. No, not in the same degree. A passenger train that is running at a fast rate of speed when she put for the station and starts in to stop, stops quickly, and that element of cost is quite considerable; not only on the tracks used, but on the wear of the wheels, which are an expensive part of the equipment. The wheels——

Q. I am not caring about details; I am trying to get your opinion as an operating man, as to how you divide those and get some basis.

1469 A. I haven't thought it out. Those are questions of detail that require reflection and consideration before a man can answer offhand.

Q. Did you not have to take all of these elements into consideration when you evolved your revenue theory of so much extra cost?

A. In a general way, but I did not go into the detail of the various accounts.

Q. It must have been pretty general then, was it not?

A. No, because elements of extra cost are based on some pretty large items.

Q. I have tried as best I could, to get you to particularize on these various items that you say go to make it up, and if you are unable to make any opinion on that, I would like to know how you arrived at a grand total on it.

A. Of course, I can't very well give an offhand answer to technical questions of that kind, without giving them particular thought.

Q. You would have to consider every one of these technical questions I have asked you, to form an intelligent opinion?

A. No, I can form a good many from a general basis, of experience, without taking up the classified accounts.

Q. Sort of an intuitive knowledge, is that it?

A. No, sir, it is not intuition exactly; it is a knowledge based on a good many years of practical contact with the actual physical things and facts, but at the same time——

1470 Q. I am trying to get you to tell me how you arrived at these actual physical facts and things, and I seem to be failing to get you to express yourself on it.

A. I don't know as to the details of the accounts, specifically, and I would not want to go into that without any preparation and answer them offhand, and say, so much for this and so much for that, should be charged here and there; because if I did I would put myself on record, and might be very wrong about it.

Q. This grand total you have reached is made up of all these elements you have been talking about?

A. It is made up on the business itself, and it is a larger unit, based on larger principles, than the——

Q. It is made up of larger things, then, than actual cost of operation?

A. It is made up of larger things than the small details of the cost of operation.

Q. Is maintenance of equipment a small detail of operation?

A. In the whole it is not, but it would be, as applied to the details that go to make it up.

Q. On the freight proposition—through and local trains are the only kind you run, are they not?

A. Generally speaking, the revenue trains are through and local trains, except that there are different kinds of through trains.

1471 Q. I am asking you for a division of those. You predicate your whole judgment and your test upon that division, and I seem to be unable to get anything specific from you. I want to know how you can reach a specific, definite and certain conclusion on this subject, without being able to tell the component parts making up that conclusion?

A. I am not qualified to take up the 124 Interstate Commerce Commission accounts and say in detail how much this, or that or the other one, would be charged, without giving the matter special investigation.

You are asking me to do something that I don't feel qualified to do.

Q. Have maintenance of way and maintenance of equipment been leading items of expense?

A. Yes, sir; and if you want to know what the difference is, in my opinion, on maintenance of way, I can give you that as between state and interstate traffic.

Q. Between state and interstate? That goes back to the other question.

A. That is what we have been discussing, you know, except now.

Q. I am trying to get back to your premise. You are premising your difference of state and interstate on local and through, and I am trying to get back to your premise, but you come back to the conclusion, instead of the premise, and so we will leave it at that.

1472 Mr. Doddridge, I want to call your attention to this statement, made in your Missouri case testimony, page 323, of the Frisco case. I will have to read you the connection, so you can get the whole.

"Q. It does not follow at all that that whole train load is for a particular company or for a particular industry. Each car may go to a separate track, and they have got to bring an engine around there and break up that train, and set up the cars on the proper tracks.

Now, don't you think that distinctive function of simply breaking up the train and setting up the cars on the appropriate track involves more labor, and consequently, more expense than that function at the way or country station?

A. Well, the same expense, Mr. Lehmann, at that terminal, is common to all the business, both local and through.

In order to make a relative comparison, you must bring it down to some unit, and that unit probably would be the carload or the car. Divide the total expense by the number of cars handled, and then you could ascertain which would cost the most.

Is that right?

A. Well, I presume it is right; it depends on whatever they are talking about there.

Q. Does not this explain itself, what it is talking about?

A. I don't understand exactly what he was getting at there, unless——

Q. It seems to be a question of dividing the terminal expense between local and through trains, that you were just testifying about. Look over it (handing witness papers) and probably you can catch the connection better.

1473 Previous question read.

A. I do not understand exactly what he was getting at there.

Q. It seems to be a question of dividing the terminal expense between local and through trains, that you are just testifying about. Look over this and perhaps you can get at the question better.

(The witness here examines the record in the Missouri Rate case.)

Mr. MOORE:

Q. Do you understand it?

A. I understand the matter he was talking about.

Mr. HILL:

Q. My question is, was this a correct statement of your testimony given in the Missouri Case.

Mr. MOORE: That is objected to. His testimony in the Missouri Case in not competent in this case, unless it is correct in this case.

Mr. HILL:

Q. I will put my question this way:

Did you not testify in the Missouri Rate case what I have just read to you from the record which you have just read?

Mr. MOORE: I object to that question. If you look at the record you will find he was testifying about conditions which are not in this case.

Mr. HILL: You can put in as much of the record as you please, Col. Moore. But I want to know if he testified to this in the Missouri Case, and any part you want to put in I have no objection to, at all.

1474 Mr. MOORE: The objection I have to it is this: Why not ask him the question right in this case? Why prove a fact by saying "Didn't you say so and so in the Missouri Case and if you did is that true in this case."

That is not competent. Every man knows that. That Missouri Rate Case record is competent only for the purpose of contradicting the witness and not competent for the purpose of impeaching the witness.

Mr. HILL: It is competent to refresh his memory.

Mr. MOORE: Ask him that.

Mr. HILL: I am asking him that.

Mr. MOORE: The only purpose for which it is competent is for the purpose of contradicting him.

I asked him to look at it and he finds it is not applicable to any condition in this case.

If you go back two pages in that record you will see that is a reference to a condition which does not exist here at all. It is comparing local switching with the switching at large terminals in cities like Kansas City and St. Louis.

Mr. HILL: I think it is competent just the way I read it and I ask that he be required to answer the question.

I will ask if he did not testify to what I read in the Missouri Rate Case.

Mr. MOORE: It is not a question of getting in the evidence but a question of the proper mode of getting it in.

1475 Mr. KIRBY: As we understand it, we asked him if there was any method of getting it, and we understood him to say there was not. Then we read this and asked him if he did not there state there was a method.

The MASTER: The rules of evidence are so much relaxed in a proceeding of this sort, that it has been decided by Judge Sanborn, when this question was directly before him, which might seem to have any bearing on the case, or which even if the Master was of the opinion, had known it was proper to go in, and the court might decide whether it had any bearing on the case thereafter, and the only thing exempt was where it was so obvious and showed on its face it could have no relation to the case at all.

So I adopted that rule and following it will let this go in. It may be it will have but little bearing on the case. But so far as I am concerned I will admit it.

Previous question read as follows:

I will put my question this way: Didn't you testify in the Missouri Rate Case what I have just read to you from the record which you have just read?

A. I presume I did.

Mr. MOORE: If you have any explanation to make about it, Mr. Doddridge, make it now.

A. I will say in that connection, after examining the record, that what brought the question up was certain questions with ref-
1476 erence to the large terminals in the state of Missouri, namely, St. Louis and Kansas City. Mr. Lehman asked about the cost of switching cars and distributing them in those terminals.

That is a condition that is dissimilar from the conditions existing in Arkansas.

Q. Now I will call your attention to this testimony, just preceding what I have quoted to you:

"Are not the operations, when you get down to it in addition to having this higher priced property, which is the base upon which the terminals rest, and the higher paid assistants to do the work, haven't you more actual operation to go through with in either detaching or setting out a car in one of these great commercial centers than at the way station?

A. Yes, because the commercial center or terminal yard is of an entirely different character than that side track along the road.

When the train reaches the terminal and it is broken up and distribut*ive*, of course there are all those operations.

But when you come to analyze the cost and pull it down to the unit of a single car, taking into consideration the large volume of business, and the large number of cars handled there, I would not be surprised if you found the cost per car did not very much exceed the cost per car at the local point.

Q. That is just what I am getting at, the cost per car, because that bears upon this question of relative expense of way and through freight."

1477 That is correct, is it?

A. Yes, sir, that is correct.

Q. I did not finish the quotation:

"Now, take it on the car, or setting it out, in the case of the way freight, at the country station, it is done by the train crew itself. They are right on hand to do that work, and they do not have to go there for that purpose. They are already there in the course of pulling their train over the road, and they lose no time, and can do it as quickly as if they were specially organized for that purpose, can't they?

A. That is one of the elements of extra expense of local freight.

Q. I am now considering that separate element of extra service. We do not want to charge that twice. I want to see how that compares with the same function performed with respect to the through freight. Now, when your through freight comes into the commercial center, the crew leave it. They do not do any of the local work. They simply attend to the road haul?

A. Yes, sir, that is all.

Q. They leave it?

A. Yes, sir.

Q. It does not follow at all that that whole trainload is for a particular company or for a particular industry?"

That connects up with what I first read to you.

That is correct, is it?
A. Yes, sir.

1478 Mr. MOORE: Before re-examining Mr. Doddridge I will want to look over the notes of his cross-examination.
In the mean time I will put in another matter.

R. E. KIMBELL, recalled, testified as follows:

Redirect examination.

By Mr. MOORE:

Q. Mr. Kimbell, have you prepared a statement showing the operating revenue and operating expenses, taxes, etc. of the St. Louis, Southwestern Railway for the six months ending Dec. 31, 1907?
A. I have.
Q. Were these statement- made up under your directions so you can state that they correctly reflect the facts?
A. They were.
Q. These are correct statements from the books of the company?
A. Yes, sir.
Q. Will you file those statements as exhibits and state what they show in regard to the earnings and expenses, etc., during the period covered by them, and the net result of dividing the expenses upon a revenue basis?
A. I file as Exhibit 32 a statement showing operating revenue, expenses, taxes, outside operations, etc., in the state of Arkansas for the six months ending Dec. 31, 1907.

1479 This Exhibit 32 corresponds with a similar exhibit, previously submitted, exhibit No. 11, which was for the year ending June 30, 1908.
The present exhibit, No. 32, covers the six months ending Dec. 31, 1907.
In answer to the latter part of your question, Judge Moore, I will say that the expenses are not divided on this statement but are divided on the exhibit that will follow this.
I might mention, before leaving this statement Exhibit 32, that a reference to it in comparison with Exhibit 11 will show that the relation of the different classes of traffic is very similar for the six month period and the twelve month period.
For example, state freight revenue for the twelve months ending June 30, 1908 was 7.65% of the total revenue.
This same item for the six months ending Dec. 31, 1907 is 7.56% of the total revenue.
The item of interstate freight revenue shows 69.44% for the year ending June 30, 1908 and 69.80% for the six months ending Dec. 31, 1907.
The passenger revenue, state, for the year is 10.66% and for the six months 10.76%
Passenger revenue, interstate, is 7.40% for the year.
And 7.46% for the six months.

1480 The miscellaneous revenue for the year is 4.85%
For the six months 4.42%.

I mention these facts to show that the proportions travel very well together for both periods.

The exhibit referred to is marked "R. E. Kimbell 32."
Said exhibit is in the words and figures following to-wit:
For Exhibit 32, see Volume 8, page 5362.

1481 I file as exhibit 33 a statement which shows the operating revenue, expenses, taxes, rentals, etc., that results from handling state freight and passenger traffic only.

Q. For the same period?

A. For the six months ending Dec. 31, 1907.

This statement Exhibit 33 corresponds with a similar statement previously submitted as exhibit 12-*a*.

Q. Covering the fiscal year?

A. Covering the fiscal year ending June 30, 1908.

Q. What does that statement Exhibit 33 show to be the net earnings from freight and passenger traffic on a freight revenue basis.

A. On the two combined?

Q. On each separately.

A. Freight, $83,837.17.

Passenger, $15,137.95.

Q. What does it show to be the freight earnings on the basis of additional cost of 50% in conducting intrastate traffic?

A. $45,393.03.

Q. What is the result on the same basis as to the passenger traffic, on the basis of 25% additional cost?

A. A deficit result on that basis of $4,595.23.

Q. What is shown upon the basis of increased expense incident to the conduct of the intrastate traffic of 100%.

A. A balance is shown of $10,418.91.

1482 Q. And what appears as to the passenger earnings, attributing 15% additional cost to that class of intrastate traffic?

A. The balance is shown on that basis to be $2,668.98.

The exhibit referred to is marked "R. E. Kimbell 33."
Said exhibit is in the words and figures following to-wit:
For Exhibit 33, see Volume 8, page 5364.

1483 Q. What is the exhibit?

A. Exhibit 34 explains the formula used in arriving at the extra cost of handling state traffic on the several bases, as shown.

The exhibit referred to is marked "R. E. Kimbell Exhibit 34."
Said exhibit is in the words and figures following to-wit:
For Exhibit 34, see Volume 8, page 5366.

1484 Q. What is the next exhibit?

A. Exhibit 35 contains the miscellaneous traffic statistics for the six months ending Dec. 31, 1907.

These results are shown in exactly the same way as previously shown for the year in exhibit 14.

The exhibit referred to is marked "R. E. Kimbell Exhibit 35."
Said exhibit is in the words and figures following to-wit:
For Exhibit 35, see Volume 8, page 5368.

1485 Redirect examination of W. B. DODDRIDGE continued as follows:

By Mr. MOORE:

Q. On cross examination you were asked if certain classes of trans-state freight, referring to refrigerator cars and live stock, did not have a larger return empty movement than any other class of freight; and your answer was you guessed that was true, in a general way.

Now the question related, as I said a moment ago, to trans-state freight, which has a perferred movement.

I want to call your attention to the language used, "if it did not have a larger return movement than any other class of freight:"

What did you mean by the words "other classes of freight?" Did you mean than all ordinary freight, or all intrastate freight? Or if you did not mean that, what did you mean?

A. I was comparing the empty movement of that class of freight with a similar class of long haul business.

1486 Q. What I want to get at is this: Did you mean when you say, "any other class of freight," did you include any other entire group, such as interstate or intrastate? Did you mean to say that had a larger empty return movement than intrastate freight, for instance, as a body?

A. No, sir, I did not mean that, because intrastate freight as a body has a large percentage of empty car mileage for the reason that there is no reciprocal loads, as a general rule.

The cars which are used in this intrastate freight movement, may be utilized in a section of the country in which they are carried, by the movement of the intrastate freight, but in other business.

The idea that I wanted to convey is, that there is the return movement in the same kind of freight.

Q. You mean when you say, other class,—what I understand is tha you refer to commodities and classes and not to any large group of freight: Is that what you mean?

A. That is what I mean.

Q. You stated in answer to the direct question on cross examination that the traffic on the St. Louis, Iron Mountain & Southern road and also on the Cotton Belt road was the same kind, whether state or interstate:

I want to ask you if you mean by that statement to imply there was a similarity in tonnage or whether you referred to the
1487 character of freight carried in the two departments of tonnage.

A. I was referring to the character of the tonnage.

Q. Referring to cotton, for illustration, and also to grain: are those commodities carried in both departments of traffic, state and intertstate?

A. Yes, sir.

Q. In what proportions are they carried in each kind? I do not mean to state it exactly, but give it in a general way.

A. The relative proportion of cotton carried as intrastate freight

is very small; the relative proportion of cotton carried in interstate freight is very large. The intrastate grain compared with the interstate grain is in somewhat similar proportions.

Q. Is it generally true that the proportions of the same kind of traffic which is carried in the two kinds of service are comparable?

A. Are comparable as to what?

Q. As to tonnage.

A. The exact amount of tonnage can be ascertained from the record.

Q. What I asked you was, if the two kinds of tonnage are similar or dissimilar, the quantity of commodities and classes carried in the two kinds of service.

A. The volume, of course, is dissimilar.

Q. When you say the traffic is the same kind, whether
1488 interstate or intrastate, tell me just what you mean?

A. I mean it is the same kind as to the commodity, as to the classification of the commodity.

Q. Let us assume that a given kind of freight is carried, say one carload twenty miles and another 75 miles: does the difference in the length of its haul create any difference in itself of the cost of handling those two shipments?

A. Yes, sir.

Q. You were asked on cross-examination if there was any difference in the cost of carrying the same kind of freight on the same train, and you stated there would be no difference in the train cost: what did you mean by that statement?

A. I meant that the same kind of commodity under the same circumstances, and conditions, the same car carried the same distance, there would not be any difference in the cost, no matter whether the freight was classified as state, interstate or otherwise.

Mr. HILL: You mean cost per ton per mile?

A. By any measure or any unit you might apply to it.

Mr. MOORE:

Q. You also stated that jobbing freight out of Memphis and Fort Smith, distributed over the state of Arkansas, the length of haul would probably be the same as for interstate freight moved under similar conditions: Memphis and Forth Smith are both border cities, aren't they? One on the east and one on the west border of the state of Arkansas?

1489 A. Yes, sir.

Q. In view of that fact, and in view of the fact that Little Rock is located in practically the geographical center of the state, I want you to state if in your judgment the length of haul would be the same on jobbing freight shipped out of Little Rock and from those two other points?

A. No, sir, I don't think it would. In making the statement yesterday, I had in mind the system of averages; and after my attention was called to the matter I am satisfied that the length of the haul from Memphis and Fort Smith would be much greater than from Little Rock.

Q. I merely call your attention to Little Rock to illustrate that phase of it.

I want you to state what the average length of haul from those places would be, as compared with the average length of haul from interior points in the state?

A. I hardly know how to answer that question without making some investigation.

Q. Do you know what the average length of haul of intrastate business in Arkansas is?

A. The statistics show it to be 70 miles on the Iron Mountain and 44 miles, I believe it is, on the St. Louis Southwestern.

Q. What, in your judgment, would be the average length of haul of a shipment from Memphis and Fort Smith: you can give it
1490 either in figures or as compared with the figures named.

A. I should think it would be more than twice as much.

Q. You stated on cross-examination that the local trains were "feeders" for the through trains: to what extent is that true?

A. A certain percentage of the local business carried on local trains is business that is distributed throughout the state, or business that is collected by these trains and carried to centers or junction points.

The percentage of the tonnage that has any direct or indirect relation to the through business, I do not know.

Q. I will call your attention to a station that was referred to yesterday, Jacksonville: Jacksonville is situated ten or twelve miles north of Little Rock on the Iron Mountain road. Is that a regular station?

A. Yes, sir, I think it is.

Q. Are local trains scheduled to stop there?

A. You now refer to passenger trains?

Q. I am referring to both kinds of trains.

A. Local trains I believe stop at Jacksonville, according to the time-card, is my recollection.

Q. Do regular trains stop at Jacksonville?

A. Local trains are scheduled to stop at Jacksonville, I believe. In other words, it is not a flag station for that class of trains.

Q. You have operated down there sufficiently to know about the condition of the country as well as the road down there, I
1491 take it.

I want you to state in your opinion what proportion of passengers get on the train at Jacksonville for the purpose of going to Little Rock, as was stated yesterday, in proportion to those who get on for local trips to Little Rock and other points?

A. The proportion of passengers from such a station, that would use the local train to go to Little Rock, or any other similar point for the same purpose, would be in my judgment almost a negligible quantity as compared with the number of people that actually travel locally between such points.

Q. Would that be true as to all regular stations that the local trains are scheduled to stop at?

A. Well, I should say it is generally true to and from stations of that class.

Q. If that is the case, is not the kind of traffic which you have in mind, when you say the local train is a feeder, a very limited quantity indeed, as compared with the regular traffic from these local stations, not including flag stations, but the regular, scheduled stations?

A. Yes, in fact in making my answer on the local feeder proposition I had in mind freight trains rather than passenger trains.

Q. Let us take it up in regard to the freight trains. Take Austin, for instance. Austin, I believe, is 25 miles north of Little
1492 Rock. You know something about that place, don't you, and conditions there? Is not that about an average country town along the line of the Iron Mountain road.

A. Yes, sir, I should say so, unless it has changed greatly in the last few years.

Q. In your judgment what is the character of traffic as to which the local trains would be treated as a feeder, assuming now a shipment from Austin, taking Austin as the station.

A. The character of the traffic would be cars that would be loaded perhaps to go a long distance, may be picked up by the local at Austin, carried to Little Rock and there placed for economical reasons in some train and carried to its destination, if it were going in that direction.

Of course, if the traffic were going in the opposite direction it would be carried to the end of the local run, in the other direction.

Q. Tell me what proportion of the traffic from Austin is carried in that way, as compared with the local traffic to and from that place.

A. I would give it as my judgment that that kind of traffic would be very small, unless it would be traffic originating at some industry say like a saw mill, or something of that sort.

Q. What proportion would that kind of traffic constitute, originating there for an industry or sawmill,—that is, from that
1493 station Austin of which I spoke?

A. It would be a very small part of the traffic of the station; a very small part.

Q. To what extent are the facilities which are created under the operation of the separate coach law of Arkansas applicable to interstate traffic? I mean the colored coaches and colored waiting rooms?

A. In my judgment the facilities of the character you name are used by a very small percentage, relatively, of interstate colored traffic.

Q. Why is that the case?

A. Well, in the nature of things the colored people are not usually in the habit of making long journeys, but they do make short trips a great deal. Naturally, the short trips would be largely intrastate.

Q. How does the speed of local passenger trains between stations compare with the speed of the ordinary through trains?

A. The local passenger trains, on account of the time they lose

at stations in the transaction of the local business, usually run at a high rate of speed between stations and probably under general conditions as fast in that respect as any other passenger trains.

Q. How does the danger of wrecks compare on the two classes of trains?

A. As a general proposition I do not see, based upon my experience, that there is very much difference in that respect.

1494 Q. Do you know of any comparative statistics in that respect as between through trains and local trains? Do you know whether such statistics are kept or not?

A. No, sir, I do not know that such statistics are kept.

Q. You refer to casualty risk, as one of the additional expenses in the conduct of the intrastate passenger business: what class of casualties do you have in mind when you refer to that character of risk?

A. I refer to the casualties arising from the handling of passengers at and about stations.

People are more apt to receive personal injuries around and about trains, who are not in the habit of traveling regularly.

If you handle four or five of one class of passengers to one of another class of passengers, the four or five would in the nature of things receive more damage in the way of casualties. That is the difference.

Q. Are those cotton platforms you referred to yesterday used for storing and holding any other kind of freight except cotton? If so, to what extent, and what character of freight?

A. They are used, especially outside of the cotton season, for the storage of machinery or other heavy articles that are received at local stations that can be stored out of doors and not be

1495 damaged by the weather. The use for such purposes is comparatively small.

Q. You stated on cross examination that the cost of the movement of the train is the same whether the cars are loaded to their full capacity or are carried empty, because the crews consist of the same number of men without regard to whether the train is made up of a full load, light load, etc.

How does the loading of intrastate freight, and cars that carry the bulk of that freight, compare with the loading of the interstate freight, in the cars that carry that character of freight?

A. The figures submitted in the Cotton Belt test show that the less than carload cars in the local trains as compared with the through trains, are loaded about one-half; all cars carried in the local trains as compared with the through train; there is quite a material difference. I have forgotten the exact figures.

Q. I do not care about the exact figures, but which is lighter and which is heavier?

A. The local trains are loaded lighter.

Q. How do the local trains compare with the trans-state trains?

A. The difference would be greater, in my judgment.

Q. Mr. Doddridge, I understood you to state yesterday on cross examination, in answer to a question you were asked, if it were not

a fact that the state and interstate business were so interwoven
1496 that it would be impossible to make any division of them, that that was the case:

What did you mean by that statement?

A. I referred to the interweaving of the costs of doing the two kinds of business; the fact that many of the expenses were common and could not be definitely separated.

I did not mean that the number of tons could not be separated, the number of ton miles, or anything of that nature, that is ascertainable from the records.

Q. Isn't it a fact that the revenue from the two kinds of business are kept separate?

A. They can be accurately determined.

Q. Are not the statistics of the two kinds of business kept separately? Does not Exhibit 5 in this case show that?

A. Yes, sir, the general statistics can be separated definitely and positively.

Q. It is the expense, then, you had in mind?

A. I had the expense in mind more than anything else, in making that statement.

Q. When you make that statement in regard to the expenses, do you mean to say that the elements of cost that enter into the two kinds of traffic cannot be separated and ascertained? I do not mean the cost but the elements and the characteristic features of the business that goes to make up the cost, or any difference there may be in the cost of the two kinds of traffic?

1497 A. The elements, of course, can be separated and the exact division of cost can be determined accurately.

Q. I understand that; but what I am asking you about is the elements that enter into it.

A. The elements that enter into the cost of course can be determined.

1498 Q. I believe you have already testified as to the different manner of handling local and through freight, and the difference in the local and through train, in railroad service:

Now I want you to state here the difference you have described in the regulation and conduct of the different kinds of trains — exist.

A. The reason why these differences exist is because of the difference in the character of the service.

The local service is scattered, at small stations, throughout the State. The necessities of the business require prompt service, daily service. The volume of the business relatively is very small. The circumstances under which the business is handled make it impossible to cover a large number of miles.

Q. It is not worth while to pursue that further.

Do the local trains stop at all stations, as a rule?

A. They do.

Q. Why do they do that?

A. They stop to take on and discharge freight, take on and put off cars; and when the business is not sufficient to maintain special switching engines, do the work that the ordinary switch engine per-

forms, such as setting cars to industries, taking out empties,
1499 placing cars at freight houses, or taking them on.

Q. Why is it that those trains are required to give way to trains engaged in the through service?

A. The reason that they give way is that the scheduled time of the local train provides sufficient margin; and then again the time that the local train consumes at a station in doing its work from day to day is an uncertain quantity.

Q. You say the schedule time for the local train gives it time to get out of the way: is that schedule time fixed with reference to the general exigencies of the business that is transacted by that class of train?

A. Yes, sir.

Q. Mr. Doddridge, you stated, as I understood you in your cross examination (at least you did with reference to certain expenses to which your attention was called, I know) that where a local train takes a passing or side track for the through train to pass, the extra cost incurred in the local service should be charged to the interstate or trans-state train, which creates the necessity for the local train to get out of the way.

I want to ask you if that statement is not inconsistent with the regulations which you have just described as controlling the two kinds of traffic.

A. There appears to be a misunderstanding as to what I meant when I said that the extra cost for delay of a local train should
1500 be charged to the through train or interstate train causing the delay.

Under ordinary circumstances, in fact under any circumstances, I do not know that any charge is ever made for a delay of this kind, in the accounts of a Railroad Company.

What I meant to convey was this idea, that if the local train was delayed by some extraordinary circumstance, in consequence of either mismanagement in the running of the train or some other cause that would delay a fast train or a through train in an extraordinary manner, the expense that would be attributable to the local expense, in consequence of such delay should be charged to the local train and not charged as a regular item of extra cost in the handling of local service.

That is what I meant. I think I was questioned twice on that point in cross-examination.

The side tracking of trains and the meeting of trains is an ordinary incident of conducting transportation business.

Q. You were questioned twice on it; once in connection with refrigerator cars and live stock part of the traffic movement, and your answer was probably influenced by that feature connected with those trains. But your attention was called again to trains on the Fort Smith Road and you made the same statement in regard to the general traffic on that road, and that is the reason I am calling your attention to it. I think you must have made the statement
1501 inadvertently rather than through misunderstanding, if that is not your judgment.

A. My explanation covers the idea I intended to convey.

Q. Mr. Doddridge for what purpose are statistics of a Railroad Company in connection with the cost of traffic made on the basis of ton miles?

A. Ton miles are usually used as a measure of efficiency of car loading, efficiency of train service, and for other comparative purposes. The use, however, of the ton mile unit, being an average unit, is limited.

Q. What other units are used in statistics, in connection with the cost of traffic, if you know of any other.

A. There is the car mile.

Q. What is that used for?

A. For the purpose of testing the efficiency and for certain other accounting purposes.

Q. Is there any other unit used?

A. The train mile also is used.

Q. What is that used for?

A. For the apportionment of expenses, sometimes; the division of certain accounts where it is applicable.

None of these units are perfect. They are more or less of an arbitrary character and represent the conditions.

Q. Mr. Doddridge, you were asked yesterday about the du-
1502 ties and the effect of outside agencies: are you familiar with the service rendered by outside agencies?

A. In a general sense, yes.

Q. Do you know of any service they render that affects directly local traffic within the borders of the State—the intrastate traffic—or, have you sufficient knowledge to go into that subject?

A. I am familiar with it only as a general proposition. I think there is no doubt but the industrial department of a railroad affects the local conditions, in the matter of advertising lands, sites for factories, business opportunities and things like that. It performs duties of that sort.

The agents would come almost directly in contact with local conditions and taking the railroad as a system into consideration he divides his labors and applies it among the several States through which the line passes.

There are other classes of outside agencies that solicit freight in competition with other lines, and look after movement of the traffic in and out of the several States.

They distribute advertising matter and they furnish information as to time tables, time cards and other features connected with the transportation business.

Of course they do not feature or specialize their duties. They treat the railroad as a unit and their services are spread over the entire business.

Q. Do you know whether or not any trans-state passengers travel across the State of Arkansas out of Memphis?

1503 A. Yes sir.

Q. Would that class of passengers have two terminals in Arkansas?

A. No sir, they would not. I refer particularly to the Memphis-St. Louis line passing across the State in a Southwesterly direction. They would not have two terminal expenses in Arkansas.

Q. Is that true of both the Iron Mountain and the St. Louis Southwestern?

A. Yes sir.

Q. Have you sufficient knowledge as to present conditions, to state whether that class of passenger traffic out of Memphis is large or small?

A. I do not believe I could qualify as to the relative volume but there must be considerable of it.

Q. If you do not know don't try to state it.

A. I do not know.

Q. Mr. Doddridge, was the classification of accounts which is now kept by railroads, I believe under the order of the Interstate Commerce Commission, kept during the time you were operating the roads? I mean, the same classification of accounts.

A. The same primary accounts, I believe were in use at that time. The details, however, of the accounts are quite different now.

1504 Q. Do you know when the railroads began to use these certain classifications?

A. July 1, 1907, I believe.

Q. Have you had any experience in operation under that system of classifying accounts?

A. No sir.

Q. You speak of "primary accounts." Was there an account of "maintenance of equipment" kept while you were operating; do you recall about that?

A. I think there was, but I am not familiar with the details of the accounts that were kept by the Accounting Department at that time. What I mean is, as to the technical names of the headings. Of course, accounts of maintenance of equipment have always been kept by railroads since steam transportation was invented, under some name.

Q. Are you through with your answer?

A. Yes sir.

Mr. Moore: I think that covers everything I want to ask him.

Recross-examination.

By Mr. Hill:

Q. Mr. Doddridge, how is cotton handled on the Iron Mountain and Cotton Belt roads?

A. In what respect?

Q. I will state the situation to you as well as I can and ask you if it is not correct:

Cotton is shipped into the compressing points and there
1505 compressed, and then shipped to eastern and foreign markets: is not that the way it is handled?

A. That is the way I understand that is done. That is the way it used to be handled, and I presume it is handled that way now.

We called that "localling" cotton: handling it flat from the local stations, and then forwarded it to its final destination, wherever it may be.

Q. Then that local rate which has been paid to carry it into the compresses is taken up and a through rate given to it from its point of origin to its point of destination: isn't that right?

A. I don't know how they handle that in the billing, but I presume it is done that way.

Mr. HILL (to Mr. Roth):

Q. Mr. Roth, can you answer that question; have I stated it accurately?

Mr. ROTH:

A. That is correct, yes, sir.

Mr. HILL (to the witness):

Q. Then the first movement of that cotton to the compress point is necessarily local, isn't it?

A. Yes sir.

Q. And carried on the local trains, probably?

A. Yes sir, I think so.

Q. Cotton is the biggest crop in Arkansas, is it not?

A. I think it is; that is, the largest agricultural crop.

1506 Q. Taking the System as a whole, there are something like a million bales shipped annually?

A. Yes, I believe Arkansas is credited with one million bales.

Q. I believe there is about one—possibly two, cotton mills in existence in Arkansas, is there not?

A. There is one, that I know of.

Q. Where is that?

A. At Arkadelphia.

Q. That has been played out for many years.

A. That is the only one I know of.

Q. There is one at Helena, and I think at Monticello, but I am not sure about that.

Except what little cotton is consumed in the one or two mills in the state, all the cotton is interstate, in its movement?

A. Yes, in the final movement outside of the state.

Q. In your revenue it is put in the interstate revenue, isn't it?

A. I cannot qualify about that; ask Mr. Roth or Mr. Johnson.

Mr. ROTH: Which movement?

Q. I mean the cotton movement as a whole; is it not all interstate?

Mr. ROTH: As a whole it is, yes.

Q. And it is so made up in your exhibits in this case?

1507 Mr. ROTH:

A. Yes.

Q. Mr. Roth, the only revenue from cotton that should be credited to Arkansas intrastate movement, would be the few bales that go to these cotton mills ?

Mr. ROTH:

A. Cotton mills, or mattress factories.

Q. Could you give any sort of an intelligent guess at the extent of that, Mr. Roth?

Mr. ROTH: Do you mean how much of the total cotton business?

Q. Yes; we all know it is very little, but I have never seen any accurate figures of it, and I would like to know if you can give it.

Mr. ROTH:

A. I think it is under one per cent.

Mr. HILL (to witness):

Q. Mr. Doddridge, taking these statements that Mr. Roth has given of the facts about the cotton movement, does it not show that there has been a large use of local trains in this cotton movement, the revenue of which has gone into the interstate movement, and thereby the local train has been a feeder of the interstate business?

A. Yes, sir, in that respect the local train would be a feeder, but in the statistics filed in this case as to the local train service, the cotton carried by the local train is included; it shows for itself. For instance, the Cotton Belt test would show.

Q. Yes sir, I have no doubt of that; but the ultimate movement is as described by Mr. Roth, and the revenue from it has
1508 gone into the interstate revenue?

A. So I understand, yes.

Q. Is it not substantially the same situation with lumber—of course, not in so great a percentage as it is with cotton?

A. I think the conditions and circumstances in the transportation of lumber and rough material, forest products generally—while there is a similarity of conditions, they would be found to be quite different as to the volume, proportions and so on.

Q. I stated that in my question, that the movement was the same with a difference, of course, as to the extent of it?

A. Yes.

Q. But the first movement, from the forest to the saw-mill, is carried on a local train?

A. Yes, I take it that is the——

Mr. MOORE:

Q. Then the second movement of it would be intrastate, if the lumber was destined to a point in the state, but if destined to a point without the state, then it would become an interstate movement from its initial point, so far as the revenue is concerned?

(To Mr. Hill): You called on Mr. Roth for some information pertinent to what you were asking him. I will ask you to let him state about the lumber also.

Mr. HILL: I would like Mr. Roth to do so if he can.

Mr. MOORE: I would like him to state how the inbound lumber accounts——

1509 Mr. ROTH: Lumber is not handled the same way as cotton, so far as our accounts are concerned.

In the first place, there is the local movement in, which is billed at a local rate, a rate fixed by the Arkansas Commission—so many cents a hundred pounds, according to the distance it is hauled; up to fifty miles it is two cents.

After the lumber reaches the mill we do not know what becomes of it, or its final destination. A certain percentage of that lumber is re-shipped, maybe to interstate points, maybe to state points, but we have no means of telling.

The outbound rate is from the mill point and not from the point of origin, as it is in the case of cotton; it is two separate and distinct movements, one into the mill and one out of it.

Mr. MOORE:

Q. How are they represented in your accounts; that is what I want to get at?

Mr. ROTH: The inbound revenue is all treated as state business, in Arkansas.

Mr. MOORE:

Q. In your accounts?

Mr. ROTH:

A. Yes.

Mr. HILL: I think that is right. It is different from cotton in that respect.

The point I am getting at is this (you can answer, or Mr. Doddridge, whoever can do so): that the first movement is carried on the local trains to the saw-mill or planing mill?

Mr. ROTH:

A. Yes sir.

1510 Mr. HILL:

Q. And then the second movement is carried—dependent on its final destination as to state or interstate, on a local or through train, as the case may be——

Mr. ROTH:

A. Yes.

Q. —or rather, more to the length of the haul, or whether it is state or interstate?

Mr. ROTH:

A. Yes, it would depend on the length of the haul.

Mr. HILL:

Q. Here is another feature about that, Mr. Roth—I don't believe either my question or your answer was quite accurate; Mr. Kirby called my attention to this fact, and it is undoubtedly true, that the second movement of that lumber from the saw-mill would be on

a local train, unless the saw-mill happened to be at a division point, wouldn't it?

Mr. ROTH:

A. Undoubtedly.

Mr. HILL (to the witness):

Q. Now, Mr. Doddridge, we will go on with you, along this line: take your coal, how is that handled as between local and through? I am speaking of that now in the same connection.

A. I presume that coal is handled mainly on coal trains.

Q. You mean by "coal trains" trains that run nothing but coal?

A. I mean, trains that originate in the district where the coal is mined, and I don't mean that coal is not handled on local trains in its distribution—I presume it is, but I am not familiar now with how that train service is handled today.

1511 Q. An entire coal train might originate out of the "Jenny Lind" mine, but it would probably be broken up and get on your locals?

A. Yes, it goes to the point where it would naturally be distributed.

Q. And there would be a vast volume of that that would also go into your through trains: don't you ship any of your Arkansas coal to Texas and Louisiana?

A. Yes. That is the way it would naturally be handled.

Q. Now, take grain: is not the reverse the movement on grain, as compared with cotton: it comes in through trains (that is, grain products), to Little Rock or some other distributing point, and is there carried on the locals?

A. It would be carried on the locals, of course, if it had a destination within the local run: that is what I mean to say.

Q. Now, Mr. Doddridge, that grain (except what little would originate in Arkansas), would go into your interstate revenue, wouldn't it?

If you don't know you can ask Mr. Roth or Mr. Johnson there.

A. I don't know.

Mr. ROTH: Any grain on which we would know the point of origin would go to the interstate business.

Mr. HILL:

Q. What is that?

1512 Mr. ROTH:

A. If we knew the point of origin, we would put it into interstate business, if the point of origin was outside of the state of Askansas; but there might be a car of grain from a Kansas point, into Little Rock, that would be re-shipped from there in small lots, that we would know nothing of.

Mr. MOORE:

Q. Where would that go?

Mr. ROTH:

A. State business, as far as the outbound movement from Little Rock.

Mr. HILL:

Q. The point is this, Mr. Roth: the revenue derived from the grain movement (except what little grain is grown in Arkansas), is carried into interstate revenue in your exhibits here.

The grain originating in Arkansas is a negligible quantity (to use this good word), is it not?

Mr. ROTH:

A. Very much so.

Mr. HILL:

Q. You might describe that as infinitesimal?

Mr. ROTH:

A. Almost.

Mr. MOORE: Mr. Roth, I want to cross-examine you on that:

Q. Assume that grain is brought into Little Rock, or some other center in the state, and shipped from there to some other point: how is that carried in your accounts?

A. That depends entirely on the basis of the freight; if it is finally re-shipped as a through freight, it would be in the interstate business, but if it is re-shipped as local, it would be state business.

Q. And carried in your accounts accordingly?

A. Yes sir.

1513 Mr. HILL (to the witness):

Q. Now, Mr. Doddridge, after hearing these explanations about the movement on cotton, grain, coal and lumber, the four great products of Arkansas, I suppose you are ready to state that the local train is a great feeder of the interstate traffic of the state, are you not?

A. Well, the local train is a part of the general machinery of the transportation system, and it has its functions—as has been stated—and in that respect it is a feeder. It is not distinguishable except in the character of the work that the train performs and the method by which it performs it.

Q. It is the arm that reaches out and gathers up your interstate traffic throughout the state, isn't it?

A. That is true all over the country, west of the Mississippi River.

Q. We are talking about Arkansas. It is true in Arkansas, isn't it?

A. Yes.

Q. Now let us talk a little about this length of haul out of Memphis, compared with Little Rock and Fort Smith: when you were General Manager of the Iron Mountain, did you not have jobbers' tariffs in effect that recognized Little Rock, Memphis, Fort Smith,

and probably Texarkana, as jobbing centers, and the tariffs were so arranged that the traffic would be distributed out of those centers, rather than passing from the one into the territory of the other?

A. I am not qualified to testify as to what the tariffs were at that time. While I was General Manager of the road, we had
1514 the head of the Traffic Department, who handled that part of the business, and I did not come directly in contact with the details of it.

Q. You know as a general proposition—take Little Rock and Fort Smith—that the tariffs were so arranged that Little Rock could reach one-half the way to Fort Smith, and——

A. I understood such arrangements were in force, but I am not familiar with the details.

Q. Is not that general railroad usage—to arrange zones by which the traffic is distributed out of those commercial centers, according to the zone belonging to each?

Mr. MOORE: I object to that. I don't think it is competent to prove a specific fact by general usage.

The MASTER: I suppose he intends to apply that to local conditions in Arkansas.

Mr. HILL: Certainly, and probably to Memphis——

Mr. MOORE: Mr. Doddridge has just stated that he was not familiar with the traffic arrangements at that time, and he is now asked how traffics are generally arranged in the railroad business. That does not prove how it was arranged in Arkansas nine years ago.

Mr. HILL: I was getting up to that, but I will change the question and make it applicable to Arkansas directly; that will be my next question.

The MASTER: I will let him answer the question.

A. I don't believe I can qualify on such a question as that. I——

1515 Mr. HILL:

Q. Take it this way: Russellville is half way between Little Rock and Fort Smith, approximately, is it not? Don't you know that the jobbing trade out of each of those cities is largely confined to the territory reaching to Russellville, each way?

A. I think you are right.

Q. How could there be a difference of length of haul on traffics that move up and down the road, between Little Rock and Fort Smith?

A. Well, it makes a difference in the length of haul as between the three points—Memphis, Little Rock and Fort Smith, with reference to its geographical location, Memphis being located on the extreme eastern boundary of the state, and Fort Smith being located on the extreme western boundary of the state; and a great deal of traffic from Memphis, I am satisfied, goes to all points in Arkansas, and I take it that the same condition applies, to a certain extent, to Fort Smith; whereas, Little Rock is located in the center of the state, and while a certain part of the Little Rock traffic might go to

all points in the state, the proportional distances would be changed on that account.

For instance: I happen to know that you are a manufacturing town at Fort Smith, in respect to furniture, and I believe that the furniture trade covers the entire state. There might be a reason for that; possibly the same articles could not be, or rather, are not produced at one of the other points.

1516 Q. Don't you know that there is one of the biggest brick plants in the United States, in Little Rock, that is sending brick all over Arkansas, and is one of the heaviest tonnages out of that place?

A. Then the relative distance from Little Rock, as a radial point in Arkansas, would be shorter than the distance to all points in Arkansas from Fort Smith or from Memphis, and vice versa, on account of the difference in the geographical position.

Q. Those things apply to all those towns alike; it is merely a little difference in detail, one from another. Don't you know the conditions down there are substantially the same, Mr. Doddridge?

A. Well, I would suggest to settle this question with absolute accuracy, that Mr. Roth, or one of these gentlemen that have these statistics under their hands, state the facts for you.

Mr. HILL (to Mr. Roth):

Q. Mr. Roth, have you any statistics on the traffic out of Memphis, Little Rock and Fort Smith?

Mr. ROTH:

A. I have some statistics out of Fort Smith.

The MASTER: Mr. Doddridge, you are not obliged to answer all those questions. If you don't know, just say you don't know. Not any of us can know everything.

The WITNESS: Well, I am ready to say that I don't know as to these details.

1517 The MASTER: Of course, you are ready to answer any question that you know, but we don't all know everything, as I said.

Mr. HILL:

Q. Then you say you don't know?

A. I don't know.

Q. What did you mean this morning, by stating that the average length of haul out of Memphis and Fort Smith, was greater than out of Little Rock?

A. I know the geographical location.

Q. You base that on geography then, and not on actual facts?

A. Yes, I based it on geography and not on actual conditions.

Q. Well, we will not quarrel with you about the geography of the situation.

Mr. MOORE: Mr. Roth, did you say that you had the average length of haul from Memphis or Fort Smith?

Mr. ROTH: Not from Memphis. I have from Fort Smith to Arkansas points.

Mr. MOORE:

Q. State what is was, for the period you have there.

Mr. ROTH:

A. For the year 1907 it was 183.65 miles.

Mr. HILL:

Q. On Arkansas traffic?

Mr. ROTH: Yes, on Arkansas traffic—on the Fort Smith branch to Arkansas points.

Mr. HILL:

Q. What was the volume of the business?

Mr. ROTH:

A. The volume of the business was 146,000 tons.

1518 Mr. HILL (to Mr. Roth):

Q. Was that for the whole year?

Mr. ROTH:

A. Yes.

Q. The entire traffic out of Fort Smith into Arkansas?

Mr. ROTH:

A. From that branch, not only Fort Smith.

Q. From what branch?

Mr. ROTH:

A. The Greenwood branch; all freight that moves through Cherokee Junction to Arkansas points.

Q. That would include all your coal mines at Jenny Lind?

Mr. ROTH:

A. Certainly.

Q. The total tonnage you have there is of the entire traffic moving over that, for that entire year?

Mr. ROTH:

A. For that entire year.

Q. Have you the traffic moving out of Memphis and out of Little Rock?

Mr. ROTH:

A. No sir, I have not. I merely have this because I thought a question might arise as to whether that traffic was interstate or intrastate.

Q. All of that tonnage has gone into the interstate statistics here

and lengthens out the interstate haul on account of being in there, doesn't it?

Mr. ROTH:

A. The interstate haul?
Q. Yes.

Mr. ROTH:

A. No, I think it is shortened. As the average interstate haul is more than 183 miles, the effect of that 183 would naturally be to shorten it.

Q. A great deal of the interstate haul is very much less
1519 than that, is it not?

Mr. ROTH:

A. Yes, there is a great deal of this interstate business that is very much less.

Q. I wish you would get up, in the same way, the tonnage out of Little Rock and Memphis; will you?

Mr. ROTH:

A. I am afraid that would be a very hard piece of work, sir, as far as Little Rock is concerned.

Mr. HILL: Mr. Moore, I would like him to do that. He has put in evidence part of the figures, and if he can get that up I think it is only fair for him to do so.

Mr. MOORE: I will see what time it takes; of course, if it takes up too much time——

Mr. HILL: I don't want to impose any unusual burden, but if he can get it up readily, as to Little Rock and Memphis; he worked that up——

Mr. ROTH: This was worked up concurrently with our statistics.

Mr. HILL: I cannot see any value to a comparative statement when you are comparing three towns and get statistics for one.

Mr. MOORE: He happened to have this on account of the conditions he spoke of just now. I will get Mr. Roth to do it if he can do it within a reasonable time, but if not, you must get your own men to do it.

The MASTER (to Mr. Hill): Do you want him to report later?

Mr. HILL: Yes; I am satisfied that with Mr. Roth's in-
1520 genuity, assisted by Mr. Johnson and these other men, they can work that up readily.

Mr. MOORE: There is no question about their ability to do it.

Mr. HILL: I mean readily; their ready ability to do it.

Mr. MOORE: The question is the time and labor. You have just been told that he worked this thing up concurrently with other statistics. We are perfectly willing to give you the information. The only question about Mr. Roth's doing it is the question of the time and labor that would be necessary.

Mr. HILL: Well, you look into it, Mr. Moore.

Mr. MOORE: I want you to understand now that the books are open for you to get the information.

Mr. HILL: I understand that.

Mr. MOORE (to Mr. Roth):

Q. Mr. Roth, can't you state now whether you can do it within such a time as would be reasonable; don't you know as much about it now as you will any other time?

Mr. ROTH:

A. No sir, I would like to have time to look into that.

Mr. HILL (to the witness):

Q. Mr. Doddridge, you think the local trains in Arkansas travel faster than your through trains, or as fast?

A. When you speak of the road speed, yes.

Q. Have you been down there recently, Mr. Doddridge?

A. No sir.

Q. If you take a trip down there with me, I believe you
1521 will revise your testimony.

A. It may be that there are some extraordinarily fast through trains there, that did not obtain years ago; but 45 or 50 miles an hour, or even 60, is not an unusual speed for a local passenger train to make between stations.

Q. Talking about picking up this passenger—at Jacksonville, I believe you said, that is a negligible quantity: of course you understand that I was using Jacksonville merely to illustrate one point in the proposition, don't you?

A. Yes.

Q. You don't think that the feeding of the through trains by the stoppage of the local trains in the state, is a negligible quantity, do you? I am speaking of passengers now.

A. Well, it depends upon how you would view it, as it must be relatively a small quantity as compared with the general local business handled by those trains; it is an incident of the conducting of transportation on railroads doing a large passenger business, as our Iron Mountain is shown to be doing in Arkansas; for a certain percentage of people who patronize the local trains, by changing——

Q. Take Mr. McPherson's statement: he said the through trains stopped every thirty-five miles on the main line, and on the Fort Smith branch they stopped every seventeen miles; that the local stopped every five miles. Now, those are the average stops. There would be thirty-five miles on the main line without any break
1522 in the through train. There would be a great deal of local passenger traffic picked up in that thirty-five miles, by the locals would there not?

A. I should think there would be considerable, on the main line.

Q. Well, on Little Rock and Fort Smith, where the stops are five miles as against seventeen, there would be considerable, wouldn't there?

A. I would not think it would be as great on that sort of a road; there would be some, of course.

Q. You stated that in the Cotton Belt test it showed on local trains as compared with through trains, that they were loaded about one-

half less-than-carload cars and all cars carried in local trains, as compared with through trains, there is quite a material difference: I believe that is your statement, as I wrote it down.

Is it not a fact that the less than carload movement is only about four per cent on your tonnage on the Iron Mountain—I don't know what it is on the Cotton Belt?

A. I don't remember, without referring to the statistics.

Q. (To Mr. Johnson:) Q. Is not that right, Mr. Johnson? About four per cent, the less-than-carload?

Mr. JOHNSON:

A. About four per cent of the total movement.

Mr. HILL (to Mr. Kimbell):

Q. What is the percentage of the less-than-carload on the Cotton Belt, Mr. Kimbell?

1523 Mr. KIMBELL:

A. On the System it is about eleven per cent.

Mr. HILL:

Q. I am speaking about Arkansas; do you remember?

Mr. KIMBELL:

A. I haven't that in Arkansas. I guess you have a corresponding statement there.

Mr. HILL (to the witness):

Q. Mr. Doddridge, I will ask you, from your experience what would you say was the average loading of the less-than-carload package freight car?

A. The load of less-than-carload freight varies greatly——

Q. I am talking about Arkansas.

A. I have no statistics as to Arkansas, but in my judgment, it probably would not run over three or four tons.

Q. What average loading is maintained in such a car, in a day's run, over a local freight train?

A. Well, in a local freight train that is peddling it out; it simply decreases until it is resolved to nothing.

Q. Don't it pick up, too?

A. No, not cars loaded at a jobbing point that is distributing merchandise—don't pick up very much, unless it is in the cotton season——

Q. Produce would be picked up, wouldn't it?

A. Not usually; the tonnage is not replaced; it is peddled out of the car in distribution.

Q. I am calling your attention to the fact that there would be two sides to it, some would be peddled out and some
1524 would be peddled in. I want your judgment as to what is the average loading throughout the run of a division.

A. They don't pick up very much, unless it would be, as I started

to say in answer to your previous question, during the cotton season—they might load those cars with cotton.

There is a certain kind of produce, of course, loaded along the road, but in respect to the tonnage, it is not a very large quantity.

Q. I understand that, but I want to get the benefit of your judgment. You have given us your judgment on this other side of the question and now I want your judgment on that.

A. I don't know what the return tonnage would amount to; it would depend entirely on circumstances and conditions, and the part of the road you were dealing with.

Q. You don't feel capable of forming an opinion on it, is that it?

A. Not to give you a definite answer, no sir.

Q. Then do you attach any importance to the statement that you have made here about the loading, in your Cotton Belt test, being about one-half, if you cannot form any definite answer as to how that is kept up?

A. About half the loaded?

Q. That is what you stated, as I understood you.

A. Well, I will find the test.

Q. I am speaking of what you said this morning, Mr.
1525 Doddridge.

Mr. HILL: If he wants to look that up, he can do so. I see it is our adjourning time.

Mr. MOORE: He said nothing about that.

Mr. HILL: I put it down here.

He has given that side of it, and I want him to give an average on it, and if he cannot do it, I want to know what value this has.

The MASTER (to the witness): If you are not ready to answer that now, we will take a recess until two o'clock.

1526 Recross-examination of W. B. DODDRIDGE, continued.

By Mr. HILL:

Q. I wish you would look at the second item on Statement 5 of Exhibit 3, in the St. Louis, Iron Mountain & Southern Railway Company's case and read that into the record.

A. "Maintenance of Equipment: This account includes all cost of repairs, renewals and depreciation of cars and locomotives, also shop machinery and tools. The cost of repairs, renewals and depreciation of equipment being of a general nature and not applicable to any particular state is divided between all states upon the basis of the mileage of each class of service in each state. The cost of repairs to shop machinery and tools, stationery and printing and supervision is divided between States upon the basis of the total engine mileage over the territory under the jurisdiction of each shop superintendent. The cost of repairs to freight and passenger cars are compiled separately and all expense of a common nature is divided between freight and passenger upon the basis of the number of train miles in each class of service."

Q. I will call your attention to the fact that Mr. Johnson testified,

and I presume you heard it, that the company pools the cost
1527 of car and locomotive repairs for the entire Missouri Pacific System, and distributes this charge among the various lines, including the Iron Mountain, upon the basis of the use made of the equipment. That is, the car and locomotive miles: isn't that correct?

Ask Mr. Johnson, if you are not sure about it.

Mr. JOHNSON: It is correct.

A. Yes, sir.

Q. The amount charged to the Iron Mountain in Arkansas in statement 4, included in Exhibit 3: this expense was arrived at on a car mile and locomotive mile basis and represents Arkansas' proportion of the pool charge for repairs and maintenance upon such basis: isn't that a fact?

A. I presume it is, according to this statement.

Q. Ask Mr. Johnson, to be certain about it.

Mr. JOHNSON: The repair items for repairs to cars and locomotives, were arrived at on that basis.

Q. Did you know that yesterday when I was inquiring for some proper basis to divide the expenses between local and through trains? That is, the equipment of local and through trains?

A. I have not made any investigation of these accounts, and, therefore, I am not qualified to make any exact statement with reference to them.

Q. I am asking you if you knew this basis of division on yesterday, when I was questioning you about a proper basis for the
1528 division of maintenance of equipment between the local and the through trains?

A. I knew there was a basis.

Q. I ask you if you knew this was the basis?

A. I had never given this matter any consideration whatever.

Q. Then you did not know yesterday, when I was inquiring for a basis upon that, that the company has used this basis (indicating exhibit), did you?

A. No, sir, I did not know it.

Q. Now, with this knowledge brought to your attention, what do you say about this division?

A. As to the appropriateness of this division of these expenses?

Q. Yes.

A. I have not given the matter any consideration and I do not feel qualified to commit myself to an opinion on the subject without doing that.

Redirect examination.

By Mr. MOORE:

Q. Mr. Doddridge, do the through trains afford any nourishment to the local trains, as "feeders."

A. Yes, sir.

Q. In what way do the through passenger trains operate as feeders to the local trains?

A. In exactly the reverse way in which the local train feeds the through train.

Q. Do the through freight trains operate as feeders to the local freight trains, in any sense?

1529 A. Yes, sir.

Q. In what way?

A. The through trains carry a great deal of interstate freight in the way of merchandise and manufactured articles, from outside of the state to the various jobbing points in Arkansas. These goods after their arrival at these points are resold and redistributed throughout the state.

There may be many other ways in which this same effect is produced, that I do not think of at the moment.

Q. Do local peddling trains usually pick up very much freight en route from the outer points to the centers over their haul?

What I mean is this: a train will start out say from Little Rock to a point 25 or 30 or 40 miles distant from there with a load of say less than carload freight for distribution along that route.

Do they, as a rule, pick up much freight in going from the point at which they started to their destination?

A. I take it you mean to replace the tonnage with which the car started?

Q. Yes, sir, that is what I mean.

A. I would say that as a general proposition its tonnage is not replaced in a car, unless it happens to be during a crop moving season like cotton, where the tonnage may be replaced, if it were going in that direction. It is not replaced with the same character of

1530 tonnage that the car started with.

Q. Does cotton move usually toward or from the centers of business?

A. Cotton moves toward the various compress points.

Q. Are those compress points located in the centers of business, like Little Rock?

A. I was going to say they are scattered throughout the state and away from the centers, mainly. There are compress points at the centers, of course, but they are not all located there.

Q. Take the smaller, local centers, small districts, what is the location of the compresses in regard to those points? What is the movement of cotton in its original baled condition, with reference to compress points? Is it for the purpose of distribution or concentration?

A. It is for the purpose of concentration.

Q. If a local train is hauling freight away from those local centers, out into the country, does it pick up any cotton in its outward journey? That is, is it likely to do that under those conditions?

A. It is not likely to do so, no, sir.

Q. I ask you to state what the general rule is in regard to the matter of that class of trains picking up freight to replace the tonnage as it is unloaded on their outward journey?

A. The local train crew——

1531 Q. I am not talking about the crew. Answer the question as to the actual facts of whether they pick up much or little on their outward trips from the centers?

A. They pick up relatively a small amount of freight on the outward trips.

Recross-examination.

By Mr. HILL:

Q. I forgot to ask you to make an estimate of the average loading of the less than carload, the matter which we were discussing before we took a recess today. You have explained your reason: now, give us your best judgment.

A. I find in looking over these statistics that the average loading less than carload is not stated therein. That is what I was to look at during the noon hour.

But the tare weight of the equipment is stated, and it shows about double the tare weight of equipment; so that would indicate that the car would be about half loaded.

Q. Do you think there is any corresponding relation between them?

A. Yes, sir, there is between the weight of the equipment and the load. But what it is, with exactness, I cannot state because it was not stated in those statistics.

Q. Your statement this morning about the average loading if you had no statistics to back it, was simply your judgment?

A. Based on this tare weight of the car.

1532 I was under the impression that the actual tonnage was in the statement.

Q. And you found you were mistaken?

A. Yes, sir, I found I was mistaken.

Q. What has the tare weight to do with the loading?

A. The amount of car required to produce a certain number of ton miles, relatively, has everything to do with it.

Q. Suppose it was loaded with feathers in one case and iron in the other?

A. If it were the same number of tons it would weigh the same.

Q. It would not be the same number of tons, if one were loaded with feathers and the other with iron, would it?

A. No, sir, probably not.

Q. That would be a question of space and not a question of weight?

A. Yes, sir. But Mr. McPherson in his testimony stated that five tons was the average less than carload loading.

Mr. MOORE: No, he did not state it was the average. He stated it was the maximum.

Mr. HILL:

Q. What we are trying to do, to make a long story short, is to get your judgment on the average loading of less than carload freight.

A. The average loading of less than carload freight, according to

my judgment, in Arkansas would not be probably over three
1533 tons.

Q. You stated a few minutes ago that the through trains feed the local: they feed it with interstate traffic, too, don't they?

A. They feed it with interstate traffic which becomes intrastate after it is rehandled.

Q. All of it?

A. No, sir, I do not say all of it.

Q. You mean by that, that it is hauled into Little Rock, for instance, from St. Louis or some other large point, and then sold, and it is reshipped from Little Rock as a new sale?

A. It is then intrastate freight.

Q. That is not the proposition we were talking about this morning, but of one train feeding another directly.

A. Well, there may be interstate freight that is distributed that is still interstate freight when it reaches its destination.

Q. I was talking about a continuous shipment, Mr. Doddridge; and we discussed that between us, you and I. And now you are shipping it into Little Rock and it may stay there for years before it is shipped out?

A. I hardly think it would stay that long.

Q. It might?

A. Some of it might.

Q. That is entirely a different proposition from the
1534 one I was discussing this morning, isn't it?

A. No, sir, I think not. That is feeding the local traffic, I think.

Q. If that is your idea we will rest with it there.

1535 F. P. JOHNSON, recalled, testified as follows:

Recross examination.

By Mr. HILL:

Q. Mr. Johnson, have you got the data I asked for the other day on the Pacific Express Company stock?

A. The Pacific Express Company stock is in the name of the Missouri Pacific Railway. The St. Louis, Iron Mountain & Southern Railway has no Pacific Express Company stock at all. Any dividends that might accrue from that stock are credited to the Missouri Pacific Railway.

Q. Have you the contract we had here the other day?

A. Yes, sir.

Q. Let me look at it a moment, please. (Counsel here examines contract).

Have you the contract with the St. Louis, Iron Mountain & Southern and Pacific Express Company?

A. No, sir, that is the only contract there is.

Q. This is one you furnished me, which appeared to be between the Pacific Express Company and the Missouri Pacific Railway Com-

pany is the only contract under which express is transported over the St. Louis, Iron Mountain & Southern Railway?

A. Or any other line interested with the Missouri Pacific Railway.

Q. Why is not this stock dividend apportioned over the St. Louis, Iron Mountain & Southern as well as the Missouri Pacific

1536 Railway?

A. I have not the slightest idea. That was a transaction in 1886.

Q. Does the Missouri Pacific Railway still own it?

A. The stock?

Q. Yes.

A. Yes, sir.

Q. And is receiving dividends on it?

A. Yes, sir.

Q. How much?

A. 6%.

Q. On the $2,400,000?

A. Yes, sir, $144,000.00. That is, that is the dividend they received in 1908.

Q. 1907 includes our period.

A. That includes that period and I feel satisfied there was that same dividend that same year.

Q. There is a provision that the capital stock of the Pacific Express Company shall not be increased over $6,000,000: do you know what the capital stock is?

A. No, sir.

Q. You do not know what proportion this $2,400,000.00 is to the whole stock of the Pacific Express Company?

A. Today, you mean?

Q. Yes.

A. No, sir.

1537 Q. Say, in 1907?

A. That is, I do not know what the capital stock of the Pacific Express Company was in 1907.

Q. That would go to just the question of the proportion of the ownership of the Missouri Pacific Railway; but you know that the Missouri Pacific Railway Company in 1907 owned $2,400,000 and received six per cent dividend thereon?

A. Yes, sir.

Q. And that was not distributed over the St. Louis, Iron Mountain & Southern Railway?

A. That dividend?

Q. Yes.

A. No, sir, and on no other line except the Missouri Pacific.

Q. Does this contract apply to any other line except the Missouri Pacific?

A. I understand it operates upon any line we may acquire.

Q. Does it state that anywhere in this contract?

A. I do not know whether the contract so states or not.

Q. Will you make copies of this contract and attach it to your testimony?

A. Yes, sir.

Paper referred to is marked "F. P. Johnson Exhibit 36."
Said exhibit is in the words and figures following, to-wit:

For Exhibit 36 see Volume 8, page 5370.

1538 Q. Have you looked into that Pullman equipment sale?
A. No, sir, I understood that was something you would look into later on.
Q. I stated I was not in any hurry about it, but before we meet again I hope you and Mr. Hamilton together can look into it.
Have you that mail contract?
A. No, sir.
Q. If you haven't it ready at this time we will take it up during the next session we have.
Have you the exhibit on the train?
A. Mr. McPherson promised to send that over here this afternoon. The stenographer was working on it at noon.
Q. I want to ask you one more question about the Pacific Express Company contract.
I understand from your statement here, although I believe there is no such statement in the record, that while under its terms it has expired, you are still operating under that contract?
A. We are still operating under that contract.

1539 J. D. WATSON, a witness of lawful age, being produced, sworn and examined on the part of the complainants, testified as follows:

Direct examination.

By Mr. MOORE:

Q. State your name and residence?
A. J. D. Watson. St. Louis, Mo.
Q. Are you connected with the St. Louis, Southwestern Railway Company?
A. I am.
Q. In what capacity?
A. Assistant General Freight Agent, St. Louis.
Q. How long have you been connected with that company?
A. Altogether 14 years.
Q. How long have you been in railroad service?
A. 29 years.
Q. How long have you been assistant general freight agent?
1540 A. Three years last passed.
Q. And what were your duties prior to the time you became assistant general freight agent?
A. Division Freight Agent in the Little Rock freight office. Traveling freight agent, and in various other capacities in connection with railroad service.
Q. Do the duties incident to the position you now occupy, and in-

cident to the positions you occupied prior to the time you became assistant general freight agent, have any connection with the making of rates, and enabled you to familiarize yourself with that subject?

A. At the present time I have direct charge of that branch of the service and have been connected with it more or less for the last twelve years.

Q. Are you familiar with what is known as the Western Classification?

A. I am.

Q. What is the purpose of that classification?

A. It is for the purpose of classifying the various articles that are transported by railroad companies, to determine the class rate to which that particular article is assigned, for the purpose of assessing the freight charges.

Q. In what territory does that classification prevail?

A. In the territory west of the Mississippi River.

Q. Does it apply to all interstate traffic that originates and
1541 terminates in the territory where that classification is operative, without regard to the point at which it may have originated in this ingoing or outgoing freight?

A. So far as the rates of the St. Louis, Southwestern Railway are concerned, yes, sir. There may be some few minor instances in the case of other lines.

Q. I mean, as a rule?

A. As a general proposition, yes, sir.

Q. Does it apply to freight that originates in a territory that may be governed by another classification but which is shipped into a territory governed by the western classification?

A. It would govern in some cases. For instance, a shipment from official classification territory into Arkansas would be governed by the western classification.

Q. And would that be true vice versa?

A. It would be true in the opposite direction.

Q. What is the object in making a classification such as the western classification?

A. With a view of assigning to the shipment transported its proper share of the expense of transportation—or, in other words, have pay for the value of the service it receives.

Q. What are the principal factors in determining the classification of the several articles that are the subject of traffic?

1542 A. The space occupied; that is, the weight per cubic foot of the article is the one unit and the value of the article is another unit. Those together are the basis for the classification.

Q. What considerations are controlling influences in determining the class to which any particular article should be assigned?

Mr. HILL: I don't think that would be competent unless Mr. Watson is a member of the Western Classification Committee.

Mr. MOORE:

Q. Is the St. Louis Southwestern Railway a member of the Western Classification Committee?

A. It is.

Q. Have you any duties to discharge in the way of representing that company in the work of that committee?

A. Mr. J. M. Park, the General Freight Agent of the St. Louis Southwestern Railway, is an active member of the committee and I have attended to several of the meetings in his place.

Q. Have you on different occasions participated in the proceedings of that committee?

A. I have.

Q. Do you know from your experience in the meetings of that committee, what are the leading factors that influence and control in determining the classes to which articles that are embraced in this classification belong?

1543 A. I do.

Q. Will you state what is the governing or controlling influence in determining the classes to which such articles are asisgned?

Mr. HILL: If Mr. Watson confines his evidence to the meetings he attended of that committee, I have no objection. But otherwise I think it is objectionable.

Mr. MOORE:

Q. I will ask, generally, if you know upon what principle classification is made by this committee?

A. The principal factor is the value of the article with a view of arriving at the risk incident to its transportation.

Q. Do you know that that is the principle upon which this classification is made?

A. I know that to be the principle.

Q. I wish you would state what connection, if any, the classification made by this committee has with the rates charged for the transportation of the articles that come under those classifications?

A. It has direct connection in fixing the actual rate, for the reason that the classification determines the class to which the article belongs, and that fixes the rate in connection with the tariff which provides the rate.

Q. What is the ultimate purpose of the classification?

A. To so assign the traffic as to fix the rate on a basis which more nearly represents the cost of transportation.

1544 Q. I want to ask you what is the dominating or controlling influence, ultimately, with reference to the price of transportation, that governs the action of the committee in fixing its classification and practically in fixing rates.

A. The value of the service as governed by the space occupied, and the value of the shipment, which is the factor as to the risk in handling the traffic.

Q. I wish you would state how many classes are provided for in this western classification?

A. Ten, designated 1 to 5 and A to E, both inclusive.

Q. Do all the articles of transportation fall within those classes?

A. No, sir. When the volume of an article will justify it is usu-

ally given a commodity rate; and when the commodity rate is assigned to the article it takes it out of the class, and the commodity rate governs.

Q. What are the principal considerations that induce the application of commodity rates to certain articles of transportation?

A. The commodity rates are usually applied to articles of necessity; and to articles where the volume is great.

For example, lumber and coal move under commodity rates. So also would wire and nails and canned goods.

Q. What is done with the ordinary subjects of traffic, such as merchandise, and that which is used we will say in the ordi-
1545 nary business transactions of the country; the stores and in ordinary use throughout the country, exclusive of lumber, coal and large articles of that character?

A. Those articles are transported and charges assessed as provided by the classes in the western classification; and they govern.

Q. They are assigned to the classes?

A. Yes, sir, they are assigned to the classes.

Q. Mr. Watson, after the articles of commerce have been classified, then I want you to state a little more fully in what way—that is, upon what principle, or what is the basis upon which rates are applied to the various classes: You have already referred to it but I want you to state it a little more fully.

The highest class rate under classification at the present time, is four times the first class. And that goes to class E which is the lowest class. The class E rate is usually 20% of the first class rate.

Q. What class embraces the highest rate?

A. Four times the first class would carry the highest rate.

Q. What do you mean by "four times the first class:" I do not understand that term.

A. The classification for light and bulky articles, articles that require lots of space and are of very light weight, are classified higher than first class; and some of them, for instance, baskets, are
1546 classified much higher than first class. That is on account of the space they occupy and their very small weight.

Q. Why are such articles as you have just mentioned classified higher than first class?

A. For the reason that those articles——

Q. I mean, classified with reference to the rates to be charged, higher than first class?

A. For the reason that those articles requiring more space per cubic foot should pay a higher rate than articles of corresponding value requiring less space.

Q. To what extent does the character and the expense of the service incident to transportation control in the application of the rates to these classes?

A. It controls absolutely. A shipment of baskets, taking four times the first class or three times the first class (according to the kind of basket) and a shipment of bar iron, would be very fair samples. You could load the bar iron to the capacity of the car,

while the baskets would be a maximum of one-fourth the capacity of the car.

Q. I notice Rule 14 of this western classification contains this provison:

"Unless otherwise provided for in the classification, all freight shipped in crates, racks, bales, box- or bundles, will take when shipped in crate- or racks a rate next class higher (greater) than in boxes. And when shipped in bales, boxes or bundles, one class higher (greater) than in crates."

1547 What is the purpose of that provision?

A. The purpose is to provide a higher transportation charge on an article that is not protected than on an article that is well protected.

For instance, a shipment in a box is protected better than a shipment in a crate; and the same shipment in a bag would be less well protected than in a crate; and the measure of protection governs the rate to be applied.

Q. What is the reason for applying higher rates in cases of that kind?

A. The additional risk incurred.

Q. You spoke about commodity rates: please state what the considerations usually are that govern the application of commodity rates to articles?

A. The consideration is usually the volume and the direction of the traffic.

Q. What I want to more particularly ask you is what are the circumstances or conditions under the practice of the committee that cause them to place some class articles in commodities?

A. The Committee does not place articles in commodities. The committee stops when it fixes the classification.

In some cases the classification provides that commodity rates will be applied.

For example, there is no class rate on coal.

Q. By what authority is a departure from classification
1548 for the purpose of adopting commodity rates, made?

A. The volume and commercial conditions, and the risk.

Q. If I understand you correctly then, the duty of the committee ends when it makes its classification and divides the different articles of commerce into the various classes you have mentioned?

A. That is true.

Q. If an article is charged on a commodity rate, it is virtually taken out of the classification?

A. It is taken out of the classification.

Q. What I want to ascertain is, what are the conditions and circumstances that usually cause that to be done?

A. The volume of the traffic and the commercial conditions incident to the marketing of that particular traffic. Each particular traffic being governed by conditions of its own.

Q. Is there any uniformity of rules among railroads governing the cases in which commodity rates shall be applied?

A. Uniformity as to locality only. For example, in a lumber dis-

trict each line would have lumber commodity rates; and in a coal district each line would have coal commodity rates.

Q. By what authority are those rates usually established? What I mean to ask is, is it by the action of one or more railroads whose lines penetrate the territory in which the particular commodities are moved, or is it done by some other authority.

1549 A. It is done by the individual railroads themselves, based upon commercial conditions governing in that territory.

Q. What is the underlying principle upon which commodity rates are fixed? Has that any reference at all in any way to the expense or cost incident to the service? State as fully as possible the rule in regard to that.

A. The commodity rate is fixed in the territory involved from the point of origin to destination, or where the commodity is marketed; and is governed almost entirely by commercial conditions.

If for any reason the carrier feels the rate is from common points too low to be handled with profit, of course, the carrier would not make as low a rate by its rails as would be applicable by some other line.

From local points the rate is fixed with a view of earning a reasonable revenue for the service performed.

Q. State to what extent, if any, the rates on commodities are influenced by the cost of the service that is to be rendered, with reference to the various articles that are rated in that way?

A. You mean by that, the question of hauling a valuable commodity on a higher rate basis——

Q. No. I mean to ask you if commodity rates—are influenced to any extent by the cost incident to the service as to that

1550 particular traffic.

A. It is, in various ways.

Q. Explain that.

A. Minimum weight is one. That is fixed by the difference in the cost of the service.

For example, if the minimum weight has to be low, as in the case of hay, you make a higher rate on account of the low minimum weight. But hay being a necessity and governed by various and sundry considerations other than value, a very low rate is necessary in that case.

Each commodity in itself has its own rules and regulations governing the fixing of a rate.

Q. Are commodity rates fixed with or without regard to the cost incident to the service?

A. In no case without regard to the cost of the service.

Q. Is there any relation between the rates fixed for interstate traffic and for local or state traffic?

A. There is a very close relation as between state and interstate rates, governed by the rates to and from the border points which serve to fix almost exclusively the through rate between the point of origin and the point of destination, through such border points.

Q. To what extent is that relation observed when a general change is to be made in the rates as to one class of business, say state rates?

What effect would it have upon the action of a railroad in
1551 fixing or making changes or readjusting the interstate rates?

A. The interstate rates would be adjusted as early as it is possible after a change in state rates is made. The requirements of the Interstate Commerce Commission and the State Commission being different, it is not effective the same date.

Q. In September, 1908, an injunction was granted your company and other companies against the commission rates, a tariff was prepared and put into effect as to intrastate traffic?

A. Yes, sir.

Q. Was there any change made following that, as to the interstate rates?

A. Yes, sir, as early as possible after those rates were established the interstate rates were changed.

Q. To what extent did the railroads make a change in the interstate rates growing out of the change that had been made in the state rates?

A. Different conditions governing the interstate rates made it necessary to readjust the interstate rates. Probably not to the same extent in percentage but probably to the same extent in cents per hundred pounds.

Q. Do you keep up with the rules and regulations of the Interstate Commerce Commission?

A. I do.

Q. Can you state if that body recognizes the fact of this
1552 relation between state and interstate rates?

A. They do to an extent. They have ruled that a through rate in excess of the combination of the locals would be unreasonable.

Q. Do you know what prima facie effect they give to the combination of the local rates in its application to an interstate shipment, as evidence of reasonableness?

A. I do not recall——

Mr. HILL: I am satisfied that is not competent evidence. I think Mr. Watson has gotten that just reversed. I think the ruling of the Interstate Commerce Commission is better evidence than the opinion of a rate man.

Mr. MOORE: I think, your Honor, that this testimony relates to a general condition affecting railroad traffic and on that account it is competent to prove it in any way. I do not think this is a case where it is necessary to go to the rules and regulations of the Interstate Commerce Commission. It is a condition applicable to a traffic with which all men who are engaged in that traffic would be familiar.

The MASTER:

Q. Did he say he is familiar with that?

Mr. MOORE: Yes, he has already stated that.

The MASTER: I think he may answer that.

Mr. MOORE: Strike out the last question and I will ask it in another form.

955

Q. What I wanted to ask you, Mr. Watson, is: whether if
1553 you know, the Interstate Commerce Commission in determining a question as to the reasonableness of an interstate rate give any effect to or pays any attention to the rates. If so, state in what manner they do it and to what extent the local rates exert an influence in determining the reasonableness of interstate rates?

Mr. HILL: That is objected to. There are many decisions of the Interstate Commerce Commission right along that line. If the witness answers correctly I have no objection but if he does not, it puts upon us the necessity of proving that. This is secondary evidence.

The MASTER: If there is any evidence of a ruling of the Interstate Commerce Commission, or any evidence of the effect of that local rate upon the interstate rate, it would be the best evidence.

Mr. HILL: There are many decisions. They publish their decisions just as the courts publish decisions.

Mr. MOORE: My understanding is that while if there is a litigated case there may be a decision published, in general practice the rules of the Commission is that where a case arises and is disposed of the decision is not published. It is known to the officials connected with this department of railroads what the rule and practice of the Interstate Commerce Commission is.

The MASTER: I do not suppose the Interstate Commerce Commission would feel itself bound in any way by the state rates.
1554 It might be persuasive, temporarily, upon them. But I do not see how this witness can explain that. I think the ruling of the Commission itself, or what it has actually done in that respect, would be the primary evidence.

Mr. MOORE: I will withdraw the question.

Q. Counsel asked this question of Mr. Kimbell, a witness on behalf of the complainant in this case:

"Assume that the entire revenue from freight in the state was $100,000; that the entire freight expense was say $70,000; that the interstate freight revenue was $85,000; that the state freight revenue was $15,000: Then calculate the amount of expense chargeable to the interstate business and the amount of expense chargeable to intrastate business. Then assume that the intrastate rates are increased 33⅓%: then make the same calculation showing what amount is chargeable to intrastate and what amount is chargeable to interstate business.

Assuming that the $70,000 expense account would remain stationary and that the other rate remain stationary, except the change I have indicated."

That is the change in the intrastate rate. This question assumes that there might be a change of 33⅓% in the intrastate rate without any corresponding change in the interstate rate.

I wish you would state your view as to the practicability of such a problem as that, based on the assumption of a change in one class of rate, applicable to one class of business, and not any change in the other.

State if such a condition is possible, in other words.

A. I do not think such a condition is possible. On the contrary, it would be absolutely impossible.

1555 Q. Why is that, Mr. Watson?

A. Because the interstate rates must of necessity change with the state rates.

1556 Mr. MOORE: I want to ask Mr. Watson another question. I want you to state, Mr. Watson, if you know, what are the leading factors that control in fixing commodity rates.

A. The commodity rates are governed by the same conditions that goven the rates generally. In addition to that, the volume of the traffic; the value of the traffic; the direction of the movement, and the length of the haul, are governing factors in fixing the rates on commodities, on rates other than those that are classified, and in taking them out of the classification.

Cross-examination.

By Mr. HILL:

Q. Mr. Watson I believe you used as an illustration this morning baskets and iron as illustrating the difference in cost. Will it cost more to haul a train of baskets than it will cost to haul a train of iron—say the same number of cars?

A. I should not think it would. I could not answer the question definitely without knowledge as to just what the train would consist of.

Q. Say a train load of baskets and a train load of iron, or
1557 take one car of baskets and one car of iron.

A. You could not handle one car of baskets for the same cost that you could handle a car of iron.

Q. Where would the difference be?

A. It would be that the cost of handling the iron would be heavier necessarily; you could not handle as many cars of iron as you could of baskets with the same power.

Q. I am speaking now of a full loaded car. Take for illustration—either take a train load of baskets or a car load of baskets—I presume there would be no difference, but take either factor as an illustration: would there?

A. There would be, yes.

Q. Where would it be?

A. In the tonnage of the car would be the difference. It altogether governs as to what particular line you are on and what particular tonnage the engine could handle.

Q. I am trying to illustrate a light haul over your road.

A. I appreciate what you are trying to get at Judge and I cannot do it for you.

Q. That is what I want to know, whether you can do it; to get at whether you take those factors into consideration in making your rates.

A. We certainly do.

Q. Now if you cannot make that, how could you take it
1558 into consideration?

A. Well, you ask one question and it does not fit with the other. The question that you asked me to answer is whether or not it would cost more to handle a car load of baskets than it would a car load of iron and I say it would.

Q. I am speaking of transportation cost.

A. Yes.

Q. Why?

A. For the reason that the baskets would be more bulky and would require more cars to handle the same tonnage.

Q. Take a single car filled to its utmost capacity of baskets and a single car filled to the utmost capacity of iron: that is what I understood your illustration this morning was, was it not?

A. My illustration had reference to less than car load, or car load fits just as well.

Q. Or take a whole train load, 30 cars, it would be the same whether you take one car or a train.

A. No.

Q. Where would the difference be?

A. You could scarcely load a train to its tonnage capacity with baskets, while you could load it to its tonnage capacity of iron very quickly.

Q. I suppose you are taking the illustration which I believe you used this morning: one car of iron and one car of baskets. That is what you were using this morning.

1559 A. Yes, and if the train was filled out with other traffic and we would add a car load of baskets we could handle it on that train, while the same train could not possibly handle the car load of iron.

Q. That is, if your train was filled to its utmost capacity with other traffic?

A. Yes.

Q. But that is getting away from your illustration. I am trying to take your illustration: here is a train made up of other traffic, and there is added to it a car of baskets or a car of iron: you were using that to illustrate your point. I want to confine to that illustration. Where would be the difference in the cost of service in that train haul, the car of baskets and the car of iron.

A. The difference between the cost of the service is that it costs more to handle the car of baskets than it would to handle the car of iron, on account of the fact that the baskets weigh much less and we have less tonnage in the car, and to carry the same tonnage in baskets it would require more space.

Q. That just comes back to the simple proposition that it requires more space?

A. Certainly.

Q. That is the only difference?

A. That is the difference, yes.

1560 Q. Now here is your train made up of other commodities and there happen to be in that one car load of baskets and one

car load of iron; the only difference at all in the cost to your road of handling that traffic would be the difference in space occupied by the baskets?

A. For the tonnage, yes; cubic measurement of the contents of the car as to the weight.

Q. How would you fix a rate relatively between those two?

A. The rate is fixed by the classification.

Q. How would you get at it; how would you determine what rate you should put on your baskets and what rate you should put on your iron?

A. The rate on the baskets is fixed by the space it occupies, per cubit foot, and the value of the baskets as compared in the case of the iron with the space it occupies and its value.

Q. What proportion would you adjust those rates on?

A. I do not understand what you mean by proportion, Judge?

Q. You have the proposition before you now to fix the rates on baskets and to fix the rates on iron being hauled over your road, how would you and your associates determine, in making these rates—how would you determine how much of a rate to put on baskets and how much of a rate to put on iron?

1561 A. Granting that there was no competitive conditions or other elements——

Q. Leave out the competitive conditions for the present; I will take that up with you a little later.

A. The proportion would be something like seven or eight hundred percent more for baskets than it would be for iron. I cannot figure it out for you in my mind.

Q. How would you get at that seven or eight hundred percent?

A. For the reason that on the baskets the classification would be four times the first class.

Q. How do you get your "4 times first"?

A. That is in the classification.

Mr. MOORE: Is that your expression, "4 times first"?

A. Four times first. You multiply the first class rate by four.

Mr. MOORE: He said fourth.

Mr. HILL:

Q. I want to know why you did that.

A. You want to know why four times first class?

Q. Yes.

A. Because that is the basis we have decided baskets should take.

Q. Why have you decided that?

A. That was decided in fixing the classification on baskets as compared with other commodities.

1562 Q. Why was it done? That is reasoning in a circle. I want to know why it was done.

A. It was done on account of the bulk of the baskets; the space required, and the value of them.

Q. Then you say it would be four times that; are those representative of the actual conditions?

A. If you will let me look at this book (indicating) I will tell you right quickly whether it is.

(Witness examines book).

There are four ratings on baskets. It is according to the manner in which they are packed to take four times first class.

Q. Which were you referring to in your illustration this morning?

A. The baskets not nested, taking four times first class.

Q. Now to make a calculation Mr. Watson, you have to have some figures to calculate from: I want to know how you get at that four times.

A. I could not tell you how we got at the four times first class in the case of baskets without going into the matter pretty thoroughly.

Q. That is what I would like to have you do.

A. I cannot do it here because I have not the information here; I do not know how much space was required, or what their

1563 value or weight per cubit foot would be.

Q. Have you not helped to make these rates?

A. Oh yes, for a good many years; something like 15 now.

Q. When you make those rates don't you know what you are basing it on?

A. You do not require us to keep those things in our mind, Judge; they are a matter of record.

Q. Where do you keep them?

A. They are kept in the classification at present and that is what this book is printed for.

Q. What sort of records have you to show the difference in the cost between the baskets and the iron?

A. The record at the time the rate was established is kept by the Western Classification Committee.

Q. What would that record show?

A. That record would show the weight per cubic foot, the value per cubic foot.

Q. Would it show the cost of the service?

A. That would show the cost of the service in itself; the value per cubit foot would represent the risk of carriage, transportation, and the weight per cubic foot would represent the space required.

Q. Would the cost of service on your road be the same as it would be on the Denver and Rio Grande?

1564 A. As a general proposition possibly, yes.

Mr. MOORE: You mean relatively, don't you Judge?

Mr. HILL: No I mean actually.

A. As a general proposition probably yes. I cannot answer the question without knowing something about the Denver & Rio Grande.

Q. Well, take the Santa Fe in New Mexico and Arizona: would the cost of transportation out there on baskets be the same as the cost of transportation on the Cotton Belt?

A. I imagine the cost of transportation of baskets in that country would be more for the reason that their volume is probably not as

great; but without a definite knowledge of their volume and all the conditions I cannot answer satisfactorily.

Q. Do you know that as a general proposition that the volume of traffic of the Santa Fe in New Mexico would be materially less than the volume of traffic on the Cotton Belt in Arkansas?

A. I imagine so.

Q. And the cost would be different?

A. It would be.

Q. And yet, under your classification it would be the same?

A. No, it would not; the rating would be the same, but the rate of transportation of the traffic may be entirely different.

Mr. MOORE: Do you mean the rate or the rating?

1565 A. No, the rating, not the rate. Rating means classification. Rating four times first class; rate means so many cents per hundred pounds for the distance hauled.

Mr. HILL: I understand the difference.

Q. The rating would be the same?

A. Yes, the rating would be the same.

Q. The rate would be different?

A. It may be different; I could not say what the figures are.

Q. Both of those elements would enter into the revenue produced from your car load of baskets would it not?

A. Certainly, yes sir.

Q. One would be as much a determining factor as the other?

A. Yes.

Q. I noticed in the Commission Tariff that was in force until the roads enjoined it, that the rate for 225 miles (which I believe is about the average interstate haul on your road, or possibly on the Iron Mountain, I do not remember whether yours, or the Iron Mountain), bar iron is at 16 cents, and baskets is at $3.08, which we get at by taking four times first, according to your statement: now I would like you to explain how you got that relation in fixing those rates.

A. I understood you to say that the tariff you are quoting those figures from is the tariff the railroads enjoined?

Q. Yes sir.

1566 A. Therefore we did not fix those rates; they were fixed by the Commission and are inordinately low.

Q. That is correct. I did not get the Railroad Tariff; I probably should have done so, but I overlooked it. You think those are inordinately low: passing aside the question of whether they are low or not, what I am trying to get at is the relation of the one to the other.

Mr. MOORE: Give him the figures you gave a moment ago.

Mr. HILL: Bar iron 16 cents and $3.08 on baskets: you get that $3.08 by taking four times first class for a distance of 225 miles—we took that as the average haul.

It is the relation I am getting at. I want to know if that is a proper relation.

A. That is not a proper relation, no.

Q. What would be the relation?

A. The bar iron rate would be the fourth class rate.

Q. Well, that is what we took——

A. No you took the commodity rate; the bar iron rate would be the fourth class rate. That will give you about the relation that is provided——

Q. That is 42 cents I believe.

A. That relation in that particular tariff is not a regularly constructed one. The figures are not as near as they should be; in other words, fourth class ought to be somewhere in the
1567 neighborhood of 50% of first class, and the figures are not so constructed in that tariff.

Q. Then that tariff is not properly constructed so far as the relations go?

A. That is my understanding.

Q. We will leave aside whether it is too low or not; I am trying to find out the relation.

A. I am trying to give you the information you want as I understand it.

Q. I want you to understand it. What would be the relation, taking my illustration; here is 16 cents as against $3.08 for a 225 mile haul. Give me in rates what should be the relation between those two.

A. I do not believe I can do that without your first telling me what the first class rate is; I will then give it to you.

Q. 77 cents.

Mr. Moore: Let him have the tariff, Judge.

Mr. Hill: Yes, that will be better (handing witness document).

Mr. Moore:

Q. Do you know what tariff that is Mr. Watson?

A. Yes, The Standard Freight Distance Tariff No. 3.

A. (To Mr. Hill:) Upon that basis the rate of the bar iron should be 37½ cents.

Q. As against 16 cents?

A. As against 16 cents.

1568 Q. And what should the rate on baskets be?

A. The figures that are shown.

Q. $3.08?

A. Yes.

Q. Then there is an undue relation in that tariff.

A. Yes, that is one of the complaints against the tariff.

Q. Well, are there other complaints against that tariff along that same line?

A. A great many, yes.

Q. What others?

A. Practically all of the less than car load commodity rates that are shown in the tariff; for example, we have bagging and ties in this tariff at 150% of the car load rate, and a car load rate that is very much less than the fifth class rate.

Q. That is a pretty heavy commodity.

A. I should not think it amounted to very much in less than car load rates.

Q. Well, give me as many illustrations on heavy commodities as you can. I do not care anything about these small movements; I want something that goes to the revenue producing feature.

A. Wire and nails would be one.

Q. Is that a heavy movement?

A. About as heavy as I should judge you would find in
1569 Arkansas.

Q. What is the relation between those?

A. You mean the relation as shown by this tariff? (indicating). You want the rating for that same distance, 225 miles?

Q. Yes, I believe that is the average interstate.

A. The rating shows that 16 cents per hundred pounds. The proper rating for that distance under this tariff as constructed, would be 37½ cents per hundred pounds.

Q. What other heavy commodity do you find? The disproportion in that is a right considerable one.

A. Lime in less than car load lots; the same rate and the same difference.

Q. Is that a heavy movement?

A. No, not in less than car loads.

Q. Just give us the heavy movement Mr. Watson.

A. Sugar, rice and molasses would be one.

Q. What are the figures on those?

A. A distance of 225 miles would be 23; it should be 33½ cents; that is, granting that this scale is correct.

Q. Well, what other heavy movement?

A. Petroleum oil, and the rate here for 225 miles is 22 cents; it should be 37½ cents.

Q. Is that a heavy movement?

A. Reasonably so.

Q. What other heavy movement do you find there?

1570 A. Canned goods is another one—23 seems to have been a pet figure—on 225 miles.

Q. What should it be?

A. 37½ cents.

Q. Those are all less than car loads?

A. Yes sir.

Q. How do you find it on car load movement?

A. Car load movements?

Q. Yes.

A. Well, the conditions are probably worse in that connection. Do you want a comparison as between the class rate and the commodity rate shown?

Q. Which ever way would illustrate your point best. I am trying to find out from you where the disproportion is in that tariff. You state very broadly there are a great many. I want them: that is, for the heavy movement. I do not want to take up a lot of detail with insignificant movements.

A. Take cotton seed, for example; it is shown for 225 miles at 8 cents.

Q. What should it be?

A. The class A rate as shown in this tariff for that distance would be 34 cents. Cotton seed takes Class A. The lowest car load rating in this tariff is class E, which is at 15 cents for 225
1571 miles, and cotton seed in this case is about one half of that rate, which is very low.

Q. Do you know what the rate from Little Rock to Omaha is on that same commodity?

A. On cotton seed?

Q. Yes.

A. A. I could not tell you. I do not think there is a rate, excepting the class rate.

Q. Take Kansas City: do you know what it is to Kansas City?

A. No I would have to refresh my memory to tell you.

Q. I believe it is about 17 cents.

A. Not on cotton seed, no; that is a cotton seed meal rate.

Q. What is the cotton seed rate?

A. I could not tell you; I do not remember what the figures are. The movement is inconsiderable between Little Rock and Kansas City. Therefore I would not be likely to recall the rate.

Q. What other commodity—I am asking about large movements.

A. Moving within the State of Arkansas?

Q. Yes.

A. Well, take your lime movement in the State.

Q. I thought you said that was not so large.

A. Not in less than car loads.

In car loads it is about as large as you would have, outside
1572 of lumber. The ordinary rating on lime, that is, for 225 miles, is 8 cents. The ordinary rating for lime is Class D, the class rate under your tariff is 18 cents.

1573 Q. How much did you say it should be?

A. 18 cents.

Q. How much should it be?

A. 18 cents.

Q. What is it; I did not get that?

A. 8 cents.

Q. That is a rather heavy disproportion, is it not? Well, take lumber: that is one of the heaviest movements in the state, I believe?

A. Yes, it is one of the heaviest movements in the state, and the rates are very low; for 225 miles, here, the rate is 8 cents.

Q. What should it be; I am not speaking of how low it is, I am speaking of the relation?

A. I am trying to give you the relation as between the class rates and commodity rates. I don't understand what you are doing this for, but I am giving you what you ask for.

Q. As long as we understand what we are calling for.

A. The class "D" rate on lumber would be 18 cents; the Class "D" rate is the rate on lumber; in the absence of a commodity rate, that would be 18 cents.

Q. It is also 18 cents from St. Charles, Louisiana, to St. Louis, is it not?

A. Lake Charles, Louisiana, you mean?
Q. Yes.
A. Yes sir.
1574 Q. That is some four or five times as far?
A. Yes, I should say it would be considerably more than that; but different conditions govern that rate.
Q. I infer from your analysis of that, Mr. Watson, that you are not enamored of the Standard Distance Tariff number 3, as a scientifically constructed tariff?
A. I don't believe the Standard Distance Tariff, number 3, was ever represented as a properly constructed tariff. I never heard anybody so represent it.
Q. Do you think it represents the cost of the service?
A. I don't think so, no.
Q. Nor anywhere near it, I would infer from your answer?
A. The result from the application of it would indicate not.
Q. It would not be a very safe measure, then, to use to determine the cost of service in the State of Arkansas?
A. I don't think you can use any tariff to determine the cost of service, Judge. I don't think you could use this one (indicating) to determine your revenue on a proper basis.
Q. Certainly you could not use it to determine the cost of the service, could you?
A. No; the tariff would not represent the cost of service; we have to have some profit, you know.
Q. I understand that; that is where you get your revenue, though, through the tariff?
1575 A. That is the only basis we have.
Q. The only basis you have for getting your revenue: do you think the rates in that tariff bear any reasonable relations to the cost of the service?
A. As a whole?
Q. Yes.

Mr. MOORE: What is that question?

(Question read.)

A. I don't think that I quite understand your question. If you are trying to measure the cost of the service, with the revenue we would derive under the application of this tariff——
Q. That is what I am trying to do.
A. I couldn't possibly do that for you.
Q. Why couldn't you?
A. Because it would be necessary to calculate exactly what revenue we would derive under this tariff, and exactly what it cost to transport or handle the traffic.
Q. Can you do that?
A. Can I do that?
Q. You wouldn't like to undertake it?
A. No sir.
Q. Can it be done by anybody? I concede if anybody could do it you could do it; but I want to know if anybody can do it.

A. Accurately, I don't believe it can be done.

Q. How can you base rates on cost, then?

1576 A. I don't believe that I have testified that we base rates on cost entirely, Judge; I did not say entirely.

Q. You said, as I understood you, that you always bore the cost in mind; that that was one of the controlling factors, or something like that.

A. It is one of the controlling factors in fixing certain commodity rates.

Q. I want to know how you could fix that—bear that in mind as one of the controlling factors, if you cannot get at the cost?

A. You can approximate them.

Q. How do you do that?

A. By the information furnished by the Accounting Department.

Q. What information do they furnish you?

A. The revenue of your tariff and the tonnage that you handle.

Q. Well, I have learned from these gentlemen that testified here before you, that that is not a proper measure.

A. It is not.

Q. You say it is not?

A. It is not.

Q. If it is not, what use can you make of it?

A. You can make this use of it: that it would be improper to assign a rate to any particular portion of your traffic which would yield a less revenue than your general average on certain classes of traffic.

1577 Q. How do you get statistics on any particular traffic, the cost of any particular traffic?

A. We do not get statistics on any particular class of traffic cost; it is not carried in that form.

Q. Then what do you mean by your answer there, as I understood you a while ago, a general average of that particular class of traffic?

A. Well, I have in mind a very large number of commodities: for instance, you make a lower rate for stone than you would for pianos. The risk in handling stone would be inconsiderable; the risk in handling pianos would be very great. The value of stone would be inconsiderable, while the value of pianos would be considerable.

Q. You get your average cost per ton, per mile, for your total ton mile? In total: Also cost per car per mile. Also cost per train per mile.

A. The Accounting Department make up such figures, yes.

Q. Are not those the figures you have before you, that you are referring to?

A. No sir.

Q. What are the figures?

A. The general statement as to the cost of the service, and the revenue derived from the service.

Q. Where are those general figures?

A. I believe they have been filed as exhibits in this case, if my memory is correct.

Q. I have not seen them; how are they expressed, by what unit?

1578 A. By ton mile.

Q. But I understood from these gentlemen who testified before you, that that is of no value, except a comparative value with other roads?

A. That is all the service possible.

Q. What service is it to you, then, in making rates?

A. The only service is to determine as near as we can from that what a minimum rate should be.

Q. How can you determine that from those figures made up in the aggregate?

A. It is not a determinable factor; you cannot get an exact figure.

Q. Can you get an approximate figure?

A. For certain services; for certain districts; under certain conditions.

Q. Different commodities?

A. Yes; taken together with the other factors that go to make up the rate.

Q. You have to take it as a whole?

A. Yes sir.

Q. You have no separate figures on the rates on iron?

A. No sir.

Q. Or on baskets?

A. No sir.

Q. You have the figures on the combination of iron, baskets and everything else?

A. Yes sir.

1579 Q. You have no figures before you at all that would give you any indication of what the rate on baskets should be, have you?

A. As an actual mathematical calculation, no.

Q. You just have to guess what relation baskets would bear to iron?

A. No; you don't guess it.

Q. How do you get at it?

A. Use your experience.

Q. Well, what is the difference?

A. Some people guess better than others.

Q. That is just about all; it is a guess in the last analysis; one may be an experience guess, and one may be no experience; but still it is a guess.

A. No, I cannot agree that it is a guess.

Q. That is probably a difference in the use of the term, more than a real difference between us.

Mr. MOORE: In estimate.

Mr. HILL: Estimate is a good word.

Q. There is no cost accounting system in use on your road, is there?

A. Not that I am advised of, no.

Q. Have you a Commissioner of Statistics?

A. I have never heard of such a gentleman.

Q. Some of the other roads, I understand, have such an officer; have you?

A. No sir.

1580 Q. Do you know of what use a Commissioner of Statistics would be?

A. I couldn't say as to what his duties would be.

Q. He has no accounting figures on cost of transportation?

A. We have not such an officer.

Q. You testified this morning about a change in interstate rates when there was a change in intrastate rates: I think you said that the example propounded to Mr. Kimbell was an impossible one, because there would be a change of interstate rates: do you mean that that change takes place automatically?

A. It cannot take place automatically on account of the difference in the effective dates as fixed by the Arkansas State Commission, and the effective dates as fixed by the Interstate body.

Q. If the railroads did not voluntarily change them, they would not be changed at all, would they?

A. The railroads usually voluntarily establish all of their interstate rates.

Q. Then your explanation really amounts to this: that the railroads should change their rates to bear proper relation to intrastate rates which have been changed?

A. No; the detail of that answer would be from the other end of it, I should say. The intrastate rates were fixed for us by a Commission resulting in a reduction in our interstate rates; as soon

1581 as that controlling factor was removed, the interstate rates would be restored.

Q. My point is this: that they would not be restored automatically?

A. That cannot be on account of the difference in the——

Q. Certainly not, and they would not be restored unless the railroads voluntarily undertook to restore them?

A. The restoration would be made by the railroads of their own volition.

Q. Then when you said that this was an impossible situation, this morning, you simply meant that the railroads would not let this situation remain, did you not?

A. They could not consistently do so.

Q. That is true. It does not mean that they are forced in any way by law or compulsion, other than their own will?

A. Their own will and their desire to earn a reasonable return on the investment, on the property.

Q. Did I understand you to say this morning that the interstate rates were fixed by the intrastate rates?

A. To a large extent, yes.

Q. Was that the condition in Arkansas at the time you got this injunction, that you fixed your interstate rates into Arkansas according to the Standard Distance Tariff, No. 3?

A. They bore a very close relation to the Standard Distance Tariff, No. 3.

Q. What do you mean by a very close relation?

1582 A. The list of commodities are almost identical.

Q. That still is not an answer; I am speaking of rates, not commodities?

A. That is the close relation; we have the Standard Freight Distance Tariff, No. 3; we have a great many of these commodities——

Q. That is going into a discussion of commodities as distinguished from class rates. I am talking about rates proper. Do you mean to say that when the Commission fixes a rate in Arkansas, that the railroads would fix the same interstate rates into Arkansas?

A. I couldn't conceive how the rates would be the same into Arkansas, for the reason that the distance would be greater.

Q. I am assuming the same distance: take a haul out of Memphis into Arkansas; the same distance as a haul in Arkansas; there would be no difference there in the circumstances of that haul, other than that you cross a state line?

A. Yes, and very often that you cross a bridge, for which you pay a certain arbitrary charge. The statement would be all right with that exception.

Q. Taking it from St. Louis, there would be no bridge arbitrary?

A. The rates from St. Louis would not be fixed with that relation; they would be fixed with relation to the rates from Memphis.

Q. I don't quite understand that; I wish you would ex-

1583 plain that a little more fully; the St. Louis rate is fixed by the Memphis rate?

A. The St. Louis rate is fixed with relation to the Memphis rate.

Q. In what relation?

A. In relation to the commercial conditions.

Q. Not according to the cost of service then?

A. Not altogether according to the cost of service, no.

Q. Let us take some concrete illustrations of your point: I have some figures here on rates from St. Louis to Bald Knob—have you the interstate tariff there before you that was in force at the time this injunction was granted?

A. No, I haven't; not to Bald Knob.

Q. Well, I will give you what I have and you can verify it: The rate on apples and vegetables, carload, is 27; less than carload is 43. That is 290 miles, and for an equal haul on the Standard Distance Tariff, it is 20 and 33—interstate tariff, I am giving you now. On the same commodity, at the same time, it was 20 for carload, and 33 for less than carload.

A. Was that apples and vegetables?

Q. Yes.

A. That is right.

Q. Now, take bagging and ties: I understand a distance equal to the distance from St. Louis to Bald Knob, would be 15 for carload, and 22½ for less than carload; is that right? I find in your

1584 interstate it is 19 for the car load and 34 for the less than car load. Canned goods I find in the Standard Distance Tariff was 22 for car load and 27 for less than car load, as against 23 and 43;

wire and nails in this Commission tariff it is 20 for car load and 27 for less than car load; in the interstate it is 18 and 30.

On salt the Commission Tariff is 12 for car load and 22 for less than car load as against 15 and 25.

Sugar and molasses is 15 in the Commission Tariff for car load and 25 for less than car load; in the interstate it is 23 for the car load and 49 for the less than car load.

A. Those figures are not correct on the sugar. The maximum rate on sugar in Arkansas is 13 cents.

Q. Where do you find that?

A. I will have to look to tell you where to find it. It is in here.

Q. We just took that from the distance rate; there may be some modification of it—a distance of 290 miles.

A. Maybe I can find it here for you in a second—item No. 80, Distance Tariff, makes the maximum rate 13 cents.

Q. That should be 13 instead of 15, as against 23 for the same thing in the interstate?

A. Yes.

Q. Now Mr. Watson after looking at those figures can you state that the interstate rates are based on the intrastate rates?

1585 A. As to an actual comparison between state and interstate rates there would be none. We base the interstate rate from a primary market, such as Memphis, and by commercial conditions; the rates would also be fixed from other markets, say St. Louis. Fixing St. Louis you would fix a great many others. For instance, Cincinnati, Chicago and New Orleans.

Q. These are St. Louis rates?

A. I know, I am trying to give you the whole dope while I am at it. Those rates all bear a relation one to the other.

Q. Well, what relation?

A. It would be very difficult for me to tell you offhand exactly the relation between each class and commodity, between each tariff. The tariff would be the best evidence of that.

Q. Well now, speaking generally, what is the relation? I understood you this morning to say that the intrastate rate would fix the interstate rate.

A. It does by fixing the rate from Memphis.

Q. This does not fix a Memphis rate——

A. I know, but the Memphis rate fixes those rates.

Q. Does the Memphis rate fix this Standard Distance rate, 290 miles?

A. No.

Q. Just the other way?

1586 A. Yes, just the opposite way.

Q. Well, let us take some Memphis rate——

A. I want to say in connection to that that the rates from St. Louis to points in Arkansas, according to the figures you have just given, are considerably higher for the same distance than the rates from the same distance in Arkansas. I presume that is what you are trying to bring out.

Q. These figures show that you have taken the figures from St.

Louis to Bald Knob and found the equivalent distance in Arkansas; now take some Memphis illustrations: take apples and vegetables—my figures are somewhat blurred——

Mr. MOORE: To Bald Knob?

Mr. HILL: No, this is to Morrillton. That is 200 miles, or rather it takes a 200 haul rate; I believe it is over or under. I have it here 13 cents for car load and 25 for less than car load.

A. For what?

Q. 200 miles, apples and vegetables.

A. 13 and 25?

Q. Interstate rates 16 and 35.

On bagging and ties the Commission rate is 11 and 16½; the interstate is 15 and 27½.

Canned goods, 16 for car load and 20 for less than car load, as against 18 and 28.

Sugar and molasses 13 and 22 Commission rate, as against 16 and 26.

1587 Now take Memphis to Arkadelphia—that is 210 miles—apples and vegetables in the Commisison tariff 15 and 27, as against 18 and 35.

Bagging and ties 12 and 18, as against 14 and 33.

Salt—I have it blurred here. I wish you would give me that.

A. 9 and 15.

Q. 9 and 15 as against 14 and 21.

Sugar and molasses 13 and 23 as against 20 and 26.

Now what do you say that the relation of those interstate rates bear to the state rates?

A. I should judge those figures are Iron Mountain figures; are based, upon the bridge arbitrary, higher than the rate from West Memphis for the distance.

Q. You think that is the only difference?

A. No there are some other differences, probably by the desire of the Iron Mountain to get more revenue than the Commission scale would give.

Q. Those figures would indicate that that was more an element than the bridge arbitrary; was it not?

A. What was that?

Q. Those figures would indicate that that was more an element than the bridge arbitrary, was it not?

A. Well, you are asking me to say something about rates I am not familiar with; I do not know anything about their construction. I am giving you my view.

1588 Q. Is it not a fact that these rates are not based on the Commission tariff?

A. I should say they were based on the Commission, from what I have seen of them.

Q. Then if they are based on it, I am trying to get at what was the relation of the interstate rate, for the same distance, in the same territory, and the state rate.

A. I cannot answer that question because I do not know.

1589 Q. Why should there be any relation between the two?

A. Why should there be a relation between state and interstate?

Q. For the same distance and territory?

A. The commercial conditions would almost make it necessary.

Q. Then it is commercial conditions and not cost of service that determines these rates?

A. No, the cost of service determines one factor only, and the commercial conditions determine another; you take them all to make up the whole.

Q. If you take the mixture of cost of service and commercial conditions, which is the larger dose, commercial conditions or cost of service?

A. The cost of service is usually the hardest one to overcome; in other words, you don't want to go below the cost of service.

Q. How would you know you were getting below the cost of service on these articles, apples and vegetables?

A. Based upon the estimate you have.

Q. And that is the estimate upon the aggregate, not upon the separate articles?

A. It is an estimate based upon the aggregate, and your knowledge.

Q. Your judgment, rather, as to the separate articles?

A. Yes, that is right.

Q. In exercising your judgment as to how to divide up
1590 the cost of service on the different articles moving under a tariff, you must have some unit to measure by, must you not?

A. As between the various commodities in the same tariff, is that what you mean?

Q. Yes; and you have an aggregate now before you of your total cost of service on the Cotton Belt road, on everything, and you want to fix your tariff now on canned goods and molasses, and the*de* others: when you go to do that you have to have some unit to do that by?

A. No, it is not necessary to have a cost unit.

Q. How do you get at it?

A. The classification is a very fair basis.

Q. How do you get at the classification? That just goes back to the same question.

A. That is exactly the reason why I do not understand your question.

Q. What is it?

A. You are taking me back to where I started——

Q. I am trying to get at your basis of fixing these things.

A. The basis for fixing the rates is the value of the article; the steps it requires to handle it, and then the commercial conditions which may govern its movement, and the distance you handle it.

Q. Are those all?

A. And as to whether or not you can afford to handle it for the rate that may be necessary to handle the traffic.

1591 Q. Now, it is this last element that I am trying to find out from you, how you get at it. I understand your explanation to these others thoroughly, but these last—how you can afford to handle it. I want to know how you (and by that I mean the men who fix the rates, either in the Western Classification or in your own office), how you get at that cost of service?

A. I don't think I said that we got at the cost of service, because we do not get at the cost of service; but we have a general idea of the cost of transportation, and that idea fixes for us the minimum charge that we can afford to handle the traffic for.

Q. You state that that idea fixes the minimum charge: where do you get that idea?

A. We get that idea altogether from the reports—from various sources—compiled by the Accounting Department—the ton-mile basis of the whole aggregate tonnage; that fixes the general question as to the actual cost for all classes of traffic. Then we must take into consideration our experience and knowledge of the cost of handling the different kinds of traffic, and from that deduct the result that we must have to determine whether we shall handle it or shall not handle it; for example, we would haul stone for considerably less than a higher class commodity.

Q. But you have no data at all to show the cost of handling stone?

A. Absolutely none.

1592 Q. Now you have referred to commercial conditions. I wish you would explain just what you mean by that term, as a factor in fixing rates.

A. That term has a general application in fixing all rates on commodities that must move. Probably one of the best explanations is the lumber proposition. A mill is located in a certain district and it must meet competition with another mill handling the same class of lumber in another district. There is a commercial condition the railroad must meet in order to carry the commodity.

Q. In other words, you must foster the industries on your line and protect them in marketing their product?

A. That is one commercial condition.

Q. Then the competition is another commercial condition?

A. That is a competitive condition; that is not altogether a commercial condition.

Q. You are not including that in your term "commercial condition?"

A. Competition between localities would be included in commercial.

Q. But as between railroads it would not.

A. Yes, that is a competitive condition.

Q. Those two factors largely enter into the determination of the rates, where they do enter into them, have a large bearing on the volume of the rate, and when the rate is fixed to meet competition, or to meet these commercial conditions you have referred to, it fixes upon a different basis than the basis of cost.

1593 A. Necessarily.

Q. To illustrate that point in Arkansas: you have a coal rate from Western Arkansas into Little Rock—I believe $1.25—on a haul which probably from the coal zone averages 150 miles.

You have a coal rate into Memphis from Illinois, Kentucky, Tennessee and Alabama of $1.00, which average longer hauls than the one in Arkansas: those are facts are they not?

A. I do not know whether the rate from Memphis to Illinois is $1.00.

Q. It was at one time—while there was a corresponding rate of $1.25 from Western Memphis into Little Rock.

A. My recollection is that that was $1.00 also.

Q. That was the commission rate I am speaking of.

A. The rate established by the railroads since November 2nd was $1.25.

Q. At that time the rate into Memphis was $1.00 was it not?

A. I could not say as to that.

Q. Assume that to be the fact for the purpose of illustrating my point: what dictated that rate of $1.00 into Memphis?

1594 A. We are not a party to that rate, Judge and I cannot give you all of the factors that entered into the making of the rate, but it was undoubtedly commercial conditions.

Q. Roughly, competition with Pittsburg coal, was it not?

A. That probably had a great deal to do with it.

Q. That would illustrate the point you have been making about competitive conditions settling a rate rather than the cost of the service, would it not?

A. To an extent, yes.

Q. Is there not another commercial condition entering into that, and that is to preserve to jobbing centers their natural distributing territories?

A. That is one commercial condition.

Q. That largely determines rates, does it not?

A. It has no general bearing, no. The distance from the jobbing center would fix undoubtedly the territory in which it should distribute. In other words, the same scale from these jobbing centers for the same mileage. would undoubtedly fix the territory in which the jobbing people would operate.

Q. That is true; but how about the rate into those jobbing points from large manufacturing centers, like the steel manufacturing centers of Pittsburg, for instance

A. You mean the rate into the steel manufacturing centers at Pittsburg?

1595 Q. No, from the steel manufacturing centers into the various jobbing points, say Memphis, Little Rock and Fort Smith.

A. The rate from Pittsburg to Memphis is governed by water competition to a great extent.

Q. How about Little Rock?

A. That is governed largely by commercial conditions.

Q. That would be account of Memphis situation, would it not?

A. Yes.

Q. How about Ft. Smith?
A. That is also governed by commercial conditions.
Q. And not the cost of the service?
A. Not altogether, no.
Q. Now is not this another consideration that a traffic man must bear in mind; that is, the reciprocal loading of the cars?
A. He certainly must bear it in mind. The direction of the movement is one of the principal factors in fixing commodity rates where the volume is large.
Q. When he offers inducements to shippers in the way of a favorable rate to get reciprocal loading of the cars that he has to furnish that shipper, he will take the return rate at pretty near anything he can get.
A. No, not pretty near anything he can get, but on a reasonable basis. In other words, the return loading for that equipment enters largely into the cost of the service.
1596 Q. But you would take it back for very much less than you otherwise would do in view of the following movement?
A. Your question is a too general one for me to give you a direct answer.
Q. Well give an explanation of that theory I am inquiring about.
A. The theory is this: that for return loading in a direction where you have a- empty movement you will necessarily make a lower freight rate than you would where you have to haul the cars to the point empty in order to obtain the traffic, all of which enters into the cost of service.
Q. On that return movement you will take whatever the traffic will pay one way, won't you? If you do not you take empty cars back.
A. You said whatever the traffic will bear—we cannot always get what the traffic will bear; there are other conditions involved.
Q. Mr. Watson, the term "what the traffic will bear" has many meaning, has it not?
A. Yes, a very great many.
Q. You have such things as zone rates have you not?
A. Yes, to and from.
Q. It catches them coming and going?
A. Yes.
Q. When you have such zones as we had an explanation of here a while back, of lumber from South Arkansas and *and*
1597 Louisiana to St. Louis, the cost of service is not a controlling factor in fixing that rate is it?
A. Not a controlling factor, no.
Q. It would be a very small factor if any factor at all, would it not?
A. It would enter into it from the standpoint that all of the carriers would not participate in all of the freight.
Q. Well.th ere would be a different cost of service on that traffic: take an illustration we had up here before—the lumber movement from Farrell, Ark., to St. Louis, and the same quantity from Lake Charles, La., to St. Louis. for instance would bear 18

cents; there would be a radical difference in the cost of service of those two cars of lumber would there not?

A. Undoubtedly.

Q. So the cost of the service would not be a factor of any moment in such a rate as that?

A. It depends altogether on how you use the term "cost of service."

Q. How do you use it?

A. You take the shipment from Farrell, Ark., the cost of service to the Iron Mountain for one handling would make the traffic profitable.

Take that same shipment from Alexandria, La. Loaded on another line and by the time they got through paying the connecting line its revenue for the service they would perform, which would be a service that would cost considerably less than the
1598 service they would render from that point, the result would probably be very fair in the aggregate.

Q. Here is an illustration taken from the Iron Mountain tariff: the rate from Lake Charles, La., to St. Louis is 18 cents, out of which the St. Louis, Watkins and Gulf would receive 6 cents per hundred pounds from its haul to Alexandria; the balance of the rate, 12 cents, accruing to the Iron Mountain for its haul from Alexandria to St. Louis; while the local rate from Alexandria to St. Louis is 18 cents, all of which accrues to the Iron Mountain. Thus it is apparent that for exactly the same service performed between Alexandria and St. Louis the Iron Mountain would only get two thirds on a car originating at Lake Charles that it would on one of similar tonnage originating at Alexandria; is not that a fact.

A. Stated just as you have stated it, it is a fact.

Q. Is this not a correct statement of the condition?

A. I cannot say that; I am not familiar with the handling of the business at Alexandria. The chances are that the service rendered by the Iron Mountain would be greater than on the shipment received from the connecting line from Lake Charles.

Q. Why?

A. It would have to place the car for loading. It would have to pick it up and handle it paying the entire expense.

Q. That is the only point you would make against that
1599 division—one terminal expense, is it?

A. Not exactly that; that would not be all, no. One terminal expense as to Alexandria proper would be all, but you take it from the first station this side of Alexandria, there would be other expenses involved, and in that particular case the Iron Mountain would probably have to handle that car empty to Alexandria to get this load of lumber, which would be another expense.

Q. The rough material rate as fixed in Arkansas by the Commission, I believe was an adoption of the railroad rough material rate existing prior to the Commission, was it not?

A. Yes and no; yes to the extent that it adopted about the same basis.

Q. Now is not the theory of that rough material rate this: that a

low rate is fixed on the lumber moving into the planing mill and a higher rate out of the planing mill, for the long haul, and that the combined rates is where the railroad gets its compensation, not on the inbound rate alone?

1600 A. Do you want me to give you the basis of that rate?

Q. I am asking you if that is a correct statement?

A. Partially so; there are other conditions involved.

Q. What are the other conditions?

A. The rate into the mill point is usually fixed on a very low basis. The rate out of the mill point—provided that the through rate from the original point of origin is the same as from the mill point—would yield to the railroad the same revenue as it would have received from this same business had the mill been located at the point of origin instead of the mill point; that is the object of the proposition. In other words, the inbound rate is supposed to represent somewhere near the cost of handling.

Q. The revenue is supposed to come out of the ultimate movement?

A. The revenue is supposed——

Q. The profit, I mean, instead of revenue.

A. Yes sir.

Q. Is supposed to come out of the ultimate movement?

A. Yes, the ultimate movement.

Q. Then if you divide up those two rates and consider them separate movements, they do not bear a proper relation to each other; you would have to take the whole rate in order to get a determination of what was a fair rate on that commodity?

A. That would be all right where the movement was say 25 or 50 miles, but where the movement was greater than that it would not be.

1601 Q. The matter in brief is this: that your profit—or are supposed to get your profit, on the combined movements and not upon either, separately?

A. The profit in handling that particular business is derived from the rate from the mill point to final destination. Of course there is a profit in handling some of the business into the mill point. There is no profit in handling some of the other business into the mill point.

Q. I am not speaking of exceptional conditions; I am trying to get at the general proposition involved in this rough material.

A. That is why I stated the answer as I did, to make it as clear as I could.

Q. But the general proposition, leaving out exceptional conditions, is that it takes the combined rate to determine the profit of the rate upon this commodity?

A. I don't understand just what you are driving at, Judge, but I will try to explain it. The rate on cord wood or logs, or anything of that character, locally, within the state of Arkansas, is fixed on a very low basis as it is, and there is very little difference as between the rough material, and the actual rate on logs or cordwood, and the

difference between the margin of profit on one and the other is so slight that I do not believe it would apear in figures.

Q. Mr. Watson, is it not a fact that in fixing the rough material rate, by the Arkansas Railroad Commission, that it was fixed
1602 at a low rate under the theory or expectation, or assumption, or whatever you might call it, that the railroad would get the outbound movement and thereby compensate themselves for carrying it at a low rate?

A. There was no assumption about it; it was a guarantee. Under the Commission order we were permitted to require a bond to compel the shipper to give to us the outbound traffic.

Q. That would be about forty per cent of the rough material?

A. Not in all cases; some forty, some thirty, some——

Q. The point is this: that a low rate was fixed by the Commission on the assumption that you had a right to charge, on the inbound traffic, at a higher rate?

A. Not on the assumption that we had the right to charge on the inbound whatever the tariff basis and whatever the destination was—there is no requirement as to the destination; just so long as we got the product we could haul it—ten or fifty miles.

Q. I believe you say the railroads re-adjust their interstate rates to meet the intrastate rates; is that a fact?

A. I did not intend to say it that way, if I said so, Judge.

Q. How did you say it?

A. That the state rates base the interstate rates. The intrastate rate is less than the interstate; therefore your term to me is used in the wrong sense; that is what I was trying to clear up.

1603 Q. Suppose the intrastate rates, as fixed by a Commission, under order of court——

A. Then it would base the interstate rates as far as the interstate lines found they could afford to go.

Q. That is the way I understood you this morning; that is the way I put my question. Where this intrastate rate is a fixed quantity, I understood you to say that the interstate rate was adjusted to it.

A. That is all right, but I was just trying to clear up the question with you that the interstate rate is higher than the state, in nearly all cases?

Q. You mean the interstate is higher than the intrastate, for the same length of haul?

A. No, but the interstate movement is greater than the state movement.

Q. The interstate movement is greater?

A. Yes sir.

Q. But the interstate rates are not greater than the intrastate?

A. The interstate rates are greater than the intrastate rates, for the same distance, in very nearly all cases.

Q. Mr. Watson, are you not mistaken, or else you have misunderstood me, in saying that the interstate rates are higher than the intrastate rates, for the same distance?

A. I don't believe you will find any case where they are not. There may be some few isolated cases, but they are very few.

1604 Q. Mr Watson, in Exhibit No. 26, of the Iron Mountain, I find that for the month of October, 1907, that the average revenue per ton, per mile, on interstate freight was 6.901 mills, and on all state business in the state of Arkansas it was 12.826 mills. The first was on the interstate business in the state of Arkansas, including trans-state business.

From those figures you will see that, in round numbers, the state rate was twice as high as the interstate.

A. The state revenue, not the state rate.

Q. This is based on rate per ton, primarily, Mr. Watson.

A. I know it is.

Q. Would there be any difference there between the rate and the revenue?

A. There would not, provided the same amount of tonnage of each particular kind moved in state or interstate traffic and you were comparing the two; there would be absolutely no difference.

Mr. MOORE: Give him also the average length of haul in these rates; let him have all the facts.

Mr. HILL:

Q. Well, your average state haul was 72.21, and the average interstate haul was 218.18.

A. If you will permit me, Judge, you cannot compare the statement that I have made with the statement you have there. I was talking about rates and you are talking about the result of the application of those rates; two different and distinct subjects.

1605 Q. That is your distinction, then, in answer to the question that I inquired of you a while ago?

A. If I understood the question correctly, yes, that is my distinction.

Mr. HILL: That is all.

Mr. MOORE: Now, Judge, before I examine him, I want to take a little time to look over this testimony; I don't suppose I can get it tonight. I want to put Mr. Perkins on. I can put him on now and then take Mr. Watson a little later, unless you prefer I should finish with Mr. Watson first.

Mr. HILL: No, just suit your own pleasure.

1606 C. E. PERKINS, a witness of lawful age being duly produced, sworn and examined on the part of the complainants, testified as follows:

Direct examination.

By Mr. MOORE:

Q. State your name and residence.

A. C. E. Perkins; St. Louis.

Q. Are you connected with the St. Louis, Iron Mountain & Southern Railway?

A. I am.

Q. In what capacity?

A. At the present time I am its General Freight Agent; that, however, dates only from the 10th of this month; prior to that I was Assistant General Freight Agent.

Q. How long have you held that position?

A. Since March, 1909, when I came with the Company.

Q. How long have you been engaged in railroad service?

A. About nineteen years.

Q. Were you engaged in the railroad service before your connection with the Iron Mountain began?

A. Yes sir, I was.

Q. State what your experience has been.

A. I started railroading with the Kansas City, Ft. Scott & Memphis, and was with them approximately five years.

Q. When did that service terminate?

A. That terminated in 1895.

1607 Q. What was the character of your service?

A. During practically all of the time I was with that road I was on the tariff desks making tariffs.

Q. From the time that service terminated, what service were you engaged in?

A. I went with the Kansas City Southern, or what was then the Kansas City, Pittsburgh & Gulf, as chief tariff clerk, having charge of the tariff department.

Q. How long were you with that road?

A. I was with that road for nearly twelve years; I was chief tariff clerk, and then sometime after that, made chief clerk, and subsequent to that, assistant general freight agent.

Q. Did that service continue until you formed your connection with the St. Louis, Iron Mountain & Southern?

A. It did.

Q. What opportunities have your duties given you to familiarize yourself with traffic and freight conditions in the state of Arkansas?

A. My duties for some time past, with the Kansas City Southern, and since coming with the Iron Mountain, have been restricted to the tariff work; the making of rates, particularly; not entirely, of course, in Arkansas, but Arkansas among other states and territories.

Q. State in a general way if you have a knowledge or any familiarity with the rate and traffic conditions in the State of Arkansas, both as to state and interstate traffic.

1608 A. Yes sir, I have. I have been engaged in making rates, principally, of course, interstate rates, into and out of Arkansas, and trans-state rates through the state of Arkansas.

Q. Are you acquainted with the Western Classification?

A. Yes sir.

Q. Are you familiar with the ratings that are established by that Classification?

A. Yes sir, I have had to deal with the Western Classification for the last nineteen years.

Q. State what the object of that classification is.

A. The object of the Classification is to assign to one of ten pri-

mary classes—or, in some instances to what might be called, secondary classes, such as double first, or first and a half—the various articles which are offered to a railroad for transportation.

In other words, with the thousands of different commodities any one of which might be offered to a railroad for transportation, we must have some guide as to the rating which will be applied on that particular article.

Those commodities have been gathered together by the Classification Committee, after years of work and study, and have been assigned to one of the various classes prescribed in the Classification. Upon these general classes or ratings, we base our freight rates.

1609 In other words, the Classification does not give a rate on a commodity, but it simply assigns that commodity to a class upon which we publish rates. The classes run from 1 to 5, and A. to E. The highest class articles is the first class, except in cases where ratings are made double first class; three times first class, or four times first class; they run down to the lowest rated classes at E.

Q. Are there any other fractions except that connected with class 1?

A. No, I think not.

Q. I believe you said the purpose of making those classifications was to adopt a method of rating with reference to commodities. I suppose you mean for transportation service—the commodities that are embodied in those classes: was that what you intended to say?

A. Yes sir.

Q. Why is it necessary to establish that classification?

A. In the first place, it would be impracticable to establish commodity rates on all the various articles which might be offered to a railroad for transportation. In the second place, it would be impracticable for any individual railroad to attempt to issue rates on the various articles without having, practically, a Classification Committee in its own employ.

While there are one or two fixed rules which govern very largely the classifying of commodities, there is a great deal of investigation made as to the particular commodities.

Q. You mean the commodities that are classified?

1610 A. The commodities that are classified. For instance, a shipper who is interested in a particular line of goods very often appears before the Classification Committee—as a matter of fact, there are a great many shippers who do appear before each meeting of the Classification Committee to give that Committee full information as to the commodities which they ship. In other words, they give them an opportunity to make an exhaustive examination into each of the different commodities. Now, a single railroad would not have an opportunity to do that at all, and we would not get the correct results if we attempted to do it singly.

Q. How are those meetings held, with reference to the time; are they stated meetings or called specially whenever it is necessary to investigate?

A. The meetings are held twice a year, in January and July.

There is a meeting now in San Antonio, or will be; it starts tomorrow.

Q. State the practice in regard to hearing complaints and what the purpose of that practice is.

A. The subjects for discussion are docketed, by the request of the shipper. The shipper may have a commodity which is one class, which he feels should properly be given another class. He gives the general information required by the Classification Committee, and in addition to that generally comes before the Classification Committee and argues his case. He is given a hearing and the result is decided on after that hearing.

1611 Q. Is there much or little of that kind of investigation of complaints from shippers?

A. There is a very great deal of it.

Q. State what is the character of the investigation usually made by the Committee on complaints, with reference to its extent and exhaustiveness.

A. Well, there are a great many features that enter into that—for instance, there may be some commodity upon which we have no carload rating at all. A classification gives—in the large majority of cases—one rating for carloads, and another rating for less than carloads. As an example: iron articles, as a general rule, in carloads, are approximately fifth class; less than carloads, fourth class. Now there may be articles upon which we have no carload rating at all, which only provide for less than carload rating, on the assumption, perhaps, that there was no movement in carloads; or perhaps on the assumption that the article should not be given a carload rating. That is usually moved on the same rate, regardless of quantity.

The shipper may feel that his business demands carload rating and he will put in his arguments to show why he thinks so. Those arguments are taken into consideration, of course, and given due weight in determining the action of the Committee.

Q. Do or do not the complaints and investigations referred to, relate to the effect of the rating upon the rates imposed upon different kinds of commodities? What I want to

1612 ascertain is this: do those complaints relate to the reasonableness or unreasonableness of the effect of the rating upon the class of transportation——

Mr. HILL: I would like him to show how many of those meetings he attended before he goes into the detail of their rating.

Mr. MOORE: I think he has already qualified, but I will ask him;

Q. State what your means are—your means of familiarity with that.

A. As a matter of fact, as far as attending the meetings of this Committee is concerned, I never actually attended any of the meetings. But the classification of articles the Western Classification as made up, and the manner of classifying freight is one which all freight men of any experience, are fully familiar with. That is——

Mr. HILL: I object to all of this testimony. I misunderstood the witness. I thought he had been to these meetings.

Mr. MOORE:

Q. I will ask you if you are in fact familiar with the manner in which the classifications are made up by the Committee?

A. I am familiar, yes; I have never actually taken part in those meetings, but I am familiar with what goes on.

Mr. HILL:

Q. These jury trials that you have been telling about, these cases of complaints: do you know anything of those, of your own knowledge?

1613 A. I can't say that I know anything about individual complaints. I know the method pursued by the Committee in handling these matters.

Mr. MOORE:

Q. How did you acquire that information?

A. I know that there are a great many shippers——

Q. Let me ask you if the proceedings of that Committee are printed and reported?

A. They are.

Q. Do you see those proceedings?

A. I do.

Q. And is your knowledge that you acquire, a knowledge based upon the reading of the reports and proceedings of the Committee?

A. The reading of the reports and the information which necessarily comes to me as an office man, you might say, from the parties who actually attend those meetings.

In the case of the Kansas City Southern, Mr. Smythe, who was our General Freight Agent, attended the meetings. I handled the office and the rate department. Those proceedings came back to me, and the machinery which was employed at the meeting was fully explained to me by Mr. Smythe.

Mr. HILL: I submit to the Master that that is——

Mr. MOORE: I am not through asking——

Mr. HILL: All right.

Mr. MOORE:

Q. Are the complaints docketed and the proceedings of the Committee shown by its publication?

A. The complains are docketed, all of them; yes sir.

1614 Q. Do you have the means, then, of ascertaining what the nature of those complaints are, and the extent of them, by the published reports?

A. Yes sir.

Mr. HILL: I would like to see those reports.

Mr. MOORE: I cannot expect to bring them here; it is not a question of primary and secondary evidence.

The MASTER: I think the court can give this evidence its proper weight and consideration when it comes before the court. I will let it go in for that purpose.

Mr. HILL: I thought he said he had attended those meetings, or I would have objected to it earlier. I understood he had attended those meetings.

The MASTER: Really his knowledge of what takes place at those meetings is hearsay; the court can give it what consideration it is entitled to receive.

Mr. HILL: Do you think you should permit hearsay testimony to be given in this record?

Mr. MOORE: I don't think it is hearsay; I will explain why——

The MASTER: I will let it go in.

Mr. MOORE: But I can show you, in a moment, why it is not hearsay—what a man learns in the course of his business.

Q. I will ask you now if the complaints which the Committee have occasion to investigate, any of them relate to the reasonableness of the rates upon commodities that result from the rating made through the classification made by the Committee?

1615 A. They do, yes sir.

Q. Do you know whether that Committee has occasion, in that way, to examine the effect of its ratings upon the rates charged by the railroads which constitute the Committee, on different commodities that are embraced in the classification?

A. They do, yes sir; the classification bears directly upon the rates; while the classification itself does not fix a rate, it fixes the class that the article shall be rated at, and that class fixes the rate—as shown in the tariff—applying in the particular territory involved.

Q. I understand that; the question I ask you is, if the investigation that has to be made by this Committee on complaints, causes them to make an investigation as to the reasonableness of the rates that result from the classification rates—on particular commodities, I mean?

A. They do, yes sir.

Q. Now, Mr. Perkins, what are the elements that enter into and influence the classification made by this Committee?

Mr. HILL: I submit that that is going too far, when he says he has not——

Mr. MOORE:

Q. Do you know as a railroad man, from your experience as a freight and traffic man, what the elements are that enter into and are taken into consideration by the Committee in making its classification?

Mr. HILL: Objected to.

The MASTER:

Q. Do you know it from your own personal knowledge,

1616 or from hearsay, or from learning it in the course of your business?

A. I know it, Judge, from knowledge acquired in the handling of the business. A man could not make a freight rate unless he knew about classification matters. The classification is probably the foundation of our freight rates. A man cannot be a freight man for nine-

teen years without coming pretty nearly knowing how classifications are made.

Mr. MOORE: What he asks is: did you acquire that information in the course of your business as a freight man? That is the question the Judge asked you.

A. Yes sir.

Mr. HILL:

Q. How did you acquire it?

A. I acquired it, Judge, from actual experience, coming up for nineteen years.

Mr. HILL:

Q. I am not questioning your experience; but take the question of complaint about a given rate; you have gone down there and had a trial about that rate: how do you know anything about that except what Mr. Smythe, or your immediate superior, would tell you?

A. In the first place, the result is all printed in a printed proceeding, which is sent to the railroads, and which I see. I know what happens.

Mr. MOORE:

Q. Do you act on those in discharging your duties, fixing rates?

A. That fixes the rating.

Mr. HILL: It is already fixed. You are asking him what
1617 these men do when they try that fellow's case about that rate, when he never was there in his life. I think you are——

Mr. MOORE: I am asking him as a railroad man; he would not be a railroad man if he did not know.

The MASTER:

Q. Is the work of that Committee authenticated, printed and sent out officially to the different railroads that are concerned in it?

A. Yes; we are members of the Western Classification Committee.

The MASTER:

Q. And that is accepted as an official document?

A. It is, yes sir.

Q. By the railroad traffic managers?

A. Yes sir.

The MASTER: There is some doubt. I am pretty liberal. I will let it go in and let the court decide what is right and what is wrong about it.

Mr. MOORE: Read the question.

(Question read as follows:)

Q. Do you know as a railroad man, from your experience as a freight and traffic man, what the elements are that enter into and are taken into consideration by the Committee in making its classification?

The MASTER: I do not see how he can have knowledge of the result

of that Committee—I don't see what knowledge he can have of it if he is sitting in his office in St. Louis——

Mr. HILL: That is my opinion.

1618 The MASTER: I should think that would be wholly incompetent.

Mr. MOORE: He has already stated he does know.

Q. In order to clear that up a little further, Mr. Perkins, just state in your own way what your means of knowledge, in regard to these matters that I asked you about in the last question, are: and what is necessary to qualify you, in the way of knowledge of those matters, to discharge your duties in the capacity you have been working in in connection with the railroads?

The MASTER: Read the question.

(Question read.)

Mr. MOORE: The question that is objected to is, what forms the elements of the basis of classification.

Mr. HILL: By the Committee, I understood you.

Mr. MOORE:

Q. What are the elements that form the basis of classification that is contained in this Western Classification?

Mr. HILL: That is what I object to, in that form as well as the other.

A. My duties would necessarily make it necessary that I be familiar with the fundamental rules of the classifying of freight, inasmuch as the classification of freight is one of the fundamental and underlying principles in all rate making. In other words, a man cannot intelligently make a freight rate unless he understands classification.

1619 He does not necessarily have to go to these meetings where the particular items are taken up, one by one, but he has got to be familiar with the general rules for classifying freight, assigning it to one of the ten classes. As soon as we get those ten classes, we sit down in the office and make those ten classes. Now, if we do not know what those in each class are, what are the controlling factors in putting those articles in these ten classes, we would have a pretty poor chance of successfully making a tariff on freight rates.

Q. Do you take part in making up those ten classes, or are you connected so you have knowledge of it?

Mr. HILL: Well, that is——

Mr. MOORE:

Q. Is your Company, or the Companies for which you worked, constituents of the Committee making classifications?

A. They are, yes sir.

Q. Are you one of the representatives of those Companies, as general freight agent?

A. I was not, in attending these meetings, but in making the rates and using the classifications, and being familiar with the ratings; yes sir.

Mr. HILL: I do not think this witness is competent to speak on those questions. His experience entitles him to speak of the fundamentals and elementals, and all that, but I do question the right of any witness to state what another man is actuated by: to tell what this meeting in San Antonio is actuated by; he can tell what they ought to be actuated by, I have no objection to that.

1620 Mr. MOORE:

Q. I will ask another question to obviate that; from your knowledge of the classification made by the Western Classification Committee can you state the elements that enter into and form the basis of that classification?

Mr. HILL: Objected to; that is just the same thing in another form.

Mr. MOORE: No it is not at all; I will tell you when you get down to that, that I could not if I had every man of the Committee around this table—Judge Hill could exclude every man of them. Judge Hill would say, you are not the Committee, you are only one out of ten or twenty or forty.

Mr. HILL: I think every bit of that ought to be excluded.

(Question read.)

The MASTER: As I look upon the statement, it just goes to the weight to be given to this witness' testimony by the Court, if he has sufficient knowledge about the facts that he undertakes to testify about, to give his testimony full faith and credit, although he may not.

Now under the liberal ruling of the testimony that prevails in this class of cases—Judge Moore thinks it could and Judge Hill thinks it could not, you gentlemen are divided upon that so radically—I think it ought to be admitted as evidence and let the Court give it what weight or what force it should receive. In the form that
1621 the question was last put by Judge Moore it is pretty nearly the same thing; it is not exactly, but the result is pretty near the same as the other.

Mr. MOORE: Say yes or no, whether you can or not.

A. Yes sir, I can.

Q. Now basing your statement upon the classification itself and your knowledge as a freight man of traffic matters, I wish you would state what are the underlying elements that enter into that classification.

Mr. HILL (to the Master): Do you hold that is competent under your ruling? I do not want to keep on objecting, but it does not seem to me to be.

The WITNESS:

A. The weight, bulk and value of the commodity are the underlying principles.

Mr. MOORE:

Q. Do those elements, weight, bulk and value, have any relation to the cost of the service in the transportation of the commodities embraced in the classification?

Mr. HILL: Before he answers that I would like him to qualify on his knowledge of cost of service. He has qualified as to making rates, but not as to cost of service.

The MASTER: I think I will let him answer the question.

A. They do have a direct bearing.

1622 Mr. MOORE:

Q. Please state in what way they do and make your answer as full as you desire, to make yourself clearly understood.

A. The handling of a light and bulky article, as an example, which is classified on the bulk and weight theory, at a higher rated class than some heavy and less bulky article, requires in the first place a greater amount of transportation facilities to handle the same weight of goods.

As an example, if we have a car load of furniture, 12,000 pounds of furniture is about what we get in an ordinary car—in that same car used for handling grain we get 88,000 pounds, if it was wheat. For that reason it would cost—or it would take at least seven cars to handle the same weight of furniture as we would handle in one car of wheat. Our revenue is, of course, derived from the weight which we handle.

Q. Does the nature of the commodity handled enter into any extent as an element in the cost of the service?

A. The nature of the commodity enters very largely into the cost. Some articles are susceptible to breakage and damage. Take as an example a car load of stoves: a car load of stoves is very susceptible to damage. Furniture is susceptible to damage, while a car load of grain is not susceptible to damage, unless it happens to be in a leaky roofed car or something of that sort. But for the ordinary handling, the rough handling you might say, it is not susceptible to the same damage, and therefore not susceptible to claim and has not

1623 the same risk incident to its transportation.

Q. Is that susceptibility to injury and damage an element that enters into or is recognized as an element of transportation by the Railroad Company?

A. Yes.

Q. I will ask you now, for the purpose of illustrating, whether there are not other articles, and a great many of which the same is true: for instance take stone and compare it with glass or with pianos, or with any commodity of more or less fragile character, or of greater value with reference to weight: would it or not?

A. The same comparison could be made against practically all of the commodities that are handled. Of course the difference between some commodities might not be so great as between other commodities, but there is the same comparison to be made between practically all of the business that we handle. Some of the business is more susceptible to breakage and to claims for damage than are others. We have some business that practically we cannot damage.

Q. Are the conditions which you speak of in your last answer such as are obvious and would be known from a knowledge of the different commodities themselves?

1624 A. To a great extent, yes sir.

Q. Now I wish you to state what is the most important element that enters into these different classifications, Mr. Perkins. I mean these classifications which result in ratings and ultimately in the fixing of rates on various commodities.

A. Fundamentally, of course, they are fixed with relation to the cost of the service. In other words, transportation is a commodity which we have for sale; the cost is so much and we have to sell it for so much to make a profit.

Q. What you term "commodity rates" is not covered by the Western Classification is it?

A. No sir, commodity rates are not covered by the classification.

Q. What are commodity rates?

A. Commodity rates are special rates, if you please, which are adjusted to apply on any given commodity without referring the commodity to any one of the ten classes.

Q. What are the conditions that usually bring about a commodity rate; I mean, the application for a commodity rate?

1625 A. It is necessary to provide for commodity ratings on the commodities which form the heaviest movement, as a general proposition; that is, commodities that move in quantities, in order—in some cases—to meet commercial conditions, and in other cases to meet competitive conditions; and in other cases to meet, what we might term rate conditions. There are a great many reasons that can be assigned for the making of commodity rates and not any two of them would necessarily apply to different commodities. In other words, the underlying reason for making a commodity rate in one case would not necessarily apply to another case.

Q. I understand that. Do the railroad companies, in fixing commodity rates, pay regard to, or do they disregard the cost of service?

A. They regard the cost of service always; that is, they attempt to. Commodity rates are often fixed on a commercial condition which necessitates a specified rate. It may be that that condition would require the Iron Mountain, for instance, to establish a rate which we would consider below the cost of operation. In that case we would simply go out of the business and would not attempt to meet that commercial condition. We would, however, meet it as far as we could, so long as it was with profit to ourselves.

Now, the direction of the haul might have a very large bearing upon the rates: in other words, if I, as a freight agent, was called upon to fix a rate on a commodity moving, for instance, from Kansas City to the Gulf—say wheat, for export—if the condi-

1626 tions necessitated what we call a very low rate, I would probably make a rate (southbound) that I would not make if the same business was northbound, for the reason that our predominance of loading is northbound. Our cost of service, southbound, therefore, on that particular wheat, would be less.

Q. Do you in any except very exceptional cases, make a commodity rate regardless of the cost of service, or whether a profit can be made on the movement or not?

A. We try always to make a profit on the business which we handle.

Q. Does the volume of the business enter into and become a consideration in the making of commodity rates?

A. The volume of the business is one of the factors, yes sir.

Q. I want to know whether the rules which prevail in ordinary business concerns—such as sellers of goods and things of that kind, which result in the fixing of different prices on articles sold in large quantities and those sold in smaller quantities, or wholesale and retail, apply also in railroad rating?

A. They do, yes sir; to a very large extent. In other words, we almost uniformly make a lower rate, in cents per hundred pounds, on a carload of a given commodity, than we do on a less than carload shipment, say of 100 or 200 pounds.

Q. How is that with regard to traffic that moves in very large volumes and train loads?

A. Traffic that moves in large volumes are generally given
1827 lower ratings than in the case of commodities with a less movement. That is, I do not mean to be understood as saying that a man can ship a train load at any cheaper rate than he can a carload, but I mean, where there is a volume to move, from a given territory, that volume has a controlling force in the adjustment of the freight rates on that commodity from that territory.

Q. In other words, you mean that you would fix a lower rate on a given commodity, if it moved in very large volume and gave you large employment, than if moved in smaller quantities?

A. Yes sir.

Q. Like a wholesale merchant could sell his goods cheaper than a retail merchant?

A. That is true.

Q. Why is that; what is the reason of that difference?

A. In the first place, the movement of commodities in large quantities gives us a steady movement, a steady employment for our motive power, it gives us trains loaded to the maximum carrying capacity in all cases, and furnishes us tonnage on a wholesale basis. It obviates the necessity of active solicitation, you might say, for the gathering up of business. There are a great many factors which enter into rates of that character.

Q. Does reciprocal movement of tonnage in opposite directions and distances, enter as factors in the fixing of commodity
1828 rates?

A. Both of them do, yes sir; very largely.

Q. Are they regarded by railroad traffic officials as important factors?

A. They are probably the most important factors which we have in fixing our freight rates and in bringing our business to an ideal condition. In other words, the best results can be obtained if we can secure loads for our cars in both directions. The longer the haul, naturally the lower the rate per ton, per mile, we can afford to handle that business for.

Q. The rate on lumber, from points in the States of Arkansas, Louisiana and Texas, has been referred to in the testimony in this case.

I wish you would state, if you know, what conditions produced the traffic arrangements that exist now with regard to the transportation of lumber, and in fixing the rate in the lumber zone that has been referred to: if you know the history of that movement.

A. The fixing of the lumber zone dates back into the 80's, when white pine was the chief lumber used in the middle west. I might say here, Judge, that I will give you the history so far as it relates to the Missouri River, for the reason that I am more familiar with the Missouri River adjustment than any other; but the conditions are substantially the same at the Missouri River as at the Mississippi River and other territories.

1629 In other words, it is a history of the inception and growth of the lumber zone.

When the yellow pine of the south began to compete with the white pine of the north, there was a great deal of competition and rivalry, not only between the sellers, but between the transportation lines. It resulted in complication and rate wars, until finally the white pine interests and the yellow pine interests agreed to leave the matter to arbitration—to fix a relative adjustment of rates to the Missouri River, if you please, from Chicago, which was the distributing market for white pine at that time, and from the State of Missouri, which was the originating and distributing market or producer for the short leaf yellow pine.

As the result of that arbitration, the rate on white pine, from Chicago to Kansas City and all Missouri River points, as far north as Omaha, was fixed at fifteen cents a hundred pounds. The same rate, fifteen cents per hundred pounds, was fixed from southern Missouri, the producing territory at that time being the Grandin District, on what was then the Kansas City, Ft. Scott & Memphis Railroad (now the Frisco), and the Leeper District, on the St. Louis, Iron Mountain and Southern.

In fixing that adjustment the arbitrators fixed a differential to be applied to the lumber originating in southern Arkansas and Louisiana, of seven cents per hundred higher than the adjustment from Missouri, or twenty-two cents per hundred pounds, which rate applied from the mills then in operation in southern Arkansas and Louisiana (they were very few at that time) to Kansas City, Atchi-

1630 son, Leavenworth, St. Joseph, Omaha, and the Missouri River towns between Kansas City and Omaha.

With the growth of Louisiana or the milling interests in Louisiana; the new mills, the new localities, were put on these same bases new routes going down into that territory, opening up new tracts of timber, saw mills going in were put on the same basis as had been fixed in this arbitration.

So that our present zone basis of making lumber rates grew out of this arbitration and that competition as between white pine on the North and yellow pine on the South.

It has been conceded as the territory developed and new mills

went in, by the transportation companies, that in order to permit the new mills to compete with the established mills, that it was necessary to give the same rates to the consuming territory as their neighbors had. It might be that one mill was on a mileage basis, considerably nearer to the point of consumption than the other. The competition, on which the freight rates were made, had grown steadily. The lumber mills were established, investments made, upon the theory that these competitive freight rates would be afforded to them, and from that start the territory has grown until it has arrived at its present proportions.

Q. That is commercial condition?

1631 Yes, that is commercial.

Q. Or was it competitive?

A. Commercial and competitive conditions. Now, as a matter of fact, it would be almost impossible under these conditions, to make freight rates on lumber on any different theory. As an example: the Kansas City Southern has a short line (practically an air line you might say) from Kansas City into the lumber territory of Louisiana. If rates were made on a mileage basis to Kansas City, the mills on the Kansas City Southern with the shortest mileage would naturally have the lowest rates and the mills on the other roads who might not have a short mileage, would be on higher rates and naturally could not compete with the mills that had the shorter rates.

In other words, a mileage theory of making lumber rates to a consuming territory is impracticable.

Q. What is the underlying principle of division as between connecting carriers that engage in the movement of and in transporting lumber from this zone that you speak of?

A. The conditions as between carriers is always a matter of negotiations and agreements. There is this general principle, however, that the originating line gets the largest share of the earnings: that is, according to distance. In other words, it gets more than a mileage pro-rate would yield for the reason that its service is considerable more; for the reason that it originates the business

1632 and must furnish the equipment for handling the business: reasons of that character.

Q. In what respect is the service greater on the originating line than on the intermediate lines, or the terminating lines?

A. I can illustrate that basis, Judge, by giving the actual experience or the actual method of handling lumber on the Kansas City Southern Road, which is one of the largest lumber producers, and I am more familiar with that road than any other.

Q. Very well, state it please, that will illustrate the general situation.

A. Yes, that would illustrate the general situation. In the first place, for lumber originating on any given road, cars must be hauled to the mill—practically all of those cars must be hauled empty to the mill; from the place where they are made empty, of course, the distance varies, but there are very few cars, comparatively speaking, which are made empty at the point where

the saw mill is located. That causes an empty haul. That car must be taken out of the train and switched to the mill. In distributing the cars to the mills special trains must be run to handle or take care of that work, for the reason that the through trains cannot economically handle that class of work, because it—taking out its cars and diminishing its tonnage from time to time.

1633 Now, when the lumber is loaded there is a train run (which in the case of the Kansas City Southern they call a "dodger") which does nothing but switch the mills and pick up that lumber and haul it to a division or concentrating point. In other words, a through train cannot handle that business from the mills for the reason that they would have to start out a train with practically nothing in it and pick up what tonnage there was offered; while this train picks up the cars as it finds them and hauls them into this division or concentrating point. When they are received there they are made up into full train loads. They are then handled to a connection with the next connecting carrier. In case of lumber coming from Kansas City Southern to St. Louis they are delivered to the Iron Mountain at Texarkana.

Q. Now state what service is performed by the Iron Mountain.

A. It picks that car up and takes it off to the transfer where the Southern has placed it, takes it to the yard and puts it into a through train and goes with it.

Q. What does it do when it gets to its destination?

A. If the destination is on its rails it sets it to the lumber yard or point of delivery; if it is not on its rails it simply sets it on

1634 a connection of the connecting carrier.

Q. Is that all the service the Iron Mountain renders?

A. That is practically all, yes sir.

Q. In dividing the amount that is received for that service from the origin to the termination of the movement, the originating line gets the larger proportion because of the yard service rendered by it, does it?

A. The originating line gets the greater proportion according to the service involved; then the connecting carrier.

Q. Do you know if the Iron Mountain has any reciprocal tonnage, uses the cars that lumber is hauled in for reciprocal tonnage, or movement in the opposite direction?

A. Yes, very largely.

Q. State what the facts are in that connection.

A. Our lumber movement is Northbound. The cars that are made empty in the North are used for transportation of grain principally; there are, of course, other commodities—back into the Southern territory, where the lumber originates.

Q. The cars then are utilized in both directions?

A. Yes, as far as possible in both directions our Northbound movement is the heavier of the two. We try to get as much business as we can Southbound to offset it. In other words, the grain Southbound comes very nearly offsetting our Northbound

1635 lumber movement.

Q. I wish you would state if under the arrangement of

rates the freight carriers engaged in that movement of lumber receive a compensation that is remunerative to them.

A. They do, yes sir.

Mr. HILL: How is that?

(Question read.)

Mr. HILL: I would like to ask how he knows it.

Mr. MOORE: Do you know what the average length of haul of lumber on the Iron Mountain is—this is trans-state movement is it not?

A. Yes.

Q. Do you know what the average length of haul on the Iron Mountain road or the Missouri Pacific System is?

A. Do you mean on all the business?

Q. Yes, trans-state business of that character, commodity business.

A. Yes sir, it is about 400 miles.

Q. Do you know what the average revenue per ton per mile is?

A. On all business?

Q. Trans-state.

A. You were speaking of——

Q. Lumber, if you know, and if not, then on what class of business.

1636 A. Lumber is approximately six mills.

Q. I did not know that you knew lumber separate from the other.

I believe you said there was a reciprocal car movement as between lumber and grain: do you know what the average revenue per ton mile on grain is?

A. Grain is a fraction over six mills.

Q. What is the policy of the Missouri Pacific or the Iron Mountain as to its participation in the movement of lumber in such districts as it could not move it and receive a remunerative rate?

A. Business which we believe is not remunerative we do not participate in. In other words, there is business coming from connecting lines which we do not feel would pay us to participate in. Of course I cannot—and I do not suppose anybody else can, sit down and figure out exactly what that figure would be, but from experience I know about what we can afford to handle that business for and there is a good deal of business that is offered to us that we do not handle. That is, I mean, offered to us in this way: that where connecting lines ask us to publish through rates from mills on their line. We figure out what it will pay us and if we do not feel that it will pay us sufficient revenue to warrant our handling it we do not publish the rates. We have done that in a great many cases lately.

1637 Direct examination of C. E. PERKINS continued.

By Mr. MOORE:

Q. Go back for a moment to the Western Classification: does the Classification Committee do more than to make the classification

that is shown on the report of the work of that Committee No. 47, to which your attention has been called; that is to say, does that Committee fix rates?

A. No sir, the classification committee does not fix rates. It simply assigns the articles to the various classes. And that classification applied to the tariffs enables us to fix the rates.

Q. Each railroad fixes the rates that obtain upon its lines, upon the basis of the classification made; that is what you mean, is it?

A. That is correct, yes sir.

Q. Do all the roads apply the same rates to the classification, or is each one governed by its own rules?

1638 A. Each road and each section of the country is governed by its own individual rates. They will use the same classification individually in all territory West of the Mississippi River.

The rates on the Iron Mountain, for instance, will be very different from the rates on a foreign road. Take the road that Judge Hill mentioned y-sterday, the D. & R. G., and the rates would probably be very different.

Q. That grows out of the differences in the conditions affecting each road, growing out of different density of traffic, and various differences in the territory in which the road is constructed and operated.

A. We fix the rates to suit the conditions and to suit the operating conditions on our line; and the D. & R. G. fixes its rates to suit the conditions and the operating conditions, I presume, on its line. Otherwise rates which might prove remunerative in one section would not necessarily be so in another section.

Q. Is this Western Classification used as a basis of distinguishing between the various commodities that are embraced in it for the purpose of rating on all lines of railroad within the territory controlled by the Western Classification?

A. Generally speaking, yes.

Q. How it is with regard to official bodies? For instance, the Arkansas Commission: does it use the Western classification as a basis?

1639 A. Yes sir as a basis. That is the fundamental basis used.

Q. Is there any relation or connection between interstate rates and intrastate rates?

A. There is a very close relation as between interstate rates and intrastate rates; not only is that true with reference to the interstate and intrastate rates in Arkansas, but in a great many of the other States, practically all States, that fix the rates to and from the borders of that State.

The advance in Arkansas intrastate rates which was made prompted a similar advance in our interstate rates. In other words, when the rates locally in the State of Arkansas were raised, from West Memphis or Bridge Junction, which is directly across the river from Memphis, our rates interstate from Memphis into Arkansas were readjusted, were raised. The raising of the Memphis rates practically affects all of our interstate rates to Arkansas. Cairo is advanced differentially over Memphis; St. Louis is advanced

differentially over Memphis. In other words, there is a relation as between the rates which we carry on interstate business from St. Louis to Arkansas as compared with the rates from Memphis.

This is brought about by the fact that Memphis and St. Louis are large distributing centers and we are forced, in order to carry out a parity of rates which will allow the free distribution of
1640 business, to keep those points on a parity; that is, on a relative basis.

That is true also of the business passing through those gateways, coming from beyond.

Now, when we have our St. Louis rates fixed, the rates from practically all parts of the United States from which through rates are carried into Arkansas, are fixed differentially as compared with the St. Louis rates. In other words, the rates from Kansas City bear a certain relation to the rates from St. Louis. The rates from all Kansas points are fixed with relation to the Kansas City rates. The rates from Chicago to Arkansas are fixed on a differential over St. Louis. The rates from Pittsburg, Pa., are fixed on a differential over St. Louis. The rates from what we call the Fox River District, which is Wisconsin, North of Chicago and Milwaukee, are fixed on a differential over St. Louis. The rates from New Orleans to points in Arkansas, Little Rock and South, are in practically all cases the same as St. Louis.

So, when we change the rates from Memphis on account of the changes which are made in the intrastate rates in the State of Arkansas, we practically change the entire rate adjustment affecting interstate rates to and from Arkansas.

This condition is not confined to the State of Arkansas, but it applies to practically all States.

As an example, a short time ago the State rates in Kansas
1641 were changed, being reduced on grain locally within the State of Kansas. The change in those grain rates affected practically every rate on grain which we carried from Kansas to interstate points.

The State adjustment, as an example, fixed the rates from points of origin in Kansas to the Missouri River, to Kansas City, Kansas. The rates to the Mississippi River and to Chicago, and that section, are made practically on a combination of locals through to the Missouri River. That is, by applying what are known as proportional rates from the Missouri River, to the Mississippi River and Chicago. The fixing of those rates fixed the rates to all points East and to Seaboard territory.

In a similar way the rates from Kansas, to Louisiana, Texas and Arkansas were all affected by the change in the rates locally in the State of Kansas.

As a matter of illustration, our rates on grain from Kansas are made from points on and North of the Union Pacific main line, the Kansas City combination to Louisiana and Texas, using of course what we call the proportional rate South of Kansas City. The rates from Kansas South on the Union Pacific main line bear a relation to the combination; in other words, to Louisiana points our rates from

Wichita, if you please, are one cent per hundred pounds less than the Kansas City combination.

So, in changing one of the factors (which is the rate to
1642 Kansas City) you have changed all of your interstate rates.

That is as good an example as I can give you as to just how these changes in State rates do actually change the interstate adjustment.

I could go on and give you a great many examples of that kind but it would be simply a repetition.

Q. Do you know whether or not this relation between interstate and intrastate rates is recognized by the Interstate Commerce Commission?

A. It is, yes, recognized in this way for one: that the Interstate Commerce Commission has laid down a fundamental and primary rule, you might say that rates which are higher than the combination of locals are prima facie unreasonable.

Q. I hand you a pamphlet having the title:

"Regulations Governing the Construction and Filing of Freight Tariffs and Classifications, and Passenger Fare Schedules.

Administrative rules.

Revised by Order of the Commission."

Is that an official publication issued by the Interstate Commerce Commission?

A. Yes sir.

Q. I will ask you to read from rule 56 B, on page 81 in that publication, which I understand to be one of the regulations
1643 of the Interstate Commerce Commission.

A. (Witness reads:)

Many informal complaints are received in connection with regularly established through rates or fares, which are in excess of the sum of the locals between some points.

The Commission has no authority to change or fix a rate or fare except after full hearing, upon formal complaint. It is believed to be proper for the Commission to say that if called upon to formally pass upon a case of this nature, it would be its policy to consider the through rate or fare which is higher than the sum of the locals between same points as prima facie unreasonable and the burden of proof would be upon the carrier to justify such higher rate or through fare.

Q. Has the question as to inequalities between state and interstate rates arisen on complaints made before the Interstate Commerce Commission, to your knowledge?

A. It has. Numerous complaints have been filed before the Interstate Commerce Commission by various sections, as to inequalities in rates generally. Those inequalities may exist as between two interstate rates, or as between an interstate and a state rate.

In other words, we are obliged, in order to keep rates on a parity, so as to permit various commercial centers to compete for
1644 traffic in a given territory, to keep our rates on a relative adjustment. The rates in and of themselves may be higher or lower, but the parity as between the sections is the one feature

which the commercial bodies, such as exist in Memphis, Little Rock, Fort Smith, St. Louis and elsewhere, look after principally. And we have many complaints where rates have been established from one section and not properly adjusted as to others—or what they consider not properly adjusted; many complaints have been made before the Interstate Commerce Commission.

Those complaints take the form first of what is known as an informal complaint. In other words, the shipper or the man in charge of the shippers Freight Bureau writes to the Commission an informal complaint, laying the matter before them. The Commission mails that to the railroads and asks them for their views and if they are prepared to meet the request. Sometimes we find those requests are logical and do meet them. Other times we feel we cannot meet them and we so advise the Interstate Commerce Commission. If the shipper or the Freight Bureau, is not satisfied with this decision, a formal complaint is entered and the matter goes to a hearing.

But there is that pressure at all times on us to keep our rates on a relative adjustment, so that even if we felt it was to our interest to disregard the relative adjustment as between commodities, we know we cannot successfully do it because there is this power behind us, the Interstate Commerce Commission, that forces that situation, if it is a just one.

1645 Q. And is the principle upon which the Interstate Commerce Commission acts indicated in the quotation you read from that regulation awhile ago?

A. Not necessarily, although that fixes it to some extent. In other words, we have to keep our rates within the combination of the locals—that is, reasonably so.

Q. Mr. Perkins, does the Western Classification apply to all freight shipped into and out of the territory that is governed by that classification?

A. Fundamentally, yes. We have a few exceptions of course to the general classification.

Q. How do the rates for interstate traffic compare with the rates for Arkansas state traffic? Are they higher or lower? Usually what is the comparison between intrastate and interstate rates, for the same distance?

A. For the same distance the interstate rates are generally higher than the state rates.

Q. Have you prepared a statement containing a comparison of the intrastate rates of Arkansas, Kansas, Louisiana, Missouri, Oklahoma and Texas, and also containing a comparison of the intrastate rates in Arkansas with the interstate rates of Arkansas, and Louisiana, Arkansas and Missouri, and Arkansas and Oklahoma?

A. Yes sir.

Mr. HILL: Have you taken in Missouri A or Missouri B?

1646 A. Missouri B I think.

Q. Do you know?

A. No sir I cannot say positively now, because that was made up by my office from the tariffs.

Q. The Missouri rates are divided into two parts.

A. Yes sir, A and B.
Q. North and South of the Missouri Pacific Line?
A. Yes sir.

Mr. MOORE: He can put the initials A or B as the case may be on this statement.

The WITNESS: I want to say, as explaining that exhibit and the commodities it covers, that the commodities were taken from the commodities shown by the Auditing Department as the commodities which were actually handled in the State of Arkansas. In other words, we took the commodities we handled intrastate in Arkansas and compared them with the commodities handled in other States.

Q. In other words, do you mean to say it is based on actual movement of traffic?

A. Yes sir actual movement rather than picking out any commodity which might look good. We took everything that was moving to any extent at all.

Q. When were those rates in effect upon which that exhibit 37 is based?

A. The rates were in effect in 1907.

1647 Q. Mr. Perkins will you file this statement as Exhibit 37 to your testimony?

A. I will.

The statement referred to is marked C. E. Perkins Exhibit 37. Said exhibit is in the words and figures following, towit:

For Exhibit 37, see Volume 8, page 5376.

1648 Cross-examination.

By Mr. HILL:

Q. In this exhibit 37 you have just filed, I see you carry your distances only to 100 miles, both interstate and intrastate.

A. Yes sir.

Q. Do you think that is a fair comparison Mr. Perkins?

A. I do, for the reason that the average haul of intrastate business is approximately 70 miles. We are comparing interstate rates against intrastate rates and for the actual service.

Q. How do you get an average haul? Do you get the average by taking the long and the short hauls?

A. We get the average by taking the figures submitted to us by the accounting department.

Q. That is made up by taking the long and the short hauls and combining the two.

A. Yes sir, that is true, to a certain extent.

Q. And you have taken only the average length of haul which is made up of a shorter and a longer length of haul than that?

A. We have taken a figure that is something longer than an average haul in the state.

1649 Q. About 28 miles?

A. About 30 miles.

Q. I think the average intrastate haul is 72 miles and the aver-

age interstate haul is about 224 miles, isn't it? Now do you think any comparison is fair on that, where you take 100 miles, when these averages are made up of the long and the short hauls, both?

A. I think so.

Q. That is your opinion as to the fairness of it?

A. My opinion is based on the fact that the short hauls are naturally a great deal more in evidence than the long hauls. Otherwise the average in the State of Arkansas would not be down to 70 miles.

Q. Are they in evidence? You have put in evidence the average hauls of interstate at 224 miles and aren't they as much in evidence as the average state haul of 72 miles?

A. I am not comparing a rate on one mileage as against another mileage.

In other words, I have taken the average movement, represented in the State of Arkansas, and compared that with the same mileage on interstate traffic.

Mr. MOORE: Allow me to make a suggestion to obviate any suggestions of unfairness:

I will ask Mr. Perkins if he can prepare a small statement comparing 200 miles and 300 miles.

A. I can. We did not make this mileage out because it
1650 looked better than the other, but simply because it represented what I thought to be the facts.

Mr. HILL:

Q. This exhibit, so far as it goes, is just to show a comparison of the short hauls of 100 miles intrastate and interstate, isn't it?

A. Yes sir.

Q. The intrastate hauls on an average are much longer than 100 miles, aren't they?

A. That is true.

Q. And this could not be representative, clearly, of interstate movements?

A. This would represent a comparison of an interstate movement for the length of the haul given, as compared with the same haul on state traffic. Naturally our rates vary as distance varies and we could not make any comparison as between state and interstate business, so far as I can see, unless we took what was the actual movement in the state and compared that with the same distance interstate.

Q. Your interstate business, as a general proposition, moves a much greater distance than the figure you use here as a comparative basis, does it not?

A. Yes sir, the volume of it does, as shown by the representative mileage. But there is business, of course, which moves these distances.

Q. Of course there is. But business in any volume
1651 does not move on this basis, does it?

A. No sir.

Q. And yet you have taken this distance as the basis of a comparison with the state business?

A. Yes sir.

Q. And you consider that fair, do you?

A. I certainly do.

Q. Take cement down here on that statement: you have Arkansas and Louisiana, for a distance of 25 miles cement 11½¢. Have you an interstate distance tariff?

A. Yes sir, we have an interstate distance tariff.

Q. What is the number of it?

A. I cannot give it to you off-hand. I can furnish you that.

Q. Isn't it a fact that your interstate tariffs are not made on distance tables but on distances from point to point?

A. No sir. For short distances we must have a distance tariff.

Q. You have a great many interstate tariffs that would be in force between Arkansas and Louisiana, haven't you?

A. No sir, we have not a great many.

Q. How many?

A. I cannot tell you off-hand just how many. I would say perhaps all told as many as 10, applying on the various commodities.

Q. From which one of the ten is this figure taken
1652 (indicating exhibit 37)?

A. This figure is taken from our interstate distance tariff, which is the only tariff we have applying from station to station, interstate, between Arkansas and Louisiana, in the same manner as between station and station in the state of Arkansas.

Q. I wish you would furnish me a copy of that tariff.

A. I will do so.

Q. I see you have taken grain here and made a comparison of the interstate grain rates and the intrastate grain rates: how is the grain movement regulated, in the rate making way?

A. I do not know just exactly what you mean, Judge.

Q. Is it regulated by a distance tariff, or point to point, or by zones, or how is it regulated?

A. As relates to interstate traffic, or short hauls.

Q. Interstate?

A. For the movement between points, except the movement you might say from the primary market, the rates are based very largely on the distance tariff rates.

Q. Except from the primary market.

A. Yes sir. For instance, business moving from Kansas City or Wichita, or from the grain fields, we publish through rates, specific commodity rates.

Q. Isn't that grain, then, distributed after it reaches the consuming territory, under that through rate?

1653 A. To some extent it is and to some extent it is not.

Q. To what extent isn't it? What percentage of it is not distributed under the through rate?

A. I cannot say as to the percentage and I cannot make even an estimate.

I think I see what you are driving at. There are some lines that operate what we call the transit privileges.

Q. Your line is one of them?

A. We do.

Q. We are talking about your line.

A. Now this transit privilege applies generally to points on our line in the same direction of haul. If there is to be a movement in the back haul direction, if you please, the business is very likely moved under the distance tariff rates.

Q. That is comparatively speaking a very small movement so far as the Iron Mountain in Arkansas is concerned, is it not?

A. No sir, so far as the Iron Mountain in Arkansas, particularly when this statement (exhibit 37) was made in 1907, a very large portion of our business for short hauls was handled on the mileage scale; because the rates between two points in Arkansas, for instance, were so low that a man located at Little Rock, for example, could go out to Oklahoma, where there is particularly low price grain, and where grain might be much cheaper than in Kansas City,
1654 and as a matter of fact bring grain over the Rock Island, because he could get it cheaper in Oklahoma than in Kansas; and when he wanted to ship out to a local point on our line, he used the Arkansas mileage scale.

Q. What percentage of grain would be represented by such a movement as that?

A. At that time I understand it was quite large, but at this particular time it is not large.

Q. What do you mean by "quite large"? I am trying to get something tangible.

A. A great deal of it was handled on that basis. I cannot tell you just exactly how much because I was not here at the time.

Q. Don't you know that the great bulk of that movement is on the rate from the producing to the consuming district and when it got into large centers like Little Rock, Pine Bluff and so on, it was not distributed on the local rate.

A. No sir I do not.

Q. Isn't it a fact that not more than 5% was distributed on the local rate?

A. No sir. If I were to make an estimate I would say 50%, at the time this statement (exhibit 37) was made, on account of the low rates in effect on grain in Arkansas.

Q. Were you connected with the St. Louis, Iron Mountain & Southern Railway at that time?

1655 A. No sir I was not. I was connected with the Kansas City Southern and I was familiar with the conditions at that time.

Q. But even if 50% of it was distributed on the local rate, after reaching Little Rock or any other local point, you mean by that 50% that it was distributed out of Little Rock, or some other local point? Of course a large amount of it would be consumed in Little Rock and those other centers.

A. Yes sir. I mean 50% out of Little Rock.

Q. Or any other distributing point?

A. Yes sir any other distributing point.

Q. 50% of all which went into the distributing points like Little Rock, Russellville, Pine Bluff, Fort Smith and so on, took the through rate from the zone where it originated?

A. Yes sir.

Q. There seems to be a difference between you and the other witnesses as to the amount which went out on the local rate, which was in fact distributed on the local rate.

You know a large part of that grain would be utilized in those grain centers, where it went on the through rate.

A. Some it would be. I would not say all of it.

Q. I said a large part.

A. Naturally there is a good deal of it consumed in those places. The larger the town the greater the consumption.

1656 Q. Take those large centers of Arkansas, such as Little Rock, Fort Smith, Pine Bluff, Texarkana, and they would consume a large part of it which never would move out of the trade centers at all, wouldn't they?

A. If you mean a large part as compared with the total I would say no; but if you mean there was a large amount of grain consumed there I will agree with you.

Q. That is what I mean. I may not be apt in the use of language. There would be very little of that back-haul you are referring to, Mr. Perkins, wouldn't there?

A. I would say it would be considerably less than the straight-away haul, but there would be some part of it.

Q. Mr. Perkins is there any intrastate movement of grain in Arkansas except such grain as originates outside of the State and moves the way you have just explained, that is of any moment at all?

A. No sir, I think not.

Q. You have made a comparison then on the grain rates of a movement of grain for 100 miles interstate with 100 miles intrastate; and as a matter of fact there is no movement of grain interstate but what goes over 100 miles, is there?

A. Oh yes, there is.

Q. Where does it come from?

A. Oh there is a whole lot of grain that moves interstate that does not go 100 miles.

Q. Where does it come from?

A. We have grain from Oklahoma into Arkansas, for instance, that does not move 100 miles.

1657 Q. Do you have any grain moving from Oklahoma into Arkansas?

A. Yes sir.

Q. Where is it raised?

A. It is raised on our Oklahoma line North of the state line and from there up to Kansas. We have grain all the way.

Q. Have you been through that country recently?

A. Yes sir.

Q. Did you see much grain, growing in there?

A. I saw lots of corn.

Q. Where?

A. In just what part you mean?

Q. What part.

A. Sallisaw, and north.

Q. From Sallisaw to Coffeyville is furnishing corn to Arkansas?

A. Yes sir. I know of several movements that have come into Fort Smith. They have been getting a great deal of grain, corn——

Q. Is that one of those movements that has been denominated as a "negligible quantity"?

A. I say there is some. You asked me if there is any and I said yes, there is some.

Q. I will modify my question. Is it considerable?

A. There is some movement. Of course it is not a move-
1658 ment to be compared with the movement from the markets of Kansas North. But there is some movement.

Q. It is one of those inconsiderable movements, isn't it, Mr. Perkins?

A. There is just as much movement as there is locally in the State, and therefore the comparison would be good.

Q. I did not understand your previous answer about what was in the State.

A. I would say that the movement interstate would probably compare favorable with the movement in the State—in other words, the comparison would be there.

Q. Didn't you say you did not have any intrastate movement, within the State?

A. I did not.

Q. Be that movement intrastate or interstate, that is a very small part of the corn movement that is carried into Arkansas, isn't it?

A. It is a small part.

Q. Very small. Your comparison in this table fits on a very small movement of grain, isn't that a fact?

A. Well, I would not say it fitted a large part, no sir.

Q. Isn't it a very small proportionate part of the grain movement?

A. It is quite small. I would not say it is very small.
1659 At the time this statement (Exhibit 37) was made, the business I would say was quite heavy. I know from my own knowledge, as a matter of illustration, that the Kansas City Southern took lots of grain into Texarkana and it was re-shipped from there to points on the Iron Mountain and points on the Cotton Belt, on the Arkansas Commission Tariff—lots of it.

Q. But compared with the total grain movement into the State, which moved under these rate, it was a small part of it?

A. Well, it depends upon what you call "small" Judge.

Q. I want you to say what is small. I would like you to give a percentage on it.

A. It is a question I could not give a percentage on to save my life. But it was quite considerable, I can say that.

Q. What is "quite considerable"? You object to my word "small" and I would like you to define what is "quite considerable."

A. Quite considerable are words that have a certain meaning to me in the English language.

Q. I want to get that expressed in relation to the whole.

A. You are trying to make me give a percentage I cannot give.

Q. If you cannot give the percentage, can you approximate it?

1660 A. No sir. Whatever percentage I could give would be more or less of a guess. But I do say there was a very considerable amount of business handled and I have already stated that at the time in my mind it would be fully 50% of the business which was handled out of these grain centers.

Q. You are talking about one thing and I am talking about another.

I understood your estimate of 50% of grain was after it reached the distributing point and was sent out locally.

A. That covers practically all the movement of grain intrastate in Arkansas.

Q. That is what I understood you to say and you corrected me awhile ago and said you didn't say that.

Now excluding such grain as might be raised in the State and shipped from one point to another——

A. There is practically none of that.

Q. That is negligible?

A. Yes.

Q. Grain raised in Oklahoma and shipped into Arkansas is also negligible?

A. No sir.

Q. What is that?

A. In certain seasons of the year it is 100%.

Q. 100% of the grain shipped into the State?

A. At certain seasons of the year 100% of the grain shipped into State is from Oklahoma.

1661 The situation is this: when Oklahoma has a grain crop and it is getting to be more and more of a grain producer every year, the prices of Oklahoma given delivered at Arkansas points is very much less, considerably less, than from any other producing territory. It is less than from Kansas because the freight rates are lower.

Q. That has no bearing on this.

Mr. Moore: Let him finish his answer.

Mr. Hill:

Q. I am asking you about the 100 mile haul.

A. You did not ask me that in your question.

Q. I am talking about the 100 miles you use in this Exhibit 37. 100 miles on your line would take it away beyond Wagoner.

A. Yes sir.

Q. I am asking you about 100 miles on grain from Oklahoma into Arkansas; isn't that also a negligible quantity?

A. Judge, I am not an expert on that term.

Q. Some of these other gentlemen are, your counsel is.

A. I would say it is a small quantity.
Q. You know that territory from Fort Smith up to Wagoner?
A. I know it tolerably well. I have been over it several times.

1662 Q. The amount of grain it would raise and ship into Arkansas as compared with the amount of grain as a whole shipped into the State, would be an exceedingly small quantity, wouldn't it?

A. Yes sir, compared with the whole. But that is not the only line that crosses the boundary. I simply gave that one as an example.
Q. On what other line could you ship grain from Oklahoma into Arkansas?
A. I would say the Midland Valley.
Q. Is that one of your lines?
A. No sir, that is the only line we have. Is that what you are driving at?
Q. And this Exhibit 37 is a schedule of your rates?
A. Yes sir, a schedule of our rates.
Q. And is that a schedule of the Midland Valley rates?
A. No sir.
Q. Well, we are talking about the Iron Mountain and not the Midland Valley.

Mr. MOORE: Do you mean to say that the movement from Oklahoma was only a short distance movement into Arkansas?

A. No sir, I simply gave that as an illustration.

Mr. HILL:

Q. Have you any other 100 mile movement on grain interstate into Arkansas?

1663 A. I do not know exactly on 100 miles because I cannot give the distance; but there is a considerable movement from the other end of our line, from Southeast Missouri into Arkansas.

Q. Give the points where that would move.
A. I do not think I could give you the point off-hand, but I know there is a movement all along that line. I do not remember from just what points.
Q. I will call your attention to Newport, which is the first point of any size coming that way, and the distance is 85 miles; so there could not be any considerable grain movement.
A. There is a movement that is going on right along to points that are practically on the State line, to the Jonesboro-Lake City & Eastern Railroad.
Q. Is that one of your roads?
A. We are handling grain in there today.
Q. You are handling in on this tariff in this Exhibit 37.
A. No sir.
Q. Confine yourself to what is in evidence, please.
A. You asked me if there would be a movement.
Q. I asked you if there was a movement that would be affected by this Exhibit you have put in here.

A. There no doubt is. I cannot give you exactly the movement to our points just over the State line, which of course would
1664 have to embrace this mileage. We haven't gone far enough. We can go further and give you the same percent as in this exhibit, and then we will get a very large movement.

Q. Isn't it a matter of fact that the heavy grain movement—I will not express it in adjectives or in percentages, but isn't it a fact that the heavy grain movement on your line into Arkansas is a movement from the Northwestern producing States?

A. No sir, it is not.

Q. You think it is not?

A. No sir, it is not.

Q. Where is the heavy movement of grain?

A. The heavy movement of grain varies.

Q. What distance?

A. It is coming right now principally from St. Louis and Illinois.

Q. What is the distance of haul when it comes that way into Arkansas?

A. About 300 miles I should say, on an average.

Q. That all goes into Arkansas on the zone rate, doesn't it?

A. No sir.

Q. What part of it does not?

A. I do not know that any part does.

Q. Haven't you a zone that covers grain shipments from
1665 St. Louis and Illinois into Arkansas?

A. No sir.

Q. At any rate, the great grain movement, the greater part of the grain movement, is over 100 miles?

A. Interstate?

Q. Yes.

A. There is no question about that.

Q. If there is no question about it, then your comparison in this table (Exhibit 37) of grain rates for 100 miles with intrastate grain rates has no value, has it?

A. Yes sir I think it has a very decided value. I have tried to show, and I think I have explained, that the movement interstate and intrastate under these rates are in my opinion about equal.

Q. From what tariffs did you take these grain rates you have put here in this Exhibit 37; you have a great many grain tariffs, haven't you?

A. What are you speaking of now?

Q. These interstate grain rates you have put down here (Exhibit 37).

A. The interstate grain rates are taken from the interstate distance tariff as compared with the state distance tariff.

Q. Is that a zone tariff or is it a distance tariff?

A. It is a distance tariff.

Q. Then these figures you have given here do not represent
1666 any of the grain rates that are based on the originating zone?

A. I do not know what you allude to as "originating zone;" we haven't any originating zone on grain.

Q. I am not using exact terms, but I will tell you what I mean: up here in Kansas and Missouri and these Northwestern States where the grain is grown, grain is carried into Little Rock for instance on the same rate—I would call it zone because I thought that was a good term, but if I am wrong about that I wish you would explain what is the correct term to use.

A. You are not wrong about the term, as I understand the term. In other words, we say a zone rate is the same rate as goes to a large blanketed territory.

Q. Or goes from a large blanketed territory?

A. Yes sir.

Q. Or both?

A. Yes sir.

Q. Isn't that the same on grain?

A. No sir, it is not.

Q. Didn't you have in 1907 a zone rate from Missouri and Nebraska into Arkansas?

A. No sir.

Q. Didn't you have a zone rate into Arkansas from Nebraska and Missouri?

1667 A. No sir. There are some rates which are naturally the same, but they are not made on a zone. The distances are not on a zone. There are a number of points which naturally from their situation take a Little Rock rate. The rates, for instance, to other points beyond grade up and take a differential higher than Little Rock. In other words it is not what I would call a zone?

Q. What do you call a zone?

A. As I have explained, I would call a zone a considerable territory taking the same blanket rate.

Now our grain rates from Kansas vary very largely as to the points of origin. The rate from Wichita is one figure and the rate from Ellsworth, Kans., is another figure.

Q. I did not say all that country.

A. And going South the rate to Little Rock is one figure, the rate to Benton is another figure, and the rate to Hot Springs is another figure. So we do not figure, and anybody else does not figure, that we have any grain figure on our zone rates.

Q. I hand you freight tariff No. 5714-A, marked Missouri Pacific-St. Louis, Iron Mountain & Southern tariff, and ask you to examine pages 10, 11 and 12.

A. (After examining papers.) I have done so.

Q. Isn't it a fact that that tariff names a blanket rate of 19 cents per hundred pounds on grain in car load lots from all points on the Missouri Pacific between Washington, Mo., and St. Joseph, Mo., to all points on the St. Louis, Iron Mountain & Southern

1668 from Bismarck, Mo. to Pine Bluff, Ark. and out as far as White Oak, Ark.; isn't that a fact?

A. (After examining tariff.) That is substantially correct. I have not checked up all the points you mention but the rates were at that

time the same from points between St. Louis and Kansas City. There is, of course, a reason for that.

Q. I am not talking about reasons now. You can explain that. I am trying to get at the facts.

A. I am getting on to the adjustment.

Q. You can explain all your reasons, but I am trying to get the facts now, Mr. Perkins.

Look at this map that is drawn to illustrate the question I have just put to you. This zone, as I call it—or any other name you choose to call it, designated as "A" indicates the points where that grain originates; and this zone designated on this map as "B" indicates points to which it may be shipped upon the same rate.

I ask you if that is not a correct illustration of the movement of grain from points "A" to points "B."

A. (After examining map.) I should say that was substantially correct. I cannot say it was absolutely correct as to all of these points.

Still, that does not change my mind about our grain rate being a zone basis. This (indicating "A" on map) is a very small proportion of our grain producing territory and these rates in here are
1669 carried on account of the rates between being intermediate. The same as we carry on the Kansas City line from Kansas City to Coffeyville, that line being intermediate wiith Kansas City. The Kansas City rates are the maximum and fix the rates to be applied at the points mentioned. That, however, we do not designate as a zone basis.

When you get West of the line mentioned, that is, the line from Kansas City to Coffeyville, the rates vary very materially. In other words, they grade up as you go West, all of our rates.

So there is not what we call a zone basis for making rates. It happens sometimes that the conditions are such as to make the same rates but that would not necessarily imply a zone.

Q. While you do not call it a zone, or call it a circle, or call it a blanket rate, or give it any name you choose—it is a fact there is a territory here in the grain producing country indicated on this map as "A" in which the grain is shipped into a large territory, including portions of Arkansas and Missouri (indicated as "B" on this map) at the same rate, isn't it?

A. I would say that is substantially correct. That is, without attempting to verify each identical point within the boundaries you have there, but substantially, I think, that is correct.

1670 Q. Mr. Perkins I would be glad if you would verify those boundaries and attach this map as an exhibit to your testimony.

A. At what time?

Q. Within any reasonable time.

A. I mean during what period?

Q. This is during 1907.

A. During the time this tariff was in effect?

Q. Yes and if there are any inaccuracies in this I would like to

have those corrected before it is finally put into the record of the case.

When you are verifying that, Mr. Perkins, I would also ask you to verify a statement descriptive of it, which you will find attached to the map, which is attempted to be made up from your tariff.

A. Very well.

Q. This also includes a 23 cent rate on wheat as well as the grain rate which was included in my first question.

The map referred to is marked C. E. Perkins, Exhibit 38.

And the statement attached to same is marked C. E. Perkins Exhibit 38-A.

Said exhibits are in the words and figures following, towit:

1671 Mr. HILL:

Q. Mr. Perkins in your Exhibit 37 I see you have put down coal rates, comparison interstate and intrastate: isn't it a fact that coal moves on a blanket rate?

A. Coal moves quite largely on a blanket rate, but short distances it does not necessarily move on a blanket rate.

Q. Isn't it a fact that all the coal moved in Arkansas on your line moves on a blanket rate?

A. No sir..

Q. What does not?

A. To a shorter distance any coal North of Little Rock would move on a mileage rate.

Q. But all of your coal moves into Little Rock on a blanket rate, doesn't it, and then goes out on a mileage rate?

A. Yes sir.

Q. I do not know whether that was a fact in 1907. How was that? I know that is a fact now.

A. I cannot answer that question accurately, Judge, because I was not connected with the road then. I know the zone — used to be in at a certain time but I do not remember just when that was, because I was not connected with the road at that time.

Q. I believe you said you would furnish us this interstate distance tariff you made this on.

A. Yes sir.

Q. I would like to examine you on that and I will not
1672 question you further on this exhibit 37 until I get that. I wish to look into this exhibit a little further.

In answer to a question from Mr. Moore I understood you to say that the lumber rate furnished a good revenue to the Company, compensatory revenue or something of that kind; is it a fact you said that?

A. I do not recall that I stated that. I may have.

Mr. MOORE: He stated it was remunerative.

A. Yes, that is what I said.

Mr. HILL:

Q. Is that a fact?

A. Yes.

Q. How do you know that, Mr. Perkins?

A. It would be rather hard to tell you Judge just how I know it. I have been following it, however, for a good many years. Our tonnage of lumber is quite considerable on the Iron Mountain, and our management, who are familiar with the cost of operation, seem tolerably well satisfied with the rates. They would like us to get a little more, but——

Q. Have you any data of the cost of the lumber traffic in order to determine the cost of handling the lumber?

A. Not the lumber traffic taken by itself, no sir.

Q. I believe you gave us the figures on the revenue derived from the lumber traffic at six mills per ton per mile, didn't you?

A. Approximately that, yes.

1673 Q. You have data by which you can ascertain your revenue on any given commodity for the whole system, haven't you?

A. That is furnished us, yes.

Q. By whom is that furnished?

A. By the accounting department.

Q. That is compiled from the way bills?

A. I do not know where it is compiled.

Q. It could not be compiled any other way, could it? It could not be furnished any other way, could it?

A. I do not know. Of course the original information as to the movement, etc., must come from the way bills.

Q. And your road can ascertain that from its records?

A. It is furnished to us, as I say, by the accounting department.

Q. Has your road furnished you any record of the cost of the movement of lumber or any other article?

A. No sir.

Q. When you go to make a rate you have no data whatever before you as to the cost of the service on that particular commodity?

A. Taking it as a particular commodity, no sir, none whatever.

Q. Have you any data of the cost of the service as a whole?

1674 A. Yes sir, we know as to the whole, about what it costs.

Q. How do you get at it?

A. It is furnished to us by our accounting department. It comes to me, really, through our traffic manager, or Vice President.

Q. I do not mean the channels through which it comes to you. I mean what is that information? In what form is that information expressed to you?

A. I do not know that I could answer that question, Judge.

Q. Is it based on the revenue or is it based on tons per mile or train mile, or what basis? I suppose there is some basis for it.

A. It is based as a whole, taking all of the commodities and putting them into one jack-pot you might say, the operation of the line as a whole is about all we have.

Q. By what unit is that measured?

A. In rate per ton per mile.

Q. Has that any value?

A. In what way?

Q. As a guide to you in ascertaining how much revenue you should receive from different commodities?

A. Yes sir.

Q. What value has it to you in that way?

A. As a guide, in this way: we know about what our gen-
1675 eral revenue is and about what our general cost is and we know from our classification the relative adjustment you might say which we must assign to the various commodities to bring about that revenue. Some articles we know are handled at less cost and must be handled at a lower rate than some other commodities and our rates are adjusted really on a relative basis. That is, on the various commodities. The rate which we would assign to each one varying of course as to the commodity, as to its value and as to its bulk and as to the direction of the movement, and as to the length of its movement.

Q. Then do you use these ton mile statistics showing the cost per ton per mile of your entire traffic in order to divide the charges to be apportioned to one traffic as against another kind of traffic?

A. No sir, I cannot say that we would do that.

As a matter of fact our rates are fixed—that is, our general line of rates you might say, are a fixture. They have been established for a great many years. There have been changes in this rate or that rate, but the general rate fabric has been in existence, of course, with the changes that are necessary, for years. We know about what result that rate fabric brings us. We know we are charging a little more on one article than on another. But that relative adjustment with all these other incidents I have men-
tioned—that is, the direction of the haul, the length of the
1676 haul, the bulk and value of the commodity to be handled, the commercial conditions, all govern us in making a rate on any specific commodity.

Q. That rate is not made on the cost of the service, is it?

A. Yes, fundamentally it is.

Q. What do you mean by "fundamentally"?

A. I mean that the cost of the service enters into our rate making to a very large extent. I do not mean to say by that the actual cost of the service, but the relative cost of the service.

Q. I am talking about actualities and not relations.

A. The only way we could make this is on a relation adjustment. If a man comes in and wants a rate on a car load of stone from a given point to a given point, I cannot tell, and no man living can tell, just what the cost of handling that car of stone is. But I know that if two men come in, one with a car load of stone and the other with a car load of pianos, that it is going to cost us more for the car load of pianos than for the car load of stone.

Q. Anybody who has two grains of sense, even though he is not an experienced traffic man, would know that.

A. Yes sir.

Q. It would not require experience to know that.

A. No sir, but it would require an experienced traffic man to know what the relative adjustment should be.

1677 Q. Where did you get the figures upon which to base that relative adjustment?

A. We did not have actual figures.

Q. Why do you have these ton mile statistics; they must have some value and I want to know what it is.

A. We have to know what our business is making as a whole.

Q. Whether it is making money or losing money?

A. Yes, sir.

Q. The traffic man makes the rates?

A. Yes, sir.

Q. The operating men do not have anything to do with it, do they?

A. Yes, sir, they have a great deal to do with it.

Q. What do they have to do with it?

A. Our Vice President, Mr. Clarke, is in charge of operation, not only of rate making, but of all departments on our road.

Q. He is at the head of all of it?

A. He is at the head and directs not only the operation of the road but to a large extent the rate making of the road. It is to him it goes very often; and not from me direct, but through my superiors, Mr. Flippen and Mr. Johnson. The General Freight Agent does not take these matters up direct. Mr. Clark is the one that has more knowledge on both sides than anybody else.

1678 Q. That is not my question. My question is whether the men operating had it, not the President.

A. He operates it.

Q. But I am speaking of the operating men. The man who occupies relatively the same position in the operating department that you do in the traffic department. They have nothing to do with the rates do they?

A. What position do you refer to?

Q. You can tell me.

A. The Superintendent does not have much to do with it. He may suggest.

Q. He may suggest, but does he?

A. I do not know whether he does or not to tell you the truth.

Q. Did you ever have a suggestion from a Superintendent as to what you should make on certain things?

A. I have had suggestions, yes.

Q. From a Superintendent?

A. Yes.

Q. Based on what?

A. Not based on the cost, however.

Q. That is what I want to know, whether a Superintendent or any one in charge of operation will confer with the men in charge of the rate making, to give them a lot of their experiences in the cost of operation, when you go to fix the rates.

1679 A. It does not go through that direct channel. As I have explained, they both go to a common head. In other words, Mr. Johnson, our Vice President in charge of Traffic, has nothing to do with the operating matters. Our General Manager has noth-

ing to do with traffic matters. But they both report to a common head and that common head directs both channels.

Q. Did you take up any of these detailed questions, like your illustration of the rate on stone, with the Vice President?

A. Generally my conferences with reference to these matters are with our Freight Traffic Manager. He is my next superior officer. If he does not happen to be in the City I would go direct to the Vice President, yes. I have gone direct to him.

Q. To Mr. Clarke or Mr. Johnson?

A. Mr. Johnson.

Q. You would not go to Mr. Clarke?

A. No sir.

Q. You would go to the head of your own department?

A. Yes sir. In other words, we do not go over our direct superior's head in any matters, unless instructed to do so.

Q. What I am seeking to ask is this: if you—and by you I mean the traffic officials, have any direct consultation with the operating officials as to the cost of the service.

1680 A. I think they do. I do not agree with you there.

Q. I am asking you for the facts.

A. Mr. Clarke is an operating man and is in charge of the operating department.

Q. Of course. He is really in charge of your road, isn't he?

A. Yes sir.

Q. While Vice President in name he is practically the President of the Road, isn't he?

A. Yes sir.

1681 Q. I am not referring to him but I am referring, as I explained before, if there is any conference between operating officials less than Mr. Clark, the Vice-President?

A. I would say there is. But I cannot say of my own knowledge on the Iron Mountain whether there is or not. I know as a matter of fact on other roads there is.

Q. We are talking about the Iron Mountain now.

A. I cannot tell you. I have not been with them long enough to know. But in my judgment I will say yes.

Q. If you do not know that answer the question?

Have you any statistics which would show you where the money of your — is made, whether on state or interstate business?

A. Personally, I have not, no, sir.

Q. I am speaking of you in your official capacity. Has your traffic department in its possession any statistics showing the profit or loss on the entire system and the profit or loss in the state of Arkansas, the State of Missouri, or any other state?

A. So far as I know the traffic department has not. I have not such a statement.

Q. Have you ever applied to your commissioner of statistics for any such information as that?

A. I did not know we had a commissioner of statistics. I never heard of him if we have.

Q. You do not know what his duties are?

1682 A. I never heard of him. There may be such an officer.

Q. He seems to be on your pay roll?

A. Perhaps he is. A lot of people are on the pay roll of the Iron Mountain that I do not know of, and never heard of.

Q. How many classifications are there, Mr. Perkins? You have spoken of the western classification: how many other classifications are there in the United States?

A. There are three principal classifications in the United States: the official, the southern, and the western.

Q. Isn't there an Illinois Classification, too?

A. I would not call that a principal classification. There is a classification, I believe, laid out by the railroad and warehouse commissioners of Illinois, that covers only a small territory.

Q. These classifications differ, I presume?

A. They differ in some respects, yes. The principal difference in them, is that they are applied to different rate conditions.

What I mean by that is, in the official classification territory their rates are only six classes, one to six, with two intermediates, minor classes, you might say. While in the western classification we have ten and in the southern approximately 13.

Q. Each of these classifications have many exceptions haven't they?

1683 A. There are exceptions, yes.

Q. The southern has a great many, hasn't it?

A. The southern has considerable, yes, in the different sections of the territory, I believe. I am not very familiar with the southern classification. I have not worked in that territory.

Q. The western classification has many exceptions?

A. The western classification has some exceptions, yes, sir.

Q. I believe you stated that the Arkansas Commission and other state commissions, adopted the western classification: is that a fact?

A. Yes, sir, as a general rule that is the basis for their classifications.

Q. I will call your attention to the standard distance tariff reading as follows: "Subject to western classification as adjusted to Arkansas traffic."

A. Yes, sir.

Q. That would not be governed by it, would it?

A. Yes, sir.

Q. But governed by it subject to its own rules?

A. Subject to the exceptions which might be made to that classification.

Q. And wherever they have minimums or any other rule that would conflict with the classification, the tariff would be applicable to their own rule and not the western classification?

A. The tariff always governs.

1684 Q. You say there is a close relation between interstate and intrastate rates: just what is that relation. I do not like adjectives very well so I wish you would explain the actual facts?

A. You will have to tell me the rates you have in mind.

Q. That was your statement not of any particular rate but a general proposition.

A. If you want any explanation I will have to know——

Q. Make your explanation any way you please. I want to know just what you meant by "close relation between interstate and intrastate rates"?

A. I mean by close relation, that the interstate rates or the intrastate rates, where not governed by state commissions, bore a relation one to another and as a general proposition where one is changed the other must be.

Q. Now what relation should they bear one to the other?

A. There is no fixed relation. If you mean on percentage?

Q. I mean on the rates themselves. You have spoken of this parity of rates and the close relation of rates: now, I want to know just what that relation should be.

A. I cannot give you any definite basis or any definite relation which they would bear. However, there is this relation, that when one changes the other is almost always bound to change. I will not say always, because there are lots of exceptions; but the
1685 general rate basis applicable into a given state depends very largely if not entirely on the state adjustment.

Our rates, as an example, into the state of Texas from interstate points, are based entirely on the rates as fixed by the commission of the State of Texas.

Q. What are you going to do when your road crosses two states and there is a great difference in the rates in those two states? Take Arkansas and Louisiana: Louisiana I believe has the highest rate of any state east of the Rocky Mountains and west of the Mississippi River; and Arkanas has lower rates than Louisiana. You have a line running between those two states. When you come to adjust these relations between the two what are you going to do with your state rates?

A. They have to be graded from one to the other.

Q. How do you grade them? That is what I want to get at, the actual facts.

A. We sit down with paper and pencil and take all the conditions that enter into rate making. There may be a dozen of them. And fix those rates. In other words, rates may be fixed by an altogether different road—for instance, the rates from Memphis into the state of Arkansas are not fixed by the Iron Mountain road to any very great extent.

Q. That is a commercial condition that is controlling and not the relation between state and interstate, isn't it?

A. It is the condition controlling our railroad.

1686 Q. I understand that. You say now this close relation, this Siamese twins relation, between state and interstate,—and I am trying to find out just what the bonds of union between the two is as an actual fact?

A. The bond of union is this: as between Arkansas interstate rates and Arkansas intrastate rates, if you want me to take up that feature of it I will and explain it.

Q. I want you to explain what this relation is. How would you fix an interstate rate based on an intrastate rate or vice versa?

A. The rates fixed by the intrastate rate in Arkansas fixes necessarily the rate from the border points.

As an example the Arkansas Commission fixed a maximum rate on sugar of 13c. to apply between any points in the state of Arkansas. That made a rate on sugar of 13c. from Helena, Arkansas, to Fort Smith, Arkansas. The rate from New Orleans, Louisiana, to Helena, Arkansas, was ten cents. When that 13c. rate was put in effect, it was considerably lower than it had been and it forced us to re-adjust all of our interstate sugar rates from New Orleans to Arkansas, to meet those conditions.

Q. You had an interstate rate from New Orleans to Memphis, didn't you, for about ten cents, wasn't it?

A. Yes.

Q. Then the Arkansas Commission rate for one-half of that distance was 13 cents, wasn't it?

A. No, sir. One-half perhaps, and perhaps double the dis-
1687 tance—well, I can't say double, because you could not get that. but it was some greater mileage, take it all over the state, and take as many routes as you want, go around in a circle if you wanted to and you would still get only 13 cents for it. The rate from New Orleans to Memphis is a water competition rate.

Q. Isn't it a fact that Arkansas tariff applies to only 300 miles?

A. My recollection is it applies to 400 miles but I may be mistaken.

Mr. MOORE:

Q. Do you mean to say that the Arkansas Commission had any application to anything over 300 miles?

Mr. HILL: That is my understanding.

Mr. MOORE: Is not 300 miles the maximum and does not the rate apply to everything in excess of 300 miles? I think it applies to all in the state.

Mr. HILL: That may be possible but you cannot get a rate, except in a few cases, a negligible quantity.

But going back to our relation, say you had a rate of 13c. from Memphis to Little Rock and a rate of 10c. from New Orleans to Memphis, what relation are you going to establish between those two rates?

A. New Orleans to Memphis is not the rate that we were considering. It is the rate from New Orleans to Arkansas, an interstate rate.

Q. Didn't you say the Memphis rate controlled the Arkan-
1688 sas rate on that.

A. No, sir, I didn't. I said the sugar proposition based on the combination through Helena.

Q. Take Helena then. You had a rate from New Orleans to Helena of ten cents?

A. Yes, sir.

Q. Which was the same rate as to Memphis?

A. Yes. However, it was the Helena combination that forced us to make the reduction, and not Memphis.

Q. You had ten cents from New Orleans to Helena and the Commission established a rate of 12 cents to Arkansas?

A. We had a through rate on sugar from New Orleans to Fort Smith of 27 cents per hundred pounds. We had a through rate on sugar from New Orleans to Texarkana of 25 cents per hundred pounds.

Now, when the Commission established their 12 cent rate it made the combination to any point in the state of Arkansas from New Orleans 25 cents per hundred pounds.

Q. What is the proper relation that there should have been between them, you having taken sugar as an illustration?

A. The relation that must follow between them is not higher than the combination of the locals in that illustration.

Q. You had the 10 cent rate New Orleans to Helena?

A. As a matter of fact there is no movement locally in the state of Arkansas on sugar. The rate was put in merely to force
1689 the through rate down. And they knew we had to come down—that is all.

Q. Would it cost you any more to haul sugar from New Orleans to Fort Smith than to haul sugar from New Orleans to Helena?

A. Yes.

Q. How much more?

A. I cannot say how much. The distance is greater a good deal from New Orleans to Fort Smith, than from New Orleans to Helena.

Q. Would it cost you any more to haul it from New Orleans through Helena to Memphis than it would cost you to haul it just to Helena?

A. Yes, sir, it would probably cost us more.

Q. Would those rates you have given now, the 10c. to Helena and the 10c. to Memphis, 27 cents to Fort Smith, 25c. to Texarkana, represent the cost of the service?

A. On sugar?

Q. Yes.

A. I cannot say whether they would or not.

Q. You know they would not, as a matter of fact, don't you? There could not be that difference because of that service, could there?

A. There certainly could be that difference. There certainly could.

Q. You think it is a fact it does exist, that *this* rates
1690 represent the cost of the service?

A. The service from New Orleans to Texarkana and from New Orleans to Fort Smith, you mean?

Q. Yes, the actual service. I am not speaking of competitive conditions at all. But do those rates represent the actual cost of the service between those different points?

A. I cannot say they represent the actual cost, no, sir. They represent what we feel was a fair adjustment of freight rates.

Q. I understand that, but that is an entirely different proposition.

A. I do not know the cost of handling a car of sugar from New Orleans to Texarkana and the cost of handling a car of sugar from New Orleans to Fort Smith.

Q. If you don't know that how could you complain of the Arkansas Commission rate?

A. I was not complaining. I was simply showing you the relation between those two rates. That is what you asked me to show. I am not making any complaint now—our complaint was made long ago.

Q. I have not seen the bond of relation.

A. You wanted to know what the bond of relation was between state and interstate rates. And I understood that you wanted to know what effect a change in state rates would have upon the interstate rates.

Q. And that is your explanation of that?

1691 A. That is one of my explanations. That is one example.

Q. Is such an example as that what you mean by stating that there is such a close relation between state and interstate rates?

A. That is one example to show what a change in the state rates will do to our interstate rates.

I explained in my direct testimony that as a matter of fact a change in the state rates as a whole affected our interstate rates as a whole. In other words, it is not confined to one commodity or one isolated case but covers the whole scale of our rate adjustment from one end of the United States to the other.

Q. In other words, I understand your term "relation of rates," "parity of rates," refers to the adjustment of the rates and not to the cost of the service.

A. I should say that parity existed very largely on account of commercial conditions.

Q. And not on account of the cost of the service?

A. The cost of the service naturally enters into it.

Q. You say the cost of the service naturally enters into it: How much does it enter into it? Take your illustration——

A. It enters into it to this extent, Judge. That if those commercial conditions force us to change our rates that brings about an adjustment that we feel we cannot operate under, we disre-

1692 gard it—in other words, break down the barrier.

Q. How did you arrive at that knowledge, that you cannot operate under it?

A. It is given to us sometimes by our people, who are in touch with the earning capacity of the road. We have been instructed on a number of cases to advance all of our rates, regardless of——

Q. That is, as a whole?

A. Yes, sir.

Q. But that is getting away from parity?

A. No, sir. To disregard the relation—in other words, that we could not maintain that relation and pay expenses.

Q. What do they base that on, their ton mile statistics?

A. I do not know. They come to us in the shape of instructions.

Q. They are going on the aggregate showing of the road, I presume?

A. I don't know what they are going on. As I say, those are instructions that come to us.

Q. You got such instructions as that when they got the injunction from Judge Van De Vanter, didn't you?

A. I was not with the Iron Mountain when they got that injunction. I cannot tell you what instruction they got, but they probably did.

Q. You were on the Kansas City Southern and I suppose
1693 you had instruction there to do it. You were with the Kansas City Southern at that time?

A. At that time, I was.

Q. And you got instructions to lift them a little, didn't you?

A. Yes, sir.

Q. You spoke in illustration of the point you are discussing now, of the change in the Kansas grain rate and how that affected the whole grain world and shook every thing up: would that be a fair illustration to apply to the intrastate rates in Arkansas?

A. I think so. Intrastate rates in Arkansas have practically the same effect. The intrastate rates have practically the same effect in any state. They are right up with the imaginary line between them and the interstate rates. You could not get very far away from it.

Q. Did not the fact of this Kansas grain rate have a material effect on the subject of grain rates, owing to the fact that Kansas is a large grain producing state?

A. Yes, sir, it certainly did have an effect.

Q. If Arkansas had made that change in grain rates it would not have affected the rate fabric as a whole?

A. No, sir, it would not.

Q. Is there any rate that Arkansas would change down there, that it is such a large producer of that it would affect the rate fabric as a whole?

A. The rates as a whole when they change, as they have
1694 changed in this case, affect our rates as a whole. In other words, when you change every state rate you change every interstate rate.

Q. That was not done until you changed them, after you got your injunction?

A. Do you mean the interstate or the state rates?

Q. State rates?

A. Yes, sir.

Q. Don't you know these rates, with very few changes, have been in effect for six years before you got the injunction?

A. Which rates are you speaking of?

Q. I am speaking of the Arkansas state rates.

A. I cannot answer as to rates in effect on the Iron Mountain prior to the commissioners's tariff.

Q. That commissioner's tariff went into effect in 1903?

A. I do not know anything about that, prior to that.

Q. There had been re-issues and revisions, but there were practically no changes. You do not know of any changes in Arkansas prior to the commissioner's rate, that would affect the whole rate fabric, do you?

A. No, sir. But I know the advance in the state rates permitted us to advance the interstate rates. And if for any reason there

should be any reduction of the state rates now in effect, our interstate rates would have to come down just the same.

1695 Q. Let me call your attention to this actual condition: when you advanced the rates in November you made the same advances in the interstate rates: isn't that a fact?

A. Yes, sir.

Q. Those state rates put in by the railroads continued until the first of June, when the court's tariff went into effect, which reduced the rates from what the railroads had had them: did you make any change on your interstate rates because the state rates were reduced?

A. Yes, sir, I think we did. I have not the figures but we did make some changes I am positive.

Q. I would like to say that the commissioners informed me that they have not heard of any application you have made to re-adjust the court's tariff?

A. All right, sir. That may be.

Q. You made several changes last spring, didn't you? Of course, all the roads did.

A. I do not know.

Mr. HILL: If Col. Moore has no objection I will ask Mr. Watson that question.

Mr. WATSON: East of Arkansas the rates were changed.

Q. When?

A. From the Illinois line, affected by the court's tariff.

Q. On coal?

A. Yes, sir.

1696 Q. Were there any other changes made?

A. I do not recall any. Those were the only ones we were interested in.

Q. I think those are the only changes that took place, that on coal.

A. It applied to Brinkley and Forrest City, common points on our road.

Mr. PERKINS: I will say we have been busy for some time past. I have not had that particular branch of it in charge, but the rate clerks have been busy checking out the revised figures on these changes. Whether they have gone into effect or not I do not know. They may not have gone into effect yet.

Q. That went into effect the first of June, didn't it?

A. Yes, sir.

Q. Taking Mr. Watson's statement to be correct, and I am satisfied it is, except on coal from Illinois points there has been no re-adjusting or lowering of interstate rates on account of the lowering of the intrastate rates in Arkansas: isn't that a fact?

A. I am not sure. Probably they have not gone into effect yet.

Q. I wish you would look that up and answer definitely?

A. All right.

Q. You increased your interstate rates whenever you get an increase in the intrastate rates, in order to preserve this parity,

1697 as I understand you?

A. Generally speaking, yes.

Q. You do not increase it to get more revenue?

A. It gives us an opportunity to get more revenue. Naturally the basis and reason for it is to get more revenue.

Q. The higher you raise the state rates the higher you are going to raise the interstate rates, in order to preserve the parity between the two and to protect the trade centers?

A. With a raise in state rates, our interstate rates do advance, yes, as a general rule.

Q. It was in evidence from your auditing department that the increase made on the Iron Mountain when it got the injunction from Judge Van De Vanter was 42%: now how much would you increase your interstate rates to meet that increase of 42% over the interstate rates?

Mr. MOORE: In stating that had you not better state for the months of November and December?

Mr. HILL: They were taken by you.

Mr. MOORE: They were taken as the only period for which information could be obtained.

Mr. HILL: You put that forward as representative. We contended it was 77 and I am stating the lowest basis contended for at that time. I think Judge Trieber said he was satisfied it was more than 50%. I think I stated that accurately because it was put forward as representative you said for two months.

1698 Q. Assuming the increase in state rates was only 42%, how much would you increase the interstate rates to preserve your parity and close relation?

A. I cannot tell you.

Q. It would be up to you to state, wouldn't it? You are the rate man?

A. No, sir, there is not any rate man or any man living who could answer a question like that. You must sit down and figure a rate. You cannot put a hypothetical question like that and answer it.

Q. That is not a hypothetical question but it is the actual fact.

A. Well, a question of that character, and rates cannot be made on such a theory. That is an absolute impossibility.

Q. You cannot preserve that parity and close relation you spoke of?

A. We can preserve a parity but it is not on a percentage relation, no, sir.

Q. It will work out as percentages if you put it in application.

A. I don't know how it will work out. It is not made up on percentages. Naturally anything you establish will work out percentages, but you do not make that on percentages. You could not make them on percentages.

Q. How do you make them?

1699 A. You sit down and work out the rates. Our rates for example, from Memphis following the intrastate rates into Arkansas, are based very largely on the rates used by the Rock Island, they being the short line from Memphis, to Brinkley, Forest City, Little Rock, Benton, Hot Springs, etc. They fix the rate in that direction. The Frisco is the short line from Memphis to points

in eastern Arkansas, Jonesboro, Nettleton, and Hoxie. They fix their rates and we get what we can. They fix the rates and we must meet them or go out of business. Our intermediate rates have to be checked up to correspond with those.

There are a thousand things that enter into the making of rates. I cannot send a tariff man to attend a meeting and tell him how to go about it. I must leave it to his judgment, and to meet those conditions as they come up.

Q. These are actual conditions. I am not putting a theory to you but actual facts.

A. That is a theory so far as rate making is concerned.

Q. I will state it to you and you will see this is not a theory.

The railroads increase their intrastate rates over the commission's tariff. The revenue produced from this increase of rates was 42% for a period of two months, as shown by the accounting department's figures. It was claimed by the state it was about 77% in-
1700 crease. Of course, that increase was not a horizontal increase of 42%; probably some commodities were unchanged and some changed very slightly. But the changes were such that they produced that much increased revenue.

You, as a traffic man, have got to re-adjust your interstate rates to meet those increased state rates: how would you go about it?

A. Just as I explained to you, Judge.

Q. Would you take into consideration that these had been raised 42%—in revenue producing qualities I mean?

A. No, sir, I would not. We would get the advance in the interstate rates which conditions would permit.

You can only set your rates from Memphis, for instance, to Arkansas at a small margin over the west Memphis rate. At any rate, that is the way they are set.

As I say, those rates are set for us by the line having the short line from Memphis. We re-adjust our rates from Cairo and St. Louis and all other defined territories when those Memphis rates are fixed.

Q. Suppose that increase has been half of that, 21 instead of 42.

A. Then the state rates would not, naturally, have increased to the extent—that is, the individual state rates would not have increased to the extent they did. Consequently the interstate rates would not have advanced to the extent they did.

1701 Q. That is what I am trying to get at——

A. In other words, Judge, here is about the proposition: given you on a fair statement of facts, if you raise a rate from West Memphis to say Hope, Arkansas, five cents per hundred pounds your increase in the rate from Memphis would very likely be the same, five cents per hundred pounds.

Now, the increase from St. Louis would be 5¢ per hundred pounds, because there would be that measure. Increase from Pittsburg, Pennsylvania would be five cents per hundred pounds; the increase from Kansas City, Missouri, would be 5¢ per hundred pounds. That is, the rates vary, of course. And there would be no percentage that could be applied.

In other words, an advance in interstate rates as compared with states rates is more on the cents per hundred pounds basis. That is the way it works out.

Q. Wouldn't it be wrong to make any increase in your interstate rates when they are already on a compensatory basis?

A. I do not say they are already on a compensatory basis, such as we would like to get them.

Q. If they produce you ten percent net revenue, with a loss on the intrastate rates, it looks as if they should be on a pretty good producing basis?

A. I do not know what they produce. Nobody knows what they produce.

Mr. HILL (to Mr. Johnson): Have you that dividend statement I called for, Mr. Johnson?

1702 The WITNESS: Mr. Johnson cannot tell what interstate rates produce in dividends on Arkansas business.

Q. That is what I am asking him.

Q. Have you that, Mr. Johnson?

Mr. JOHNSON: Yes.

Mr. HILL:

Q. Mr. Perkins I understand it is in evidence here that the intrastate business is being carried at a loss, and that the railroad is making money as a whole but carrying its intrastate business at a loss: are not the interstate rates, then, necessarily compensatory?

A. Taken as a whole I would say, yes.

Q. If you are making 10% dividend on a very large amount of stock and carrying the burden of heavy losses on your state traffic, would not your interstate rates be extremely profitable?

A. They might and they might not. It depends on what the rates are. We may be getting a very good rate in one section and not so good in another.

Q. I am speaking of your interstate rates as a whole.

A. Interstate rates? Granting what you say is true, I would say that would be substantially correct.

Q. If that is substantially correct, and the change in Arkansas rates is going to change your whole interstate fabric, would it be right to increase those interstate rates?

A. Interstate rates have been increased—as a matter of
1703 fact, some of them were increased before we made the increase in Arkansas. In other words, we physically disregarded that adjustment.

Q. That does not answer my question.

A. I am trying to answer it.

The previous question is read.

A. I answer that by saying we had made an increase in those interstate rates prior to the increases made in the state rates.

Q. You made raises immediately upon increasing your state rates, didn't you?

A. We made some raises. But the principal rates had been made before that.

Q. Before that?
A. Yes, sir? In September.
Q. Then there was not any material re-adjustment of the interstate rates when you made this raise in the state rate?
A. There was a sufficient raise in order to get back to the parity. In other words, we broke the parity to some extent, on instructions from our Management that the revenue was not giving us the returns it should.
Q. And did you reduce these rates to restore the parity on the interstate rates, when you restored the state rates?
A. No, sir, we did not reduce them.
1704 Q. You increased them?
A. Yes, sir, we increased them.

Mr. MOORE: You are speaking now of the Kansas City Southern?

A. I am speaking of the roads generally.

Mr. HILL:

Q. When was it that the Iron Mountain made its increase in interstate rates?
A. The Iron Mountain made its first increase in September.
Q. Was it a general increase?
A. Yes, sir.
Q. What tariff was that?
A. Into what territory?
Q. I am talking about Arkansas.
A. Into Arkansas? I can not give you the number of the tariff off-hand. Perhaps I have a memorandum of it here. (Examining papers) I have not the number of the tariff but I can get that for you.
Q. Was it a general increase on everything?
A. Yes, sir.
Q. How much increase, broadly speaking, was it over pre-existing interstate tariffs?
A. I cannot tell you that.
Q. Was it large or small? You ought to know, generally.
A. I do know generally. It was on the basis of about ten cents first class.
Q. What would that be fourth class?
1705 A. Six cents, I believe.
Q. You mean for all material and all distance, or what do you mean by your ten cents?
A. That was approximately what it amounted to. Without taking the tariff and sitting down and telling you just what changes were made in mileage and rates——
Q. I am not asking you that. I said generally speaking
A. I said generally speaking about 10 cents on first class and from that on down.
Q. That would carry it to what on the fourth class? About six cents?
A. Yes, sir, about six cents.

Q. You mean six cents increase?
A. Yes, sir, six cents increase.
Q. That was done irrespective of any parity with the state rates?
A. Yes, sir.
Q. That is, disregarding the parity?
A. Yes, sir.
Q. When was that made, in 1907?
A. In September, 1908.

1706 FRANK NAY, a witness of lawful age being duly produced, sworn and examined on the part of the complainant, testified as follows:

Direct examination.

By Mr. MOORE:

Q. State your name, residence and occupation?
A. Frank Nay; Chicago, Ill.; Comptroller of the Chicago, Rock Island & Pacific Railroad.
Q. How long have you been connected with the Chicago, Rock Island & Pacific Railway Company?
A. It will be seven years on the first of next April.
Q. In what capacities have you been connected with that company?
A. First as assistant comptroller, then general auditor, and I was recently appointed comptroller.
Q. What experience did you have in connection with railroad accounting prior to the time you went with the Chicago, Rock Island & Pacific?
A. I began service on April 1, 1883 with the Missouri Pacific Railway as clerk on statistics. I worked for that road one year. I was then with the St. Louis, Southwestern Railway 15 years, as clerk on statistics and on freight accounts; as traveling auditor and as chief clerk. I was chief clerk for the last ten years of
1707 those 15 years. I left the St. Louis Southwestern in April, 1889, and took the position of auditor of the Minneapolis & St. Louis and was auditor of that road for four years, leaving that road on April 1, 1903, to go with the Rock Island; and during the last year that I was with the Minneapolis St. Louis I was also auditor of the Iowa Central.
Q. Have you given any thought to the question as to what unit is the basis to be used in dividing operating expenses as between state and interstate traffic?
A. Yes, sir.
Q. Have you prepared a statement setting out your views on that subject?
A. I have.
Q. Does that statement correctly reflect the result of your investigation and thought upon the subject?
A. Yes, sir, it does.

Q. Will you read that statement into the record so as to make it your testimony in this case?

A. Yes, sir. (Witness here reads as follows:)

"Practically all trains carry both intrastate and interstate traffic at the same time; a very large number of passenger cars and of freight cars carrying less than carload freight, carry both intrastate and interstate traffic in the same car; both classes of traffic move over the same rails, roadbed, bridge, etc.; both classes of traffic are supervised by the same officers and employés; the account-
1708 ing work is performed, for both classes of traffic, by clerks without reference to the time expended on either class.

It is a fact that the two classes of traffic are handled simultaneously through all the various departments of railroad service in such a way that an accurate division of the operating expenses between intrastate and interstate traffic, is an accounting proposition which has never been solved, and probably never will be solved.

In very rare cases, such as suburban traffic, lying wholly within one state, where separate tracks, equipment, etc., are used for such suburban service, a part of the expenses can be definitely assigned to such intrastate passenger traffic. Certain small railroads situated wholly within one state may be able to assign certain expenses to intrastate freight traffic, but as a general proposition, it is an absolute impossibility to make any definite and accurate assignment of the operating expenses of railways to intrastate traffic. Therefore, when for any reason, it is desirable or necessary to approximate the operating expenses for intrastate traffic, some basis for such approximation must be selected.

It is possible to determine accurately the number of intrastate tons, intrastate tons one mile, and the amount of intrastate revenue for freight traffic handled. Likewise it is possible to definitely ascertain the number of intrastate passengers, intrastate passengers one
1709 mile, and the amount of intrastate revenue for passenger traffic handled. Therefore, with regard to freight and passenger traffic, it is necessary to select as a basis for approximating operating expenses of intrastate traffic, one of the three classes of information mentioned herein as being definitely ascertainable with regard to the traffic itself.

In determining which one of the three factors, or bases, should be used the one should be selected which will more nearly represent the service performed, bearing in mind all the time that what is being attempted is the segregation of the total operating expenses of every character of freight and passenger traffic into two classes,—intrastate and interstate; that the total amount expended is not increased or decreased, but the aim is to arrive at the best estimate of the proportion of operating expenses to be assigned to the class of traffic under consideration.

First, with reference to passenger traffic.

The passengers, passengers one mile, and passenger revenue, can be definitely ascertained for intrastate and interstate traffic separately, and the proportion of each one of these three factors which is intrastate or interstate, may be positively known.

First taking the passengers; using the number of passengers as the basis, would assume that the cost of transporting a passenger five miles would be the same as the cost of transporting a pas-
1710 senger 500 miles, which is an absurdity, and hence that basis is discarded immediately and search made for something better.

Next, taking the passengers one mile; that factor measures the number of passengers and the distance, so that using that basis assumes that the cost of transporting a passenger 500 miles, is 100 times as much as the cost of transporting a passenger five miles, which is obviously more nearly the fact than to assume that it cost the same to transport a passenger 500 miles as to transport him five miles. However, the cost of running a train is not greatly increased by doubling the number of passengers therein; as, for example, it would cost but little more to haul one hundred passengers a given distance, than to haul 50 passengers the same distance. Hence, it has been the custom of railroads for a great many years to make excursion rates, in order to produce train loads of passengers instead of having the cars partly filled; while the excursion rates are at a low average rate per passenger per mile compared with the maximum rates the remuneration to the railroad company is greater with such low average rates because the cars are filled, thus producing a higher average revenue per train mile and causing only a slight additional cost for hauling a train with all the cars filled over the cost of hauling one with the cars practically empty. Where the traffic is regularly heavy, the rates are frequently lower than where the traffic
1711 is light; as, for example, the average suburban service of the various railroads conducting such service into the city of Chicago, is handled at less than 1¢ per mile, because of the density of the traffic. Therefore, we find that the passenger mile basis is faulty and that the passenger revenue will more nearly correspond to the expenses of the service. If the revenue per passenger per mile was uniform in all cases, the passengers one mile basis would be as good a basis as the passenger revenue in approximating the division of the operating expenses between intrastate and interstate, but since the passenger revenue recognizes certain conditions herein explained which are ignored by the passengers one mile, the best basis known at this time for approximating the operating expenses of intrastate passenger traffic, is the passenger revenue basis.

As to freight traffic, first take the tons transported; this basis considers weight only and to use the tons hauled as a basis for dividing the expenes between intrastate and interstate freight traffic, would assume that the cost of hauling a ton 1000 miles is just 100 times as much as the cost of hauling a ton 10 miles; that the cost of hauling freight in carload lots per ton is the same as the cost of hauling the same kind of freight in less than carload lots; that the cost of hauling a ton of coal is the same as the cost of transporting a ton of showcases; that the cost of hauling a ton of baskets is the same as the cost of hauling a ton of brick; that the cost of hauling a
1712 ton of paper boxes is the same as the cost of hauling a ton of canned meats. That the cost of hauling a ton of chicken

coops is the same as the cost of hauling a ton of cement in sacks; that the cost of hauling a ton of lantern frames is the same as the cost of hauling a ton of gravel; that the cost of hauling a ton of millinery is the same as the cost of hauling a ton of pig iron; that the cost of hauling freight in full train loads where the engine is loaded to its maximum capacity, is the same per ton as the cost of hauling freight in trains where the traffic is light and moves in short trains where the engine is not loaded to nearly half of its capacity. The ton basis is very faulty, and is immediately discarded for something better.

Next, taking up the ton mile basis; this basis modifies one fault of the ton basis because it takes into consideration both the weight and the distance, but it assumes that the cost of hauling a ton 1000 miles is exactly 100 times the cost of hauling a ton ten miles; it is manifest that such is not the case, because there are terminal expenses in connection with every shipment, and the longer the distance carried, the less per mile is the cost of terminal service. Other factors exist which operate to make the cost per mile less on any shipment when the length of haul is increased. This fact is recognized by all rate making bodies, including the various state railroad commissions which make rates; that is to say, none of the commissions, nor any other reputable rate making bodies make the
1713 rate for 300 miles 30 times that for ten miles. Such rate making bodies recognize the fact that the cost per mile decreases as the length of the haul increases, and the rates are made accordingly; therefore, even if we had only the two conditions, weight and distance, to measure, the ton mile basis would be faulty for the reason that it assumes that the cost increases in exact proportion to the increase in the length of the haul and the increase in the weight; then again, the ton mile basis, has all of the objections to the ton basis, with the exception of the one which is modified by taking into consideration the distance; but, as has been stated, the cost does not increase in exact proportion to the increase in the distance; for these reasons, a basis is sought which will give more satisfactory results than either the ton basis or the ton mile basis.

The only basis left, is the revenue basis.

As has heretofore been stated, the revenue basis assumes that the cost of the service increases when the haul increases but not in proportion to the length of the haul; thus, the rate on a given shipment for a haul of 50 miles is not ten times the rate for a haul of five miles, because it is universally recognized that the cost of a haul of fifty miles is not ten times the cost of the haul for five miles. The rates for distances are graduated, and while they are increased for greater distances, the increase in the rate is not in proportion to the distance; hence the revenue basis takes into consideration the
1714 fact that the cost of the service does not increase in proportion to the length of haul, which is ignored by the ton mile basis; in fact, the ton mile basis assumes positively that the cost of transportation does increase in exact proportion to the increase in the length of the haul. Then again, the rate for carloads is less than the rate for less than carload freight, thus recognizing that the

cost of transporting less than carload freight is greater than the cost of transporting carload freight. Likewise, the rate on coal is less than the rate on fruit and vegetables, or live stock, because it is recognized that the cost of transporting fruit and vegetables or live stock, is greater than the cost of transporting coal, and so on, the various illustrations heretofore given about baskets and brick, millinery and pig iron and so on, could be mentioned as illustrating the fallacy of the ton mile basis—or, rather, the superiority of the revenue baiss over the ton mile basis. In portions of the country where the traffic is very great and is moved in full train loads, the rates are usually made lower per ton mile than in portions of the country where the traffic is very light and moves in short trains, with only a few cars in a train. The ton basis, or ton mile basis, would assume that the cost of transporting freight which required the use of special equipment, such as refrigerator cars, stock cars, etc., was the same as for transporting ordinary dead freight not requiring the use of any special equipment, but the rates for
1715 such freight requiring special equipment, are usually higher than those for ordinary dead freight not requiring special facilities and equipment, and therefore the revenue basis recognizes that the cost of transporting such freight requiring special equipment, is greater than the cost of other freight which does not require such special equipment and facilities.

A large number of other conditions which are considered in the rate used in arriving at the revenue, might be mentioned, and thus show the superiority of the revenue basis over either the ton or ton mile basis. It is not claimed that the rates are made on the actual cost of service, but that the cost is consciously or unconsciously given consideration in making rates, and that any rate schedule made by a reputable rate making body will give evidence of the fact that the cost of transporting different kinds of freight is given consideration in making the rates.

An argument is sometimes used to the effect that using the revenue basis is like traveling in a circle, and those who take that position claim that when the revenue of intrastate traffic is doubled, the operating expenses are also doubled, and the end is just the
1716 same as in the beginning. The following illustrations will demonstrate the fallacy of that argument——

First, take for illustration, a small railroad with freight operating revenue of $100,000 and freight operating expenses of $80,000, of which the intrastate freight traffic is $25,000 and the interstate freight traffic $75,000. We have the following statement.

| | Intrastate. | Interstate. | Totals. |
|---|---|---|---|
| Operating Frt. revenue.... | $25,000 | $75,000 | $100,000 |
| Operating Frt. expenses dividing the expenses between intrastate and interstate on the revenue basis would be as follows ..... | 20,000 | 60,000 | 80,000 |
| Net Operating frt. rev... | $5,000 | $15,000 | $20,000 |

Suppose that the rates on intrastate freight traffic are increased so as to exactly double the intrastate freight revenue leaving the interstate freight revenue just the same and the operating freight expenses exactly the same,—an impossible condition in actual practice,—but the extreme condition is used in order to emphasize the error of the argument that doubling the intrastate revenue in such a case would double the intrastate expenses.

After doubling the intrastate freight revenue as just mentioned, we would have the following statement.

| | Intrastate. | Interstate. | Totals. |
|---|---|---|---|
| Operating frt. revenues.... | $50,000 | $75,000 | $125,000 |
| Operating frt. expenses the intrastate rev. would not be 40% of the total revenue. The operating expenses of $80,000 divided on the revenue basis would now be.. | 32,000 | 48,000 | 80,000 |
| Net Operating frt. rev... | $18,000 | $27,000 | $45,000 |

1717 It will be noted that in the first statement, where the intrastate freight revenue is $25,000, the net operating revenue from intrastate freight traffic was only 20% of the total intrastate freight revenue, while in the second statement after intrastate freight revenue had been doubled, the net operating intrastate freight revenue is 36% of the total intrastate freight revenue. If the result had been to increase the operating expenses in the same proportion as the increase in revenue, the net revenue would have been just the same percentage of the gross in each instance.

While it is recognized that it is impossible to accurately divide the operating expenses for freight traffic between intrastate and interstate traffic, it is believed that the revenue basis is preferable to either of the other two available bases, and that an approximation of the operating expenses of intrastate freight traffic, or interstate freight traffic, based on the revenue derived from such traffic as compared with the revenue derived from both kinds of traffic, more nearly approximates the facts than by the use of either the ton or ton mile basis, which are the only other two bases available.

After making the basic approximation of the operating expenses for intrastate freight or passenger traffic, the figures thus arrived at may be increased in the proper proportion to represent the excess of the cost of transporting intrastate traffic over the cost of transporting interstate traffic."

Mr HILL:

1718 Q. You mean by that you make your computations on a straight revenue theory and then add to your state traffic such proportion as you think the state traffic should bear?

A. Yes, sir.

Mr. HILL: The state has approached Mr. Nay heretofore, with a

view of submitting to him some accounting propositions; but learning that the plaintiff is going to use him, we have deferred any consultation with him until he has testified for the plaintiff, and for that reason, by agreement, we defer any cross-examination of Mr. Nay until after he has testified.

C. E. Watson (continued) testified as follows:

1719 Direct-examination.

By Mr. Moore:

Q. Mr. Watson, in the course of your cross-examination you stated in one place that you could handle one car of baskets at the same cost you could handle a car of iron. Do you mean by that it would cost more, literally, to handle just one carload of baskets than it would one carload of iron? Or explain what you mean.

A. The answer was based on the measure we use in fixing freight rates: six cents per hundred pounds.

That is, that the cost of handling a carload of baskets would be more in cents per hundred pounds than the cost of handling a carload of iron, using the same basis.

Q. In discussing in your testimony the relation between the various rates in the standard district tariff No. 2 speaking of lumber you say that the ordinary rating on lumber for 225 miles is 8 cents.

A. The ordinary rating is wrong. It should be the rating on lumber under the standard freight distance tariff for 225 miles is 8 cents.

Q. Then you say: "The ordinary rating for lumber is Class D. The class rate under your tariff is 18 cents."

You were then asked how much it should be and you said "18 cents."

Do you mean to say that the proper rate for transporting
1720 lumber 225 miles would be 18 cents? And if not explain what you did intend to state.

A. That the rate under that tariff on the class D basis would be 18 cents. I did not attempt to determine what the rate should be for lumber for any particular distance other than the revenue that would be derived from handling the traffic if the classifications were used and the tariff rates in the standard distance tariffs were applied.

Mr. Hull: That is what I understood. I did not attempt to be misleading. On the carriage that was a fixed quantity and I was asking how it should be divided.

Mr. Moore: I know you did not so intend but the short answer, just "18 cents" would rather make it appear so, or at least it so impressed me.

Mr. Moore:

Q. You say in referring to these tariffs that you do not think any tariff should be used for determining the cost of service: explain why that is so.

A. Any tariff properly constructed should show a profit. In other words, we should have a profit for conducting transportation. And if it represented the cost of the service there would of course be no profit.

Q. In other words, what you mean is that a tariff properly constructed should represent the cost of something in addition?

A. Yes, sir, in addition to the cost.

Q. You said in your testimony that the accounting department makes up figures on the basis of the average cost per ton per mile or total ton miles: does it make them up on any other basis, such as the *the* cost per car per mile or train per mile?

1721

A. I presume they make such figures on account of the operating department, that would not be used by the traffic department nor would they have any bearing upon our part of the work.

Q. I merely wished to know if they prepare figures on those other two bases?

A. They may do so. I cannot answer the question definitely.

Q. Mr. Watson, the statistics filed in this case by the St. Louis Iron Mountain & Southern Railway show that the average revenue per ton per mile on interstate business is 6.7 mills and on intrastate is 13.4.

Do those figures reflect any light upon the rates that are received for the commodities that are transported?

A. Absolutely none.

Q. Why not?

A. For the reason that the length of haul, the difference between the various commodities, carload, less than carload, ratings, and in fact all of the different factors that go to make up the different traffic is added together and this is the final result, including the revenue per ton per mile on the entire traffic over the entire line. Taking shipments moving 10 miles and shipments moving 2 or three hundred miles; taking a shipment of pianos together with a carload of stone.

1722

Q. That is true of each branch of service, interstate and intrastate?

A. Yes, sir.

Q. It disregards everything except the difference in the length of haul?

A. It disregards everything in connection with the factors that go to make it up.

Q. You were asked on cross examination if you had used any figures as to the cost of transportation of iron or baskets: what effect if any would the nature of those articles have in determining that question, on the face of it: I do not mean accurately but approximately, in a general way?

A. The fact that a carload of baskets would weigh approximately ten thousand pounds and occupy the same space as a carload of iron, that weighs approximately 60,000 lbs. That would be one determining factor.

Re-cross examination.

By Mr. HILL:

Q. Mr. Watson, about this average revenue per ton per mile that you have just explained does not throw any light on the rates, that is, the form in which statistics are made up and put before you when you determine rates, isn't it?

1723 A. That has no relation in determining rates whatever. The statistics you had reference to in your previous question, as I understood it, were the statistics that show the cost per ton per mile.

Q. That is true. But that is made up in the same way, isn't it?

A. Yes, sir, made up in the same way.

Q. Except one is the cost per cent and the other is the revenue per cent, made up on the same unit?

A. Yes, sir, made up on the same unit, using the same figures.

Q. Both made up on averages?

A. Yes, sir.

Q. Both represent a system of averages?

A. Yes, sir, they do.

Q. What you have just said in explanation as you see it of the value of such statistics would equally apply to the cost statistics?

A. I have also stated on previous examinations.

Q. That is as I understood it. But those are the only statistics you had before you as the basis for rate making?

A. As the basis for cost, yes.

Q. Cost in making rates?

A. Yes, sir.

Q. You have just stated in answer to Mr. Moore that no

1724 tariff could be used to show the cost of a service because a tariff should show a profit, a "properly constructed tariff" I believe was your expression: you do not mean that answer is to take the place of your answer yesterday, where you said that the standard distance tariff No. 3 could not be used because it showed inequality and lack of proper relation of one commodity to another, do you?

A. The answer I gave yesterday had no relation to the cost of service, in the same relation in which you now place it.

Q. What did you mean by your answer yesterday?

A. Which particular answer do you have reference to?

Q. In regard to using revenue derived from standard distance tariff No. 3 as a measure of the cost of the intrastate service.

A. May I read the answer I gave yesterday?

Q. I will be glad to have you do it if you can turn to it.

A. (986) "I do not think you can use any tariff to determine the cost of service. I do not think you could use this one (indicating standard distance tariff No. 3) to determine your revenue on a proper basis."

Is that the particular answer you have in mind?

Q. I think so. I want to see the connection in which that was stated (counsel examines record page 986).

Just above that, on the same page, you said:

1725 "I do not believe the standard distance tariff No. 3 was ever represented as a properly constructed tariff. I never heard anybody so represent it."

"Q. Do you think it represents the cost of the service?"

"A. I don't think so, no."

"Q. Nor anywhere near it, I would infer from your answer?"

"A. The evidence from the application of it would indicate not."

I suppose you mean there the evidence of your particular application?

A. The result from the application of it.

Q. That is what I understood you to mean.

"Q. It would not be a very safe measure, then, to use to determine the cost of service in the State of Arkansas."

"A. I do not think you can use any tariff to determine the cost of service, Judge. I don't think you could use this one (indicating) to determine your revenue on a proper basis."

Now, the answer you have made to Mr. Moore about the tariff a few minutes ago was not intended to qualify or take back any part of this statement to which your attention is now called, was it?

A. It is evident we have two understandings about what that statement means. If you will tell me the understanding that this

1726 (indicating Page 987 of record) conveys to you I will indicate very promptly if that is the one I intended to convey.

Q. I think it is very clear, and the only doubt I had was whether your answer to Mr. Moore's question a while ago was intended in any way to take back what you said yesterday.

A. The object of that answer was to make it clear to you that the tariff in itself would not indicate the cost of the service.

Q. You make that very clear in the record there, do you not?

A. That is what I tried to make clear, yes, sir.

Q. You say positively here that it does not represent the cost of the service; and that is your opinion now?

A. Yes, sir.

Q. Do you think an interstate tariff represents the cost of the service?

A. It is not intended to represent the cost of the service.

Q. It is not framed to represent the cost of the service, is it?

A. You would have to define the word "represent" for me, judge. I don't know what you mean by represent, in that case.

Q. Suppose we take another word. The interstate tariff

1727 is not based on the cost of the service—if that will make it plainer to your mind what I am asking.

A. As a general proposition no, the cost of service being only one of the factors.

Q. The cost of service varies materially on different roads, that operate under the same tariff, does it not?

A. I don't know of any roads that operate under one tariff. They operate under a number of tariffs, and that difference in number of tariffs probably carries that point.

Q. That is leading off. Here is what I mean; you would have one

tariff covering a number of roads, wouldn't you? You would enter into a joint tariff with the St. Louis, Iron Mountain & Southern covering certain commodities, and that would cover the rate on your road and on the Iron Mountain and such other roads as desired to enter into it; and that would cover the rate on your road and on the Iron Mountain?

A. To certain points, yes.

Q. There would be a certain difference in the cost on your road and on the Iron Mountain for transporting those commodities, wouldn't there?

A. In the case to which you refer, the tariff is fixed or based upon a condition which does not consider cost of service as a primary factor, that condition being probably either a commercial or a competitive condition.

Q. And those rates are then based upon those conditions
1728 applicable to two or more roads, and ignores the cost of the serivce to be rendered and ignore the difference in the cost of service on one road as compared with the other one?

A. That would be a disparity of line, the difference in the cost of service.

Q. That statement as I have made it is a correct statement?

A. As I understand it, yes.

Q. A good illustration of that point would be your Texas common points, wouldn't it?

A. Yes, sir, that would be a fair illustration of it.

Q. When you speak of the relation of the interstate and the intrastate, I believe you used that term and I know Mr. Perkins did—did you mean the relation of the commercial and trade conditions or did you mean the relative cost between the two?

A. I mean both.

Q. Primarily which?

A. It would be necessary for you to tell me the particular rate to which you refer, in order to answer that question. I cannot give you a general answer because one condition would apply in one case and another condition would apply in another case.

Q. I think you made that statement generally, and for
1729 that reason I cannot give you a specific rate.

I understood they had a close relation between interstate and intrastate rates. I want to know if that close relation refers to the close relation of the cost of handling the traffic, interstate and intrastate; or does it mean close relation in commercial and competitive conditions and freight conditions that enter into interstate and intrastate traffic?

A. The close relation would largely be the trade or commercial conditions and the fact constructed under the state tariff would apply from a border point which would influence *influence* the rates through that border point probably control them.

Q. I believe you stated this morning, it has gone into the record in Mr. Perkins' testimony, that the only change in the interstate tariff to meet the court's tariff on coal from Illinois?

A. I did not hear him make that kind of a statement.

Q. I say, didn't you make such a statement, while Mr. Perkins was testifying?

A. No, sir, you asked me if there had been any change in the rates on coal and I said there had been a change in the rates on coal.

Q. I was asking generally if there had been any change and I understood you to say that had been the only change made, to readjust the interstate rates to the court's tariff?

1730 A. I did not so understand your question.

Q. I intended it that way and thought that was your answer.

A. My understanding of the question was that you had reference only to the coal rate and I answered only as to the coal rate.

Q. I want to bring that out clearly.

What adjustment or re-adjustment of interstate rates has been made to meet the change brought about by the court's rates of June 1, 1908?

A. There has been quite a number of them. I cannot give you that in detail.

Q. Are you certain of that?

A. Yes, sir, I am certain of that.

Q. My information is there has not been any except on the coal. I would be glad to have you look that up and give me such information as you have on that subject of the re-adjustment.

A. Do you want it on actual commodities and the tariff reference and so on?

Q. I think the tariff reference would be sufficient.

A. It would take some checking to get such information as you want and I want to know exactly what you desire.

Q. I want the tariff changes that have been made to meet conditions in the interstate rates, brought about by the court's tariff of June 1st.

1731 A. Do you want it confined to the court's tariff or also the railroad tariff put in subsequent to the court's tariff?

Q. I want to get what changes were made to re-adjust the interstate rates to the court's tariff.

A. I understand you want the changes made in the interstate rates since June 1, 1909.

Q. Yes.

A. That will require a very large statement.

Q. If there are very large changes I want to know it. I do not mean for you to give the detailed statement.

Mr. MOORE: Just make a statement making reference to the tariffs and pages, and the items if they are numbered.

Mr. HILL:

Q. In speaking of your illustration of baskets and iron, would there be any difference in the transportation cost per car of a car loaded with baskets and a car loaded with iron?

A. I should imagine on the per car basis the iron would be the most expensive proposition.

Q. For what reason?

A. For the reason that the iron would weight approximately six times the weight of the baskets. And, necessarily, it would require more power to handle it and there would be more wear and tear on the car and the various and sundry additional cost item.

Q. That is negligible, the cost. What I have in mind—

1732 I expect I used the wrong term—but I meant in transportation; the actual handling of the car.

Mr. MOORE: You mean the terminal service?

Mr. HILL: I mean broader than that. I mean the transportation of the car.

A. In carload traffic the railroad performs no service in connection with the loading and unloading; and therefore the service performed by the transporting company in both cases would be the hauling of the car and the terminal expenses. They would be the same.

Q. The terminal expense would be the same?

A. Yes, sir, the terminal expense would be the same.

Q. And the actual hauling and the labor and the fuel expense would be the same?

A. It would be the same with the exception that in the case of the iron it would require more of the actual tonnage that the engine can handle to take care of the iron than it would to take care of the baskets.

Q. There is no doubt of that. There would be that increased expense due to hauling a heavier load and the increased wear on the track and on the equipment?

A. That is true.

Q. With those expenses, there would be no difference in the cost of the service in handling a car of feathers or a car of iron?

A. There is no doubt about that. I can probably make

1733 that clearer to you, Judge, by making the statement that all our bases are figured in cents per hundred pounds and not per car.

Q. Of course, it would make a difference on that basis.

A. Yes, sir.

Q. That would result in requiring more cars to transport the different way. When you take it on the 100 pound basis?

A. Yes, sir, more cars and more terminal service.

Q. More engine haul?

A. Yes, sir, more engine haul and more dead haul.

Q. That is true. When you take it on the car basis it resolves itself into such difference only as you have heretofore mentioned?

A. Yes, sir.

1734 Cross-examination of C. E. PERKINS continued:

By Mr. HILL:

Q. Mr. Perkins, these interstate distance tariffs you have utilized in making this Exhibit 27 seems to have been effective Sept. 12, 1905: I want to know whether the traffic moves under that tariff

or does it move under the tariffs designating classes and commodities from points to points?

A. It moves almost entirely under that tariff.

Q. Under this distance tariff?

A. Traffic moving locally between Arkansas & Louisiana would move under that tariff.

We have, I believe, three tariffs other than that, as I recall it; one from Little Rock applying to points in Louisiana; one from Pine Bluff to points in Louisiana; and another from Camden. Those are the only other tariffs that apply interstate, that I recall or have any knowledge of.

Q. That is from Arkansas to Louisiana?

A. Yes, sir.

Q. From Missouri into Louisiana does that move under this distance tariff?

A. I am not sure whether that particular distance tariff covers interstate Missouri or not; I would have to look and see.

1735 Q. Look at it.

A. (After examining.) Interstate between stations and Arkansas and Louisiana on the Iron Mountain, no, sir, that would not cover. We have another one, though.

Q. Shipments from St. Louis to Louisiana or St. Louis to Texas would not be controlled by this distance tariff?

A. From St. Louis?

Q. Yes.

A. No, sir.

Q. Points from Kansas and Oklahoma into Louisiana or Texas, moving through Arkansas, would not be governed by this?

A. I have not attempted to show that they would. In other words, the statement Exhibit 37 does not cover any such example as that.

Q. There are such interstate rates as I have mentioned, are there not?

A. I am not sure whether we have rates of that character. I presume we have.

Q. This applies only to the local movement between Arkansas & Missouri where some other tariff does not apply?

A. It covers a large amount of our rates. That is, with one or two exceptions—with one exception that I know of, it covers all of our interstate rates between points in Missouri other than St. Louis. Of course, we have a terminal tariff from St. Louis

1736 and a terminal tariff from Springfield.

Q. I thought you said this tariff does not apply from Missouri?

A. That particular tariff does not, no, sir. But the rates represented in this statement do, we have an interstate tariff applying between Missouri and Arkansas.

Q. Is that on the same mileage scale as this?

A. Yes, sir. It is shown in the statement (exhibit 37).

Q. Is it the same?

A. I do not know that it is exactly the same (after examining

paper). No, sir, it is not. We base it on our interstate tariff between Arkansas and Missouri.

Q. This applies only to the interstate tariff between Arkansas and Louisiana

A. That is correct.

Q. These movements indicated in your exhibit 37 that would move under this distance tariff are comparatively a small part of your interstate traffic, aren't they?

A. Taking our interstate traffic as a whole, yes.

Q. About what percentage of your interstate traffic, as a whole, moves under these distance rates?

A. I have not any idea.

Q. I will call your attention to the fact that your exhibits in this case show that your trans-state traffic is 51% of the whole: none of that would move under this, (indicating exhibit), would it?

A. No, sir.

1737 Q. Then that leaves 49% to be reached by other tariffs: of that 49% how much would move under this distance tariff?

A. I could not tell you. I have not any figures or any information.

I might say that in making these statements, it is a rate comparison. I did not attempt to go into the statistics to find out how much business moved under each tariff.

Q. I am trying to do that now. I am trying to find out how much value your exhibits has?

A. It is a comparison of rates.

Q. I understand that, but rates amount to nothing unless freight moved under them. And you commenced your statement as to this exhibit by stating that it represented commodities which had large movements.

A. I stated I had taken a list of the commodities handed me by the accounting department, which represented the movement in Arkansas.

Now to make a comparison of our state rates in other states with our interstate rates between Arkansas & the bordering states, I gave the rates on those commodities for the interstate haul.

Q. If there is no considerable traffic moving under such rates as that, it has little significance as a comparison, has it?

A. It has a certain significance, because it designates the

1738 difference in the rates as published in certain states and on interstate traffic.

The question whether the business moves or not of course was not taken into consideration. It may have moved in large quantities or it may have moved in small quantities, for aught I know. I do not know.

Q. You know a large portion of the interstate traffic of Arkansas, excluding trans-state traffic, moves out of St. Louis and Memphis, do you not?

A. No, sir. I know there is a considerable quantity but there is quite interstate movement in other directions.

Q. I am not disputing that: but isn't there a large interstate movement out of Memphis and St. Louis into Arkansas?

A. There is, yes; there is considerable movement.

Q. You have already admitted you would have to exclude from this schedule the trans-state movement which is 51%: you would have to exclude the St. Louis, Memphis & Fort Smith interstate movements, wouldn't you?

A. Yes, they would not be covered by these rates.

Q. You would have to exclude the New Orleans movement, wouldn't you?

A. Yes, sir.

Q. Then the Pine Bluff and Camden tariffs that you have heretofore referred to, would have to be excluded, too?

A. Business moving under them would not move under the
1739 rates in exhibit 37, no, sir.

Q. None of the lumber moving in Arkansas or Louisiana and the northwest would move under these rates, would it?

A Yes, sir.

Q. You say the lumber would?

A. Yes, sir.

Q. Where from?

A. If there is any lumber moving from Arkansas to Louisiana or Louisiana to Arkansas, it would move under these rates.

Q. To the northwest?

A. I did not say to the northwest. We have not any figures that would indicate any such thing in that statement Exhibit 37.

Q. You have here interstate lumber rate in your statement?

A. Yes, but I have not anything that would cover a movement from Louisiana to the northwest.

Q. You have a 12 cent lumber rate covering 200 miles.

A. Yes, sir.

Q. What movement does that represent?

A. You would have to tell me where it is from?

Q. You will have to tell me.

A. I mean on the statement.

Q. 200 miles Arkansas and Lousiana.

A. That would apply between a given point in Arkansas
1740 and a given point in Louisiana which were 200 miles apart.

Q. Now take your Arkansas and Missouri tariff, where would that apply?

A. That would apply from a point in Arkansas to a point in Louisiana or from a point in Louisiana to a point in Arkansas.

Q. What about that 18¢ blanket rate from South Arkansas to St. Louis?

A. We are not talking about St. Louis traffic. There are lots of other stations in Missouri besides St. Louis.

Q. St. Louis is in Missouri, isn't it?

A. Yes, sir. St. Louis is in Missouri.

Q. You have this Arkansas and Missouri?

A. Yes, sir.

Q. And you will have to except from that St. Louis, will you not?

A. Yes, sir.

Mr. MOORE: What is the mileage from St. Louis to Little Rock?
A. 345 miles.

Mr. HILL:

Q. You say "from Arkansas." You would get a movement on the face of it from North Arkansas to St. Louis.
Mr. MOORE: What is the northern boundary of the lumber rate?
A. The Arkansas River.

1741 Mr. HILL:

Q. Now this 49% of the interstate traffic it could possibly move under this distance tariff, what is your judgment of the percentage that actually moves under this distance tariff shown on your exhibit 37.
A. I have absolutely no idea. I could not even make a guess at it.
Q. You have taken a comparison of rates——
A. A comparison of rates only.
Q. Without any knowledge of the extent of the movement under them?
A. Yes, sir.
Q. Do you regard that as fairly representing the conditions of the traffic?
A. I regard that as fairly representing rates adjustments yes.
Q. I want to call your attention to the statement in this distance tariff on page 2:
"Where the use of continuous mileage makes a lower rate than authorized by the Arkansas Commission for *for* two or three lines, the Arkansas Commission basis will be observed as the minimum in making rates between Arkansas and Louisiana points."
A. Yes. In other words we would not go lower. Those rates would apply, but we would not in any case go lower than the Arkansas distance rates.
Q. Don't they authorize it?
A. No, sir. We simply say we will not make a lower rate than that.

1742 Q. The effect of that would be this: if the Arkansas Commission rate for two or three lines was lower than this interstate distance rate, you would take the Arkansas Commission rate?
A. No, sir, just the other way. If you will read it again, Judge, you will see that.
In other words, if the rates named in that tariff should happen to produce a lower rate than the Arkansas rate, the Arkansas rate would be the lowest rate we would adopt.
Q. I thought that was the way I stated my question?
A. No, sir, you said if the Arkansas rate was lower we would take that rate.
Mr. MOORE: If that rate were lower you would take the Arkansas rate?
A. Yes, sir.

Mr. HILL:

Q. You have explained that there, whether I said it right or wrong?

A. Yes, sir, I have explained it.

Q. What effect would that have upon this schedule of rates you have put in?

A. None. It should have none. The schedule of rates was taken from that tariff and if that note was in effect at the time, during this particular period, the rate clerk would take that note into consideration—in other words, the one effect it could have would
1743 be to perhaps bring the interstate rate up to the Arkansas State rate.

Now, I do not think there are any instances in here where the interstate rates between Arkansas & Louisiana are lower than the Arkansas state rates.

Q. Mr. Perkins, haven't you taken a one line rate to make this statement on?

A. Yes, certainly. We are making the Iron Mountain rates. If I had not, I would have had to take a joint line in Arkansas.

1744 Q. Mr. Perkins, let us now take the map; Have you examined the zone grain rates that I submitted to you yesterday?

A. Yes, sir.

Q. This is the rate on corn and articles taking the corn rate; and wheat and articles taking the same rate, of which there is a map made showing zones A and B and an explanation attached to the map: you have examined those?

A. I have examined the map, yes.

Q. And the explanation attached to it?

A. Yes, sir.

Q. Did you find it correct?

A. I did.

The map referred to is marked "C. E. Perkins Exhibit 38."
Said exhibit is in the words and figures following to-wit:
For Exhibit 38, see Volume 8, page 5380.

1745 Q. The next of these zones or group rates is on lumber from Louisiana and Arkansas to Northwestern points: have you examined the map and the statement attached to the map?

A. I have examined the map. I have not personally examined the statement.

Q. Did you find the map accurate?

A. It is accurate in a way; that is, all points within the zones marked "B" take a blanket or zone rate to the northwest. There are points in that zone, however, which are not on the Iron Mountain road. But they would take the zone rates.

Q. And they are shown by the Iron Mountain tariff to take the zone rates?

A. Yes, sir, they are shown in the Iron Mountain tariffs.

Q. That I believe you will find explained in the statement attached to the map, if you will examine that.

A. (After examine- statement.) These statements go on to give information which is not tariff information and I do not know but I think Col. Moore ought to say as to what I will agree to and what

I will not agree to. This statement goes on to speak of the expense of Kansas City terminals and so on.

Q. I stated yesterday that I did not expect you to agree to any comments in those statements.

I merely intend to ask you if the statements of facts therein
1746 contained are correct?

A. So far as the rates named from point to point, I have had that checked.

Q. I just want to ask you if those are correct'

A. Yes, sir. I have had those checked.

Q. I merely wanted you to state the facts that this map is correctly drawn, covering your exhibit 37, and that it covers the territory named and the rates named in the statement attached to it are correctly drawn from your tariff.

—. That is correct.

The exhibit referred to is marked "C. E. Perkins Exhibit 39."
Said exhibit is in the words and figures following to-wit:
For Exhibit 39, see Volume 8, page 5382.

1747 Q. Here is a map showing the group or zone rates on lumber from Arkansas and Louisiana points to St. Louis and Carondelet, Missouri and Thebes and Cairo, Illinois; have you examined this map and the statement attached to it?

A. Yes, sir, and with the corrections made in pencil I find it to be correct.

Q. The corrections you call attention to has already been made on the map?

A. Yes, sir.

Q. And is the statement attached too correct?

A. Except that there are 29 commodities stated herein and I counted the commodities named on the tariff and find there are 33.

The map referred to is marked "C. E. Perkins Exhibit 40."
Said exhibit is in the words and figures following to-wit:
For Exhibit 40, see Volume 8, page 5384.

1748 Q. Here is a map representing the zone rates on cotton seed products: have you examined that?

A. Yes, sir.

Q. You have attached to this map what you say is an explanation?

A. Yes, sir.

Q. Which reads as follows: "Attached map representing rate and adjustment on cotton seed meal is correct except that portion of the Missouri Pacific line Shook to Kiowa, Kansas, should be excluded from the territory marked 'Zone A:'" is that correct?

A. Yes, sir.

Q. Since you have made that explanation Mr. Hamilton has excluded that territory from the zone marked A on the map?

A. Yes, sir.

Q. Have you verified the rates and distances that are mentioned in the statement attached to the map, explanatory of it?

A. Yes, sir.

Q. Are they correct?

A. They are.

The map referred to is marked "C. E. Perkins Exhibit 41."
Said exhibit is in the words and figures following to-wit:
For Exhibit 41, see Volume 8, page 5386.

1749 Q. Have you examined the map covering Texas common points and rates covering points to the common point territory mentioned in the statement attached to the map?

A. Yes, sir.

Q. Have you examined the statement with reference to the rates and distance shown on the statement in explanation of the map and have you found them correct?

A. So far as the map is concerned it is now substantially correct and the actual rates and distances shown are correct.

The map referred to is marked "C. E. Perkins Exhibit 42."
Said exhibit is in the words and figures following to-wit:
For Exhibit 42 see Volume 8, page 5388.

1750 Mr. HILL: I hand Mr. Perkins a map showing blanket rates on Cotton, with a statement attached thereto.

Mr. Perkins has not had an opportunity to examine this map to verify the statement. By agreement it is put in as Exhibit 43 subject to proper proof of its correctness hereafter.

The paper referred to is marked "C. E. Perkins Exhibit 43."
Said exhibit is in the words and figures following to-wit:
For Exhibit 43, see Volume 8, page 5390.

1751 Q. Are you familiar with the freight rates on citrus fruit from California east?

A. No, sir, I am not.

Q. You don't know the belt or zone of the citrus fruits from California and the rate it carries east?

A. I do not.

Q. You do not know the rate that your road hauls citrus fruit from California on?

A. No, sir.

Q. Do you know the blanket or zone, without knowing the actual rate itself?

A. No, sir, I do not know that. That is something I have never come in contact with as yet, Judge.

Q. Have you anyone especially in charge of that?

A. Yes, sir we have a man who has charge of the transcontinental business.

Q. I have a statement here of what we understand to be the facts about that. Would you mind having your man in charge of that verify this statement?

Mr MOORE: I object to that.

Mr. HILL: If you object we will withdraw it.

Q. Now, Mr. Perkins, coming back to this question of cost of service in fixing rates, when you fix a rate do you bear in mind two elements, one the cost of the service and the other the profit to be made on that rate?

A. No, sir. I cannot say we do. When we are fixing
1752. any particular rate we cannot bear in mind the cost, because we do not know the cost.

Q. You cannot bear in mind the profit, because you do not know the profit?

A. No, sir.

Q. Who is the head of your rate making, in your railroad, at the present time?

A. I am.

Q. I understood from you yesterday that Mr. Finnen was your superior officer and that Mr. Johnson was his superior officer?

A. Yes, sir, but we do not call those officers rate makers. They are my superior officers, but I am in charge of that department.

Q. Mr. Johnson is the head of your department?

A. Mr. Johnson is the head of the traffic department, if that is what you want to know.

Q. He is an experienced man in traffic and rates, is he not?

A. He is so considered, yes.

Q. I want to submit to you the statement of Mr. Johnson which hereafter I will put in evidence, and ask you from your knowledge of rate making in the Iron Mountain road if this is a correct statement of the way rates are made?

Mr. Moore. We object to that statement of Mr. Johnson's views. If counsel wish to propound as a question to the witness
1753. facts contained in that statement for the purpose of getting his views, we have no objection to it.

Mr. Hill. That is exactly what I wanted to do.

Mr. Moore. You put it in as a statement of Mr. Johnson, and I object to that because his statements are not binding here except when propounded to him on the witness stand.

Mr. Hill. When I come to put in my evidence I state here and now that I intend to put that in evidence.

I asked Mr. Perkins as a matter of fact whether the statement made by Mr. Johnson as to the making of rates is correct, the way it is done, is the essential fact I am trying to develop.

Mr. Moore. I have not any objection to counsel making a statement here and asking the witness if that is a correct statement of the way rates are made. But I do not understand you are intending now to put in Mr. Johnson's statement, because I will most certainly object to that. His statement in one case certainly cannot be used in this case.

The Master. Is his statement in evidence in this case?

Mr. Hill. No, sir, in another case.

The Master. I am inclined to think Mr. Moore is correct.

If you will read that into the record and then ask Mr. Per-
1754. kins about it.

Mr. Hill. That is exactly what my question is. I was going to hand this paper to Mr. Perkins and let him read it and then read that into the record as a correct statement of the way rates are made in his department.

Mr. MOORE: I object to that. If you want to ask him the question, ask him. If you want to read that statement and make your question by asking if that statement is correct, I cannot object to that.

The MASTER: I think that is the proper way.

Mr. HILL: I will read you this:

"Q. Mr. Johnson, in your experience as a traffic and freight man have you studied the cost of the movement of the different classes of freight, and the different kinds of tonnage, in determining what would be a reasonable rate in the handling of different classes of traffic? And are not railroad rates based on the assumption that they make a fair return on the cost of the movement of that freight?"

Mr. MOORE: I object to the reading into the record of that question.

Mr. HILL: I am just following your own suggestion.

Mr. MOORE: No, my suggestion was to read the facts, not as a question to Mr. Johnson.

Mr. MOORE: That is the interrogatory which Mr. Hill is propounding to this witness and I suppose he has a righ- to propound it in such shape as he wishes and ask him what part he considers correct.

Mr. HILL: I will continue to read as follows:

"A. It is very difficult to determine the cost of moving
1755 any particular commodity any particular distance. In fact, it might be said to be impossible to do it. We can only figure in a very general way. We know about what it costs to move a ton of freight one mile, at the end of a year and we know what we have received for moving a ton one mile.

Now, that is on the business as a whole, which of course is made up of hundreds of thousands of different shipments. It is impossible to know the exact cost of moving one ton of any particular class of freight for any particular distance.

"Q. But in making the rates, is the general average of cost of moving a commodity taken into consideration in fixing a rate that will be compensatory in the moving of any particular commodity? I refer to the general average of cost you have spoken of, as shown by your records at the end of the year.

"A. No, sir, rates are not made that way. By experience we have some knowledge of about what we ought to have for the service in question.

Rate making, as a general proposition, is largely a guess; and the railroad people claim that by experience they are very much better able to guess correctly than the other fellow.

There are so very many factors entering into the cost that it is impossible to determine the cost of moving the different classes of freight. And we can only determine in a general way, from experience, about what is fair and compensatory."

Is that a correct statement of rate making as made in your department of the Iron Mountain road?

Mr. MOORE: You are asking that as a statement made by Mr. Johnson. Is that a statement made by him at a banquet or in a case.

Mr. HILL: Do you want to know the case.

Mr. MOORE: Yes.

Mr. HILL: It was made in the case of the Chapman and
1756 Dewey Lumber Co. vs. the Jonesboro, Lake City and Eastern Railroad, in the Circuit Court of Craighead County, in the Jonesboro District of Arkansas, in which your partner, Mr. William B. Smith, appeared as one of the parties.

A. I cannot say that I would agree entirely with that statement. That is, particularly in the terms in which it is expressed.

I have stated that I agree with the statement made that it is impossible for us to know what the cost is to move any one particular commodity for any given distance.

There are a great many factors, however, entering into the making of freight rates which would keep it entirely out of a guessing competition. We base freight rates to some extent it is true on our judgment, a judgment which we have received in years of experience along those lines.

While there is no hard and fast line, no scientific rule which can be laid down for making a freight rate exactly, where there are no two freight rates that will be the same, even on the same commodity, for the same distance, because there will probably be different elements entering into that particular movement; all of these matters have to be considered and naturally our judgment comes into play to a very large extent.

But, as I stated, there are a great many factors which we do con-
sider in making our freight rates and which do recur back
1757 to the cost of handling the business.

Q. What about Mr. Johnson's statement there "It is impossible to know the exact cost of moving any one ton of any particular class of freight for any particular distance."

Is that a correct statement?

Mr. MOORE: That is objected to.

Mr. HILL:

Q. Or if you will prefer it I will ask him if that is a fact.

A. That is correct, I understand.

Mr. HILL:

Q. Take this statement and I will ask you if this is a fact:

"It is very difficult to determine the cost of moving any particular commodity any particular distance. In fact, it may be said to be impossible to do it."

A. Accurately, yes.

Q. This is the statement I believe you say is not a fact:

"Rate making as a general proposition, is largely a guess. Railroad people claim by experience that they are much better able to guess correctly than the other fellow."

Is that right?

A. That is the particular statement I do not entirely agree with, or do not agree with, in those particular terms.

I think I know what Mr. Johnson had in mind in making that statement. That is, that in making freight rates we use our judgment to a very large extent. Our judgment, owing to our experience in the matter, is better than that of someone who has had no experience or no judgment.

1758 Q. If I would substitute the word "judgment" instead of the word "guess" that statement would then meet your approval, would it?

A. Read it again please?

Counsel here reads the statement referred to.

A. No, sir, I would not agree with it then. You have to take out the word "largely" to suit me. If you will substitute "to some extent" for "largely" I think I could agree with that statement.

Q. That would put you and Mr. Johnson pretty far apart, wouldn't it?

A. It probably would, on that particular statement. But the wording of that can be construed different ways. That is, you can put one extreme on it and I may put the other extreme on it.

Mr. MOORE: I move to exclude all of the statement- counsel has introduced in connection with Mr. Johnson, on the ground that they are introduced here for the purpose of bringing into the record the facts that two railroad officials differ as to the question to which the testimony relates, and it is not competent to do that.

The only competent way to bring in to this record the statement of Mr. Johnson, is to put him on the stand as a witness, as the statement made by him as a witness in another case is not competent evidence in this case, either to prove the facts stated by him

1759 or to prove that he entertains different views from the views of the witness now on the stand.

The MASTER: I will let the record stand as it is and let that go in. I would not undertake the responsibility of ruling that testimony out.

1760 *Stipulation of Counsel as to Value of the Property.*

It is agreed by counsel for defendant in these cases that the assessments introduced in evidence at the hearing of applications for injunctions in these cases before Judge Van Devanter, and which are set out in the exhibits filed by the accounting officials of the respective complainants in the evidence taken before the Master in these cases, were made upon the basis of 50% of the value of the property and that said assessments, multiplied by two, respectively, represent the value of the property, for the purpose of this case. Counsel for complainants have also introduced the assessments made by the Tax Commission of the state of Arkansas of the property of each of the complainants in the year 1909; which assessments are set out in the respective statements filed as exhibits in these cases by the accounting officials of each of the complainants.

Counsel for defendant objects to the competency and admissability of said statements, as to the assessments made in the year 1909.

But if said statements are admitted as competent, it is then agreed that they were made on the basis of 50% of the value of the property; and that in order to represent the full value they should be multiplied by two.

It is further understood that the defendants are not concluded by this agreement to object to any consideration of any items included in the assessments which the defendants claim should not be
1761 included therein, which has heretofore been brought out in evidence or which may hereafter be brought out in evidence.

NOTE.—The objection of the complainants to portions of statement attached to the map numbered as Exhibits 38 to 43 inclusive, are sustained as to certain matters which are stricken out of said statements by counsel for defendant; leaving certain other statement therein of affirmative facts, to which complainants also object but as to which the objection is overruled.

The witness C. E. Perkins on cross examination admits that the facts relating in the statements attached to the said map are true.

Complainants object, however, upon the ground that the statement attached to the maps are not the proper way to introduce independent facts of that character into the record.

NOTE.—It is agreed that the taking of testimony by the complainants may continue until the 29th day of January, 1910, upon which date it will terminate.

1762 F. P. JOHNSON recalled:

At the request of counsel for defendants Mr. F. P. Johnson files an exhibit which is an analysis of the mail earnings for the six months ending Dec. 31, 1907.

Said exhibit is marked "F. P. Johnson Exhibit 44."

Said exhibit is in the words and figures following to-wit:

For Exhibit 44, see Volume 8, page 5392.

1763 Cross-examination by FRANK NAY:

By Mr. HILL:

Q. Mr. Nay, as I understand the substance of your testimony, it is you prefer as more nearly accurate the revenue theory than the other two theories you mentioned in your testimony?

A. Yes, sir.

Q. You do not mean to state that the revenue theory would bring exact results, do you?

A. No, sir. I think I stated in the opening that to bring an exact division between state and interstate expenses was an accounting impossibility, that we had not yet found a solution of.

Q. Necessarily the revenue basis is dependent upon how nearly the rate is based upon the cost of the service, isn't it?

A. Yes, sir.

1764 Q. If the rate does not reflect the cost of the service, then this as a basis for ascertaining the respective expenses, intrastate and interstate, would not be of value?

A. If that was true. If the rate did not reflect at all the cost of service, it, of course, would be of no value.

Q. Its value is entirely dependent upon how nearly the rate reflects the cost of service?

A. Yes, sir.

Q. Have you had any experience in rate making?

A. No, sir.

Q. That is outside of your experience in railroad matters?

A. Yes, sir.

Q. Your knowledge upon that is largely theoretical, I assume?

A. Well, it is based on the knowledge of classifications and tariffs that have been prepared by other people.

Q. That is what I mean. It is not first hand knowledge?

A. No, sir.

Q. It is a knowledge which has come to you from your experience in the auditing department of railroads and so far as you are concerned is theoretical: isn't that true?

A. You mean the knowledge of?

Q. Of ratemaking.

A. Yes, sir, of ratemaking.

Q. Mr. Nay, have you given consideration to Exhibit 23
1765 this case, which is the calculation made by Mr. Kimbell. I called your attention to it at St. Louis. I don't know whether you gave it any close examination or not. I wish you would, if you have not already done so.

A. I have not, any more than I did at that time when we were there together.

Q. Did you examine it enough to answer questions as to its correctness? If you have not just look it over now.

A. (After examining paper.) I have examined it now.

Q. Does that exhibit correctly work out the effect of the increase that is therein indicated on the earnings and on the expenses?

A. I have examined the figures so far as they relate to the division on a straight revenue basis but I have not examined these results under the heading "100% extra cost," but those on the straight revenue basis, the calculations appear to be correct.

Q. That is really the same illustration as you used in your direct examination, isn't it?

A. Practically the same.

Q. Just using different figures to illustrate the point?

A. Yes, sir.

Q. You stated in your testimony on Page 1128 "An argument is sometimes used to the effect that using the revenue basis is like traveling in a circle, and those who take that position claim that when the revenue of intrastate traffic is doubled, the operating expenses are doubled, and the end is just the same as in the beginning."
1766 Then you gave an illustration to demonstrate the fallacy of that argument.

I will call your attention to the fact that the effect of the revenue theory as we contend for it, is not as you assume in your testimony, but is as shown in that illustration: isn't that a fact?

A. No, sir, I think both illustrations prove the same thing. That is, that doubling the revenue or adding one third of the revenue, does not double the expenses and does not add one-third to the expense of intrastate business.

Q. You don't quite catch my point: what I am calling your attention to is this:

The illustration you made was to meet an argument which was not being advanced by us, as you will see from our illustration. So your argument was shooting at someone else rather than the state, in this particular case: isn't that a fact?

A. Perhaps that is true. I have heard that argument used on several occasions and I ask your pardon. I did not want to intimate you were taking that ground, but I had not heard the testimony in the case. I did not have the advantage of hearing the previous testimony.

Q. You see from that we are making our calculations on the revenue basis, the same as you are?

A. Yes, sir.

Q. So this argument will lose its force as applied to the
1767 state of Arkansas in this particular case, whatever it may be to others, who are using it.

Mr. Nay, I wish you would turn to Mr. McPherson's Exhibit 30. Have you ever examined that?

A. No, sir.

Q. I will call your attention to that exhibit and ask you to look at the line which he has there representing freight earnings per ton per mile. It shows a considerable fall and also fluctuations as you will see by examining it.

A. (After examining Exhibit:) Yes, sir.

Q. You can see there it has fallen as low as 83 in 1906?

A. Yes, sir.

Q. And in 1907 at what does it stand?

A. 1907 it is 85, apparently strong 85, nearly 86.

Q. There has been some rise during 1907, I believe?

A. Yes, sir.

Q. It was in evidence in the hearing for a modification of the injunction in this case last spring, that during the period covered by the last four or five years on that chart, there was no material change in the intrastate rates so far as revenue was concerned. If that were true it would necessarily follow, wouldn't it, that the fluctuation or lowering in these freight earnings shown on that line you are now examining would be due to the lowering and changing of the interstate rates, wouldn't it?

A. I should not say it would necessarily be due as to
1768 that.

Q. Why wouldn't it?

A. Because the average revenue per ton per mile is not an absolute indication of the rates charged. For example, in one year there might have been say 50% of the traffic was coal or lumber, which

carried a low average rate per ton per mile; and in another year 30 to 35% of those so-called low class commodities; and that would cause fluctuations in the average rate per ton per mile.

Q. I see that is true; as a matter of fact in the last few years there has been no change in the movement of the classes of freight in Arkansas?

A. I do not know, and especially on the St. Louis Iron Mountain & Southern I would not know.

Q. Except for those differences you have indicated those fluctuations would naturally follow from changes in the interstate rates, wouldn't they, assuming the state rates were fairly level?

A. Yes, except for those indications—but I do not want to convey the idea that those indications are minor ones. As for example, I happen to know that with the Chicago and Eastern, Illinois Railroad, during the stringent period when business was dull, and their average revenue per ton per mile was higher than it was when their business was good, due to a falling off of the coal business.

Nearly 80% of their tonnage is lumber and coal, practi-
1769 cally all coal. That has impressed this point upon my mind in a way that makes me feel altogether that with other similar experiences, the change in the classes of freight may make a very marked change in the average rate per ton per mile, and the rates remain the same.

Q. That lowering and fluctuation in the freight earnings may represent either of two conditions, or probably both, the fluctuation in the interstate rates and the fluctuation in the classes of traffic carried.

A. Yes, sir, it may be either, as you say; or both; or it may be due to the change in the character of the state freight.

Q. I am assuming in my question to you, predicated upon this evidence, that there has been no material change so far as revenue producing rates are concerned in those years.

Mr. MOORE: You misunderstood him.

A. I understood your first question to refer to rates.

Mr. HILL:

Q. That is true.

A. If the character of the state freight had been different in the different years it would help along the fluctuations.

Q. I thought you said rate instead of freight. I see your point.

You notice a much greater rise in the cost of the various
1770 items of cost indicated on that chart, than there is a lowering of the freight earnings, don't you?

A. Yes, sir, that is of freight revenue per ton per mile.

Q. What effect would that have upon the use of the revenue as a measure of ascertaining the cost, interstate and intrastate, and is that marked difference that is shown in the chart before you?

A. I do not think that would have a serious effect. Of course, as I have said, the revenue basis is not an exact one, but the character of freight changes from month to month; and, of course, the expenses change with the character of the freight; and in that way I

think the revenue basis, whether it is lower or higher, more nearly measures the expense than either one of the other two I have mentioned.

The fact that the average rates are lower, would not necessarily condemn the revenue basis, because it might be due to lower rates or it might be due to a difference in the classes of freight handled; and, furthermore, while I have had no experience in actual rate making, yet every rate that is made is immediately furnished to the accounting department, and it is the duty of the accounting department to see that the revenue is collected, according to those rates. And as a matter of fact we know, as a rule when state rates are lower the interstate rates are also lower; and the reverse may be stated also, as a matter of common knowledge. That being the case, the two classes of revenue are somewhat similarly affected.

1771 Q. That is on the assumption there is a relation between the lowering or raising of state rates to the interstate. If that proper proportion were not kept between them, then the value of the revenue basis would be destroyed, wouldn't it?

A. No, sir, it might be somewhat impaired but certainly not destroyed.

Q. It would be very considerably impaired, wouldn't it, Mr. Nay, if both rates were changed and no change in the rate proportion to each other?

A. Well, not necessarily. It might have been they were not in proper proportions in the first place. That, of course, involves the making of rates.

Q. Of course you would have to assume at some time a proper proportion between them.

A. But the assumption is, as stated in my direct examination, that the rate making bodies while they do not take the cost of service as an exact basis, yet every schedule of rates they produce will give evidence on its face, practically every schedule, that the cost of the service is considered.

Q. Right upon that point, I want to call your attention to a summary which I have drawn here of what I understand to be the sum of the evidence in this case, upon this relation of the intrastate and the interstate rates.

It is in evidence that after the injunctions were obtained in this case the Iron Mountain and the railroads obtaining an in-

1772 junction, united in increasing the intrastate rates. That advance produced an estimated increase in revenue of 42%, as shown by the Iron Mountain, for the months of November and December, 1908.

It was claimed by the state that the increased revenue produced was about 77%.

Mr. Flippen, the Freight Traffic Manager of the Iron Mountain has testified that when the state rates were thus increased, as soon as the necessary work could be done and the statutory time observed, the interstate rates were advanced, in order that they might bear their proper relation to the state adjustment, and as we term it

(this is quoting from Mr. Flippen's testimony) "share their part of the transportation burdens."

By "interstate rates" he was referring to those rates having destination and origin in the state, and not to trans-state rates.

Mr. Flippen further testified that the measure of advance in interstate rates was not the same percentage of advance in state rates because of the fact that the adjustment relatively was already much higher and in explanation thereof he said:

"The rates within the state of Arkansas under the Commission's tariff were inordinately low and, therefore, when we came to the point of advancing the interstate rates with relation to the state rates we did not have to observe the same percentage."

He said the average increase of said interstate rates to readjust the relation, increased the state rates therefrom 10 to 15%.

1773 Now, assume for the purpose of this question the correctness of Mr. Flippen's statement above quoted, and that the railroads made an average increase of rates which produced at least 42% increased revenue, and, to observe the proper relation between state and interstate rates, increased the interstate rates having origin and destination in Arkansas ten to fifteen per cent on the average, but did not change the trans-state rates. Then were the revenues produced from the intrastate rates and interstate rates which existed before these advances were made, in such relation to each other that the revenue produced from them would be proper factors or accurate factors in determining the cost of operation, respectively, of state and interstate?

A. Well, of course, Judge Hill, in one case the 42% increase is in revenue and the other increase is in rates, as I understand.

Q. That is the way he stated it. I am quoting his language, I think.

A. It is assumed, however, that if any increase was more than 15% there could not be an increase in revenue of more than 15% in the interstate rates. And assuming that Mr. Flippen's statement as quoted here is true and that the state and interstate rates did not bear a proper relation to each other in the first place, it would indicate that the revenue basis, based on the lower state rates, was giving the state the best of it. They were not assigned their proper proportion.

1774 Of course, the revenue basis has that fault, it is admitted, that it is not perfect and no basis is perfect that has been discovered as yet. And it would indicate in the early cases where they used the lower rate, the Commission rate, that not a sufficient proportion of expenses had been assigned to state traffic.

Q. In that particular instance, as you give it, the state would get the best of it. And if it were the other way the interstate rates would get the best of it?

A. Surely, if the reverse were wrong. Either way.

Q. The fact that I asked you in particular was if the facts existed that way, will the revenue basis be a proper measure of relation between state and interstate rates?

A. Well, for the revenue basis to be the proper measure, excluding

in this consideration the addition of anything for increased cost, the state rates should be enough higher than the interstate rates to balance that excess of cost which operating men say exist in connection with state business over interstate business and if the state rates were not sufficient to produce that revenue, the state basis would be faulty to that extent. And if they were too high and so much higher than interstate rates of course it would be faulty the other way.

Q. The point of that testimony to which I have just called your attention, is this: there was not a proper relation between state and interstate rates during the period we have under inquiry

1775 (that is 1907) and if that is true then the revenue basis would not be a proper factor with which to apportion the expenses, would it?

A. Well, it would not be an accurate factor but being in my judgment the best that is known, it would be the proper one. I think in the first question you have the word "accurate;" it is not an accurate factor.

Q. It will fluctuate according to the fluctuation between state and interstate rates?

A. Yes, sir.

Q. And it will, of course, be inaccurate to the extent that the proper relation does not exist between state and interstate rates?

A. Yes, sir, I think that is true.

Q. And when the rate does not represent the cost of the service it would not be of any value at all, would it?

A. Well, if there was such a rate, no, sir, it would not be. If there was any such rate that did not represent the cost of service at all.

Q. Now, Mr. Nay, does not the rate pre-suppose it covers the cost of service and a profit also?

A. Surely, I should think it would. As I say, I am not a rate maker but it would seem that the railroads should have some profit or return upon their investment.

Q. There should be two factors in that rate: one, the cost of the service; and the other, the profit to the railroad company in performing the service?

1776 A. If I were making rates, I think as a novice I would use those two factors. I suppose there are others. There are commercial conditions which necessarily governs; and, of course, the density of traffic, which reduces the cost of the service.

Q. That just goes to the cost of the service in that particular country, I should take it?

A. Yes, sir.

Q. Then it depends upon how much profit or how little profit the railroad company puts into its rate, as well as these other matters, in order to use the basis as a factor to determine the expenses: isn't that true?

A. I should not think the profit would make any difference, Judge Hill. That is, as to the relation between the different kinds of rates. Because I should assume that where a profit was made and my

opinion is probably not worth much on that point, but I would assume it to be distributed pretty evenly over all the rates.

Q. Would that be the condition where you have to meet competitive conditions, and commercial conditions and new industries and things of that kind? Do you think the profit could be distributed into all the rates? Probably I should put that question to a rate man, but I am asking you from your observation in handling the revenues of the company.

A. I qualified my last answer by saying it probably was not worth much, from my experience; but that was my judgment.

1777 Q. If it were shown that a large proportion of the freight traffic of a road moved on rates which are not based on cost, what effect would that have upon your opinion of the revenue basis as applied to that particular road?

A. Of course the position which I have taken is that the cost is not the only factor that is taken into consideration; that the cost is considered. Now, of course, the rates might be based—I can conceive of a case where the rates might possibly be based largely on something else than cost. But if they were made in such a way as not to consider the cost at all, then, of course, the value of the figures for dividing expenses between state and interstate would not be very great. But in my experience, I do not recall rates of that kind. There may be rates made which are very low, which appear to be less than cost; while I assume the movement of a commodity that would be recognized to be a high class commodity, moving to the same point, would take a relatively higher rate.

So, while the rate man might not have consciously taken into consideration the cost, the general schedule of rates indicate that they have done it.

There might be exceptions to that and possibly are. But in this revenue basis there would be the exceptions and the rule. The revenue basis is used as a selected factor, taking all the revenue from all classes of traffic, these exceptions together with the items

1778 that fall under the rule. So if you had a case where all your revenue was produced by those exceptions then the revenue basis would be very faulty, indeed. But, in my judgment, there is scarcely a case where all the revenue of the company would be——

Q. I did not put it "all revenue." I said "a large proportion of the freight traffic." You might take some very large commodity to illustrate that, like lumber and grain and cotton. They have shown those rates were not based upon the cost of the service. While that would not be the entire traffic of the road, it would be very considerable traffic and my question was directed particularly to such matters like that, some large movements that were not based upon the cost of the service.

I want to know just what your view would be of the effect of such large movements as I have indicated, or any other illustrations that may occur to your mind, upon the revenue basis.

Mr. MOORE: Are you assuming in the case you have in mind that the rates are made without any regard whatever to the cost of the service?

Mr. HILL: I said they did not represent the cost of the service.

A. I believe the word is "not based on the cost of the service."

Q. It represents the same idea. Not based on the cost of the service or does not represent the cost of the service?

1779 A. Of course if the rates are made not based on the cost of the service, if there are such rates, that is one of the weaknesses of the revenue basis, which I freely admit. And the weakness would be simply to the extent of the relative amount of such business as compared to the whole.

Q. Mr. Watson, the Assistant Freight Agent of the Cotton Belt, testified that the Commission's tariff, that is the intrastate tariff, was not properly constructed so far as the relation of commodities and classes was concerned; and this improper relation existed as to both less than carload and carload rates; that they were out of proportion, considering the sale of the rates in the tariff.

He further says the tariff so constructed did not represent the cost of service or anywhere near it.

Assuming Mr. Watson's statement to be true, would it be proper to use the revenue derived from such a tariff as the measure of cost of operation of intrastate traffic?

A. I think it would be proper, as I say, because I think it is the best basis I know of. It would not be accurate and I think Mr. Watson's testimony would bear out what I have said, that he does consider cost of service when he makes the rates although not entirely, perhaps.

Q. You don't understand me. He was referring to the Commission tariff, which was not made by the railroads. He stated they were out of proportion and further stated that this Commission tariff did not represent the cost of the service nor

1780 anywhere near it.

Now all the freight revenue that is in this case was revenue derived from that tariff—intrastate rates, I am referring to.

Now, I ask you if the revenue derived from such a tariff would be a measure of the cost of operation of intrastate traffic?

A. Yes, sir, it would be a measure; not an accurate measure but I think the best known measure.

Q. It would necessarily be far from an accurate measure if Mr. Watson's statement is true, wouldn't it, Mr. Nay?

A. It would depend on just how far the rates were from the cost, as representing a relative cost. Of course, we must all bear in mind that it is the relation between the two which we are using all the time; and the interstate rates Mr. Watson doubtless had a great deal to do with the making of—and, by the way, when I refer to interstate I include trans-state, too, as we have but two classes of business. He undoubtedly in making the schedule of those rates had in mind the relative cost of the different classes of commodities and as the Commission rates accepting his statement to be true that they did not represent the cost, of course, the revenue basis would be faulty to the extent that they did not represent the cost. But even with its faults, I think it is the best we have yet.

Q. "With all thy faults I love thee still"; isn't that
1781 your position about it, Mr. Nay?

A. I presume that poetry has more sentiment than business to it. But with all its faults, so far as I know, it appeals to me as being the best basis we have found.

Q. You think it is better than the ton mile?

A. Yes, sir.

Q. That is the substance of all your testimony in this case, that in your judgment it is better than the ton mile?

A. Yes, sir, that is really what it amounts to. The ton mile is better than the ton basis and the revenue is better than the ton mile. Those are the only three bases that——

Q. I have not considered the ton basis at all. And I do not suppose you have given that any serious consideration. You have just considered whether you should use the ton mile or the revenue and your judgment is in favor of the revenue rather than the ton mile?

A. Yes, sir.

Q. And that is substantially your whole testimony in this case, as I understand you?

A. Yes, sir, that is correct.

Redirect examination.

By Mr. MOORE:

Q. You stated you would not engage yourself in rate making but still you have a general idea of the basis upon which rates are made, have you?

1782 A. My idea as I have said is formed from an examination of tariffs and classifications received from rate making bodies.

Q. What do you understand to be the principal elements that enter into the making of rates outside of arguments that may be brought about by competitive conditions and special commercial conditions? What do you understand to be the principal elements that enter into rate making?

A. My judgment would be the relative cost of the different commodities.

Q. I believe you stated on your cross examination that all rate schedules contained evidence on their face that the cost of the service is observed in making them: in that connection, I want to ask if you have ever had occasion to examine the schedules prepared by the Western Classification Committee?

A. Yes, sir, I have considered their classifications.

Q. What is the purpose of that classification, Mr. Nay?

A. The purpose of it is to divide the various kinds of freight shipped by carriers into classes: first, second, third, fourth and so on. By means of which the rates that are in the tariffs may be applied.

Q. Are those rates applied with reference to the classifications made by that committee. I will ask you if that classification on commodities carries on its face any indication whatever with reference to the cost in the classification made there?

1783 A. It seems to me to be very clear that it does, and the reason I say that is, not because I had anything to do with pre-

paring the classification but because, for example, taking some things with which I am familiar.

I take corn planters first, because I was raised on a farm. Corn planters set up take double first class rates. Corn planters knocked down, in packages, take third class rates.

Q. How do the rates apply to them on that classification?

A. There is one tariff for a distance of five miles double first class would be 40 cents and third class would be 13 cents.

Or for a distance of 100 miles, double first class would be $1.26 and third class would be 42 cents.

Q. It is not worth while multiplying instances, Mr. Nay. But I will ask you to state if the illustration from that runs generally through that classification?

A. Yes, sir, it does. Another case is harrows set up with teeth one and one-half times first class, knocked down, tied and in bundles, they are third class.

Corn planters set up and harrows set up make bulky freight. There could be only a relatively small weight loaded into a car of that kind of commodity while if knocked down and put in packages there might be a great deal more loaded into the car; therefore, on the face of it, without being an operating man or a rate making man, it seems very clear even to a layman——

1784 Q. In other words, in one case they occupy much less space than the other?

A. That is the idea. All the way through the same thing prevails. Take fanning mill, first class and knocked down third class.

Bulky, light articles, which occupy little space take a higher class; and bulky heavy articles like bricks and bells and coal and sand, and so on, take a lower class. And they take a lower rate from the rate schedules.

If the charge was made by space it would be a different proposition entirely. But the reason for that is that the charge is made by weight.

Q. Your attention was called to Exhibit 23 prepared by Mr. Kimbell at the request of defendant's counsel?

A. Yes, sir.

Q. I wish you would state whether or not that illustration is based upon the condition that you have ever seen or heard of in railroad practice with regard to changing one rate without changing another?

A. No, sir. And in that respect it is like the one I mentioned in my testimony, that it was a very extreme condition and probably an impossible condition.

Q. When you say "impossible" you mean impossible in view of railroad practice and custom, do you?

A. Yes, sir, it would be impossible to have during one period $100,000 of revenue made up of $85,000 interstate and $15,000 state and in another period interstate revenue remain exactly the

1785 same and the state revenue increase 33 1-3% and the expenses remain the same.

I used that kind of example because I thought it made the illus-

tration more forcible against an argument which I find now has not been brought in. But it is an impossible condition, I should say, in actual railroading.

Q. Your attention was called to Exhibit 30 filed by Mr. McPherson and you were asked in regard to the cost and fluctuation on the red line there below the base, which indicates the earnings per ton per mile: you stated that line's fluctuations in earnings shown by the red line, might indicate a difference in the commodities; they might be higher and thereby increase the rates.

If that were true, would not that show that the revenue basis is probably the best upon which to represent those changes?

A. Yes, sir, I think so because the rates are different on the different classes of commodities.

Q. Would the ton mile basis throw any light upon it at all? Would the ton mile basis show any change in the character of the commodities which might affect the rates?

A. Oh, no. Every ton mile would be exactly the same, on the ton mile basis.

Q. What effect now would the increase in the class of commodities, assuming there was a higher class of transportation: how would that effect that line upon the revenue basis?

1786 A. The revenue would be more per ton per mile on the higher class commodity and by using the revenue basis it would assign a greater portion to the period when the higher class was handled.

Q. Would that fluctuation be shown by the diagram there, if that were the fact, if the class of commodities were higher and the revenue was increased thereby, would the fluctuation on that line indicate that?

A. I don't know that I quite understand your question, Judge.

Q. What I mean to ask you, Mr. Nay, is this: if that were the case——

A. If the commodities were of higher class?

Q. And you were to attempt to represent the earnings per ton per mile by a graphic representation, would it be reflected in the representation you make?

A. I understand the question, is, is it? If the class of commodities were higher in one period?

Q. Assuming a higher grade of commodities with reference to rates were transported in 1907 than in 1904, now if you make a graphic representation intending to represent the revenue—or, rather, if you make a graphic representation of it, would the change affected in the revenue by the higher grade of commodities carried appear upon your diagram?

A. Yes, if the rates remained the same.

Q. What has been the tendency in the average ton mile
1787 earnings since the Commission tariff was put into effect in Arkansas?

A. What date did that go into effect?

Q. 1900.

A. The tendency has been downward according to this diagram; and I think that is true of the Rock Island results.

Mr. HILL: Do you mean according to the map or according to the facts?

A. Both, I think.

Mr. MOORE:

Q. Mr. Nay, referring to the chart Exhibit 30 to which your attention has been called, I wish you would state what relation that chart shows during the period of time covered by it to exist between the expense of operating railroads and the earning capacity of the lines?

A. Well, the chart shows that such items of expense as cross-ties and all other material, train labor, track labor, and taxes have all increased very materially, some of them apparently more than double; while the average revenue per ton per mile has decreased during the period covered by the statement.

Q. To what extent, if you know, do the things that are covered by the chart there and shown to have increased in price, enter into the operation of railroads. Do they constitute a large or a small proportion of the cost of maintenance and keeping up of railroads?

1788 A. They constitute a very large portion, I can say that.

Q. That is all I want, just to know whether it is a large or a small proportion?

A. If I had some detail of operating expenses I could figure out some sort of percentage. But it is quite a large proportion of the elements of operating expenses.

Q. How does the upward trend of prices of labor and material, as shown on that chart, compare with the prices of general product of industry in this country during the same period? Such as the farms, agricultural, labor, and in fact prices generally of those things which enter into living, manufacturing and carrying on of the industries of the country? How does it compare with the trend of prices as shown upon that chart?

A. With the trend of prices it compares favorably with those other things. That is to say, I think it is a matter of common knowledge that prices of nearly all commodities that enter into the cost of living have increased: in fact, I read the statement recently by the manager of the Siegel, Cooper Grocery Company, that the only thing he was able to find that had not increased in prices was prunes. Other things had increased largely.

Q. How is it with the prices of materials that enter into manufacturing and industrial operation of the country: they have shared in the rise of prices?

1789 A. I think so. I know that steel and iron, which enter largely into manufacturing have increased largely in price, according to what railroads pay, and I suppose others pay the same prices.

Q. What has been the increase relatively in the rates charged by railroads during the same period, for transportation?

A. The tendency has been downward. The average prices of the unit for transportation has been decreased.

Q. And that has occurred while the cost of production of everything else has increased, hasn't it?

A. Yes, sir.

Recross-examination.

By Mr. HILL:

Q. Notwithstanding the increase in the cost of labor and other items shown on that chart, and the decrease in the earnings the Iron Mountain is shown to be paying 10% dividends on its stock and paying interest on a large bonded indebtedness. That would indicate that it is getting along pretty well, notwithstanding the increase in the prices, wouldn't it?

A. If it is able to keep its property in good shape and earn a ten per cent dividend over and above all its charges, yes, it is doing well.

Q. To use a slang phrase "it has not much kick coming," has it? Don't you think that is doing remarkably well?

A. For railroads, yes.

Q. Isn't that doing well for any large enterprise, to pay a
1790 large bonded indebtedness and pay 10% dividend on its stock?

A. My impression has been that private enterprises pay much better than that.

Q. Large ones, where anything like the capital that is in a railroad is invested?

A. Yes, sir, we read frequently of corporations doubling up their capital, like Sears Roebuck & Co. doubled up their capital and the Burroughs Manufacturing Company, that manufacture the Burroughs Adding Machine, which I understand are paying several hundred per cent over the original investment.

Q. They have patents upon those?

A. Their patents have all expired now, I understand.

Q. That is a large earning power for a railroad, isn't it?

A. That is larger than the average.

Q. If there is a larger profit in the intrastate rate than in the interstate rate, owing to competition that largely controls the interstate rates, wouldn't that fact, the difference in the profits on the two rates make it unfair to use the revenue, intrastate and interstate, to measure the expenses of operation with?

A. Of course, in the first place it would depend on what basis was used in determining the profit was larger in one case than in the other. But if that could be absolutely determined beyond
1791 any question of a doubt, which is an impossibility, I think, then of course the revenue basis would be faulty to the extent that difference existed.

Going back to the same statement again, that the revenue basis is not a perfect basis but is the best known basis at this time.

Q. It seems to have several faults, doesn't it, Mr. Nay?

A. These faults are really the same fault under different names, I think.

Q. Not under different names but under different circumstances; isn't that more nearly the case than under different names?

A. My idea in making the statement that they seem to be the same fault was that the two rates, intrastate and interstate, seem to be out of proportion to each other, and that is what produced this unfairness that is spoken of. If they were in exact proportion all the time, the revenue basis would be a perfect basis.

Q. And if it represented the cost of the service? You would have to have that also?

A. I presume if they were in proper relation to each other they would represent the relative cost of the service. When I say "in proper relation to each other" I mean in reference to the cost of the service.

Q. Some of these traffic men use that term in an entirely different sense. I think your use of it is correct but you will see from the testimony the others use it as having a proper adjustment to the
1792 commercial conditions. A just rate of one trade center with another trade center. That is the reason I was particular in calling your attention to it. You mean by it a proper relation of the cost of the service: isn't that right?

A. That is what I had in mind.

Q. That is what you had in mind in your testimony generally, I assume.

A. The proper relation?

Q. The proper relation of cost, you mean?

A. Yes, sir, the proper relation in regard to the cost.

Q. You said in regard to the illustration exhibit 23 and a similar one in your testimony, that that would be an impossible situation. I want to call your attention to this fact, although I presume you know it that there was this large increase in state rates and it was certainly more than 33⅓%, as assumed in Exhibit 23; for at least two months there was no increase in interstate rates. You know that to be a fact, don't you?

A. No, sir, I don't know it but I think that is correct.

Q. And during that period, during those two months, the illustration Exhibit 23 would be a proper illustration of the exact conditions, wouldn't it?

A. Only providing the character of the freight, state and interstate, was exactly the same in both months, which makes the illustration I think impossible. The relation of each of the many
1793 commodities would have to be just the same, just the same proportion of first class freight, just the same proportion of second class freight, and so on.

Q. That is the other proposition. I understood you placed the impossibility to the fact that there would not be an increase of one rate over a relative increase in the other?

A. You understood me. I mean the condition, I think I stated, whether there would be a one hundred thousand dollars of revenue in one case——

Q. I understand your point in that, but I thought you put the im-

possibility that there would be a corresponding raise of the interstate revenue. You did not put it upon that?

A. No, sir, that was only one of the conditions that made it impossible.

Q. So far as that condition was concerned, this actual thing occurred in Arkansas.

A. It might happen.

Q. And it did happen, as a matter of fact.

Now your other proposition rendered it impossible, simply because exactly the same kind of traffic does not move in a corresponding period, which of course is true.

A. Yes, sir.

Q. But taking it generally speaking, on the roads in Arkansas, I do not suppose there is a great difference in the character of the traffic, is there, in one year as compared with another year?

1794 A. Well, I have not made any investigation of that but I would suppose there is a difference and the reason I suppose that, Judge Hill, is that in compiling our monthly statistics we find the average revenue per ton per mile differs in different months, one month with another, and that the total average for the year is something different probably from either one of the months.

I had occasion to look up certain averages for six months in Arkansas, and I did not find that any two were alike. They varied from nine mills up to fourteen mills on the average revenue per ton per mile.

Q. That would always be true, I assume. There never could be absolutely uniform movement one year with another?

A. I do not suppose so.

Q. The fluctuation would be just such fluctuation as would be natural in freight handling?

A. I presume so.

Q. I infer from your answer to Judge Moore a moment ago that traffic men bore in mind, either consciously or unconsciously, the consideration of the cost of the service in making all rates: I want to call your attention to some testimony given by Mr. J. M. Johnson, whom I presume you know, the Vice President in charge of traffic of the Iron Mountain road?

A. Yes, sir, I know him.

Mr. MOORE: Was that testimony given in this case?

1795 Mr. HILL: No, it is the same testimony I have had here before.

The MASTER: The testimony is admitted subject to the objection.

Mr. HILL:

Q. This question was put to Mr. Johnson. I will give you the substance of it:

"But in making rates is the the general average of cost of moving the commodity taken into consideration in fixing a rate that will be compensatory in the moving of any particular commodity? I refer to the general average of cost you have spoken of, as shown by your records at the end of the year."

"A. No, sir, rates are not made that way. By experience we have some knowledge of about what we ought to have for the service in question, but rate making as a general proposition is largely a guess and the railroad people claim that by experience they are much better able to guess correctly than the other fellows. There are so many factors entering into the cost that it is impossible to determine the cost of moving the different classes of freight. And we can only determine in a general way, from experience, about what is fair and compensatory."

Q. Now, if Mr. Johnson is right in stating that rate making as a general proposition is largely a guess, what would you think of your revenue basis?

Mr. HILL: No, I will give him Mr. Perkins' answer. Mr. Perkins' answer made to you when you asked him that?

Mr. HILL: No, I will give him Mr. Perkins' answer. Mr. Perkins made a very good answer.

A. My idea about that is, of course Mr. Johnson knows more about rate making in a minute than I would know in a hundred years. But I am satisfied if I take the schedules that Mr. Johnson has compiled, he will guess relatively higher rates for instance for
1796 fanning mills set up than he will for sand. That is what I mean. The relative rates. Not as to whether any particular rate is compensatory or not, on that particular commodity, but the relative rates.

I am sure I could take all the tariffs Mr. Johnson has compiled in all his tariff making, and that relatively higher rates for a fanning mill as compared with sand will always prevail.

Q. Of course I understand that you would charge more for hauling pianos than you would for hauling sand?

A. Yes, sir.

Q. But that is a very broad proposition, to state that way. That gets it down to rate making. He says rate making. He is not referring to classification. He says "rates are not made that way. By experience I have some knowledge of about what we ought to have for the service in question. Rate making as a general proposition is largely a guess. The railroad people claim that by experience they are much better able to guess correctly than the other fellow."

What I want to know is if they are made that way and if made that way what value would you attach to the revenue theory?

Mr. MOORE: That is objected to because counsel is stating that as Mr. Johnson's opinion and there is no evidence that that is Mr. Johnson's opinion or any evidence of it except a mere reading of it by counsel.

The MASTER: The testimony will be admitted subject to the objection.

A. The revenue theory rests not upon whether a rate is compensatory or not. The revenue theory applies where the
1797 rates produce a deficit as well as if they produce a surplus. It bears upon the relative rates for the different kinds of com-

modities. If they guess the rates for every commodity then the revenue theory would not be any better than the ton mile theory—in other words, if they made exactly the same rate for feathers, cordwood, or what not, that would be the ton mile basis. That is what the ton mile basis would use. But as a matter of fact we know if they are guessing they do unconsciously take into consideration, if they do not do it consciously, the relative cost of the service.

They will haul a carload of saw logs for a great deal less money than they will a carload of apples, for the same distance.

Q. It is not the basic cost you are referring to but the relative cost?

A. Yes, sir, the relative cost.

Q. You understand the state rates certainly in Arkansas and probably in many other states, are fixed by the Commission; so the railroads do not get a guess at them. So you must interpret Mr. Johnson's testimony here as referring to interstate rates?

A. Yes, but my examination of the two I find that practically the same relative cost of first, second and third classes in carloads exists with the Commission as with the interstate rates.

1798 Q. You differ with lots of these witnesses, like Mr. Watson, very much, Mr. Nay.

A. His judgment is better than mine. I say practically the same. I have not compared individual rates. But what I mean, Judge Hill, is to say for example, here is an Arkansas rate, a rate for first class 50% more than the rate for fourth class. In the interstate rate tariff the rate for first class is double the rate for fourth class.

What I mean is, that they have preserved a relation and fixed a higher charge for the commodities that are classed as first class in this classification than they have for those fixed as fourth class.

Q. That is following out the classification. And I suppose they run along general lines with not much difference. But Mr. Watson in our last hearing took a great many instances of the leading commodities in the state and pointed out where there was an improper relation between state and interstate rates. I have forgotten now how many but especially in the case of commodity rates, where it called for a large movement.

In view of these facts and in view of the fact that Mr. Johnson said interstate rates (it must have been interstate rates) are largely made by guess, what would you say to the revenue theory applied under conditions like that?

A. I still think it is the best we have.

Q. These facts I have just enumerated in this question would very much impair its value, wouldn't they?

1799 A. No, sir, I don't think so. I understand the relative difference between what we call high class commodities is still preserved, even where the relation may not be perfect, still there is a difference between millinery and pig iron.

Redirect examination.

By Mr. MOORE:

Q. Your attention was called to the fact that at the time the rate

charged by railroads was increased by putting in a voluntary rate by the railroads in November, 1908, that some weeks lapsed before a corresponding change was made in the interstate rates: could that be avoided under the rule of the Interstate Commerce Commission requiring notice, and other rate matters that entered into a change in the interstate rates?

A. Of course I am familiar with the rules of the Interstate Commission requiring thirty days' notice before a rate is advanced; and there would be at least that delay before a rate could be advanced.

Q. In your experience and knowledge of railroads, have you ever known of a radical change made in one class of rates, state or interstate, and a change to correspond with it not made in the other class as soon as it could be done?

A. I have not checked up such matters, Judge Moore, to be able to state positively; but from my general understanding I should say not; although there may be some few cases of that kind.

1800 Q. You know the rule in such cases?

A. Yes, sir.

Q. During the last few years, say eight or ten, what has been the tendency as to the earnings with reference to the increase of the industrial concerns generally of the country,—industrial and manufacturing establishments? Have their earnings, their profits and prices grown larger or have they grown smaller or what has been the trend during the last eight or ten years, since 1900?

A. I really do not know, except as to prices.

Q. And what has it been as to prices?

A. As I said before, prices of nearly everything have advanced,—as I guess we all know.

1801 I. G. RAWN, a witness of lawful age, being duly produced, sworn and examined in behalf of the plaintiff, testified as follows:

Direct examination.

By Mr. MOORE:

Q. Mr. Rawn, state your full name, please.

A. I. G. Rawn.

Q. Will you state your occupation?

A. President of the Chicago, Indianapolis & Louisville Railway.

Q. How long have you been engaged in railroad service, Mr. Rawn?

A. Twenty-five years, or more.

Q. Will you state concisely what your experience has been in railroad operation, stating the various positions you occupied and with what railroads?

A. In official positions, I have occupied that of Train Master, Superintendent, General Superintendent, General Manager, Vice President and President.

The railroads with which I have been connected are, what is now part of the Big Four; the Kentucky Central; the Chesapeake &

Ohio; the Illinois Central, and the Chicago, Indianapolis & Louisville.

1802 Q. Have the positions that you have occupied given you any facilities for making investigation as to the cost of operation in the transportation of freight by railroads?

A. Yes sir.

Q. Have you given that subject any thought and consideration, Mr. Rawn?

A. I have.

Q. The lines of railroads mentioned by you as those with which you have been connected, are all, I believe, east of the Mississippi River; have you had any experience in the operation of roads west of the Mississippi River?

A. I have not.

Q. You have no knowledge, then, I take it, of local conditions in that territory?

A. None whatever.

Q. Have you given any consideration to the question as to whether there is any difference in the expense or cost of operation as between local and through trains, and in the expense of handling traffic which is hauled on local, and that which is hauled on through trains?

A. I have.

Q. I wish you would state if, in your judgment, there is any difference in the expense of operation as between local trains and through trains?

A. Yes, there is a difference.

Q. Will you now state, Mr. Rawn, in your own way, what the difference consists of? I will be glad if you will make as

1803 full and complete a statement as necessary to present your views.

A. As I understand, your question and inquiry is as to whether in my judgment there is any difference in the cost of operating what is termed through freight trains, and local freight trains?

Q. That is my question, yes sir.

A. There is a considerable difference. Do I understand from your question that you desire my opinion as to what constitutes the difference—how it is brought about?

Q. Yes, that is what I intended to ask you: what that difference consists in; what differences exist as between the one class of freight and the other, and what brings about and creates the difference in cost?

A. The difference in cost is in favor of the movement of through freight.

Q. I understand that you mean by that, that it costs more to handle local trains—that traffic which is conducted on local trains, than on through trains: is that what I understand you to mean?

A. Yes; the difference in the increased cost in handling local freight trains, as compared to through freight trains, is occasioned by many conditions.

The local freight train necessarily consumes more time in making

the same distance, than the through freight train, because of doing what we call local work, at the different stations. The through
1804 freight train goes over that same district without making the stops and doing what is termed the local work. As a consequence, the time consumed by the locomotive and cars, engine and train crew, is necessarily greater on the local freight train than on the through freight train.

The rate of pay is higher per unit on the local freight train than on the through freight train. There is less use obtained by the Railroad Company of the locomotives and cars used on local freight trains than on through freight trains, because of the additional time consumed in making a relative distance. The consequent consumption of fuel and supplies is relatively greater because of the additional time consumed in going a given distance, and the additional switching necessary at all of the local stations; the general local work at the different stations, which is not done by through freight trains.

All of that very materially enters into the cost of the local freight train in excess of the through freight train. The Railroad Company must of necessity have a greater capital investment in locomotives and cars in the performance of local freight business, than through freight business, because of the additional time consumed by the local freight train over the through freight train, per given distance, as I said before.

The expense to the Railroads of the maintenance of their station forces is, in great preponderance, due to the conduct of local
1805 business and not through business. That becomes a very large item of cost consequent upon local business. That is true at all stations, and if it were not for the local business the large forces at all of the stations would not be necessary nearly to the extent that it exists.

The train load handled by the locomotive on local freight trains is very much less than that handled on through freight trains. As a rule, through freight trains are not run over railroads excepting where there is what we call full tonnage, for the locomotive; the recognized tonnage which the locomotive is capable of handling. That is not true of local freight trains. Local freight trains are run daily, without reference to the amount of business on that particular day. It is a regular service that must be performed. Even if there is what might be termed a full train for a local freight train, it would be of very much less tonnage than that handled by the same locomotive on the through freight train, because of the necessity of stopping at all stations and doing the local work, and the (in a way) limited amount of tonnage in local service, as compared with through service. Hence, the very material reduction in the tonnage handled per locomotive; hence the increased cost in handling local freight as compared with through freight.

Q. In your enumeration, I think you said nothing in regard to the effect upon the cost of maintenance of equipment and of way, grow-
ing out of the different method of handling the two classes
1806 of trains: if there is any difference in the method of handling which has an effect upon the relative cost, will you explain that also?

A. I would not consider there was any difference in the cost, so far as maintenance of way was concerned. There would be some additional cost—considerable additional cost with reference to the maintenance of locomotives, for two reasons:

In the first place, the greater number of locomotives it would be necessary to maintain in the conduct of local business, accomplishing the same train mileage or ton mileage as the locomotive in through freight service; hence the material increase in the maintenance, by reason of the additional number of locomotives.

Another element of increased maintenance cost would be the lesser miles made by the local freight locomotive; hence the increased cost per engine mile for repairs.

I do not consider that there is any material increase in cost in maintenance of cars in local freight business and through freight business.

Mr. HILL:

Q. You just put that difference on locomotives?

A. Locomotives particularly, is the item.

Mr. MOORE:

Q. Are there not switches which are used—side tracks, in the operation of local trains for the purpose of distributing local freight, that are not used by the through trains as much (if at all) as they are by local trains?

1807 A. Oh, yes, to a considerable extent.

Q. What is the effect of wear and tear upon the cost of maintenance, in that class of operating?

A. Of course, all of the wear and tear upon the sidetracks purely local to each station, is made by the local business.

The side tracks at the stations used for what the railroad companies term "passing side tracks" is used by both local and through trains, so the maintenance of the passing siding should not be considered more cost for the local business than the through freight business. I think I would in a measure qualify, to the extent that the tracks are used purely for local business at the different stations, their maintenance would be chargeable wholly to local business.

I had in mind, when I said there was no difference in maintenance, the main tracks, the passing side tracks, the buildings, etc.

Q. You have mentioned the use of stations and station service, as growing very largely out of local traffic: what are the elements of additional cost incident to terminal service in the use of local trains, and the distribution made by local trains?

A. Do I understand you to mean at stations?

Q. Yes, at stations.

A. Do you mean what enters into the increased cost by reason of local business?

1808 Q. Yes.

A. Its increased forces, increased number of men necessary to the operation of the station, by reason of the local business. As I stated before, if it were simply the through business, one man

might possibly do all of the business; while with the local business at that same station—just in the way of illustration—there would, perhaps, be three, four or five men necessary. That would depend, of course, upon the character of the station and the volume of local business done.

Q. You include in that the clerical work that is incident to that?

A. It is largely clerical work, and laborers.

Q. When you spoke of cars a while ago, in connection with the maintenance cost, I suppose you spoke with reference to car for car: I will call your attention to the fact (which I believe you stated in the former part of your testimony), that more cars are used in doing a given amount of local business, than through business: what effect does that have upon the cost of maintenance as a whole?

A. As the increased number of cars bear to the total number of cars used.

Q. There is, then, an increased cost of maintenance in that way: that more cars are required to perform the same amount of service?

A. Certainly.

1809 Q. What relation is there, if any, between local and through traffic, and state and interstate traffic? I will be glad if you will explain what, in your experience, you have found to be, if any, the relation that exists between the two classes of freight traffic.

A. For the purpose of determining the cost of operation of transportation, the question of state and interstate traffic is not the method of consideration. The method is that of through and local business. I would consider, however, that the relation (if it may be termed so), between through and local business, and state and interstate business, would be that state business might be termed a local business, and interstate business a through business.

I would not consider those lines as accurately drawn, but state business is of necessity limited in territory and extent, and so is local business. So that I presume, to a very great extent, on railroads throughout the country, the local freight trains as a rule would be confined to within states, although that would not wholly apply, and railroads do not run their local freight trains with a view to confining them within state lines. But to my mind, there would be a relation between state and interstate business, and through and local business, in that state business would very nearly conform to what we term local business, and interstate business would ordinarily conform to through business; if that answers your question.

1810 Q. I wish you would state, taking into consideration the direct train expense and other expenses, such as terminal at stations, the difference in the cost of maintenance, either of way or equipment, and all the elements that have been mentioned by you, what difference you estimate there is in the expense of conducting local as against through business?

A. That subject has been a matter of very great consideration on all railroads for a long period, for many reasons and many purposes, and my own deduction and investigation leads me to say that I have regarded—and it has been universally regarded—that the

operation of local freight trains—the direct cost of operation of local freight trains, as compared with through freight trains, is a minimum of 3½ times more.

That has been a generally well accepted basis, I think I am safe in saying, excepting further, that there are a number of elements entering into the cost of local freight trains, as compared with through freight trains, that increases that difference.

Q. Let me see if I understand: do I understand that in the statement just made by you, that you refer to direct train expenses when you say three and a half times as much?

A. Well, I would refer to direct train expenses, and, if it expresses it properly, things contingent thereto. There are many details that enter into what we call direct train cost, so that that is rather
1811 a broad proposition, in that it takes in many details——

Q. Excuse me for interrupting you, but I will ask you to go on with your statement later.

I would like to know if there are other elements, and if there are, what are they?

A. One of the very important elements that enters into the difference in cost between local and through freight, is the limited tonnage of the local trains compared to the through trains. In the operation of railroads it is termed the "ton mile cost."

In other words, the capacity of a locomotive to haul freight and the load which it does haul. Therefore, any material reduction from the capacity of the locomotive very materially increases the ton mile cost, because of the reduction below the capacity of the locomotive.

Q. Is that in addition to the elements that you considered in your former answer?

A. Very largely so. The station expense—and I would say with reference to the station expenses, as I did about the direct train cost—there are many details entering into the station cost (but it would properly be termed a station cost), which increase materially the cost of handling of local freight. So the proposition of 3½ times the cost does not, in my opinion, cover the entire difference in cost between handling through freight trains and local freight trains. That is an opinion I have held for a number of
1812 years and is based upon my experience and investigations made.

Q. Could you undertake to state what the total difference (considering all the elements thus involved in the difference of tonnage or station expense) would amount to?

A. I do not think I should make that statement; no; for the reason that to be altogether accurate as to the total amount, I would say that detailed figures should be produced, which I am not in possession of at the moment.

I simply want to emphasize as my opinion, based upon years of experience and investigation in this matter, that the minimum difference in cost we have regarded for a number of years, as between local and through freight service, is 3½ times; and I further emphasize that there are many elements entering into the cost which increases that difference.

That is the only statement I would be willing to make and I would not be willing to make any statement of figures, for the reasons I have given.

Q. I suppose you mean that that depends upon local conditions?

A. Not altogether. It depends upon local conditions, and yet the same general elements enter and govern on all railroads, to more or less extent; but what I have in mind (if I can make it clear) is, if I were to say to you it is five times as much, it would be perfectly competent that I should show figures, but I am simply giving my opinion as an experienced railroad man.

1813 Q. Now, then, to sum it up, Mr. Rawn, if I understand correctly: your estimate of train cost, of those things incident thereto, which you enumerated in the first part of your statement, would make a difference of 3½ times as much expense in conducting the local over the through freight trains and business; that there is additional expense, such as difference in tonnage, terminal expense, station expense, which are not included in that, and you do not undertake to state what——

A. That is correct, including the capital value of locomotives and cars, and that sort of thing.

Q. Mr. Rawn, I understand that the matters in regard to which you have been testifying, are such as are general and common to all railroads throughout the country?

A. I should say so, with a possible slight difference in local conditions; but I would consider that the same general principles apply.

Q. Excluding such modifications as might grow out of local differences, topographical and other local conditions, is the practice in local transportation and the conduct of it, about the same on large railroads throughout the country, in a general way?

A. Yes, substantially the same, I think.

1814 Cross-examination.

By Mr. HILL:

Q. What familiarity have you with the Iron Mountain in Arkansas, Mr. Rawn?

A. None whatever.

Q. You have been over it, I presume?

A. Yes, some years ago; not during the past ten years, perhaps, or more.

Q. You are testifying as to general conditions as you find them in the railroad world with which you have been familiar?

A. That is correct; east of the Mississippi River.

Q. I wish you would give your definition of local and through freight.

A. Through freight is composed of carload shipments which pass directly from one district or divisional point to another district or divisional point, or beyond, and as a rule, does not stop between district or division points, with the exception—for your information (doubtless you are familiar with it, but for your information), an occasional car might come from a distance and pass a district or divis-

ional point, and go to its destination between district or divisional points.

As a general proposition through freight, as I say, is made up in train loads and carload lots, and passing between district or divisional points, or beyond.

1815 Local is principally made up of less than carload freight, destined to local stations between district or divisional points where the local freight train is scheduled to run, and more or less carload freight for such local stations.

Q. Does not the through train carry the less than carload freight that goes through the division?

A. Do you mean goes beyond the divisional point?

Q. Yes.

A. There are instances of that kind.

Q. They are quite common, are they not?

A. Yes, to a limited extent.

I shall use west of the river as an illustration; assuming that the practice is general throughout the country: a less than carload car might be loaded at St. Louis, and be carried by a through freight train over one or two divisions, before going to some point where it would begin distribution by a local freight train; to that extent.

Q. In other words, your through freight trains would carry less than carload freight?

A. Only long distances, for distribution upon a restricted district.

Q. But through and local trains carry state and interstate freight, do they not?

A. As a rule, yes.

Q. I did not quite catch your relation between the local to the state, and the through to the interstate: I wish you would explain that a little more fully, Mr. Rawn.

1816 A. I said, or intended to say, that in the operation of a railroad, the definition has not been, or the distinction has not been, in the class of operation and cost of operation in the difference of state and interstate traffic, but in answer to the question, it seemed to me that the nearest relation would be to liken the state freight to the local, and the interstate freight to the through; inasmuch as the local freight trains, I presume as a rule, throughout the United States, are run within a state—although that is not altogether so and is not designed so by the railroads; the railroads run their local trains in certain districts whether it happens to pass a state line or not; but I think it is safe to say that the preponderance of local freight trains in this country are run within a state, and therefore a restricted district. So is the state freight a restricted district; while the through freight, of course, runs without any reference to state lines as well, and usually longer distances. I said that for comparative purposes it seemed to me that the interstate might be likened unto the through freight. That is the relation I intended to convey.

Q. Assuming for the moment that it is correct, as a general proposition, that local freight is run within state lines: that does not mean that it carries state freight entirely, or even necessarily a large proportion of state freight, does it?

1817 A. It does not mean that it necessarily carries only state freight. I would think that it would carry a great preponderance of state freight.

Q. Has your experience led you into the handling of cotton?

A. I have had to do with it; I don't know to what extent you mean by experience.

Q. I mean whether the railroads you have been connected with have been cotton carrying roads?

A. Yes, the Illinois Central is a cotton carrying road.

Q. You, of course, are then familiar with the way in which cotton is carried by local trains into compress points, and from compress points on to the seaboard?

A. Yes sir.

Q. There would be an instance of a local train handling a very large volume of traffic which was interstate, would it not?

A. Yes, as a specific traffic, that is correct.

Q. Lumber which is gathered up first from the forest; then carried to the saw-mill, and then from the saw-mill out to interstate points, would be another instance of the local train handling a large volume of interstate traffic, would it not?

A. Yes, excepting that that would be, I should say, very much less than the cotton, for the reason that the logs are usually handled by the logging roads to the mills, and they become a trans-
1818 portation, as a general proposition, from the mills.

Q. I call your attention to the fact that Arkansas is one of the largest lumber producing states in the country.

A. I am not under-estimating the volume of the lumber business, but I am taking up the point that you make as to the local freight trains handling a large volume of logs that afterwards becomes interstate freight. I say that that, in my opinion, would be a small matter in comparison with the amount of cotton that is so handled.

Q. I put two propositions there, Mr. Rawn. I think you just caught one. There is a movement of the logs to the saw-mill, and then there is a movement from the saw-mill to the next division point—saw-mills are not, as a rule, division points, I presume?

A. Well, they are and they are not.

Q. Of course, some are and some are not, but there would be two movements——

A. Yes sir.

Q. The movement of the logs into the saw-mill, and then the movement of the sawed lumber out to the next division point, if the saw-mill did not happen to be stationed at the division point: is not that correct?

A. I shall have to answer that based upon my experience in this respect, and not with reference to Arkansas.

The large preponderance of lumber handled from Louis-
1819 iana and Mississippi is not handled as you say, by local freight trains. The larger mills are served at the district or divisional points, or by through freight trains, and not by local freight trains, although there is more or less handling of it, as you state. There is a large amount of handling of cotton in the manner you state.

Q. Practically all of the cotton is handled that way?

A. Necessarily so.

Q. I believe it is in evidence here that less than one per cent is consumed locally, in Arkansas.

A. I am not prepared to say.

Q. That is a conceded fact in this record.

A. Yes, I think so.

Q. There are shipments of grain that come from the grain districts into Arkansas, and are then distributed out from trade centers, some as a new shipment, but I believe most generally on the milling in transit rate from point of origin: that large volume of grain that would be shipped out under the original rate, would be necessarily interstate shipments, and that would move on local trains, would it not?

A. I should think so, although I am not familiar with such traffic.

Q. Speaking as a general proposition, that would be the course of handling it?

A. As I recall, the volume of grain business going into that portion of the south with which I am familiar, was altogether
1820 a re-consigned proposition, from a point like Memphis, and was not a milling in transit rate. That is my recollection of it, but whether——

Q. We can concede it, I take it in this case, that the grain moves on the milling in transit rate: assume that to be true, for the purpose of my question: then there would be a large movement of grain on the local trains, after it reached the trade center in Arkansas, would there not?

A. I am not familiar with the conditions, so I do not think it is competent for me to discuss that.

Q. I give you these different instances, Mr. Rawn, on cotton, lumber and grain, to show a very large interstate movement on local freight trains, which I believe you accept as being the general condition of affairs, and ask you if in view of that fact, you would consider that there was any close relation between the local train and the intrastate traffic?

A. I stated a moment ago, or intended to state, in answer to your question, that while there is more or less interstate business moving on local trains, as you say, I give it as my opinion that the great preponderance of freight moved on local freight trains, is state freight and not interstate. That is my best judgment. The question of territorial boundaries of local freight trains has never been, as I said before, regarded as between state borders; but I think that investigation throughout the country will show that perhaps more largely confined to within state borders.

1821 Q. I understood your general proposition, but I was calling your attention to what was in evidence in this case, as to conditions in Arkansas, and asking you—assuming these conditions that I have stated, to be true—if that would not disturb somewhat the relation which you have given of interstate to local, as you generally find it?

A. Well, I should think if it is shown to be a fact that the local

freight trains in the state of Arkansas actually handle the preponderance of interstate freight, that is one thing, but I would have to say that in the first place, I have no knowledge of Arkansas, and in the second place, the statement you make with reference to local freight trains in Arkansas has not been my experience during my time.

Q. That is what I supposed, and the reason I was stating to you what we conceive to be the facts that have been developed here, and ask you to give your views, assuming the facts I stated to you are correct.

I take it those are not what you have generally found to be the case?

A. No, and therefore it seems to me that I am not competent to discuss a matter with which I am not at all familiar.

Q. I would not think of questioning your competency to discuss these propositions.

A. I thank you very much, but I question my own competency, because I have no knowledge of them.

1822 Q. Then, if the situation in Arkansas is about as I have outlined in these questions, you would not consider yourself competent to discuss the relation of the local to the through?

A. No, because it is at variance with my experience.

Q. Let me state another proposition to you that I believe is conceded in this evidence to be a fact: at the two extreme borders of the state are two large distributing points, Memphis and Fort Smith. Memphis, you know, happens to be across the river and all of the freight coming into Arkansas from Memphis is necessarily interstate.

Fort Smith, while in Arkansas, has the line of the Iron Mountain running into Oklahoma, which carries all of its freight through Oklahoma, and makes that interstate freight. Excluding the transstate freight (and by that I mean freight passing across the state) the proportion of the interstate freight handled in and out of Memphis and Fort Smith is about 13% of the total of that class of interstate freight in the state of Arkansas—I believe, to be accurate about that, it is 13% of the tons and about 3% of the ton miles. That, I presume, would bring about a condition in the relation of the through and local trains in Arkansas, different from what you had in mind when you were stating the general proposition affecting their relation?

A. I would consider that only to the extent to which such freight applied. Perhaps in answering a different way, and not to evade your direct question, a local train starting from Memphis,

1823 going into Arkansas, would have the same elements of cost, even though it happened to pass from Memphis across the river into another state. For the purposes of operation and the costs of operation, of course the elements would be the same, notwithstanding the local freight train crossed the border line from one state to another. Perhaps the mileage would be the same per day as though it were all confined to the state of Arkansas or Tennessee.

Q. That is true, Mr. Rawn, but in this case——

A. Pardon me, I would still say, in answer to the original question, and in answer to your question, that if you were to make a comparison between state freight and interstate freight, and local freight and through freight, that it would be proper, and to my mind more competent than anything else, to liken the state freight to the local freight, and to liken the interstate freight to through freight. It seems to me that the relations are more nearly correct, if we discuss a relation. That is what I mean.

Q. Mr. Rawn, the evidence in this case shows that this freight in and out of Memphis and Fort Smith, which you have very correctly said carries on a local freight, would not differ in cost by the fact that it crossed the state line; but that is carried in this case as interstate traffic, and properly so, under the law.

1824 A. I would like to ask in that connection, whether that is not a question of the rate, possibly, on interstate traffic, while, as I understood, it is the desire that my evidence should be as to the cost?

Q. It is carried on an interstate rate, Mr. Rawn, and it is classified as interstate freight, and in making the division between the state and interstate in the exhibits in this case, that is part of the interstate business, and the cost apportioned accordingly.

A. Of course, I have no desire to discuss my friends who are operating that railroad. The fact that they maintain an interstate rate or local rate, will not change the condition of their cost in the operation of that local freight train.

Q. It would be entirely a matter——

A. That is a matter for them to decide, however.

Q. Mr. Rawn, you spoke about the industrial or local tracks, at stations, and that the local train would go in there to get cars: you do not mean that you would attribute all of that to the state traffic, do you?

A. I think it is quite evident that I was talking about local freight and through freight, and that I was determining the cost as between local and through.

A. I thought so, but you spoke of the direct cost of local as against the through: can you get the direct cost of local as compared——

Mr. MOORE: Take transportation cost: what he understood me to mean was the cost incident to transportation——

1825 Mr. HILL:

Q. Can you get a direct cost of one train as against the other?

A. You can as pertains to many elements; some are necessarily an approximation. For instance, you take the maintenance of way, all that sort of thing that has to be arbitrarily divided.

Q. What is that?

A. The question of maintenance of way is necessarily divided between different classes of trains.

Q. Is that transportation cost?

A. No, that is a maintenance cost.

Q. Mr. Moore wanted me to confine you to transportation cost, but I would be glad to have you give your views on the whole subject.

Mr. MOORE: You are mistaken. I was asking for information to know whether he confined certain remarks he made to direct transportation. I wanted to know what his estimate of three and one-half times applied to.

Mr. HILL:

Q. I will ask Mr. Rawn to give us his views as to getting at the direct cost of transportation.

A. I hope it will be understood, so as to economize time, that I said in reply to the question a few moments ago, that I shall decline to enter into the question of dollars and cents, or percentages; I shall not do that.

Mr. HILL: I understand that.

A. I desire to give in this testimony, my judgment based upon my experience.

1826 Q. That is what I am calling for.

A. Based upon experience, and a great deal of investigation, we find a very increased cost in the operation of local freight trains, by reason of the increased unit of wage. The local freight engine men and train men get a higher rate per mile a day, than the through freight men, and the cost of fuel and supplies is greater because of the increased time——

Q. I believe you misunderstood me.

A. That is a transportation cost.

Q. I am not asking you for figures and things of that kind, but a method for getting at them. You refer to getting at the direct cost and I want to know how you would get at the direct cost of those two kinds of trains.

A. Of the items that I have referred to, we get at the direct cost by reason of the difference in the rate of pay——

Q. That can be found on your books?

A. Yes; and in the difference of the amount of coal consumed

Q. That can all be ascertained?

A. Yes sir.

Q. What I wanted to get at is this: if this can be ascertained and those that cannot be ascertained definitely, how would you approximate them?

A. The approximation is based upon many conditions of the different railroads. It would vary to some extent, and

1827 while the general result would be in a measure approximately the same, yet there would be many variations.

The direct cost would be, as I say, that of wage, that of consumption of fuel and supplies, and that of the ton miles, which is a very decided difference, and of course, an accurate measurement, because that is a matter of record with all of the railroads. They determine very accurately the ton miles of the local freight trains, and the ton miles of the through freight trains, and the mixed freight trains, so that that is a method of determining——

Q. Is that an accurate method?

A. Absolutely so.

Q. —of determining the cost?

A. Yes, because it is the ton miles which they make, and of course the cost——

Q. I am not asking about this extra cost. You have explained that. I am asking you how you divide your expenses between the local train and the through train.

Mr. MOORE:

Q. Is your answer complete? If not, complete it.

A. Thus far.

One of perhaps the most accurate methods of determining the division of costs, if that is proper, is the ton miles. That is one of the very large elements and methods of determining the cost of the through freight and the local freight; on the question
1828 of maintenance and many other things that would otherwise not be determinable.

Q. What besides maintenance?

A. Maintenance of equipment and maintenance of way.

Q. You would divide those on the ton mile?

A. Very largely so, as well as on train mile, between passenger and freight.

Q. How about maintenance of equipment between passenger and freight?

A. Well, of course, the passenger equipment is charged to the passenger miles, and freight equipment to freight miles, so that determines itself. When you speak of maintenance of way and maintenance of equipment, you have taken all there is except the cost of transportation, what is termed conducting transportation, and capital.

Q. Then if I understand your view it is this: that on maintenance of equipment and maintenance of way, you would divide that on ton mile——

A. Or train mile.

Q. As the case might be; and as to conducting transportation, which would be all of the balance of the expense, you would arrive at actually?

A. No, there is part of that that would necessarily be determined on a train mile——

Q. What would that be?

A. Part of the station expense, for instance, would be determined on a train mile, between the passenger and freight; the
1829 agent or force at the station that performed a certain amount of service for passenger.

Q. Coming back to the local and through: how would you determine that?

A. That is not determined except taking the individual railroad and the individual stations, but the principle is the same throughout.

Q. You would do that on a tonnage basis, would you?

A. Not necessarily.

Q. How? I am trying to get at that.

A. I am going to answer that. A man familiar with that particular railroad—the manager, if you please, would determine that. Say at station A. there was a force of an agent, five clerks and three laborers. He would determine, from his knowledge of the business and the operation of the station, the proportion of that station which would be chargeable to through and local.

Q. In other words, if there was fifty per cent of local business at that station, and fifty per cent of through, you would divide it equally?

A. That is right, but the preponderance, as I said a moment ago, is of course local because of the——

Q. I am just using that as an illustration.

1830 Redirect examination.

By Mr. MOORE:

Q. Mr. Rawn, the through traffic as distinguished from local, is that which usually transports freights from centers of trade or manufacture, from one section of the country to another section, for the purpose of distribution and consumption, is it not?

A. I presume that is a fair definition, although the through freight business—and for the purpose of determining cost of through freight trains—is any business which the through freight train may handle between district or divisional points.

Q. I am not speaking with reference to the cost, but the use: I want to know, in view of the location of centers of trade and manufacture in this country, and also the consuming districts which are usually supplied from those centers, whether state lines are disregarded, and this through business does not largely consist in transporting business from one state to another, growing out of trade and manufacturing centers, as relating to consuming centers?

A. I think that is correct.

Q. What is the purpose of the local train; is it not a distributing train?

A. Yes, within a restricted district.

Q. It is a peddling train which distributes this freight that is brought in by the through train?

A. Yes, or that which originates at the place where the
1831 local freight train originates.

Q. You spoke a while ago about determining the cost by ton or train miles: is that the gross or net expense that you referred to?

A. Gross expense.

Q. Would you undertake to divide the expense of conducting——

A. Pardon me, I said gross expense. When you say net expense, may I ask what you mean?

Q. Perhaps I used the term in the wrong way there, because there is really no such thing unless it would be gross or net revenue.

A. That is why I asked you what you meant.

Q. What I want to get at is this: would it be feasible to under-

take to divide the expense of conducting state and interstate traffic, in your judgment, by the ton miles, without regard to the qualities and characteristics of the freight that is to be moved?

A. I would not consider that a very practical proposition.

Q. The question I asked you a while ago suggested to me that you spoke of dividing the ton miles between local and through business: do you mean gross ton miles or net ton miles?

A. The gross ton miles enter into the cost; it is what it costs the railroad company to transport the whole thing——

Mr. HILL:

Q. The difference you mean, is the difference in company
1832 freight handled—the difference in company material and equipment?

Mr. MOORE: No, it is the difference, as I understand it, between the freight that is net, and the freight and equipment——

A. I was only talking about ton miles on commodities.

1833 W. J. MCKEE, a witness of lawful age being duly produced, sworn and examined on the part of the complainant, testified as follows:

Direct examination.

By Mr. MOORE:

Q. State your full name?

A. W. J. McKee.

Q. Are you engaged in railroad service?

A. Yes, sir. I am General Superintendent of the Missouri Pacific Railway Company, at Kansas City.

Q. How long have you been engaged in that kind of service?

A. Since 1873.

Q. In what capacity did you enter the service?

A. As telegraph operator; then as agent; and then as train dispatcher; chief train dispatcher; train master; assistant superintendent, superintendent, and general superintendent.

Q. With what road did you begin your service?

A. On what is now the Big Four, in Cleveland, Ohio.

Q. And how long were you with that road?

1834 A. 16 years. With the Cleveland, Delaware & Cincinnati.

Q. And what road did you go with when you left there?

A. The Chesapeake & Ohio.

Q. And how long were you engaged in that service?

A. I don't recollect just the date. There is a biography that will tell that. I was there probably two or three years.

Q. Where did you go when you left that service?

A. To the Central of Georgia at Savannah as train master.

Q. And how long were you there?

A. Eighteen months.

Q. Then where?

A. What is now part of the Illinois Central. It was then the Louisville, New Orleans, Texas & Pacific. It is now the I. C.

Q. How long were you engaged there?

A. I was there six months and was then transferred to the division between Louisville and Memphis, now all owned by the Illinois Central.

Q. In what capacity were you there?

A. Superintendent in both places.

Q. Then where did you go?

A. Then in 1893 I went to Little Rock as Superintendent of what was then the Central division extending from Coffeyville,
1835 Kansas, to Alexandria, Louisiana, with headquarters at Little Rock and stayed there until 1900.

Q. In what capacity?

A. Superintendent.

Q. Go ahead.

A. I was then transferred to the Arkansas Division which included the line between Poplar Bluff and Texarkana, Memphis and Bald Knob, Knobel to Helena, and various branches of the Arkansas Division.

Q. Through Arkansas you say?

A. Yes, sir, through Arkansas.

Q. How long did you remain on the Arkansas division?

A. Until 1902 when I was transferred to the Colorado Division at Pueblo, Colorado. I stayed there three or four months and was transferred to the Eastern Division at Sedalia, which embraces the lines from St. Louis, Kansas City and Joplin.

I stayed there four years and was made General Superintendent of the middle district, with headquarters at Coffeyville, Kansas.

Q. What was your jurisdiction under that assignment?

A. I had the Iron Mountain lines between Little Rock and Coffeyville, between Newport and Carthage, Wichita, Southern Kansas, and the Joplin divisions of the Missouri Pacific.

After staying there a year and a half they discontinued the middle district and split the general superintendent's territory into
1836 two districts, the northern and the southern and I was sent to the Southern district at Little Rock.

After staying there one and one half years I was transferred to the northern district at Kansas City, where I am now located.

Q. What territory was under your jurisdiction when you were at Little Rock the last time?

A. I had the lines south of St. Louis and west of Coffeyville and the dividing line at Carthage.

Now, the dividing lines were St. Louis, Coffeyville, and Carthage, the same as now.

Q. Was that the time your headquarters were at Little Rock?

A. Yes, sir.

Q. Did that take in any of the Arkansas lines?

A. All of the Arkansas lines.

Q. You spoke of your service on the Big Four, the Chesapeake and Ohio, and the Illinois Central; I believe Mr. Rahn, who pre-

ceded you on the stand, testified that he was connected with those roads during the period of his service: were you engaged on the same lines with him at any time when he was there?

A. All the time. All the time on the Big Four and the Chesapeake & Ohio. In other words, Mr. Rahn employed me to go from the Big Four to the Chesapeake & Ohio when he went there.

Q. Mr. McKee, you are familiar, then, are you, with the
1837 conditions that existed upon the roads upon which Mr. Rahn was engaged, and in regard to which he testified this morning, during the time he was there?

A. Yes, sir.

Q. I wish you would state whether there was any similarity in regard to the conditions as to matters of transportation on those lines and the lines of the Iron Mountain and other roads in Arkansas?

A. They are similar? In what respect do you refer to?

Q. In the matter of conducting transportation and in such matters as would enter into the cost of transportation, through transportation and local transportation?

A. Why, yes.

Q. Have you had occasion during your experience in railroad service to give any consideration to the question as to the cost of conducting transportation?

A. Yes, sir.

Q. Have you given any attention to the question as to the relative costs in the different departments of traffic, such as local and through transportation?

A. That word "traffic" in there——

Q. Perhaps I had better use the word transportation, instead of traffic?

A. Yes, sir, I have.

Q. What is a through train and what is the character of traffic usually conducted on through trains?

1838 A. Through trains are trains consisting first of cars loaded as much as possible to their capacity and trains loaded to the capacity of the engine. That is what a through train is.

Q. What is the character of freight usually carried on through trains, as between state and interstate freight?

A. It is mostly interstate. In fact, there is only a very small proportion—a very small proportion—of intrastate freight carried on through freight trains compared with the entire commodities carried on through freight trains.

Q. How is the running of through freight trains regulated. Do they run at regular stated times or are they governed by other considerations?

A. They are run whenever they can get a full tonnage for a train except to even up the power. In other words, they must have full tonnage in one direction.

Q. What is a local freight train?

A. A local freight train is a train of which the commodities largely consist of what is termed "less than carload freight." It might be

a full car of freight but we would term it less than carload freight; not usually a full car, but what we term less than carload freight is what the locals mostly consist of. And they are run for the accommodation of intermediate towns on a division, and must run every working day, regularly.

Q. Are they run with reference to divisions? You spoke
1839 of divisions just now: are they run between division points usually, or something of that cort?

A. We cannot always do that. They are sometimes run over only one half of a division, what we call a local district.

Q. But they are run as locals as distinguished from the run of the through trains?

A. Yes, sir.

Q. Are you prepared from your experience in the operation of railroads to state whether there is any difference in the cost or expense of operating local trains and through trains?

A. Yes, sir.

Q. What is the more expensive train to operate?

A. A local freight train, for a great many reasons.

Q. I would like you to state, Mr. McKee, what causes that difference in the cost of operation as between those two classes of trains and the reason why it is more expensive to operate the local than it is the through trains. I would like you to state as fully as you wish, so as to save repeated questioning.

A. Among the reasons I will state a few that occur to me just now.

First, the decreased tonnage loaded in cars handled by the local freight trains,—when I say decreased tonnage, I mean tonnage per car, causes more cars to be used in the local trains handling
1840 the same amount of freight than in the through trains.

That causes the increased cost of the cars and an increased cost for maintaining the equipment.

Switching the cars in local freight trains at almost every station increases the wear and tear of the cars more than on the through freight trains. And materially increases the cost of maintenance of equipment, on that account.

The claims caused by the damage to freight is heavier on local freight trains than on through freight trains, caused by the class of commodity handled, such as merchandise, and in case of derailment it is very much more cost to the company.

Also on account of the switching continuously at stations, causing the damaged claims to arise.

The maintenance of track is considerably more due to local freight trains than through freight trains, because the through freight trains use the main line and passing sidings, except in rare instances that the through freight trains are run, but a very small proportion are run to pick up at industrial tracks.

Therefore, the local freight trains in addition to using the same main line and passing sidings that the through freight trains uses, uses the house tracks, the industrial tracks, and other tracks almost

exclusively, which largely increases the cost of maintenance due to the local freight trains over that of through freight trains.

1841 The cars handled in local freight trains have a class of commodities that are shipped to many different people that it requires to each car ten to twelve times the number of way-bills that it does to a car in the through freight trains. That causes additional work in the way of clerks, agents, warehouse men and laborers at both the starting point and the receiving point. And cuts considerable figure in the cost of handling the cars on local freight trains.

The cost of fuel and other supplies on local freight trains is more than on the through freight trains.

Q. Why is that Mr. McKee?

A. Because they stop so much more. That would apply to coal, oil, waste, danger signals, and other supplies.

There is an increased cost for the wages of train and engine men on the local freight trains over the through freight trains.

I would say we pay as much for running 60 miles on a local freight train as we do for running 100 miles on a through freight train—at least. In some instances more, which would include the regular wages and overtime.

Those are some of the items, Judge, that go to increase the expense.

Q. Is there any difference in the train haul as between the local trains and the through trains and if there is any difference does that have any effect upon the relative cost of operation?

1842 A. Yes, sir, that cuts a very large figure in the cost.

Q. Explain that and I would like to have you explain that fully, Mr. McKee, if you please.

A. Well, if you can haul five times the tonnage in a through freight train for 100 miles by paying less wages to the train and engine men; and less cost for supplies than you do on the local freight train for running 70 miles, if the local freight train running 70 miles on a higher rate of pay and more overtime, and using more supplies in the way of fuel and other supplies, it stands to reason that the train haul cuts a very large figure in the expenses of running the local freight trains as compared with running the through freight trains.

Q. Does that difference which you refer to and which you say "if it exists" in reality exist?

A. It does. That is a very conservative estimate.

Q. What does that condition grow out of, Mr. McKee, that increased efficiency: I suppose you would call that a difference in efficiency of the service of the two trains.

A. You cannot handle the potential of an engine on the local freight train. You handle the commodities that are to be distributed at various stations along the district that the local freight train covers. You have to give them what is termed "a light train." Even if you had the freight you could fill them out with, you would not do it.

Q. Why not?

1843 A. Because you decrease the efficiency of the local freight train. They could not make the time between stations, start and stop quick and do their work in the prescribed time.

Q. You mean the switching?

A. Yes, sir, doing the switching, picking up their train and going to the next stop. They would get only half way over the road before a day's work was completed so far as the men were concerned and a day's work not completed so far as the company is concerned. So we load them light and start them out with merchandise cars and various empties for local points.

Q. Now how is that in respect to the through trains?

A. The through trains, as I explained before, will handle full tonnage in one direction, at least, and you will hold your freight trains until you get your full tonnage. On the other hand, the starting point in handling through freight trains is to first full-load your cars. You increase the efficiency in that respect.

Q. That is the through trains you speak of?

A. Yes, sir. You cannot full-load your cars on the local trains but you full-load your cars on the through freight trains as much as it is possible to do so. Then you give the train the tonnage the engine can handle—and when I speak of the five times difference between the through freight and the local freight I am figuring on the same class of engine, Judge.

Q. You are speaking of train mile tonnage when you say
1844 five times as much?

A. Yes, sir, train mile tonnage or gross tonnage, either.

Q. You said a while ago, the local trains run every working day?

A. Yes, sir.

Q. Do they do that without regard to the loading?

A. Yes, sir.

Q. Do those local trains run on schedules?

A. Yes, sir.

Q. Do they run in one or two directions, daily?

A. Two directions.

Q. You mean one run in each direction between the points between which they are operated?

A. Yes, sir.

Q. And that is without regard to the loading of the cars?

A. Yes, sir. The tonnage on the car in the local trains would not average more than four and one half to five tons per car. The tonnage of a car on the through freight will run from 16 to 40 tons.

Q. Does it average as high as four and one-half to five tons a car on the local trains?

A. I doubt if it would. But that is a conservative estimate to say it would.

Q. By saying "conservative estimate" do you mean that is a high estimate?

1845 A. Yes, sir, a high estimate.

Q. There is also a class of interstate transportation which has been termed in this case "trans-state traffic"; that is, in which

the cars (speaking with reference to the state of Arkansas) pass across the state and are neither loaded nor unloaded in the state.

I wish you would state if you have in mind in speaking of the through trains that class of traffic or the class of traffic which either originates or terminates in the state of Arkansas.

Speaking now with reference to conditions that exist in that state?

A. I couple both together, the trans-state—in fact, I included all through freight.

Q. That is what I understand. When you say through freight you include so far as it refers to trans-state, all classes of interstate freight?

A. Yes, sir.

Q. Have you at any time ever made any test for the purpose of determining the efficiency as between the local and the through trains?

A. Yes, sir.

Q. Along the lines you spoke of a moment ago?

A. Yes, sir.

Q. State what you did in that respect and what it showed?

1846 A. I desired to make a test to ascertain the net train mile tonnage on local trains as compared with those on through, and it demonstrated that there was five times the number of net tons moved one mile on through freight trains that there was on local freight trains, and the tests made on the through freight trains included the locals, which materially decreased what the showing would have been on through freight trains, providing that the local had been held out in making the test for the through freight net train mile tonnage.

Q. When you say "showing" do you mean the showing of expense?

A. The expense would naturally follow.

Q. What lines were those tests made on? In what state and on what line of railroad?

A. They were made in Arkansas altogether.

Q. On what line of railroad?

A. Between Malvern and Little Rock.

Q. Was it on the Iron Mountain?

A. Yes, sir, altogether.

Q. Where did you make it, on what part of the line?

A. Between Malvern and Little Rock, Malvern and Texarkana, Little Rock and Hoxie. Between Gurdon and Camden; between Little Rock and Denning and between Van Buren and Denning; and then on the Memphis division.

Q. Did those parts of the line fairly represent the entire Missouri Pacific in Arkansas?

1847 A. It represented practically all of it, except on the branches.

Q. Will you please state, in view of the differences to which you have referred in the manner of operating the two classes of trains, what in your judgment is the difference in expense of

operation as between local and through trains: in other words, how much greater the expense of operating local trains is than through trains?

A. They cost on an average from four to five times more to operate local freight trains from any standpoint—no, I will not say from any standpoint; I mean, from the standpoint of cost—than it does to operate through freight trains. That is a very conservative estimate. In other words, I would call it low.

Q. That estimate is the result, is it, of your experience in operating railroads?

A. Yes, sir.

Q. Is there a similar division of the service as to passenger trains, as to that which you have spoken of with reference to freight trains? I am not speaking of the cost, now, but am speaking of the division with reference to through and local trains?

A. I don't know that I just catch just what your question is.

Q. I will re-state it:

Do railroads as a rule operate through passenger trains and local passenger trains?

1848 A. Yes, sir.

Q. Now I will get you to define what is a through passenger train?

A. A through passenger train would be from St. Louis to Texarkana.

Q. You mean on the Iron Mountain road?

A. Yes, sir.

Q. And what is a local passenger train?

A. A local passenger train would be one from Little Rock to McGehee; Russellville to Little Rock or Russellville to Fort Smith.

Q. Are trains run in that way on the Iron Mountain in practice?

A. Yes, sir.

Q. Is there any difference in the cost of operation between local and through passenger trains?

A. In Arkansas?

Q. Yes.

A. Whenever you run a local passenger train a short distance you have two terminals, you know, to take care of. Take the case at Russellville, we run that train from Little Rock to Fort Smith, we would get away with considerable terminal expense at Russellville and also they would make less engine miles. In other words, use less engines. It takes more engines to run local passenger trains, comparatively to the mileage, than through passenger trains.

1849 Q. Do those differences result in any differences in the cost of operating the two classes of trains?

A. Yes, sir.

Q. Which is the more costly?

A. The local passenger trains are more costly.

Q. Are you, from your experience in operation, prepared to state whether there is any difference in the expense of transporting local passengers as compared with through passengers?

A. Yes, sir, the through passenger gets on the train and goes through. The local passenger rides only a short distance.

Q. Is there any difference in the terminal expenses with regard to the two classes? Where the through passenger is an interstate passenger and the local passenger is an intrastate passenger?

A. Yes, sir, there would be the difference of the agent's work selling the tickets and checking the baggage and receiving the baggage at the stations if there is any. It would be a large cost. And there is extra engines used and extra equipment used. In other words, it is lying "dead" all night long, which does not enter into the through passenger service.

Q. And all that difference enters into the two classes of passengers?

A. Yes, sir.

1850 Q. Speaking of the difference a while ago in the cost of operating the two classes of freight, I do not recall that you made any statement in regard to the difference, if any, in the frequency of stops: is there any difference in the frequency of stops of the local and the through trains?

A. Yes, sir.

Q. Is there a difference in cost?

A. Yes, sir.

Q. Does either the through or the local passenger train, and if so which stop more frequently?

A. The local train stops much more frequently than the through train.

Q. Is there any difference in the expense involved in that?

A. Yes, sir, the wear and tear on the equipment and the cost of the fuel.

Q. Are you prepared to make an approximate statement as to the difference in cost of transporting interstate and intrastate passengers?

A. No, sir.

Q. You do, however, say there is a difference, and that it costs more to transport local than interstate passengers?

A. Yes, sir.

Cross-examination.

By Mr. HILL:

1851 Q. Are you using the term "interstate passenger" as equivalent to through passenger?

A. Yes, sir.

Q. And you are using the term "intrastate passenger" as the equivalent of local passenger?

A. Yes, sir.

Q. That is a passenger carried on the local train as contradistinguished from a passenger carried on the through train?

A. Yes, sir.

Q. There are a great many passengers carried on local trains to

the next divisional point or larger town and then they get on the through trains?

A. Not very much, in Arkansas. We do not carry that as extensively in Arkansas as in the eastern states.

Q. I do not catch that.

A. That does not apply to Arkansas as much as in other states.—That is, to run "pick-up trains" for the through trains.

Q. There is a great deal of travel of that kind in Arkansas?

A. Not very much.

Q. On the main line?

A. One or two trains there, but it is not as extensive in Arkansas as it is east of the river.

Q. I believe it is in evidence here that on the main line the train stops only every 35 miles. I mean the through trains.

1852 A. That probably is correct. I have not figured that.

Q. You take that distance of 35 miles, wouldn't there be a lot of local passengers that would have to be picked up by the local trains, that are going to make interstate journeys?

A. My experience in Arkansas is that the local trains carry*ing* state passengers and very few interstate passengers; and that the through passenger trains do carry some intrastate passengers.

Q. How do you know what are state and what are interstate passengers on those trains?

A. Take the line from McGehee to Little Rock. The interstate passengers average on that line going into Louisiana about three to a train.

Q. How do you know that?

A. Because I have checked it up.

Q. Was that the test you spoke of?

A. No, sir, that check was made for another purpose, and not for this purpose at all.

Q. When was that check made?

A. About a year ago that test was made.

Q. Can you give the figures on it?

A. No, sir, we just checked it to find how many passengers were going to Louisiana.

Q. Just one train?

A. Six trains going into McGehee.

Q. Did your check extend along the line only from Mc-

1853 Gehee to Little Rock.

A. Altogether, yes.

Q. Did you go over any other part of the main line?

A. No, sir, that was one place we checked it. That is the one place I know of.

Q. What did you say the proportion was?

A. There were about three passengers on that train, on the average, that went into Louisiana.

By the way, they did not all go into Louisiana. They went to Lake Village. I mean south of McGehee—let me see, I don't believe it averaged one. There was Lake Village and McDermott.

Q. How many trains did you take, just one?

A. We checked the night train and the day train, too.

Q. Two trains then. How long a period did you check that for?

A. The night train we checked, I think we took two months. We paid more particular attention to that because there was a longer wait between the trains.

Q. During those two months what proportion of your passengers were interstate and what proportion were intrastate?

A. Going into McGehee on that train there were not any interstate.

Q. Going into it from Little Rock?

A. No, sir. And going back there was not any interstate
1854 on that particular train. Now on the through train that went in there at midnight, it averaged three that went through.

Q. It averaged three?

A. Yes, sir.

Q. How about the line up to the Fort Smith branch?

A. My opinion is that up on the Fort Smithe branch there would be a very small proportion of those interstate, except the line from Russellville to Fort Smith, that would go around by way of the Cherokee Junction.

Q. They would be all interstate?

A. Yes, sir. I judge you know that is correct, because there was quite a dispute about it, you know.

Q. I don't think there was much dispute about it.

A. Oh, there was a big dispute about it.

Q. I thought you meant in this case? It is not disputed here?

A. Oh, no.

Q. That is about half the travel there, two trains each way. Or is it as much as half, going via Cherokee Junction?

A. I do not understand you there. Half the travel on the Fort Smith branch?

Q. Yes. You run two passenger trains across the bridge and the balance of your trains are run by Cherokee?

A. Let me see if I understand what you want.

Q. I understand you run a passenger train each way across
1855 the bridge; that would be intrastate traffic?

A. Yes, sir, our bridge.

Q. No, across the Van Buren Bridge. Your other trains you run through Oklahoma and that makes it interstate?

A. We switch that around so there is no regularity about that. We run them so as to use up the minimum expense we are required to pay.

Q. It is in evidence here, and I assume correctly from your people here, that they run just two trains each way on the Van Buren bridge?

A. On the bridge?

Q. Yes.

A. One each way. Is that in evidence here?

Mr. MOORE: I don't think so.

Mr. HILL: Ask Mr. Johnson or Mr. McPherson.

Mr. McPherson: One each way.

Mr. Moore: He understands you to say one train a day each way out of Fort Smith?

Mr. Hill: I am talking about the Van Buren bridge.

Mr. Moore: I think that is in evidence.

Mr. Hill:

Q. All of those except those two trains would be interstate there.

A. Those we have mentioned?.

Q. All that go into Fort Smith except on those two trains would be interstate passengers?

A. I suppose they would, Judge.

1856 Q. On those other trains that go into Fort Smith, that cross the Van Buren bridge, they would be a great many of them interstate going to other points?

A. Of course you are familiar with that, Judge, but I think you will bear me out in saying that at Fort Smith the identity of the train is practically changed; everybody gets out and a new crowd gets on, you know.

Q. That is largely the case. But you will find a great many of them going on through into Oklahoma, that is from my observation if it is not yours. Don't you know a great many go through?

A. Not very many. They may lately.

Q. A large proportion get off, of course. You are right about that.

A. I was more familiar with it when I was Superintendent.

Q. You know there is quite a considerable through traffic that passes through the state line, I mean?

A. I did not know it, no, sir. My idea would be that that train largely changed identity there; one crowd gets off and another gets on.

Q. How is it down about Texarkana?

A. At Texarkana——

Q. You have a great many interstate passengers down there on your local trains?

A. On local trains?

Q. Yes.

1857 A. No, sir, I don't think we do. I think the local trains in Arkanasas—but it is only a very small proportion of the passengers, that are interstate.

Q. Have you ever had any figures made on that, to know?

A. I have rode the trains?

Q. You take it from your observation, then?

A. Yes, sir.

Q. You never had any statistics compiled from the train auditors?

A. No, sir.

Q. And you are basing your evidence on just your observation?

A. You say train auditors—I have. I frequently, in fact every time I was on the train there I would find out from the train auditors where the passengers were from and where to.

Q. You would check up how many were interstate and how many state?

A. Well, I would get that information but not for the purpose of finding out whether they were interstate or intrastate; but I did get that information by getting after the record I wanted. There were a number of passengers on the train, and I would find out where they were from and where they were going to. I wanted that for my own information and I got it and as I told you I got it pretty near every time I was on the passenger trains.

1858 Q. You would not know whether they were interstate or intrastate?

A. Except the knowledge I got bore out that the largest number of passengers on the local trains in Arkansas were intrastate.

Q. You say the largest number: what proportion would you say?

A. Not only that but a large number on the through trains are intrastate.

Q. Give us your best judgment on the proportion of intrastate and interstate.

A. On which train?

Q. On both of them.

A. To McGehee?

Q. I am speaking of the state as a whole.

A. The state as a whole?

Q. Yes.

A. I would say there was not five per cent—I do not want to go into percentages much.

Q. Give us your best judgment.

A. That would be my best judgment.

Q. Five per cent. But what are you applying that to?

A. I mean if a passenger gets on at Gurdon and buys a ticket to Little Rock and gets off at Little Rock and buys a ticket for St. Louis, he is an intrastate passenger until he gets on the train at Little Rock; he was an intrastate passenger from Gurdon to Little Rock.

1859 And I will state that I believe that not more than five per cent of the passangers, from my standpoint, the way I have explained it, on the local trains in Arkansas are local passengers.

Q. What per cent of the intrastate passengers do you think are on your through trains?

A. That would be harder for me tell you and I don't believe I could tell you that. I don't know. I would not want to say that. I would have to think that over some. I am not familiar with that.

Q. Take the illustration you just made, of the man getting on at Gurdon going to Little Rock on the local and then getting on the through train going to St. Louis. Might not that man buy a ticket at Gurdon for St. Louis and ride on the local to Little Rock there get off the local train and get on the through train and go to St. Louis?

A. Then he would be an interstate passenger, in my opinion.

Q. And he would be an interstate passenger from Gurdon?

A. Yes, sir, in that case. But that was not the kind of a case I referred to. He would get off at Little Rock, go up town and do some trading or do some business there and then come on down town and take the night train for St. Louis. Maybe when he got off the train

in the morning he did not intend to go to St. Louis and perhaps he did.

Q. You have explained your idea about the local passenger
1860 train carrying principally intrastate passengers; now what about your local freight trains? What per cent of intrastate traffic do you think it carries?

A. Well, I would not want to state any particular percentage. I think it is a small amount. But I will say this, Judge, that whatever interstate freight is handled on the local freight train in Arkansas, it reduces the cost of the local freight train in the interests of the intrastate freight.

Q. You mean the proportion that you would charge to intrastate?

A. I mean this: that if there is any interstate freight you handle on the local train in Arkansas, it helps the intrastate in making the cost of that train.

Q. What do you mean by "helps it?"

A. I stated that you can handle five times the amount of freight on a through freight train that you can on a local. Now, you take the interstate freight off the local train in Arkansas and you can handle a good many more than five times as much on your through freight. That is including your intrastate that I made those figures on.

Mr. KIRBY: If you would take the local freight off, you would have to run a local to carry that. You would not have a local freight on it either way, in that proposition?

A. There is a very small amount of that, you know.

Mr. HILL:

Q. Did you ever make any freight train tests to find out the
1861 proportion of interstate and intrastate freight carried on the local train.

A. No, sir, I did not.

Q. Or on a through train?

A. No, sir.

Q. What is your idea about how much intrastate freight is carried on the through trains?

A. Intrastate on the through trains?

Q. Yes.

A. Compared with the whole of the through trains, a very small proportion.

Q. I mean how much of the——

Mr. MOORE:

Q. What was your statement there?

A. Compared with the whole freight handled on through freight trains.

Q. You mean freight traffic?

A. What is the difference between through freight traffic and other through freight trains?

Q. One relates to all traffic and one that particular train.

Mr. HILL:

Q. I do not believe you understood me. How much of the intrastate traffic is carried on the through trains?

A. In Arkansas?

Q. Yes, in Arkansas?

A. I don't know, but I should say so far as less than car-
1862 load stuff is concerned, very little.

Q. What is that?

A. I should say, so far as less than carload stuff is concerned, very little.

Q. I did not ask you about less than carload. That is only about four percent of the business. I am talking about intrastate freight traffic in Arkansas.

A. How much of it is handled on through trains?

Q. Yes.

A. I don't know how much is handled on through trains.

Q. What is your best judgment. You have given us a great many experiences here and I would like to have your experience on that proposition.

A. Yes, and if I had known you were going to ask that, when I was down there I would have made a test for you.

Q. You never have made any tests of that?

A. Not of that, I did not.

Q. You cannot even approximate that?

A. Let me see if I could. (Witness pauses.) No, sir, I could not.

Q. Take the other proposition: How much of the interstate traffic is carried on the local trains. I mean by that, what percentage of the interstate traffic is carried on local trains?

A. I would say it is so small it is hardly a mathematical problem.

1863 Q. I want to follow that up with this: What percent of the ton mileage of the local train is interstate freight?

A. That varies, you know.

Q. Give your best judgment.

A. My judgment is, that a very small percentage of any local freight train, in either direction, out of Little Rock or between Camden and El Dorado, in fact from the state line of Missouri through to the state line of Texas, and through to the state line of Louisiana, a very small percentage of that is interstate that is handled on locals, for the reasons I have already stated, that the people in that vicinity patronize the wholesale men in Little Rock.

Q. Which road carries a larger percentage of interstate on its local trains, the Iron Mountain or the Cotton Belt?

A. Well, I can only answer—you see I have made no investigation on the Cotton Belt but if you want my individual opinion——

Q. That is what I am asking for.

A. My individual opinion about it would be that there would be more interstate freight carried on local trains on the Cotton Belt than on the Iron Mountain, because they have not Little Rock set in the middle of their territory to draw from.

Q. You have made no tests, I understand. This is just your best judgment you are giving on these propositions?

A. Yes, sir, that is right.

1864 Q. What was this test, you told Mr. Moore about a while ago. I did not quite catch the extent of that and what it covered?

A. That covered the net train mileage on local freight trains compared with the through freight trains.

Q. Covered what?

A. The net train mile tonnage.

Mr. MOORE:

Q. Explain what you mean by that.

A. The net tons moved per train mile.

Mr. HILL:

Q. When did you make up that test?

A. It was just after the time or during the time that that hearing was held at St. Paul. I had made an affidavit from my best knowledge at that time, and I wanted for my own information to find out some facts in connection with it, and I made the test.

Q. Have you the result of your examination of those trains?

A. I have in my head. I made it through the officials.

Q. Have you put it on paper?

A. No, sir.

Q. What became of it?

A. I did not need it. I got the figures from the local officials and figured out the net ton mile tonnage.

Q. You did not preserve any memorandum of it?

A. If I did I don't know where it is. What the memorandum would be would not do anybody any good because it was

1865 simply dividing figures, you know; that was all.

Q. You have not it in shape where we could take your calculations and run through them?

A. No, sir, but I will give you any information you want about them.

Q. Explain in just what shape it is?

A. I will tell you how that is done, Judge. You take it on the local from Little Rock to Malvern. The train master was told to make a test on a day that was a good average. I did not want a low day and I did not want an abnormally high day but I wanted it to be a fair average for the year. These men ride up and down every day on those trains and know what a fair average would be. I said I want the tons between this station and that station; between this station and that station; and so on, until I get to Malvern. Give me the tons. I then reduced that to tons going one mile.

Q. It was simply the statistics of the tonnage moved between those stations?

A. Yes, sir, the tonnage movement, which resulted in obtaining the net tons per train mile.

Q. Did your train master get you the tonnage figures from the wheel reports.

A. No, sir. From the way-bills.

Q. You made no record of that but it was just information conveyed to you for your own information and guidance?

A. Yes, sir.

1866 Q. In forming your opinion?

A. Yes, sir. Now when you say I made no record—I made figures on there and I don't think you will find them down there. But possibly you may. I hope you will if they are there. There is nothing to hide about it at all.

Q. As I understand your testimony, Mr. McKee, to sum it up: you think the local freight train is more expensive of operation than the through freight; and the local passenger than the through passenger?

A. Well, I want to say about that local freight train, that I not only think it but I am positive of it and I know it from experience, that it is not only more, but four or five times what it is on the through freight train. It costs four or five times more to run a local freight train than a through freight train.

I know it costs more to run a local passenger train, on account of the terminals and the loss of equipment and the loss of power; but I am not prepared to give any percentage or figures of that character about it.

Redirect examination.

By Mr. MOORE:

Q. I just want to ask you one question.

How many local freight trains are scheduled or run each way per day on the Iron Mountain? Is there more than one?

A. In what territory?

1867 Q. In the districts in which the local trains operate.

A. No, sir, only one in each direction.

1868 CHICAGO, ILL., *January* 26, 1910.

Met pursuant to adjournment as above, on Wednesday, January 26, 1910, at the same place.

Present, parties as before.

The following proceedings were had.

EDMUND D. SEWALL, a witness of lawful age, being duly produced, sworn and examined, in behalf of the Complainants testified as follows, to-wit:

Direct examination.

By Mr. J. M. MOORE:

Q. Please state your name in full?

A. Edmund D. Sewall.

Q. State where you reside and what your occupation is, please.

A. I live in Chicago, and have been in the railroad business. My title is Assistant to the President of the Chicago, Milwaukee & St. Paul Railway. I am also Vice President of the Chicago, Milwaukee & Puget Sound Railway Company.

Q. How long have you been engaged in railway service?

A. I have been with the Milwaukee Company since 1882.

Q. I mean since the beginning of your experience?

A. Prior to that time I was for a few years in the Civil Engineering Department of the Great Northern, Northern Pacific, and other roads.

Q. You say you were in the service of the Chicago, Milwaukee & St. Paul in 1882?

1869 A. Yes sir.

Q. What capacities have you served in in connection with that road?

A. First, as local agent, at Stillwater, Minnesota; next, traveling lumber agent; next as commercial agent, at St. Paul; then assistant general freight agent, Milwaukee; then general northwestern agent, at Minneapolis; then assistant general superintendent, in charge of the northern district, Minneapolis; then assistant to the president.

Q. What mileage was embraced?

A. About 3,000 miles in the northern district, including all lines in Minnesota; North and South Dakota, except the Sioux City & Dakota Division; that is the line along the north tier in Iowa—what we call the Dakota Division, that runs along the Mississippi River on the east side of the state of Iowa.

Q. What was your position subsequent to the time you——

A. Assistant to the president.

Q. Have you had occasion to give any attention and study to the question of the operation of the different classes of trains that are used in transportation, local trains and through trains?

A. Yes, sir; I had particular charge of that work as Assistant General Superintendent, in Minneapolis, in that northern district.

1870 Q. Did you become familiar with the difference in the manner of conducting local or intrastate business, from interstate business?

A. Yes sir.

Q. I will try and use the term state, instead of intrastate, so as to shorten the terms and avoid confusion.

Mr. HILL: I object to the way you put that question: you say "local or intrastate." I do not think this witness has held them to be synonymous terms, or any other witness. I think it would be misleading.

Mr. MOORE: Let his answer stand.

Q. Then do I understand you to state, if there is a difference between local and intrastate traffic—do I understand that your observation has covered that entire subject and branch, whether local or intrastate?

A. Oh, yes.

Q. Mr. Sewall, I wish you would state, in a general way, what the differences are in the manner of conducting interstate traffic and state traffic, growing out of the difference in length of haul, the tonnage, the character, and the manner of loading, that exists as between

freights that are hauled upon interstate trains and those that are hauled upon intrastate trains.

A. The principal points of difference are the tonnage of the trains and the length of the haul.

1871 Our trains which do the local work (which we call way freights), have from perhaps 60 to 75% of the tonnage of our through trains, under the most favorable circumstances, and from 50 to 60% of the net tonnage of our through trains. The lighter loading of the cars in the way freights of course reduces relatively the net tonnage in the train.

Q. What is the principal use made of those trains that are run over limited districts or divisions, and carry largely intrastate traffic? I mean with reference to the distribution of freights?

A. Those are the trains that handle merchandise, for instance, from the principal jobbing points to the smaller stations, and such carload freight as there may be for those stations.

Q. They are distributing agencies, are they not, rather than——

A. Yes, that is their function.

Q. Have you found that there is any difference in the expense of handling the local state traffic and the through interstate traffic?

A. Yes, sir, there is a very great difference.

Q. Which kind of traffic is the more expensive to handle?

A. The local traffic.

Q. I will be glad if you will state what causes that difference, and give such elements as occur to you, of the difference in the manner of conducting the two kinds of traffic, that go to make up the difference in expense.

1872 A. In the first place, the wages of the engine and train men are greater on the local than on the through trains. The fuel and other supplies consumed are greater per ton mile, than on through trains.

The average length of haul on our local trains is probably not more than one-fourth the haul of our through trains. The lighter tonnage I have already referred to. The unloading of way freight upon station platforms by the train men, is a very expensive way of handling it, in actual cost, and also because of the risk of damage. Of course the risk is much greater in unloading from a car floor to a low platform, as it is usually handled, than it would be to take out of the car to the truck in a warehouse, as it is handled at terminal stations.

The way freights make more than one stop at most of the stations for which they have freight to unload, because, with all the cars that may be taken in loading, there will be freight in more than one car, for the same station. It is not an uncommon thing to have freight in ten cars, for one way station, if it is a station of any prominence, and we have to stop the train for each car. Of course it occasionally happens that two cars may be next to each other, but as a rule they will be in different parts of the train and we will have to make a move of the train for every car from which freight is unloaded.

The way freights make use of industry tracks at stations, and

do some switching there, which, of course, the through
1873 freights do not.

One of the items is the cutting of crossings of freight standing at a station. Most of our stations are adjoining a highway, and, for the convenience of the public, and in all the states through which we run, the laws require that the highways be left open; so if there is any considerable amount of way freight to be unloaded, the car must not only be stopped at the station, but the highway must be cut, and when that train is unloaded that process must be repeated if we have other cars for the same station.

One of the great items of expense is in the use of cars. It will take perhaps four times as many cars to cover the same ton mileage of way freight, as would be required in through freight service.

The delay in loading and unloading the cars is the same whether the haul is short or long, and of course the ton mileage is in direct proportion to the length of the haul.

There is a considerable element of expense in connection with starting and stopping trains. A considerable share of the repairs of cars results from the application of brakes, which, of course, is increased in proportion to the number of stops the trains make.

I think that covers the principal items.

Q. Are the conditions that you have enumerated in answer to the last question, such as commonly exist on all through lines of interstate railroad carriers?

1874 A. They are.

Q. Have you ever operated in territory south of the Missouri and west of the Mississippi River: in other words, in Arkansas and adjacent territories?

A. No sir.

Q. But you state that the conditions you speak of are such as are general and apply to all through lines of railroad?

A. They are.

Q. Have you made any estimates or calculations for the purpose of ascertaining what the amounts of these differences are on the lines of road you have operated, so you can give us any information in that connection?

A. I made investigation one time, with special reference to the terminal expense, and the result was that the terminal expense on way freight was about 8½ times the terminal expense on through freight.

Q. You spoke a while ago about the difference in cost on account of the switching: what are the characteristics of switching, connected with state service, that causes an increased cost there? Can you describe them?

A. There is more or less carload freight handled on way freight trains, which has to be set out at the station to which it is consigned, and of course there is an occasional car picked up at those stations to be taken forward to its destination.

1875 A. I am speaking of the intra, and not the interstate.

A. Well, way freights do that class of work between the

terminals. Of course much of the business that they pick up is interstate.

Q. Are there more or fewer sidings used by the local trains that transport the greater amount of intrastate freight than through?

A. There are more used by the local trains.

Q. That is what I asked you?

A. Yes sir.

Q. What sidings are usually used by the through trains?

A. They use what are called passing tracks, if they take a siding at all; but through trains, of course, do not stop at every station.

Q. What tracks are used by the local trains?

A. They use the industry tracks, and other sidings, if there are other sidings at the station where they stop, and occasionally use the passing track also.

Q. Without going further into detail in the matter, Mr. Sewall, I will ask you to state what, in your judgment, based upon your experience and railroad operation, is the difference in the cost of handling state and interstate freights.

A. In my judgment, it costs at least four times as much to handle state traffic as interstate traffic.

Q. At least four times as much?

1876 A. Yes, at least four times as much.

Q. Have you given any investigation to the subject of passenger traffic, and the difference which exists between the interstate and state business?

A. Yes, some consideration.

Q. I would be glad to have you state your views, as to whether there is a difference in the cost of transporting local or state passengers, and interstate passengers.

A. There is a decided difference.

Q. What does that difference grow out of?

A. The density of the travel and the length of the haul, on an average, of the passenger carried.

Q. What would you say is the difference, in figures, as near as you can approximate it?

A. The local traffic, in my judgment, costs at least fifty per cent more than the through passenger traffic.

Q. To go back to the transportation of freight for a moment:

The records in this case show that the average length of haul in the state of Arkansas, on one of the lines engaged in this litigation, is 70 miles on state freight, and 224 miles on interstate.

In another it is, 42 for state freight, and 231 for interstate.

How does that difference in the length of hauls compare with the difference that exists on lines that you have been familiar

1877 with?

A. I have not the exact figures on that, but in my judgment, the interstate haul is at least three times the state haul.

Q. And it has been about that on the lines you have operated?

A. Yes sir.

Q. In that respect the differences would be somewhat similar, perhaps; the difference a little greater than in Arkansas?

A. Yes sir.

Q. I will ask you also to state what the average tons hauled, per car, is in state and interstate movements?

A. If you will excuse me, I will refresh my memory by a little memorandum that I have. I had occasion to compile some figures in a case before the Minnesota Commission about three or four years ago.

(Witness refers to paper).

The average weight of the contents of 5,889 cars of less than carload way freight, loaded at Minneapolis during three months, was 3.6 tons.

Mr. HILL:

Q. Less than carload?

A. Less than carload.

The average weight of 12,223 cars of carload freight, loaded in Minneapolis during the same period, was 23.1 tons.

1878 Q. Do the local way trains run as many miles, per day's work, as the through trains? Just state what the conditions are in that respect.

A. Not in the same number of hours. As a rule our way trains cover a division. We have some places where they cover part of a division and come back to the original starting point, but as a rule they will go from one division point to another. They will be a good many more hours in covering the distance than the through freight will. That runs into overtime, very frequently, which is a very considerable item of expense.

Q. Please explain how it runs into overtime and what effect the overtime has.

A. The wages of train and engine men are based on 100 miles of service, or ten hours of service. If the length of the run is 120 miles, they are paid for that, if they make the run in 12 hours and 30 minutes, or less; if more than 12 hours and 30 minutes on the road, then they are paid by the hour, at the rate of 10 miles an hour.

The overtime is frequently as high as 15% of the total cost of the wages of train and engine men.

Q. How does the rate of wages paid to crews and engine men on the two kinds of trains compare?

A. We pay higher wages on the local trains; it averages about 20 cents per day for engineers; 15 cents for firemen, and about the same for conductors and brakemen.

1879 Q. Mr. Sewall, what effect does the difference in the efficiency of locomotives in train haul have upon the cost of transportation? You referred to that a while ago.

A. Well, if you reduce the efficiency of a train 50%, it just increases your expenses—or rather, doubless your expenses; that is, the expense incident to the handling of the train.

Q. You spoke also, I believe, of damage to trains: I wish you would state what the comparative damage to equipment, in the two

methods of operation, or state and interstate. I mean, what it consists of; not dollars and cents, but how it occurs and is brought about?

Mr. HILL: I object to the "two methods of operation, or state and interstate". No witness has ever testified in this case to any such methods as that.

Mr. MOORE: The question may be stricken out.

Q. I believe you have stated already that there was a difference in damage to equiqment, growing out of the methods of handling these local way trains and the interstate trains: I wish you would state how that occurs; what is the cause of that difference?

A. The greater consumption of fuel——

Q. Damage to equipment?

A. Oh, damage to equipment. That is the result of the application of brakes—the shock that comes from stopping and the shock which comes from starting.

1880 Q. Is there any difference in its effect upon the structures, increase in the cost of maintenance of way, for instance, by the method of handling the local trains?

A. It might be a little more expensive, the way the local trains are handled.

Q. The larger number of tracks and——

A. Whatever tracks have to be maintained for local trains, that are not used by through trains, would be a direct element of expense.

Q. Now, Mr. Sewall, I believe you have stated that there is more switching done by the local trains than there is by the through trains: what effect does that have upon sidings and that portion upon which the switching occurs?

A. They increase the wear and tear—the cost of maintenance and renewals, and also of equipment on the train.

Q. What result does it have upon the locomotive?

A. It increases the wear and tear and cost of repairs; coal consumption and water consumption.

Q. How does the amount of claims for personal injuries growing out of the operation of local trains, compare with through trains?

A. Personal injuries would be greater on the local trains in consequence of the switching that is performed in connection with which most personal injuries to employés arise.

Q. Now, is there any greater exposure to injury in the case of local passengers, state passengers, than there is interstate passengers?

1881 A. The damage is greater with local passengers. There is more getting on and off of trains; that is where the damages occur.

Q. How does the terminal expense of the two classes, as between through and local trains, and the handling of state and interstate freights compare?

A. It is very much greater on the local trains. As I testified before, the terminal expense on less than carload freight is about 8½ times the terminal expense on carload freight.

Q. Excuse me for calling it up again. I had overlooked the fact that you had gone over that.

Cross-examination.

By Mr. HILL:

Q. Mr. Moore has been putting questions to you about state traffic and interstate traffic, and I have understood by your answers that you have been answering about traffic on local trains and traffic on through trains: is that right?

A. Yes; my answers as to local trains would apply to state traffic.

Q. Do you think the local train is synonymous with state traffic?

A. We designate our local trains as way freights, and the way freight is a regularly scheduled train running six days in the week, and sometimes seven, between certain terminals; that is, over
1882 a division, distributing the merchandise from the jobbing centers, and such carload freight as may be shipped to local stations.

Q. Is that all intrastate traffic that it handles?

A. Not all intrastate, because it may carry some freight that was received from a point without the state; they may also pick up some freight at local stations, carload and otherwise, that goes to a point without the state.

Q. It is possible for those way trains to pass the state line, is it not?

A. Yes, it is possible.

Q. And do they not do it?

A. In some instances. Of course whatever interstate freight they carry reduces to just that extent the expense of handling the state freight, because it increases the tonnage of the train.

Q. When you spoke of interstate traffic, in answer to Mr. Moore's questions here, as I understood you, you were referring to through trains?

A. Through trains, yes sir.

Q. Those through trains carry interstate traffic, too, do they not—I mean, intrastate traffic?

A. Some, yes; it depends on the length of the run.

Q. If you take Arkansas, with a large distributing center in the middle of the state, at Little Rock, you would expect on your through trains to have a large intrastate traffic?
1883 A. I don't know anything about the conditions down there.

Q. I am stating a situation to you, that you know, geographically, to be true: would you not expect there a large intrastate traffic on through trains, out of Little Rock, the largest distributing point in the state?

A. Not on through trains; not if they operate as I suppose they do there. Let me illustrate a case of our own, which shows how we handle it, and which is the basis of my statement:

Our Hastings & Dakota line runs from Minneapolis to Aberdeen; our first division point is Montevidio, Minnesota. A through freight will start out at Minneapolis with nothing for any point east of

Montevidio; the business between Minneapolis and Montevidio will be done by the way freights; west of Montevidio (if it has loads for stations west of Montevidio) between there and Aberdeen), they are sent out at Montevidio and taken by way freight from Montevidio the next——

Q. How do you define the through train, as you are referring to it in your testimony?

A. One that does no local work between terminals.

Q. Does it not handle both classes of traffic, state and interstate?

A. Yes, but very much more interstate than state.

1884 Q. That might vary in places, might it not?

A. Yes, it does vary in places, but that is the general situation.

Q. Now, all your testimony that has been given heretofore, has not been in relation to state and interstate, but has been in relation to through and local?

A. No sir, in connection with state and interstate.

Q. Let us get that clear now: I understand these expenses that you put there as four times, was on local trains as against through: is that right?

A. Yes sir.

Q. You are treating that as synonymous with state as against interstate?

A. Yes sir.

Q. That is, you are disregarding the amount of interstate traffic of the local train, and disregarding the amount of intrastate traffic of the through train?

A. Yes sir.

Q. I believe you stated a while ago that you did not know the conditions in Arkansas?

A. I did.

Q. Do you know from your railroad experience, how cotton is handled?

A. No sir.

Q. I will state it to you, and if I misstate it, I will ask these gentlemen to correct me: from what appears in this record;

1885 cotton is gathered from plantations and small points and carried on a way freight to the nearest compress point, where it is unloaded and compressed; after compression it is reshipped, usually to the seaboard.

The rate given it is the rate from the first point of origin, to its ultimate destination—the milling in transit proposition applied to the cotton condition; they call it concentration, I believe.

That is all interstate freight, owing to the fact that there is no consumption of cotton in Arkansas, except a negligible quantity, and it is shipped on the through rate. Now, it is handled, as I have indicated, from point of origin to the nearest compress point, on a local, and then at that compress point (which will usually be a town or division point), is unloaded on a through train for the east.

In view of this statement of the facts, how many terminal handlings would that cotton have?

Mr. MOORE: Counsel assumes that the facts stated in this question, and has on former occasions assumed that facts stated in certain questions put to witnesses are conceded.

Mr. HILL: I did not say conceded, I said proved; at least I intended to say that. I am not asking any concession.

Mr. MOORE: Is it not correct that many of the elements that are embodied in these questions are conceded, or that we concur in the view that they have been proven? I just want to put them

1886 in——

Mr. HILL: If there is anything about that incorrect in the testimony so far, I want you to pick it out.

Mr. MOORE: I don't think you have proven those things as broad as you state you have.

Mr. HILL:

Q. Assuming that they have been proven as I have stated to you, Mr. Sewall, how many terminal handlings of that cotton would there be within the state?

A. I should say one.

Q. Where would that be?

A. At the compress, would it not?

Q. Would there not be a loading of that cotton there—would that not be a terminal handling to begin with?

A. Not what we ordinarily consider a terminal handling.

Q. What do you consider a terminal handling?

A. The handling that is done at a division terminal.

Q. Would you consider the terminal expense then unless it occurs at a division terminal?

A. No sir, the switching that is done at a local station in picking up a carload of cotton, or a carload of anything else, is part of the expense of running that train. We so consider it.

Q. I thought you said there was more terminal expense on these local trains, than there were on the through?

A. Yes, I say so.

Q. You are referring to the terminal expense at division points only?

1887 A. At division points only, yes.

Q. Then you do not consider it a terminal expense if a shipment is made from a place, put on the cars, carried seventy miles, and put off at another station: you would not consider any terminal expense on that shipment at all?

A. No, if it was loaded and unloaded in the way—not in the ordinary sense in which we use the term terminal expense. Perhaps I can explain myself to you a little more clearly as to the question of terminal expense:

At the time these figures were made up, which was in 1906 as I recall it—I have not the exact date here, it cost us to handle merchandise in our Minneapolis warehouse, in the freight house, 31.9

cents per ton, less than carload. It costs a good deal more than that now.

It cost us to handle out freight, 29.9 cents per ton.

Q. Is that still less than carload?

A. Yes sir. Carload freight, 2.9 cents per ton. The expense of the billing of the less than carload was 4.2 cents a ton, and billing carload freight was 6/100 cents per ton.

Q. That applies both to state and interstate freight, does it not?

A. That expense would be the same on the same kind of freight, whether destined state or interstate.

That made the expense per ton of merchandise, switching, 27.8 cents—I took that arbitrarily at $1.00 a car as representing
1888 the bare cost and divided it by 3.6 tons—handling, 29.9 cents; billing 4.2 cents, made 61.9 cents per ton for terminal expense on less than carload freight.

In the same way, carload freight, 43 cents for switching; 29 cents for clerical work in the yard, and 6/100 cents for billing, making a total of 72.06 cents.

Q. Now coming back to our cotton: suppose a bale of cotton was loaded on way freight at London, Arkansas, and carried to Russellville, Arkansas, five miles distant, at its compress: what would you say as to the terminal expense on that handling?

A. If there is a bale of cotton I would not say there was any terminal expense.

Q. In making estimates or cost of handling local traffic, you would not count any cost attendant upon the handling of it except in division points?

A. That is what we consider terminal expense.

Q. These gentlemen heretofore on the stand have been educating me to believe that there was a terminal handling whenever any freight was put on a train, car picked up, or whether it was put off a train, or car dropped out.

A. That is quite true, but I distinguish between terminal and handling. There will be cost of loading and unloading with anything on the train.

Q. Would you count that as an item of expense?

A. Most certainly.

1889 Q. Every car that goes through a division terminal would have some expense, would it not?

A. Some, yes.

Q. What would you call that, a terminal or handling expense?

A. That would be a terminal expense if performed by yard engines; say a carload of freight is going through; if it is handled by yard engines, it would be a terminal expense.

Q. What is the usual way?

A. We always handle it the latter way when we can, but unfortunately, the conditions are such that we cannot always do it.

Q. Now, going back to our cotton movement. It seems we are driving at the same thing, under different names. You call that a handling expense that I have been referring to?

A. Yes sir.

Q. There would be three handling expenses of that?
A. You mean the loading, unloading and reloading?
Q. Yes.
A. Yes, if it was reloaded by the Company.
I don't know about your arrangements, whether you consolidate in small lots and ship in large cars——
Q. That is what we do—loaded by the compress, but that would be the same way with any other industry; is it not loaded by the industry?
1890 A. Carload freight?
Q. This all goes out carload; comes in less than carload and goes out less than carload; I think that is the usual way; then you would have two handling and one terminal expense, would you not?
A. Yes, one would be in less than carload lots; the Company would unload it, I assume.
Q. If you had a large volume of such traffic as that on the way freights, you would not regard the way freights as if they took interstate rates, and classed as interstate freight; you would not regard toe way freights as anywhere near synonymous with intrastate freight, would you?
A. You mean if the majority of the business was of that kind?
Q. I did not say a majority; I say a large volume of cotton?
A. If handled on way freights, I would consider it way freight.
Q. But you would not consider it state business when this was an interstate shipment?
A. No.
Q. That would make a very material difference in your opinion in describing local and state as being about the same thing, would it not?
A. Not with us, because we do so small a proportion of that kind of business on our way freights. We have the same thing, you know, picking up grain and taking it to a milling point.
1891 Q. Do you have a large movement of that?
A. At certain seasons, but not on way freights with us.
Q. You see here is a difference; it is handled on way freights and there is a large volume of traffic; I do not know what percentage, but everybody knows that cotton has a big movement in Arkansas. Now that is handled on local freights, way freights; would that not make a considerable difference, in your judgment, that a local freight and a state freight are equivalent terms?
A. I should think the effect of that would be to reduce the cost per ton, per mile, of their way freight service.
Q. That was not my question——
A. Reduce relatively the expense of handling the state business.
Q. It might and it might not. That is not my question, Mr. Sewall. You have stated that you disregarded the interstate freight that was on the way freights, in considering that the way freight and the state freight are practically synonymous; now, I am putting to you this large movement of cotton in Arkansas, which is an interstate movement, and carried on the way freight——

A. Does that change the character of the train, you say?

Q. —and ask if that would not change the statement that you have made, that you would disregard that in the interstate freight that is on that, in considering that the state freight and the way freight was synonymous?

1892 A. That would depend entirely on the amount of that business done.

Q. If it was a large volume of business, it would materially change your views on that subject, would it not?

A. It would modify them.

Q. I believe you stated you were lumber agent at one time?

A. Yes sir.

Q. Are you familiar with the method of shipping lumber out of Arkansas and the southern country?

A. No, I did not make that territory; we had troubles of our own.

Q. I will state this situation about the lumber, as I understand it is proved in this case: we have what we call a rough material rate on lumber. Lumber first moves from the logging camp to the saw-mill; then it moves from the saw-mill to the planing mill, or some industry, and then after it is a finished product it is shipped out—the larger part of it is interstate, although some of it is consumed in the state. This movement, up to when it reaches its finished state, is carried on the local; after that, usually on the through trains. Somewhat different, but in principle, the same as cotton.

There is a large movement of way freights of lumber, which ultimately becomes interstate shipment and has an interstate rate, based on that principle.

Lumber is one of the largest movements in Arkansas.

1893 In view of these facts, if I have stated them correctly, would that not also modify your opinion that you would regard the state traffic and the local traffic as practically the same?

A. It would modify it, but I cannot say to what extent, unless I knew the proportion of tonnage that was actually consigned to destination without the state. As I understand you, both cotton and lumber are consigned to some destination without the state.

Q. All of the cotton and the larger part of the lumber.

A. Then your method of handling lumber is a good deal different from ours. We dress lumber in transit, but not just that way. It is a state proposition with us, for the most part.

Q. I want to read you from Exhibit 19, which was a test made on the St. Louis Southwestern Railway, one of the parties to this suit, and it shows that the commercial ton miles on the local train in the state of Arkansas, was 1,084,580; and on the interstate (still of the local train, you understand), commercial ton miles, 2,256,361; do you catch those figures?

A. Yes sir.

Q. That is just in round numbers, a little over twice as much interstate as state carried on the local trains. You could not in view of that, regard those terms of state traffic and local traffic as synonymous, or anywhere near the same thing, could you?

1894 A. Not on the basis of those figures.

Q. These are the test figures here. Your testimony has been based on a radically different method of operation from what these figures and the statements I have made to you appear, has it not?

A. A different conditions; I don't know how radical.

Q. Those statistics show pretty radically——

A. I do not know what periods are covered by those statistics; it might be for a week or year—your cotton does not move all year round, does it?

Q. No, it moves about six months, pretty well.

A. I would have to have the figures for a much longer period than that, in order to say to what extent to modify the situation. I am not testifying as to what happens in Arkansas.

Q. These gentlemen have testified that that was a normal period, representative of the whole traffic of the year; that is what they have testified. I do not know. So far as this case is concerned, we have to take that under the testimony, so far as being representative of the year's traffic.

A. I did not understand that that was supposed to be representative of the year's traffic.

Q. Assuming what I have just stated to you, under the condition of the record, what do you say of the testimony you have given heretofore on the theory that the state business is practically the same as the local business?

1895 A. Well, it does not alter my testimony so far as the matters to which I have testified, on which I am familiar, are concerned.

Q. I understand that perfectly, but I am asking you——

A. If the conditions in Arkansas are such as you have described, and as the evidence states (which, of course, I do not question), and there is no other situation which would offset that to any considerable extent, the testimony I have given would not apply to the conditions in Arkansas.

Q. What would you say, in view of what I have stated to you to be what I understand is the testimony here, and in view of these statistics of the Railroad Company, of this four times as much to operate state as interstate freight?

A. I could not tell that at all without having their traffic figures and knowing what their traffic was as a whole.

(Following colloquy:)

The WITNESS: Handling interstate freight on a local train reduces the cost per ton mile of the handling of all the freight on that train.

Mr. KIRBY:

Q. The local freight train would have to operate any way, to accommodate interstate traffic, if there were no local traffic, would it not?

A. No, it would be operated as a through train in that case. If we had no local traffic between——

Mr. KIRBY:

Q. I did not say local traffic.

1896 A. Excuse me.

Mr. KIRBY:

Q. If you had no intrastate traffic, you have to carry your car to the station anyway, if it is less than a carload——

A. But if we had no intrastate traffic we would not operate way freights in the state where we did not have that kind of traffic; we would operate through freight; we would run a train from Minneapolis to La Crosse.

Mr. KIRBY:

Q. Suppose you had to put a car of each one, or a half car?

A. Then there would be local traffic.

Q. That is what I was trying to get at, the difference between intrastate and interstate: if you had no intrastate traffic you would still have to operate your local train to get your interstate traffic to the local point?

A. If there was interstate traffic at the local points, yes.

Mr. HILL:

Q. This 8½ times on terminal expense, was 8½ on less than carload freight, was it not?

A. Yes sir.

Q. Not state over interstate?

A. No, except——

Q. But——

Mr. MOORE: Let him answer the question.

A. It has a direct bearing on the question because of the preponderance of less than carload freight on our way freight trains, as against our through freight trains.

1897 Q. Is there not some such thing as interstate less than carload?

A. Yes sir.

Q. That would apply the same——

A. The interstate less than carload is handled on a through train to the division point.

Q. And then peddled out on the local?

A. Yes sir.

Q. That 8½ times would apply to that as much as to state, would it not?

A. It would.

Q. That is the character of the traffic and not state lines: the state lines does not have any magic when it strikes a freight train, does it?

A. Not at all.

Q. It is the same old freight train whether it is in Minneapolis or Canada?

A. Yes. We have division points located on state lines in some places, but not in all places.

Q. Do you not carry interstate passengers on local trains?

A. A few.

Q. Only a few?

A. You and I may not mean the same thing by a local train. By local passenger train I would mean the same as by a local freight train, that runs from one division point to another, doing business at the intermediate stations.

1898 Of course all of our through trains stop at certain intermediate points, the principal ones.

Q. What is the average distance between stops on your local trains; do you know?

A. About six miles.

Q. And what on your through trains?

A. On trains between here and Minneapolis, say about twenty miles.

Q. What do you do with these trains stopping every six miles? Don't you pick up any interstate passengers?

A. Occasionally, yes.

Mr. MOORE:

Q. What would it be on your line as a whole?

A. I could not tell you that because we have such a great variety of what we call main lines.

Mr. HILL:

Q. Do you not have any state passengers on your through trains?

A. Yes sir.

Q. A pretty large percentage, don't you?

A. I think I have a memoranda of that, if you would like to know.

Q. I would.

A. An analysis was made of our passenger business on the La Crosse division, in connection with the Wisconsin two cent rate case, and I made a little memorandum of the compilation. It covered five trains.

One was what we call the "Pioneer Limited" from Chicago
1899 to Minneapolis. It is the best through train the St. Paul road operates.

The next is No. 1.

The Pioneer Limited leaves Chicago at 6:30 at night and arrives at Minneapolis at 8:30 the next morning.

No. 5 is the day train, leaving at 9:00 A. M. and arriving at 10:30 at night.

No. 23 is a local train, from Milwaukee to Portage, Wisconsin.

No. 33 is a local train, from Milwaukee to Madison, Wisconsin.

No. 7 is a local train, from Milwaukee to Watertown, Wisconsin.

These figures are made from special reports compiled by the conductors running between Milwaukee and La Crosse, in the state of Wisconsin.

Q. Were they not put in evidence in the Missouri Rate case?
A. I think they were.
Q. By Mr. Ellis?
A. Yes sir.
Q. Would you mind attaching them to your evidence as an Exhibit?
A. I have only a memorandum here; they are not at all complete, because there are only certain features that I jotted down here. There is a great deal of evidence in th Missouri case
1900 that I haven't in this, put this just happens to cover the point you raise.
Q. If you do not object, I would like to have that.
Mr. MOORE: Let him go on.
A. The percentage of through to local passenger miles (this is miles, not individuals), on the Pioneer Limited—that is the night train—was 78.6% through; on the day train it was 47.8%; on the Portage local train it was 9.7%——

Mr. HILL:

Q. I do not quite understand your percentages: you say "through"; do you mean interstate?
A. Interstate, yes sir.
On the Madison local it was 4/10 of 1%; and on the Watertown local there was no interstate traffic at all.
Q. That is just one division of your road?
A. Yes sir.
Q. Have you any statistics that would give you, generally, the number of intrastate passengers that ride on your through trains?
A. No; that division was selected as covering all the different kinds of trains—strictly local; day through trains and night through trains. I do not know of a better example.
Q. If you could do it conveniently, I would be very glad to have you attach that to your evidence.
A. All right, sir.

The MASTER:

Q. Are there any other matters in it?
A. Yes, there are some other things here.
1901 Mr. MOORE: Mr. Sewall, if you wish to do it, you can just take off those figures and make a separate statement of it; have it typewritten and send it to us.
The MASTER: That will be the better way.

A. There are some things here that I have not testified to.

The MASTER: Just so much of it as you have read.

Redirect examination.

By Mr. MOORE:

Q. Mr. Sewall, you handle a good deal of lumber on your line, do you not?

A. Yes, a great deal.

Q. State how you handle it, with reference to milling in transit, for instance.

A. The majority of that is handled on the basis of a local rate to the mill point, which represents the difference between the through rates from the original point of shipment to destination, and the through rate from the milling point to destination, taking the distances arbitrarily; for instance, if we bill lumber from a point where the rate to Chicago is 12 cents, to be dressed at a point where the rate to Chicago is 10 cents, we would add 2 cents, plus whatever arbitrary we saw fit to charge for the stopping in transit, and then it would be re-billed from the milling point whenever they——

1902 Q. How is it handled physically?

A. It would be handled by local trains to the milling point, unless the point of shipment and the milling point were a long distance apart. If one is on one division and the other on another, it might be handled by through freight, but as a rule it is handled by way freight.

Q. You say there is a considerable movement of lumber on your line——

A. Not so much now, because lumber, which used to be a tremendous traffic locally on our lines, has been pretty well used up. We still have lumber in Wisconsin and northern Michigan, but it is not the percentage we used to have. We have——

Q. How long since it ceased to be an important element in your traffic?

A. Well, the lumber traffic as a whole is still an important element.

Q. I mean that part which you raise in this territory?

A. It has been gradually waning for the last five years.

Q. How do you ship—a great deal of territory traversed by your lines, over your lines?

A. Yes, a great deal of it.

Q. How is that grain handled for the purpose of concentration for shipment?

A. The great bulk of our transit grain goes to Minneapolis from the first hands. We have from two to nine elevators at each

1903 station. A train will start from the terminal light—it may be only an engine and caboose—and will pick up grain until they have a full train load; then they will go to the next terminal, and it is taken from there as a through train.

Q. Is that work done by your way trains?

A. No, it is not done by our way trains.

Q. The manner of handling cotton was referred to, as developed by the testimony and as referred to by Judge Hill: if that cotton were not carried on the way trains or local trains, would you consider that was an element that enters into your local traffic, or influenced the estimate which you made as to the relative expense of the business?

A. If it was not carried on local trains?
Q. Yes.
A. No, I should not; it would not affect it.
Q. Would the same be true about lumber?
A. It would.
Q. What is the difference between terminal expense and handling expense? You referred to those two kinds of expense a while ago.
A. Well, as I use the term, the terminal expense is the cost of handling and switching at a division terminal; and the handling expense, as I referred to it, was the cost of loading and unloading less than carload freight at intermediate stations.
1904 Q. In estimating the cost of conducting a traffic, either on local or through trains, do you take into consideration both the terminal expense and the handling expense?
A. Yes sir.
Q. And both kinds of expense are included in the estimates which you have given here, are they?
A. Yes sir.

Mr. HILL:

Q. Are you referring to that 8½ times proposition or general proposition, in that answer?
A. I testified that in my judgment it cost at least four times as much to handle intrastate freight as to handle interstate freight; that is the point I had in mind.

Mr. HILL:

Q. Not on the 8½ times proposition?

Mr. MOORE:

Q. I believe you stated through trains carry local and intrastate freights, did you not? but not to the same extent——
A. Some do and some do not; it is a small percentage of their total tonnage; very small.
Q. I understand that, but it is true that your interstate trains, through trains, do carry to some extent, local freight?
A. Yes sir.
Q. How is it in regard to local trains? Do they also carry interstate freight?
A. Yes, as it originates back of the terminal from which they start, or as they pick it up, destined beyond the terminal to
1905 which they are——
Q. I just mean to call attention to the general facts?
A. Yes sir.
Q. You do not mean to state that either kind of train is exclusively engaged in carrying one or the other kind of traffic?
A. No.
Q. As a general rule, by whom are the carload freights loaded, by the shipper or by the carrier?
A. By the shipper.

1906 The paper referred to by the witness is in the words and figures following to-wit:

"Analysis made in connection with the Wisconsin 2¢ rate case, viz: on basis of actual cost of wages, terminal switching, car cleaning and minor repairs, car and engine supplies, coal and water, (which were 35.9% of the total operating expenses of the Division), the cost of the above items in operating passenger trains specified, on the La Crosse Division, from April 9th to May 30th, 1909, was as follows:

| Train. | Per passenger mile. | Per cent of through to total passenger miles. |
|---|---|---|
| No. 1 | 1.84 mills | 78.6% |
| No. 5 | 2.89 mills | 47.8% |
| No. 23 | 3.78 mills | 9.7% Portage Local |
| No. 33 | 4.62 mills | 0.4% Madison Local |
| No. 7 | 3.09 mills | 0.0% Watertown " |

Average of all local.....3.21 mills.
Average of all through.....2.18 mills.
Excess cost of local..... 47%.

FRANK E. WARD, a witness of lawful age being duly pro-
1907 duced, sworn and examined on the part of the complainants, testified as follows:

Direct-examination.

By Mr. MOORE:

Q. Please state your name in full?
A. Frank E. Ward.
Q. You reside in Chicago?
A. I do.
Q. Are you engaged in railroad service?
A. Yes, sir.
Q. What lines of road are you connected with?
A. I am with the Chicago, Burlington & Quincy.
Q. How long have you been engaged in railroad service?
A. About 28 years?
Q. Where did you first begin your service in connection with railroads?
A. With the Grand Trunk Railway in Montreal, Canada, in 1881.
Q. In what capacity were you engaged there?
A. I was an apprentice clerk.
Q. How long were you with that company?
A. I was with that company four years in the capacity of apprentice clerk and stenographer.
Q. Where did you go when you left that service?
1908 A. I went from there to St. Paul. I entered the service of the St. Paul, Minneapolis & Manitoba Railway Company, which was the predecessor of the Great Northern Railway.
Q. And how long were you connected with that railroad?
A. Twenty-two years.

Q. State the several capacities in which you acted in connection with that line of road?

A. I was for about two years secretary to the second Vice President of that company. Then I was connected with a subsidiary company, the Eastern Railway of Minnesota, as Secretary and Treasurer; and for a short time successively as purchasing agent, auditor, and then when the road was built and put into operation, as Chief Clerk to the General Manager of that line. That lasted until 1890. Then I was transferred to the Great Northern proper, as Secretary to the President of that company.

Q. Who was the president?

A. James J. Hill. I acted in that capacity for about four years, and then was made assistant to the President of the same company. In 1898 I became General Superintendent of the Montana Central Railway, Great Falls, Montana, and was there for about a year.

Q. Was that part of the Great Northern Railway?

A. Yes, sir, that was a subsidiary company of the Great Northern. I was there for about a year and from the last end of 1898 to 1903 I was General Superintendent of the Great Northern System,
1909 the whole system.

From 1903 until the fall of 1907 I was General Manager of the same company. From the fall of 1907 until the present time, General Manager of the Burlington lines, east of the Missouri River.

Q. What is your age, Mr. Ward, if you have no objection to stating it?

A. 43.

Q. Have you had any experience in the operation of railroads south of the Missouri River and west of the Mississippi River?

A. Only on the Burlington in the state of Missouri.

Q. That is in the state of Missouri?

A. Yes, sir. That is the part of it south of the Missouri River.

Q. You have had no experience in operating a railroad in the State of Arkansas?

A. No, sir.

Q. Are you acquainted with the manner in which local, way freight is handled, generally, on railroads in this country?

A. I believe so.

Q. I wish you would state please, how such freights are handled?

A. It is usually handled—in fact, almost exclusively so, on what we call the local train which on almost all districts is sched-
1910 uled on a time card over the line in each direction; that is, there is one train in each direction.

Q. You mean one train a day in each direction?

A. Yes, sir, one a day in each direction. And the way freight is practically all carried on such trains.

Q. I was going to ask you what character of freight—or, to ask it more directly, what class of trains is local freight, state freight, as distinguished from interstate freight mostly carried?

A. State freight usually being short haul freight, is usually carried on the way freights I have described.

Q. Now on what class of trains are interstate freights usually carried?

A. Interstate freight being usually long haul freight is ordinarily handled on through freight trains that run through from one terminal to another.

Q. To repeat the same question, possibly as the question I have already asked you, I would like you to state the functions or uses to which those two classes of freight are principally adapted and put in the transportation of freights.

A. The way freight or local train, as I have described it, is one which carries the short haul freight going to towns intermediate between the terminals, either carload or less than carload; and those trains "peddle" as we call it: that is, load and unload the small lots of less than carload freight and they "spot" the cars for the
1911 local stations; do all the station switching and are practically traveling switching trains to do the miscellaneous work that has to be done between terminals. The through freights are trains which are made up as nearly as possible of a unit of size, based upon the grades on the line over which they run, and the power that is in use there; and on those trains freight destined to distant points is carried.

So that in handling that freight it is not disturbed. There is no switching or other expense put on to it. It is carried through from one terminal to another terminal ordinarily.

Q. How does the loading of cars in those two classes of trains compare, usually?

A. There is a very much heavier average loading on the through freight, because a very large percentage of the through freight is carload business. Or, if it is less than carload business it is made up of carloads of less than carload business, all united, going from one terminal to another; or, at least beyond another terminal for distribution at local points beyond that.

In the case of the through freight, the opportunity to load the car full exists in the great bulk of the cases.

With the less than carload freight, handled on the way freights, it is of necessity very much smaller in quantity in the cars. The very best that can be done with it is to load the car full at the commencement of its trip, and that load rapidly
1912 reduces as the freight is peddled along the line. And even the original load is small because of the necessity for so stowing it in the cars that it can be reached at the different stations and handled properly. And so to a large extent, because of the character of freight handled in that way, being less than carload lots of miscellaneous merchandise.

Q. Does the fact that the local trains run on daily schedules have any effect upon the loading of them?

A. Oh, yes, very materially so. The service is a fixed quantity in that case, and the service must be given so as to give the people in the country towns their merchandise; and many of those trains carry passengers, too. And they must be regular and the train

must run very closely to their schedule and the business cannot wait for the train load, as is the case with through business.

Therefore, all way freights, locals, are light in tonnage. They are of necessity run on quite fast time from station to station.

Q. It results from that that they frequently start out with light loads,—the fact that they run on fixed schedule?

A. Yes, sir. They are never loaded up to what we call their "engine rating."

Q. Do the local trains carry any interstate freight and do the through trains carry state or local freight?

A. Yes, sir, I think ordinarily there is some interstate freight in local trains; and some state freight in a good many
1913 through trains. But I should say, as a rule, there is very little state freight in through trains.

Q. Is there any difference in the cost of transporting state freight and interstate freight?

A. Yes, sir, the cost of handling state freight, by reason of the short haul and the additional service required, is more expensive than the handling of interstate freight.

Q. I wish you would state the elements that enter into the service connected with the two classes of traffic; that is, state and interstate, that produces that result.

A. In the first place, because of the fact that the state freight is of necessity handled on the way freights; it is handled in a train which is in itself less economical to handle than in the case of the through freight. The tonnage of the train is necessarily less.

The number of cars required to handle a given tonnage of freight is very much more, because of the light average loading.

And the wear and tear on both equipment and roadbed is very considerably greater, because of the additional number of stops and the switching incident to the handling of freight at stations. The wear and tear on freight equipment is very much greater in cases where the cars have to be handled very frequently. In the case of way freight, cars are handled and coupled onto them and uncoupled many times, even when the freight within them is not handled, on
1914 account of picking up and setting out of other cars.

The damage to cars, causing expense and going a long way toward the expense of maintenance of these cars, is caused by that coupling and uncoupling and handling of the brakes.

The element of loss or damage to freight is much more considerable in the case of the state freight than the interstate for the reason that the cars are very frequently moved and it is difficult to so stow the freight that it is not damaged when the impact of coupling comes. That is a matter which has to be watched very carefully and as closely as it may be watched that watching cannot eliminate damage to the freight.

Then the opportunity for pilfering freight is very much greater on cars that are constantly opened.

Q. I was going to ask you, is the loss on account of pilfering and the manner of handling trains as you have just described very considerable?

A. It is. As an example of that, the loss and damage claims on the road with which I am connected amounts in the year to over $300,000, in the aggregate. Of course, that includes all classes of freight. But a very large proportion of that is in this less than carload, short haul, state business, because of the conditions under which it is handled.

The risk of injury to employés is also very much greater on trains of that class, because they are constantly engaged
1915 in the switching of the cars, in their trains and in the handling of freight, much of it bulky and inconvenient packages to handle, which they have to bring out from the cars to the station platforms, and injuries more or less severe occur, more than in the case of the through train men.

Q. How important an element is that? A considerable element of cost?

A. Yes, sir, quite an item. I have not the figures in my mind now.

Q. How does the efficiency of the locomotive in the train haul on the two kinds of trains we are speaking of, compare?

A. In the first place the locomotive used on the way freight train is in almost all cases a smaller locomotive; and, therefore, less efficient and less economical. Because a train, whether it is a small one or a large one, costs about the same to handle in the matter of wages of the crew engaged in it. Therefore the larger the engine the larger the train that you can handle as one unit, the cheaper will the resulting cost per ton per mile be.

The way freight, being handled by a small engine, because it has to go into spurs and side-tracks and around sharp curves to industries, is an extravagant engine in that respect.

The through freight, on the other hand, is handled by an engine just as the structure and character of the
1916 main line roadbed will permit.

The ideal condition for economical operation of a railroad is one where you can use the largest practicable engine, and load it every time it goes out with a train load of loaded cars. Now if that could be done every time, the ideal would be realized. And the further away you get from that ideal the greater the expense per unit is.

And the handling of state freight in way freight trains is about as far removed from that ideal as anything we have in railroad operation.

Q. How do the wages paid the employés engaged in operating the two kinds of trains compare?

A. There is usually a premium paid to a man engaged on a way freight train, running from 10 to 20% higher than they pay a man on the through freight trains.

Q. Is there any element of overtime that would have any effect upon the amount earned by the engine and crews on the local trains over the interstate?

A. Yes, sir, the element of overtime is quite an important factor in the making of their monthly wages, because under the basis under

which railroad train men are paid, they are paid for a minimum day of 100 miles, or 10 hours, or less; the terms being interchangeable—100 miles in ten hours—and way freights in many cases run over lines of less than 100 miles, on account of their slow movement; and the men are necessarily paid by the hour as they run;
1917 because for a given number of miles 50 or 60, they will get not less than 10 hours or 100 miles pay.

Q. Do the locals run at night, as a rule?

A. No, sir, they run almost altogether in the day time.

Q. Does that cause any expense, on account of the cars being out of service or matters of that sort?

A. Only in the sense that those cars are not used during the full 24 hours.

Q. That is what I mean.

A. Those cars can be used only in the daytime, for that reason.

Q. How does the train mileage compare on the two classes of service? That is the matter you have just been over?

A. I do not quite understand the question. You mean the train mileage on a given tonnage of freight?

Q. Yes, that is what I mean.

A. A very much larger number of trains miles would be needed to handle a given number of ton miles in a local way freight than on a through freight—very much larger.

Q. But is there any difference in the use of fuel and supplies upon the two kinds of trains?

A. Yes, sir. The fuel measure in its consumption per ton per mile is very much greater in quantity on the way freight than on the through freight, because in the first place the engine is a small and uneconomical one; and the very frequent stops
1918 and starts adds greatly to the consumption of fuel; and there is a good deal of time spent at stations during which no ton miles are being moved; but during which a great deal of coal is being consumed. Coal is the principal item of supplies; oil, waste and other items increase in the same proportion but they are comparatively small items.

Q. Is there any difference in the number of cars required to reach the same tonnage in the two branches of service?

A. Yes, sir, there is quite a considerable difference because of the light loading in the way freight trains.

Q. Assume a case in which the average haul of state freight is say 70 miles and of intrastate freight 224 miles: how many cars would be required to move a given tonnage of state freight over the length of haul 224 miles of interstate freight of equal tonnage?

Take one carload of interstate freight, the average haul of which is 224 miles: now, how many cars of state freight will be required to handle an equal amount of tonnage contained in the interstate car I spoke of, over that distance of 224 miles, when the average haul of the state freight is 70 miles. I wish you would state your opinion about that?

A. Bearing in mind the conditions under which railroad cars are

moved, there would be a greater use of the cars necessary than the mere difference in the mileage would indicate on its face.

1919 In that case, there would be practically eight times as many cars required to handle the same tonnage in state as in interstate business.

I have in mind, in making that statement, that on each one of the short hauls, comprising the total required to equalize the ton miles for the state and the interstate, that there would be a free time allowance for both the loading and unloading of the freight; and in that case almost universally throughout the country that free time is 48 hours.

So, there would be not only a difference in the mileage but a difference in the time, because of the necessity for getting additional cars, and the time the cars were delayed by reason of the free time allowance under ordinary railroad regulations.

Q. You stated a moment ago it would require eight times as many cars for state freight to carry the tonnage that would be required for the interstate freight: does that cover the free time or does the free time you speak of, 48 hours for loading and unloading, have any effect in increasing that disparity?

A. I think that would just about double it, because without the free time, there is the stoppage at each of the short hauls points and the 48 hours added in each case would more than double it. It would need a pencil and paper calculation to know exactly what that means but it would run a good deal more than double.

1920 Q. I simply want to get at in a general way what the facts are.

What difference is there in the terminal service as between state and interstate freight, and what effect does that difference have upon the relative cost of the handling of the two kinds of freight?

A. In state business there is necessarily two terminal handlings; the freight has to be loaded and unloaded twice; and all of the expense in connection with the billing and checking and expensing is double in the case of the state freight.

The interstate freight never has more than one handling and if it happens to be trans-state freight there is no handling in a given state.

And then the difference in the length of haul would make a marked difference, because wiping out state lines altogether, the longer the haul the less the cost per ton per mile would be for station service, because you have a much greater figure into which to divide that cost.

Q. You spoke of the elements of damage to cars and equipment and to employés, on account of the manner of handling local trains in which state freights are mostly carried: now is there any greater liability to damage to the tracks and any greater cost for maintenance of way produced by the manner of handling those trains?

A. Yes, sir, the stopping and starting of trains adds materially to the wear and tear on the rails and roadbeds.

1921 The maintenance of switches in itself is a considerable item and there are many more switches for instance needed to take care of the short haul business than the long haul.

Q. What is the effect and the extent of the wear and tear on the locomotives engaged in hauling way freight trains as compared with through trains?

A. The additional stopping and starting wears the locomotive out quicker; it brings it to the shop faster and increases the expense.

Q. I wish you would state if the conditions operate in a similar manner in the operation of all the trunk lines of the road in the country?

A. So far as I have knowledge of them, they do. They are practically common to all lines.

Q. I suppose freights are handled generally the same on all lines of railroad in the country?

A. In a general way, pretty much the same.

Q. I wish you would state, in view of the facts you have referred to in your testimony, entering into the difference if any in handling state as compared to interstate freight, what in your judgment the increase in cost of handling the state freights would be over interstate freight, on a road where the average haul of the state freight is 70 miles and of the interstate freight it is 224 miles?

A. My opinion is that the state freight under such con-
1922 ditions would cost not less than five times as much as the interstate.

Q. I want to call your attention now to the manner of conducting passenger traffic:

I believe all the trunk line railroads of the country run their passenger and local passenger trains, don't they?

A. Yes, sir.

Q. Is there any difference, in your judgment, in the cost involved in the transportation of local state passengers over through passengers, that is interstate passengers, as a general proposition?

A. Yes, sir, the cost of handling local passengers, state passengers, is higher than the cost of handling through passengers, interstate passengers.

Q. Why is that?

A. One of the principal reasons for an added cost in that case is the additional amount of equipment required to handle the local passengers.

These local passenger trains run almost exclusively in the daytime and through passenger trains run continuously night and day. They make a very much larger average mileage per day, throughout the year, than do the cars and engines engaged in the local business.

The necessity for tying those cars up at night requires additional cars.

They are cleaned more frequently. The wear and tear on them is
very much more severe than is the case with through cars,
1923 which run many miles without stopping and without changing their passengers.

The expense of providing accommodations for the local passengers is greater. And the employés required for the handling of the tickets and baggage are more numerous than would be the case in connection with the long haul interstate business.

The requirements of the country with which I am most familiar, being a cold country, and I know it is the case down as far as Missouri, is that we have to provide in winter time places where we can heat those cars with steam during the night, while they are standing idle.

We have to provide water for the cleaning of the cars and in many cases special round house accommodations for the engines, which are not required for the through service.

Q. Is there a difference in the length of haul between state and interstate passengers?

A. Yes, necessarily.

Q. Does that enter as an element into the difference in expense?

A. Just as I have stated it, because the short haul passengers are handled and the tickets are sold to them and their baggage handled, much more than in the case with the through passengers.

Q. That is what I supposed you meant.

Now, take a case where the average distance of a state
1924 passenger's trip is 30 miles and of the interstate passenger is 118 miles: what would you say would be the difference in expense of hauling the two classes of passengers?

A. I think it would cost per passenger per mile probably from 40 to 50% more for the state passenger than the interstate, in such a case.

There is one element of added cost which I did not mention; and that is an indirect cost, through the interruption to the through business by those local trains and the necessity for the freight trains being stopped and side tracked and these local passenger trains being first class trains have the right over other trains; and on account of the frequent stops and the slower time they make they cause a greater interruption to other traffic and a greater expense in connection with that other traffic than do the through trains.

Cross examination.

By Mr. HILL:

Q. Do not the through trains lay out the local as much as the local lay out the through trains?

A. No, sir,—well, yes, I think that is true. You are right on that. But there are a great many more through trains than there are locals so the interruption of the through trains by the locals is greater in the aggregate, I think.

Q. Is it right to charge all that on to the locals?

A. Not all of it, but a great deal of it. It is an indirect expense contributing to the higher cost of handling the local business.

1925 Q. Why should you charge to the local any more than you should to the through?

A. Because the through train runs on quicker time and charging all that actually occurs in either case, the delay on account of the local is greater than it is on account of the through.

Q. You have to make the local get out of the way to let it run faster, don't you?

A. No, sir, not in the case I cited; because I am speaking of the local passenger trains and the delay to the through freight business.

Q. I was thinking of the local freight when I asked the question.

A. I did not speak of that in connection with the local freight. The local freight usually does get out of the way.

Q. It is not right to say that should be an expense of the local freight?

A. No, sir, I didn't say that.

Q. You were referring to the local passenger trains?

A. Yes, sir.

Q. In speaking of these five times more cost for handling state freight, you mean by that freight which is carried on the local, don't you?

A. Well, I took that into account as the principal item going to make up the total of state freight; and meant it in the broad
1926 sense that it does cost in my opinion five times as much to carry state as interstate, taking that element into consideration.

Q. Basing that principally upon the proposition that you think the local train carries largely state freight?

A. Yes, sir.

Q. And the extra cost is the extra cost of operating the local train?

A. Well, yes, the local train and all the freight that is carried on that local train.

Q. There is no difference in the cost of freight, state or interstate, per se?

A. No, sir, it is because of the different character; state being short haul and interstate being long haul.

Q. I want to call your attention to an exhibit in this case put in by one of the complainant railroads being Exhibit 19. This shows the commercial ton miles carried on the local freight for one month 1,084,680; that is state freight. The interstate carried on local trains for that month 2,236,361; something over double the commercial ton miles of interstate freight were carried on the local trains during this month.

And it is in the testimony by the railroad witnesses that that month would fairly represent the business of that company.

— Is that a condition to which you are accustomed in your railroad experience?

1927 A. That proportion is larger for the interstate on the local trains than would ordinarily be the case. I think possibly that might apply in some special cases on some special roads or some special parts of those roads.

Q. But the testimony you have given in explanation of this difference in the cost of the service is not based on such traffic as this, is it?

A. That would not up-set it materially, because even though there were interstate freight carried on the local trains, the cost of the handling of that state freight would not be materially reduced by reason of that fact; or, rather, put it the other way: the cost of handling the state freight would be very much more than what I have stated if it were not for the saving effected by the handling of

that interstate freight on that train. If we excluded all the interstate freight from the local trains, the figure of five to one would not be at all correct.

Q. But the proportion there of two to one carried on those local trains of interstate freight, should make it bear that portion of the expenses, should it not?

A. Well, I don't know that I can answer that. That would depend upon conditions. I do not know to what you refer and perhaps it is in a territory with which I am not acquainted. I rather feel as though I could not answer that question.

1928 Let us put the other side of that proposition: this was (as I have stated) as an actual test. Suppose an actual test of the performance of a similar month for a representative period should show that 50% of the state freight ton miles were made on through trains: what, then, would be your opinion of the extra cost of the state business?

A. That would take some time to consider. It would perhaps modify my opinion but to what extent I could not say, off hand.

Q. It would modify it materially, wouldn't it, Mr. Ward?

A. I am not prepared to say it would do it materially but it would modify it to some extent. That would depend upon the surrounding circumstances. I would like to understand the whole case before I would make a definite answer on that.

Q. Are you familiar with the local conditions in Arkansas, at all?

A. No, sir.

Q. Are you familiar with the cotton movement.

A. No, sir.

Q. Your roads are grain carrying roads, of course. You originate grain: are you familiar with the way grain is distributed in the non-grain producing states?

A. Distributed, you mean——

Q. In Arkansas?

A. I am not.

Q. Of course you are familiar with the way it is gathered up and shipped down to Arkansas?

1929 A. Yes.

Q. And you know how it is handled at the other end of the line?

A. Yes.

Q. I will state what I understand to be the evidence on that: we having a milling in transit rate in force there and grain is shipped into the trade centers on that rate; and what is not consumed in that particular trade center is shipped out on the way freights and most usually take the through rate from the point of origin to the point of destination—the balance of the through rate. In that way a large volume of the grain tonnage of the state is handled. And that is one of the large movements in the state. I cannot give you the percentage, so I will have to just speak of it generally.

Assuming that to be a correct statement of the handling of that grain, how many terminal expenses would you ascribe to that movement in the state of Arkansas?

A. I don't believe I could answer that intelligently. That is, I

would not feel sati-fied with my own answer, because I am so unfamiliar with the conditions of the handling of that business at the point where it is milled. I think someone familiar with local conditions could answer that much more intelligently than I could.

Q. It is apparent from that statement, if it goes into a trade center that way and is held there for a while, and then con-
1930 signed to another place on the local freight, there would be three terminal expenses within the state, in that case?

A. Yes, sir, there would be in that case, if the trade center was in the state. Grain unloaded and put back again into another car and shipped out again.

Q. Or if it were just put on the track. Suppose it went from some point on your road to Little Rock, on a through train and then would be side-tracked down there at Little Rock and a day or two later they would get an order to ship that car to Arkadelphia, further south; they would hitch it on the way freight and haul it down there?

A. That is a terminal expense of a certain kind, but it is not the particular kind of which I thought in speaking of the state freight in my direct examination. All through freight is what you might call an intermediate terminal expense, which is small in quantity, because when it gets to an engine terminal the engine is changed and the make-up of the train is more or less altered; but that item is very small as compared to the whole.

Q. But this is reconsigned and usually rebilled to the next point. Would not that include all the terminal expenses?

Mr. MOORE: Would you call that interstate if it is reconsigned and rebilled, any more than you would a ton of merchandise hauled into a merchant's store and then reshipped out?

Mr. HILL: We are not arguing legal questions now.

1931 Q. Mr. Ward, would not that include all the terminal expenses you have heretofore named?

A. No, sir.

Q. What else would there be?

A. There would not be the switching of that car to the track on which it is to be unloaded and taking it away from the track and putting it on another track. It would be quite different in the amount of work done and the amount of property used in connection with the movement.

Q. I do not quite catch that difference. In any event, in handling it on the terminal it would be switched to the particular industry in which it is to be reloaded?

A. No, sir. I am acquainted with reconsignments of freight of various classes, and that is not the way it is handled. It does not go to the industries. It comes into a station on some kind of a holding order and is just put on some convenient holding track in the train yard; and is picked up again when the rebilling is received. But between that and a car coming into a terminal to be unloaded, the difference is quite marked. Because in one case a car might be switched a long distance, at considerable expense and a good deal of

property used in so doing it. And the same thing in getting in the empty and taking it out loaded again.

Q. I see the difference. If that went into the elevator in Little Rock, would there be any difference?

A. It would not be any different from any other car. I
1932 am speaking of Little Rock, not knowing the situation there.

Q. In the event it went into the elevator, then there would be three terminal expenses in Little Rock?

A. One at the loading point and two at Little Rock.

Q. Oh, yes, I meant the unloading point; two at Little Rock?

A. Yes, that car is loaded outside of the state.

Q. I am supposing it to be loaded on your line?

A. Yes, sir.

Q. There would be three, then?

A. Yes, of the kind named.

Q. I will state to you as I understand the evidence as proved in this case the way cotton is handled:

Cotton is generally picked up at a plantation or more generally at a small town, and shipped on the way or local freight to the nearest compressing point. It is there delivered to the compress company and is compressed. After compression it is delivered to the railroad company and shipped east.

With the exception of less than one percent, all of the cotton of Arkansas is shipped out of the state? There is an interstate rate given from the point of origin to the point of ultimate destination, omitting its concentration for the purpose of compression:

What would you say as to the terminal handlings of that commodity, handled in the way I have stated in that question?

1933 A. That business is so strange to me that I do not feel competent to express an opinion. It would be a factor which those who know the state and class of business could more fully detail.

Q. I will state that more fully, which will enable you to answer. It is handled into the compress point less than carload; it is handled out of there most usually in carloads, after it is compressed. You know from general knowledge that cotton is one of the large commodities of Arkansas?

A. Yes, sir.

Q. That large handling of cotton, in the way I have outlined, upon the local freight, and that being entirely an interstate movement, would have a material effect upon your opinion you have heretofore expressed as applied to conditions in Arkansas, wouldn't it?

A. I don't think so.

Q. Why not?

A. In almost any state you can think of there is some peculiar condition which would tend to reduce the exaggerated conditions that might apply to the handling of state or interstate freight.

Arkansas may have cotton; North Dakota has wheat; Minnesota has wheat or iron ore. They all go to make up the general average.

1934 While I don't know Arkansas, on account of the much longer haul I don't believe that fact would very materially alter my opinion.

Q. Suppose that cotton movement represented a larger tonnage than all the intrastate tonnage of the state: what would you say, then?

A. Of course, you understand my opinion as to the five to one, was based on a general proposition, based on certain lengths of haul, state and interstate. I don't believe that would materially affect my opinion of it.

Mr. MOORE: May I ask what you mean, Judge Hill, when you say the cotton movement represents what percent of all the business of Arkansas?

Mr. HILL: I did not say any percent.

Mr. MOORE: You said a large part of the business: do you mean the cotton moves from the country point to the compress, the concentration movement represents a large percent of the business of Arkansas?

Mr. HILL: I did not say that.

Mr. MOORE: Is that what you meant?

Mr. HILL: I am talking about the whole movement of Cotton.

Mr. MOORE: What you are discussing with the witness is the country movement to the compress. You include the country movement to the compress until finally shipped out of the state.

1935 Mr. HILL: It is all interstate. Part is carried on the local and part on the through train.

I meant the entire movement of the cotton.

Q. Mr. Ward, the following question and answer you gave a while ago: Suppose you exclude all the intrastate freight from the local trains, would not that put a greatly enhanced cost upon the interstate freight which is carried on these local trains?

A. If you exclude all the intrastate freight from the local trains?

Q. Yes. I am going back to this statistical table or showing on the Cotton Belt road, on the local train there was carried twice as much interstate as intrastate.

I say, if you exclude all that intrastate freight from local trains, would not the cost be greatly enhanced?

A. As an operating man I don't think I would carry it on the local trains.

Q. I am not asking what you would do but as to the result if you did carry it there?

A. It strikes me as being a rather impossible proposition.

Q. I think you put just the other proposition; and if that were possible I do not see why this should not be the same.

A. I do not recall anything that should bear that interpretation.

Mr. KIRBY: Your statement was that the carriage of inter-
1936 state freight on local trains reduced the cost of the intrastate, because it increased the tonnage: if you excluded the interstate freight from the local trains the cost of the state freight would be greatly enhanced?

A. Yes.

Q. Now, we ask you where the interstate freight is twice the amount of the tonnage of the local train, if you exclude the intrastate freight from that local train would not it greatly enhance the cost of the carriage of the interstate freight?—just the other proposition?

A. It is a little more than the other proposition.

Q. You have to carry your interstate freight on the local trains between those local stations?

A. It would make it larger if that were a possible condition, yes.

Mr. HILL:

Q. You spoke about the less than carload freight on the local trains: isn't there a great deal of less than carload freight on through trains?

A. There is, but it is in carloads. You understand, there may be a carload of less than carload freight and when it is handled on a through train it is in most cases at least carried at least one full operating district as a carload; and then it may be peddled from one terminal to the next terminal.

Q. It would require peddling?

A. Yes, sir, it will require peddling over a part of the road.

1937 Q. Sooner or later?

A. Yes, sir, sooner or later.

Q. It does not cost less to peddle that less than carload interstate than less than carload state?

A. No, sir, but if you are talking about cost per ton per mile, over the whole distance, it makes a difference.

Q. What proportion do you think the local trains carry of interstate less than carload freight?

A. I don't know. That varies very much in different parts of the country.

Q. In making your estimate here a few moments ago; about what proportion were you bearing in mind when you made your general statement?

A. I had in mind that more than half of it would be state business.

Q. More than half?

A. Yes, sir.

Q. Carried on the local trains more than half would be state freight?

A. Yes, sir.

Q. In the Iron Mountain exhibit in this case, No. 26, it shows that in October, 1907 (a month which they took as representing their traffic) interstate less than carload 2,253,381 the number of tons one mile.

Intrastate freight 459,204 tons. That is for a corresponding period.

1938 Would that be such a situation as you would regard as a normal movement of less than carload traffic?

A. No, sir, that would hardly be normal. That was the tonnage handled on the local trains, wasn't it?

Q. All trains.

A. The first question was as to the tonnage handled on local trains?

Q. Yes.

A. Then that would be different.

Q. I have no separation of it on this exhibit. This is all trains.

A. I think perhaps I might modify my answer, because I was talking and thinking only of business carried on local trains.

Q. What would you say? Would you say this would be a normal movement?

A. On all trains it would not be abnormal, I should not think. Of course that varies so much it is hard to say yes or no to that.

Q. As a matter of fact, there is no hard and fast rule on the subject, at all?

A. It is not a rule but a matter of fact.

Q. And it is a question of fact which requires local knowledge to work out, isn't it?

A. Usually, yes.

Q. And you have absolutely no knowledge of the conditions in Arkansas?

1939 A. No, sir, none at all.

Q. They are academic so far as you are concerned?

A. Academic is putting it pretty strong.

Q. I am not questioning your ability to speak of propositions generally, at all; but I am asking as to the local situation down there in Arkansas?

A. I don't know it.

Q. Have you ever had the pleasure of visiting our great state?

A. I traveled through it once.

Redirect examination.

By Mr. MOORE:

Q. Mr. Ward, your attention was called to the reconsignment of grain at commercial centers in Arkansas, and the terminal expenses, and the fact that there were three terminal handlings and expenses: If we should assume that the expense of loading and unloading was borne by the shipper and not by the carrier, what effect would that have upon the expense attached to it.

A. Considering it was grain, it would not have any effect, because the loading and unloading of grain is always done by the shipper.

Q. What I mean is, what effect would it have in differentiating it from a case where the expense is borne by the carrier: as I understand it, the terminal expense of handling local way freight

1940 on local trains is borne by the railroad company, less than carload freight?

A. All less than carload business is handled by the railroad employés.

Q. If the terminal expense was borne by the shipper and not by the carrier it would make a difference so far as expense is concerned?

A. Yes, sir, of course, the cost per ton, either by the ton load or ton mile is much greater in the case of less than carload than in the carload handling.

Q. If 37% of all train mileage is performed by the local trains, would it be abnormal or unusual for those trains constituting that per cent of the total trains to carry 8% of the interstate business?

A. No, sir, I think not. I think that would be a very normal condition.

1941 F. O. BECKER, a witness of lawful age being duly produced, sworn and examined on the part of the complainants, testified as follows:

Direct examination.

By Mr. MOORE:

Q. State your full name, please.

A. F. O. Becker.

Q. Where do you live?

A. Chicago, Ill.

Q. What is your occupation?

A. I am Chairman of the Western Classification Committee and Superintendent of the Western Railway Association's weighing and inspection bureau.

Q. How long have you occupied those positions you speak of?

A. Since the summer of 1904.

Q. The Western Classification Committee classifies the commodities and objects of transportation on the railroads of the country, does it not?

A. In western territory.

Q. I was going to come to that in a moment. Over what
1942 territory does its jurisdiction extend?

A. Generally speaking, the territory west of the Mississippi River.

Q. What is the object of making the classification that is made by that committee? I mean with reference to rate making by railroads?

A. The purpose is to classify the freight that is offered for transportation.

Q. Is that done as a basis of rate making by railroads?

A. Yes, sir.

Q. How does that committee proceed in making its classification. I mean with reference to the character of the articles embraced in the classification.

A. Primarily they take first into consideration the density of an article; because the lighter and more fragile, the more it costs to handle and transport it.

Secondly, the value; the greater the value the greater the element of risk, which also enters into the cost of handling and transporting.

Secondarily, the character of risk; susceptibility to damage; the volume——

Q. In what sense do you use the word "volume," Mr. Becker?
A. The quantity, taken as a whole; the total tonnage.
Q. Does the space occupied have anything to do with it?
A. Always. That is covered by "density."
1943 The weight per cubic foot or the number of cubic feet per hundred pounds, plus the value per hundred pounds, makes what we call "a unit." And taking the several hundred commodities, for instance, rated in the classification as "first class" we have found the first class unit to be approximately 20.61. The other classes range downward from that.
Q. That figure you gave, 20.61, is a kind of base, is it?
A. Yes, sir, just a basis which we first consider. There may be other conditions subsequently entering into the consideration but primarily we consider the density and the value.
Q. Does the cost of transportation—and I use that word now in the broad sense—including transportation service and handling and the risk incident to the transportation, enter into the consideration of the committee in the classifications made by it?
A. Always.
Q. Is it a part of *of* the duties of that committee to hear complaints and adjudicate and pass upon them, among the shippers or railroads, either?
A. Yes, sir, they meet twice a year for that purpose.
Q. I wish you would state in just a brief way, in what manner the committee proceed in passing upon and determining complaints as to commodities, for instance, that are in the classification
1944 where the object of the complaint is to bring about a change in classification: what are the considerations and what are the elements that are considered by the committee in such cases?
A. A shipper who feels that any commodity handled by him is classified unreasonably high, executes a petition on a blank, files it with the committee, and it is docketed for the consideration of the committee at their next coming meeting.
We always require of him that he furnish the weight per cubic foot and the value per hundred pounds. He presents his reasons to the committee, either verbally or in writing.
The committee takes his statements under consideration and bases its conclusions on what it believes to be reasonable and fair in rating; taking into consideration the weight, value, risk, and tonnage and other elements or features that I have mentioned.
Q. Your statement that it takes into consideration elements of risk, value, density, etc., involves again the cost of the service as I defined it a while ago in my question?
A. Yes, sir.
Q. Do your duties as superintendent of the Western Weighing Association and member of the inspection bureau give you any opportunity to observe the effect of your classification with reference to the element of cost of service?
A. Yes, sir, particularly so with respect to the element of
1945 risk. Fragile packages or articles that often become damaged in transit under the ordinary handling.

Q. What is your practice should you, in the discharge of your duties, see something that you considered out of line in the classification?

A. It is always our custom to docket such questions for the consideration of the *committees* at the next meeting.

If, for instance, our inspectors should observe that bottles in bulk were susceptible to great damage and consequent claims, we should docket for the consideration of the committee the question of requiring them to be loaded in packages so as to remove that element of cost.

Q. Why does your committee give consideration to the question of bulk or density in making your classification, Mr. Becker?

A. Because as I stated in the first place, the lighter the articles the more it costs to handle and transport.

Q. State why that is, please?

A. For instance, a given weight of baskets must necessarily take more space than a given weight of iron; and it would require more cars to transport; all of which adds to the cost.

We found it necessary to rate the baskets three times first class; whereas we rate iron fourth class, in less than carload quantities, that being our lowest less than carload rate.

1946 Q. The reason for that is that it requires more cars and more equipment in which to transport the more bulky articles: is that it?

A. Yes, sir.

Cross-examination.

By Mr. HILL:

Q. Mr. Becker, how do you get the cost of service, this element to which you say you always give consideration?

A. We know that it costs to transport; that it costs to handle; that the element of risk necessarily enters into the cost. We, of course, do no know the total cost; but all of these are factors in the total cost.

Q. You have no basis of cost?

A. I hardly understand what you mean by "basis."

Q. Do you use the ton per mile as a basis in ascertaining the cost of a given line of road or through a given country?

A. Oh, no, sir.

Q. Yo do not give any consideration to that?

A. No, sir.

Q. You know that railroad companies prepare statistics of their cost per ton per mile?

A. I believe they do. That is not in my line but that is my understanding.

Q. But your Western Classification Committee does not use those statistics in making its classification?

1947 A. No, sir.

Q. You know that this element of risk exists, and you

bring to bear your experience and your observation on that: isn't that a fact?

A. Yes, sir.

Q. You have no actual figures on that?

A. Yes, sir, we take the aciduous carboys, for instance, and we know, of course, there is great liability to damage and subsequent loss to other freight.

Q. What I mean is, you do not have the cost of carrying those acids in carboys. You do not know what it costs to carry that particular commodity, do you?

A. No, sir, not definitely.

Q. You know it is very liable to injury and easily broken and you put a high rate on it?

A. Yes, sir.

Q. Going back to your illustration of baskets and iron: You use your best judgment to determine the relation that should be borne between those two commodities?

A. Yes, sir. That is, we do not compare baskets with iron, particularly; but there is a relation and a distinct relation so far as relates to density and value.

Q. You used those as an illustration and I think a very apt one. That is the substance of your work in arranging the proper relation between the different commodities, isn't it?

A. Yes, sir.

1948 That is the committee's work. I am Chairman of that committee.

Q. I am speaking of you in your collective capacity.

A. Yes, sir.

Q. You do not make any rates, themselves?

A. No, sir.

Q. You just make the classification upon which the rates may be fixed?

A. Yes, sir.

Q. Those classifications have many exceptions to them, don't they, by the railroad companies in different parts of the country?

A. Yes, sir.

Q. Are they generally accepted by the State Commission?—Is the Western Classification generally accepted by the Commissions in your territory?

A. I think so, although there are quite a number of exceptions.

Q. Each Commission makes its own classification?

A. Each Commission in the western states has its own classification, which are largely based upon the Western Classification Committee's classification.

Q. And they contain many variations?

A. Yes, sir.

Q. Are there other classifications besides the Western?

A. The Official and the Southern, besides the Western Classification.

1949 Q. Are the classifications the same in the official and the southern as in the western?

A. The ratings you have reference to?
Q. Yes.
A. No, sir, not always.

Mr. MOORE: Are the ratings and classifications the same?

A. I understand his question to be that a commodity rated in the Official second class, may or may not be second class in our territory.

Mr. HILL:

Q. That is what I mean.
Why is there that difference in different classifying bodies?
A. For the same reasons I assume that makes the ratings higher in the sparsely settled district than they are in the thickly settled community. The traffic is more dense; the rates are lower and generally speaking, the classification ratings are somewhat lower. Relatively they should be approximately the same.
Q. There is a very great difference in local conditions in the territory covered by the western classification?
A. Yes, sir, that is what makes the exceptions, necessarily.
Q. Take the conditions in Arkansas and the conditions in Nebraska?
A. They are quite different.
1950 Q. In fact there would be a greater difference in the different parts of the western classification committee's territory than in the official and southern and western classifications?
A. Yes, sir, so far as aggregate charge is concerned; but so far as relations between the different commodities, I should say no.
Q. There are many published exceptions in Texas to the Western Classification?
A. Yes, sir.
Q. Why is it that Texas has worked out so many exceptions?
A. They have a Commission who makes its own ratings, and exceptions; what governs them I do not know.
Q. I refer to the interstate tariff, where there are exceptions.
A. Those are in the nature of commodity ratings.
Q. They amount to exceptions, don't they?
A. Yes, sir. And you ask what makes that necessary?
Q. Yes.
A. I presume commercial and competitive conditions.
Q. Those Texas exceptions to the Western Classification apply on the traffic moving from St. Louis to Texas, do they not?
A. Yes, sir.
Q. All the trans-state traffic that moves through Arkansas or St. Louis to Texas would be governed by the exceptions to the
1951 Western Classification, made to fit Texas conditions, wouldn't it?
A. That would be my understanding.
Q. Does your commitee give consideration to commercial and competitive conditions also, in making classifications?
A. More or less; not to the same extent, of course, that governs

in the commodity ratings. You know our classification governs over quite an extensive territory and there might be local conditions that would make it necessary to except to that classification.

Redirect examination.

By Mr. MOORE:

Q. Mr. Becker, are the exceptions in the interstate classification made in Texas, made to conform to the classification made by the state authorities; I believe you said the Texas Commission made a classification which contained exceptions to that made by the Western Classification Committee?

A. They have a classification of their own which in some respects differs from ours.

Q. I understood you to say that the interstate classification in Texas contains a number of exceptions to that made by the Western Classification Committee: Are those exceptions made for the purpose of conforming the interstate classification to the state classification?

A. No, sir, not as I understand it. You say "exceptions
1952 in the classification;" I presume you have reference to the commodity tariffs, which in themselves are exceptions to the classification.

Q. Take it that way: Are there exceptions, whatever they may be, if commodities are embraced in the different tariffs, made for the purpose of conforming so far as may be to the Texas Commission's classification and rating?

A. Not according to my understanding of it.

Q. What is the object in making any change from your classification in Texas?

A. There may be many conditions. The traffic may not be able to stand the classification rating from a competitive standpoint. For instance, from New York by water to Texas, there is a strong competition, which makes it necessary for the lines leading from St. Louis and other gate-ways, to meet.

Q. It is conditions of that sort that bring about the exceptions in Texas?

A. That is one of many. The boat line rates from New York to Galveston plus the local Texas Commission's rate from Galveston to an interior point might make a rate less than our classification rating; and it then becomes necessary for the interstate lines from St. Louis, Kansas City and other gate-ways to meet that rating by an exception to the classification ruling.

Q. What classification governs from St. Louis to Texas?

A. The Western Classification in western territory.

1953 Q. What classification governs interstate rates to Texas?

A. Western Classification.

Mr. HILL: You mean the Western Classification and Texas exceptions?

A. He asked me what classification governed to Texas from interstate points.

Mr. HILL:

Q. And the exceptions are in the western classification?
A. No, sir.

Mr. MOORE:

Q. Are there any exceptions? You say "The western classification governs on interstate movements in Texas": now there are exceptions to that such as you mentioned a while ago.
A. Commodity ratings, yes.
Q. Are those exceptions you speak of also made or contained in the state classification made by the Texas Commission?
A. No, sir, they publish no interstate rates.
Q. I do not mean that. What I mean is this: these exceptions to the classification made by your committee which obtain in Texas——
A. I want to correct you there, please. We do not make any exceptions to the classification. Those are made in the tariff committee, governing in different respective territories.
Q. I understand that. But what I mean is this: are the exceptions which prevail in Texas, however made—I understand they
1954 are made by the local committees down there, but in your classification which applies to interstate transportation are they the same or do they correspond in a general way with the classifications made by the Texas Commission?
A. If I gather your idea correctly——
Q. I will explain my idea to you: I understand that the local authorities of Texas have made a classification which differs in some respects with the classification made by your Committee: that is which prevails in local business?
A. Yes.
Q. I understand also that on account of the conditions which you mentioned a while ago, the rating tariffs in Texas made exceptions to the classification made by your committee applicable to that section?
A. Yes, sir.
Q. I want to know if the exceptions made by the local tariffs in Texas, and the application of the interstate rates correspond to the classification made by the Interstate Commerce Commission and applicable to that state?
A. There is a distinct relation between the rates made by the Texas Commission and the interstate rates governing to Texas points.
Q. That is what I wanted to know.
A. Absolutely and necessarily so.
Q. That is so, generally, too, isn't it?
1955 A. Yes, sir.
Q. You were asked on cross examination if the same classification was made by other bodies, similar to yours, other classification committees and you stated there were instances where they differed: as a rule, taking it as a whole, how does the classification made by the different classification committees—that is in different

territories compare, baring exceptional local conditions which might bring about a change?

A. Generally speaking there is a very close relation between the different commodities, but in the Official Classification territory oftentimes their basis is somewhat lower than ours.

For instance, they may classify an article as third class and we will classify it as second class. But there is approximately the same relation between the first, second, third and fourth classes.

Q. Do you know what brings about that difference you mentioned in the different territories? What I mean is, is it some local condition that obtains there, purely applicable to that territory?

A. I think it is, for the same reason the rates are lower. That is, the population is more dense and the traffic is heavier and they can afford to handle the business on lower rates and on a lower classification basis.

Q. I do not understand you to have stated that your classi-
1956 fication is based on a knowledge of the actual cost of transportation of the several commodities embraced in the classification. I understand you to mean that it is made relatively with reference to the cost of the articles you are dealing with?

A. Yes, sir.

Q. That you are able to determine in the way you spoke of, by comparing the density, bulk, weight, the value and those qualities that pertain to the articles that enter into your classification?

A. Yes, sir.

Recross-examination.

By Mr. HILL:

Q. I do not know that we have clearly in the record the conditions about the Texas traffic from St. Louis through Arkansas to Texas: That is what we are concerned with; that which will move over the Iron Mountain and the Cotton Belt road through Arkansas into Texas. I understand from you there is an exception sheet issued by the railroads for Texas points: isn't that true? Issued by the Southwestern tariff bureau?

A. Yes, sir.

Q. That exception sheet governs the traffic moving from St. Louis through Arkansas into Texas?

A. Such traffic as it covers, yes.

Q. Do you know the range of commodities it covers or the
1957 volume of the traffic it covers?

A. No, sir, I would hardly attempt to say it.

Q. Necessarily you would not know it accurately; but could you approximate the volume of that traffic?

A. No, sir.

Q. It is a large movement, isn't it?

A. Yes, sir, it must be a large movement.

Q. Do I understand that those exception sheets have been issued by these bureaus to bring the interstate movement in relation with the Texas state movement?

A. Not in all instances. My point is that there is a distinct relation between the rates made by the Texas Commission and the interstate rates to Texas points.

Q. That is to say, on account of commercial conditions?

A. Yes, sir. If the Texas Commission reduces the rate on a given commodity between points in Texas, the interstate rates are reduced proportionately.

Q. This large volume of traffic passing through Arkansas, from St. Louis to Texas, will then be governed largely as to both classification and rates by the classification of rates put in by the local authorities of Texas, will it not?

A. I do not know what proportion of that would be governed in that manner. But there is a distinct relation. The rates in Texas might be reduced by reason of the fact that the interstate rates were reduced, and vice versa.

1958 Q. But my point is, that these classifications of rates made by the Texas authorities would have a distinct relation and bearing on the interstate classification of rates made from St. Louis to Texas, on that traffic passing through Arkansas?

A. The local Texas classification has no effect whatever upon the Western Classification. But I assume that any classification adopted by the Texas Commission, which would have the effect of reducing the rates in Texas, would make it necessary to establish an exception to the Western Classification in the shape of a commodity rate.

Q. Or an exception sheet to the local classification?

A. Or an exception to the Western Classification.

Redirect examination.

By Mr. MOORE:

Q. That relation you speak of between the classification and rates, as between state and interstate classifications of rates in Texas, prevails elsewhere generally in your territory—that relation between interstate and classification rates?

A. Yes, sir, I so understand it.

1959 Mr. F. P. JOHNSON recalled, testified as follows:

Direct examination.

By Mr. MOORE:

Q. Mr. Johnson, I hand you a statement: please state what that is.

A. The paper marked F. P. Johnson Exhibit 7-*a* is a statement of the assesment as levied by the Arkansas State Board of Assessors for the years 1907, 1908, and 1909.

That portion for the years 1907 has been revised by eliminating the assessment of the Little Rock Junction Railway, which was in our original statement filed as Exhibit 7.

Q. Will you file this paper as an exhibit to your testimony?

A. Yes, sir.

The paper referred to is marked "F. P. Johnson Exhibit 7-*a*." Said exhibit is in the words and figures following to-wit:
For Exhibit "7-*a*" see Volume 8, page 5273.

1960 Mr. MOORE:

Q. Mr. Johnson, will you file now the statement marked Exhibit 3-*a* and explain what it is.

A. Exhibit 3-*a* shows the assessed value of the property divided between freight and passenger traffic and total, and between intrastate freight and intrastate passenger traffic.

It shows the amount of the assessment, interest on that amount at various percentages, and the return upon the value of the property, based upon the assessment as levied by the Taxing Board.

Mr. HILL:

Q. Is that just the same as your original Exhibit 3 except with the change of eliminating the Little Rock Bridge?

A. Yes, sir, it is the revision of Exhibit 3, paragraphs C, D, and G.

Q. It takes its place?

A. Yes, sir, of those three paragraphs.

Mr. MOORE:

Q. Will you file that as an exhibit to your testimony?

A. Yes, sir.

The paper referred to is marked "F. P. Johnson Exhibit 3-*a*." Said exhibit is in the words and figures following to-wit:
For Exhibit "3-*a*" see Volume 8, page 5256.

1961 Mr. MOORE:

Q. Mr. Johnson, will you file the statement marked Exhibit 8-*a* and explain what it is?

A. Yes, sir. I wish to say in this connection that Exhibit 3-*a* deals with the business of the road for the six months ending Dec. 31, 1907; and Exhibit 8-*a* is the same kind of statement, based upon the assessment for those same three years, 1907, 1908, and 1909, and covering the business for the six months ending June 30, 1907; and in that same respect takes the place of paragraphs C, D, and F.

Mr. HILL:

Q. That is, there is no other change except that?

A. That is correct.

The paper refered to is marked "F. P. Johnson Exhibit 8-*a*." Said exhibit is in the words and figures following to-wit:
For Exhibit "8-*a*" see Volume 8, page 5281.

1962 Mr. MOORE:

Q. What is the next one, Mr. Johnson?

A. Exhibit 8-*b* is based upon the assessed value of the property and covers the period for the calendar year ending Dec. 31, 1907,

and shows the assessed value divided between the total freight and passenger traffic and the intrastate freight and passenger traffic; and shows the return upon the value of the property based upon that assessment. It supersedes paragraphs E and H in Exhibit 8.

Q. Will you file that as an exhibit to your testimony?

A. Yes, sir.

The paper referred to is marked "F. P. Johnson Exhibit 8-*b*." Said exhibit is in the words and figures following to-wit:

For Exhibit "8-*b*" see Volume 8, page 5284.

1963 Mr. HILL: The defendant objects to any exhibits containing any calculations on the 1908 and 1909 assessments. We have made no objection to the changing of the assessment, but we do not think the 1908 and 1909 assessments have any bearing upon the case.

Mr. MOORE:

Q. Mr. Johnson, I hand you a statement which you will please examine and state what it is and file it as an exhibit to your testimony.

A. This is a statement of the gross earnings of the St. Louis, Iron Mountain & Southern Railway in its entirety for the period from Jan. 1, 1900, to June 30, 1908, divided into periods of six months each. It shows the traffic mileage of the St. Louis, Iron Mountain & Southern Railway, the gross earnings, and the gross earnings per mile.

The paper referred to is marked "F. P. Johnson Exhibit 45." Said exhibit is in the words and figures following to-wit:

For Exhibit 45, see Volume 8, page 5394.

1964 C. J. MCPHERSON, recalled, testified as follows:

Direct examination.

By Mr. MOORE:

Q. Will you please explain this statement I now hand you?

A. This is a statement showing the local and through passenger trains operating in the state of Arkansas during the month of October, 1907.

Q. Will you file that as an exhibit to your testimony?

A. Yes, sir.

The paper referred to is marked "C. J. McPherson Exhibit 46." Said exhibit is in the words and figures following to-wit:

For Exhibit 46, see Volume 8, page 5396.

1965 NOTE.—Mr. F. P. Johnson here files exhibits called for by the defendant.

The first statement is a statement of the capital stock and the amount of dividends paid by the St. Louis, Iron Mountain & Southern Railway for the fiscal years ending June 30, 1904, to 1909, inclusive.

Said paper is marked "F. P. Johnson Exhibit 47."
Said exhibit is in the words and figures following to-wit:
For Exhibit 47, see Volume 8, page 5412.

1966 The next is a statement showing the fixed charges of the St. Louis, Iron Mountain & Southern Railway for the fiscal years ending June 30, 1906 and 1907. It shows the fixed charges for the year, capital stock, dividends paid, and the owned mileage of the road.

Said paper is marked "F. P. Johnson Exhibit 48."
Said exhibit is in the words and figures following to-wit:
For Exhibit 48, see Volume 8, page 5414.

1967 W. M. WHITENTON, a witness of lawful age, being duly produced, sworn and examined in behalf of the Complainants, testified as follows:

Direct examination.

By Mr. MOORE:

Q. State your name and your place of residence?
A. W. M. Whitenton; my present residence is El Reno, Oklahoma.
Q. How long have you lived there?
A. About thirty days.
Q. Where did you live prior to the time that you went to El Reno?
A. For about twenty-eight months prior to going to El Reno, I lived in Little Rock, Arkansas.
Q. What is your occupation?
A. At the present time I am Manager of the Rock Island lines in Oklahoma, Arkansas and Louisiana.

1968 Q. What official position have you occupied prior to this time in connection with the Rock Island lines?
A. I started in the summer of 1900, with the Choctaw, Omaha & Gulf, as night operator, for about sixty days; then was chief dispatcher at Little Rock, on what is known as the Arkansas Division.
I held that position for about eight months and was then appointed Train Master in Oklahoma.
I held that position for two years and was then appointed Superintendent in Oklahoma.
I held that position for about nine months and was transferred to Little Rock as Superintendent of the Arkansas Division.
I was in that position for just a year, when I was transferred to Missouri as Superintendent, and remained there for twenty-seven months.
I was then transferred back to Little Rock as General Superintendent of what is known as the Choctaw District.
Q. What territory does that cover?
A. That covers all of the Rock Island lines in Arkansas, Louisiana, and the eastern half of Oklahoma.

Q. When did you begin railroad service?

A. I first began railroad service in 1882.

Q. Were you engaged in it continuously up to the time you came to the Rock Island line in 1900?

A. With the exception of two years when I was in
1969 school.

Q. Have you had opportunity to familiarize yourself with the various problems relating to the operation of trains, and to the investigation of the question of the expense involved in such operation?

A. Yes sir.

Q. Are you acquainted with the methods adopted by the railroads throughout the country in handling state and interstate traffic?

A. Yes, I think I am familiar with those.

Q. Is there any difference in the method of handling the traffic that is local in the state—the intrastate traffic, from the interstate traffic?

A. Yes, there is a difference in the way that it is handled.

Q. In your judgment, is there any difference in the cost of handling the two kinds of traffic?

A. Yes, there is a difference in the cost.

Q. I would be glad if you would state what the elements of difference consist of, and in making your statement accompany it with such explanations as occur to you, if necessary, as to the respect in which the two kinds of service differ as affecting the difference in expense.

A. My opinion, which is based on my experience as an operating man, is, that the intra or state freight of railroads is handled largely by the local freight train, and by local train I mean one
1970 that distributes and picks up package merchandise and does such other work at intermediate stations as is consistent with its run, after giving first consideration to the distribution of this package freight.

These local trains are scheduled, one in each direction, over a definite territory, and usually——

Q. In what period, one each day, or what?

A. One in each direction, each day, and generally six days a week.

On this character of train a great deal of the short haul business is taken care of.

This local freight train is more expensive to operate than the through freight train, and I might add right there, that by through freight train I mean one that handles carload freight, and makes no distribution of package freight.

I think the local freight train is the more expensive of the two classes of trains, and in my opinion, the cost per ton mile (if we put it on that basis) of freight handled on a local in Arkansas, is from four to seven times greater than the cost per ton per mile on the through freight train. In other words, the average excess cost is somewhere between four and seven times greater than the cost per ton per mile on the through freight train.

This extra cost is made up from different reasons. The character of freight handled has considerable to do with the cost of
1971 handling it. Package freight, ordinarily known as local merchandise, is more expensive to handle, per unit, than a carload of coal.

Another condition which will cause fluctuation in the ratio of cost is the country through which you operate. If the country is well settled and has a great many industries to serve, the work of the local freight train is much heavier, and the cost of operating it is necessarily increased.

Some of the more important items which go to make up the extra cost of the local freight train as compared with the through freight train, in my opinion, are as follows:

1st. The short haul of state freight as compared with interstate or through freight, as I have termed it, and a fixed local freight train service. In other words, a local freight train is scheduled, one in each direction daily, except Sunday. This local freight train schedule is, to a great extent, an arbitrary one, and runs regardless of whether there is full tonnage; while, generally speaking, the through freight trains are run only when there is tonnage to justify it.

2nd: The terminal expense: on all of the state freight, you have two terminals within the state. I consider the terminal expense in handling any freight, an item of very large proportion, and when you have to maintain so many terminals for your short haul freight, it naturally follows that your expense will increase in pro-
1972 portion to the number of terminals you are required to maintain.

3rd: The waste car and waste train space:

Take the Rock Island, with which I am more familiar than the others; our average loading for the month of July, 1909, was about eighteen tons per car.

Mr. HILL:

Q. That is local?

A. That is all—the average loading of all cars was about eighteen tons; while our merchandise loading in the state of Arkansas (and when I say merchandise loading I mean less than carload package freight) averaged only about 10,000 pounds, or about five tons, and my experience in operation is, that when you get about 10,000 pounds in your merchandise car, you have a good average load. That is about what all railroads get.

Mr. MOORE:

Q. You mean when you start out with that?

A. When you start out with that much from the initial point from which you start. Of course that load distributes en route. The average ton mile haul for that car will be much less than 50% of that amount.

Regarding waste train space—my observation (and I have watched the matter quite a good deal) is that you do not get anywhere near

751

the efficiency of your locomotive on the local freight train. The distributive nature of the freight that the local is handling, makes it impossible to get full tonnage on the local train.

We are compelled to run these trains to protect the business
1973 of the various communities they serve, regardless of tonnage.

We are compelled to furnish cars to the various stations to take care of their business, regardless of whether there is a full carload or not. If a man offers a package of freight we have got to move it.

4th: The local train makes fewer miles per day than the through train.

My observation of that (and I think it is applicable to all lines in Arkansas) is that the mileage per day for a local freight train, is a run from 65 to 75 miles. The mileage for through trains per day is from 100 to 140 miles. I think the average is somewhere about 115 miles.

5th: The rate of pay of the crew operating a local train is greater by about fifteen per cent, than is the rate of pay of the crew of the through train.

6th: The local——

Q. That is general and common on all lines, is it?

A. That is general and applicable to all lines.

6th: The local freight trains, as a rule, operate only in daylight, tying up at night. I think that this is advisable and a good business proposition, made so by the character of the work: it can be handled more economically in daylight than it can at night.

The package freight-merchandise freight, is more liable to sustain loss or damage, if unloaded at night; it cannot get proper
1974 handling. Therefore I think it is advisable to run these trains in the daylight, as far as possible.

7th: It is my opinion that the train mile cost of a local train is more than double that of a through freight train.

This is due to the higher wage of the crew—longer time on the road, which is made necessary by the amount of work that it has to perform, and in order that you may understand what I mean by that, I will cite an example:

Take a railroad 100 miles long, or a freight district 100 miles long: if a through train goes over this distance in ten hours or less, the crew, under the Rock Island schedule (and this schedule is applicable to all the other roads in Arkansas, as they all have practically the same schedule of pay), is paid $16.71.

A local freight train going over this distance in ten hours, or less, the crew is paid $21.26.

If either train is in excess of ten hours, the crew is paid overtime at pro rata rates.

My observation and experience, gathered from the various reports that I analyze every month and go over every month, lead me to this conclusion in that it is a statement of fact that the local will make about 20% overtime, while the through freight will make five or six per cent overtime.

Add to this the additional fuel and supplies consumed on account

of the longer time on the road; the additional wear and
1975 tear on locomotives or equipment, from increased stops and switching, the cost of the local freight train will average more than double that of the through freight train.

This, however, does not include any extra expense in the way of waste space or terminal expense. I am dealing in this statement only with the actual cost of the crews on that train and the extra cost of fuel and supplies; the extra cost of additional wear and tear on the equipment, whatever that is—and takes no account of the waste space in the train, or terminal expense of the train.

8th: Extra switching: This is an element of additional cost, the setting out and picking up of cars, which is done largely by the local freight train. That, of course, is regulated by the different conditions.

We have first got to take into consideration this fact: that a local train must, or at least should, go over the road in daylight and distribute its high class freight, such as merchandise and package; then do such switching at intermediate points as it can do, and enable it to get to its destination in daylight, if possible. Of course it will handle out of its initial terminal a great deal of short haul carload business that sets out at the intermediate station, and in setting that out it naturally places these cars at an accessible place for unloading.

9th: The increased damage to equipment: the increased switching and handling of cars in the local business, in my opinion,
1976 has a very decided tendency to damage the equipment. In fact, I believe that somewhere about 70% of our total damage to equipment is done in the switching of cars. That is based simply on my observation and experience in trying to run down the elements that go to make up the cost of repairs to equipment, and which create the conditions which make repairs necessary.

10th. The casualty risk on freight is greater on local freight than on through freight, on account of more frequent handling of the freight and more liability to injury in switching service.

11th. Car hire is greater in the handling of the short haul business than it is in the handling of long haul business. It takes more cars to do the business. In my opinion, it requires somewhere from ten to fifteen times as many cars to accommodate purely state business where the haul is short, as compared with interstate business where the haul is long.

12th. The increased cost in the maintenance of yard tracks: The yard tracks at intermediate points are used largely for the accommodation of local state business and they require considerable attention and expense in maintaining them.

13th. There are many cases where special station facilities are necessary in order to properly handle the local
1977 state business. Of course this makes another element of increased cost of maintenance and operation.

Those are some of the main items that go to make up this extra cost of handling the local freight business.

Q. Are you acquainted with the conditions that obtain in the

operation of railroads on the principal lines in Arkansas, say the Iron Mountain, Cotton Belt and those lines?

A. I am fairly well familiar with the conditions on the Iron Mountain road in Arkansas. Once or twice in my experience, I have worked on the Iron Mountain——

Q. On its lines in Arkansas?

A. On its lines in Arkansas, and it is my opinion that those conditions are about the same on all lines in the state.

Q. The conditions that you have been testifying to, as the result of your experience on the Rock Island?

A. Yes sir.

Q. If a local freight train runs less than 100 miles, how is the pay of the men graduated? I mean with reference to the 100 miles?

A. They have to be paid a hundred mile minimum we cannot pay them any less than for a hundred miles.

Q. You stated, I believe, that the daily run on the way trains was from 65 to 75 miles, did you not?

A. Yes sir.

Q. And that is what involved what you call overtime? That is to say, if you run that average daily, you pay the men on the basis of 100 miles run?

1978 A. We have to pay for the hundred miles. For instance: say a local train runs 65 miles and they make that run in six hours. We have to pay them for 100 miles on the schedule, but we do not have to pay any overtime until they have been on duty more than ten hours.

Q. I understand that. What is the minimum of 100 mile pay that you pay the crew on the local trains, as compared with the amount that you pay for the same mileage on through trains? You spoke a while ago, I think, about the difference in cost; did you not say about 15% more?

A. Well, the 100 mile——

Q. You spoke a while ago about a difference in wage: what would the difference be in the amount paid the local crew for 100 mile service, and the through train crew for the same service?

A. Assuming that neither one made any overtime and made the run within ten hours?

Q. Yes.

A. Well, the through freight crew would get $16.71 and the local would get $21.26. That is correct, if my compilation is correct, and I think it is. I have made the figures and checked them over, taking the actual rate from our schedule, which is applicable also to the other lines.

Q. Will you give your views, now, as to whether there is any difference in the expense of carrying state passengers, as compared with interstate passengers.

1979 A. Yes, I think there is a difference in cost.

Q. Please state what you think produces that difference and what you think is the amount of the difference.

A. As in the case of state freight, there are various causes that go to make up——

Q. I am speaking about passengers now.

A. I know, but I say that, as in the case of state freight there are various causes that go to make up extra cost in state passengers. In my opinion, some of these reasons are as follows:

1st. The short haul of state passengers as compared with interstate passengers.

2nd. More terminal service; two terminals on each state passenger.

3rd. More stops, probably twice as many stops on the train handling state business as one handling interstate business. This is due to the character of the business. For short haul passengers a train must stop to let off and take on passengers.

4th. It requires more supervision to handle a purely state business than an interstate business, for the reason that more frequent handling of passengers is required, which in turn requires more attention on the part of the supervising staff.

5th. The greater hazard: I think this is natural, as in my opinion, the greatest hazard to passengers is brought about
1980 by getting on and off trains. Where the haul is short, you will naturally have more people getting on and off the trains than where the haul is long.

6th. The greater cost of repairs to equipment and locomotives, which is due to more frequent stops, which have a great influence on the wear and tear of equipment.

7th. More facilities are required for handling state than interstate passengers. Where you handle a class of travel on which the haul is short, you must necessarily provide facilities at each terminal point. The more you stop, the greater will be the increase in cost for facilities.

In my opinion, it costs somewhere from 25% to 50% more to handle local or state passengers, as compared with through or interstate passengers.

Q. Have you made any special investigation or test for the purpose of determining in any way the relative efficiency of the service applicable to state and interstate traffic, either freight traffic or passenger?

A. We made some tests on freight traffic in Arkansas.

that is about the date that those tests were made.

A. I think from about November 22 to about December 21, 1908; that is about the date those tests were made.

Q. Will you state what the test was and what was developed through it?

A. The tests were made by putting men on trains and see-
1981 ing just what each train handled, with regard to state and interstate business.

We did not work up all of that data, but we did take ten local freight trains and ten through freight trains, and worked up some data as to the per cent of state and interstate business on those trains.

Q. Who had that done; was it under your supervision?

A. It was partially done under my supervision. I outlined many

of the methods used and went over a great deal of the information at the time it was compiled; that is, at the time that the men would make their test on the train. It all came to my office and I personally handled a great deal of it. The actual figures taken from these reports on the 10 local freight trains and 8 through freight trains, were compiled by some of our accounting officers from these reports and worked by the men we had on the train.

Q. What did that show, as to any bearing in regard to the matters that you have been testifying about?

A. On the 10 local trains, the percent of state freight to the total freight handled, was 17.9%. In other words, approximately 18% of the total was state freight, and 82% was interstate freight on those 10 local trains.

That 17.9% of state freight handled on those 10 local trains, represents about 60% of the total state freight handled on the 18 trains that was worked up.

The L. C. L. or less than carload state, to the total state handled on the 10 local trains was 11.2%.

1982 The less than carload interstate to the total interstate handled on these 10 local trains was 4.6%.

The percent of revenue freight to the total tonnage handled by the local freight trains was 33.6%. In other words, we were handling dead weight on local trains of 66.4%, and a revenue weight of 33.6%.

On the through trains the commercial freight was 41.1% and the dead weight was 58.9%.

The car miles on the local freight (the cars that had this package merchandise or less than carload freight) made 17.6% of the total mileage.

The straight carload freight (that is, freight that did not distribute; that went to a station, was set out and unloaded), made 48.5% of the total car miles.

The empty cars handled on the local freight made 33.9% of the total mileage, or a little better than one-third; while on the through freight the car mileage was 87.7% of the total; the empty mileage 12.3%.

In that 87.7% I have included as loaded cars the merchandise cars that moved in those through trains from one important center to another and was set out, but the freight was not distributed by the through freight trains; simply moved from one point to the other.

On the eight through freight trains, the percent of state freight handled on those trains, to the total freight handled, was 5.1%; or, you might say, that of the total freight handled

1983 by those eight trains, 95% of it was interstate freight and 5% was intrastate freight.

Of the 18 trains combined, the through freight trains and the local freight trains, the percent of state freight handled to all was 9.2%. In other words, of those 18 trains, we will say 91% was interstate and 9% state freight.

The car miles made on those 18 trains—loaded car miles was

79.4% of the total; 20.6% being the empty car miles made on the 18 trains.

Q. How many local and how many through trains were involved in that test?

A. Ten local and eight through.

Q. You spoke in one place of there being ten of each kind.

A. No, there was a total of 18 that we worked up; 10 locals and 8 through.

Q. I believe you spoke somewhere in your statement about the cost per ton: for what purpose and to what extent do you measure the cost of transporting a body of freights in that way, by the ton?

A. I do not know that I understand just what you mean by that, Mr. Moore.

Q. I refer to a statement made by you: I believe you said it cost from four to seven times more, per ton, did you say, or per ton mile?

A. Per ton, per mile.

1984 Q. To move the one kind of freight than the other?

A. Yes sir.

Q. I want to ask you this: is it practicable to divide the expense of operation as between state and interstate business, on the basis of ton miles?

A. I do not think it is; I do not believe it is.

Q. Why do you think it is not—just in a general way? I do not care about going into detail on that subject.

A. When you go to consider that difference, of course you take into consideration the money that you earn on the two classes of business. If you have that and then want to arrive at the expense for doing the two classes of business—it seems to me that you must necessarily put them both on the same basis, or consider from the revenue side.

Q. Your idea would be then, that the revenue basis is the proper basis to make a division of expenses between the cost of conducting state and interstate business, is it?

A. I think it will probably more nearly represent the actual difference, or actual cost, than any other basis that I have heard discussed and talked over.

Q. Mr. Whitenton, I want to ask you if all of the merchandise freight is distributed by these local trains you have described?

A. On the territory that I am familiar with, all of the merchandise is distributed by the local freight trains that I have just described.

1985 Q. I believe you stated that less than carload freights are carried on through trains?

A. Yes, there are some——

Q. How are the cars loaded that carry less than carload freight in through trains; are they loaded usually like the other cars, as to their capacity?

A. As an example of that I can give it to you in this way, taking an actual case that I have in mind:

At Little Rock we load a car of merchandise every day for distribution between Devall's Bluff and Searcey; it breaks bulk at De-

vall's Bluff. That car is handled from Little Rock to Devall's Bluff in a through freight train; set out there, and the agent takes out the Devall's Bluff freight the next morning on his platform; then the local train that does the work between Devall's Bluff and Searcey takes the car up and distributes the balance of the freight.

We have a number of cases of that kind.

Another case in point is this:

We load on our Little Rock platform a carload of merchandise that moves from Little Rock to Fordyce, on a train that leaves Little Rock at about 9:00 P. M., and gets to Fordyce the next morning.

Q. A through train?

A. Yes. That car simply sets this merchandise car out on the side track and the agent at Fordyce takes his freight out, and the local which leaves Haskell at seven o'clock in the morning,

1986 when it gets down to Fordyce, picks that car up and distributes the balance of the freight.

Q. Then the distribution of less than carload freight that is carried in through trains, is made by local trains, as you have described them?

A. Yes sir.

Cross-examination.

By Mr. HILL:

Q. Mr. Whitenton, is there any difference between state and interstate traffic, in the handling of it?

A. Judge, I don't know that I just get your meaning.

Q. Does not state and interstate traffic move in the same cars, by the same men, and pulled by the same engine?

A. Yes, sir, that is true.

Q. In both the questions and answers in your testimony there seems to be an interchange in the word local as compared to state, and through as compared to interstate; do you mean it that way?

A. I mean this: that in my belief the state business is largely a short haul business and for that reason it is naturally handled on the local freight trains. That is the only distinction I make between the handling of state and interstate.

Q. The length of the haul?

A. Yes sir.

Q. And owing to the length of haul, would more probably

1987 be handled on local trains?

A. Yes, the short haul business more naturally falls to the local freight train in the conduct of the business.

Q. Suppose 50% of this short haul business was carried on through trains, and 50% was carried on local trains; what would you say then of the comparative expense of state and interstate, or long and short haul?

A. I do not believe that would make any material difference in the cost. I do not see just how it would.

Q. Why would it not?

A. Well, there still is the extra cost of terminals and facilities,

and the setting out and picking up. There is still all of that expense.

Q. Suppose one-half of that kind of business was carried on through and one-half on local?

A. Those facilities would still be necessary, Judge, to take care of it; they would still be necessary.

Q. The facilities would be necessary, but would the cost attendant upon the same be in the same proportion that you have given?

A. If that were a fact that it was equally divided the extra cost might not be so large. That would be dependent largely upon the character of the freight—how you handled it.

Q. Assuming the handling is just as it is now, and say that this short haul business, which you regard as the more expensive
1988 on account of this short haul, that one-half was carried on your through trains: would that be any more expensive than a long haul business carried on through trains?

A. So far as the train expense—what I mean by train expense, is the cost of the crew, etc., there would be no difference.

Q. Now, take your long haul business carried on the local train. Some of it, according to these figures you have given here—would there be any difference in the expense as between that and the short haul business carried on local trains?

A. The long haul business carried on local freight trains, in my opinion, has a tendency to reduce the cost per ton per mile, of the operation of that train.

Q. I presume so, but does it cost any more? My question is, does it cost any more to handle that business on a local train, than it does the short haul business on a local train?

A. Yes, it costs more in this way, that the cars are not moving the same distance within a given time, and the expense of equipment, etc., is greater.

Q. You seem to be comparing the two trains. I am talking about a shipment of long haul freight on a local train, as against a shipment of short haul on a local train: is there any difference in the cost of those two shipments on that train?

1989 Mr. MOORE:

Q. The shipment, you say, of a long haul and a short haul?

Mr. HILL: Yes; on a local train.

A. Judge, I want to give you the answer just as near as I can. I do not want to be in the attitude of dodging anything, but if I understand you right, I still think that it would cost more per ton per mile to handle the long haul business on a local train, than it would on a through freight train.

Q. That is not my question, Mr. Whitenton. It seems I am unable to make myself clear.

Suppose you have a shipment from Little Rock to Van Buren, 160 miles, which we will call a long haul shipment, of merchandise freight; and a similar shipment of merchandise freight, of the same bulk, to Morrelton; and both of those shipments are put on a local train that goes from Little Rock to Van Buren; both of them carried

in the same car: what is the difference in the cost of those two shipments?

A. The cost per ton per mile should be greater on the shorter haul than on the longer.

Q. For train expense?

A. You do not get just your train expense—of course if they are both handled in the same way, there would be the same train expense.

Q. There would be no increased train expense on such shipment?

A. No, there would be no increased train expense, taking
1990 the wage and items of that character; that is, the same rate would apply——

Q. I am giving you two identical shipments in my illustration—the same rate; same bulk; one going to Morrelton and one to Van Buren, and carried in the same car; I want you to explain where the difference in cost comes.

A. The difference in cost would be——

Q. I am talking about train expense.

A. As I said before, there would be no difference in train expense for the distance handled there.

Q. The fact that a shipment goes out of a state and comes into a state and in the course of its transit passed over a state line, does nothing to the cost?

A. No, we don't know anything about state lines in the operating staff of the railroad.

Q. When you talk about intrastate and interstate freight, you are just talking about them for the purpose of a lawsuit, and not for the purpose of operation; in operation there is no difference?

A. As I stated a moment ago, Judge, my idea on this is based entirely upon the length of the haul—the long and short haul?

Q. That is the operative term, and intrastate and interstate is the term when you get into a lawsuit?

A. I guess that is probably true, I don't know.

Q. You give us figures on the test that you made down
1991 on your road: when did you make that test?

A. It is my recollection now that that test was made between November 22 and December 21, 1908.

Q. What runs of trains were taken?

A. We tried to cover everything in the state of Arkansas.

Q. Do 18 trains cover everything you have in Arkansas?

A. We took only 18; we have data on everything for that period, but we took only 18——

Q. Then you did not give us the benefit of anything but 18?

A. That is all we worked up, Judge.

Q. Were those 18 single trains or 18 trains a day?

A. Eighteen single trains.

Q. Where did those 18 trains run?

A. As I recall now, some of them ran between Little Rock and Hopefield; some between Little Rock and Booneville; some between Little Rock and Eldorado; some between Tensman and Crossett; that is my recollection.

Q. How many freight trains does your road run a year in Arkansas?
A. I do not know.
Q. How many a day then?
A. Oh, I could figure that out, of course——
Q. I would like to know somewhat within the range of what it is; I could not expect you to give an absolute accurate answer,
1992 but you ought to know, generally speaking, how many freight trains you run in the state in a day.
A. I can figure up now about 2 scheduled freight trains which we have in the state of Arkansas.
Q. By schedule do you mean local?
A. Local and through, both; they are both scheduled.
Q. That is 32 per day?
A. Yes sir.
Q. These 18 that you referred to were taken out of a period of ten days?
A. November 22 to December 21.
Q. A period of about thirty days. In that thirty days it would be 960 scheduled trains that you would run in that period?
A. If that is what it figures out, that is what it would be about.
Q. Within that period you would have some extra trains run, would you not?
A. Yes sir.
Q. In round numbers it would be something like 1000 trains run in that period?
A. I expect so.
Q. And you have given us the benefit of 18 out of 1000?
A. That is what we have taken; whatever that would be.
Q. Do you think that would fairly represent the percentages of your traffic as you have given them in those 18 trains?
1993 A. I think that would be fairly representative: that is my opinion about it.
Q. Do you know that there are about 1300 trains in Arkansas, on the Iron Mountain alone, in one month?
A. I don't know anything about that.
Q. But you think these 18 trains out of 1000, would be fairly representative of the percentages as you have given them here?
A. Yes, I think it would, because in taking that we represent all of the territory; practically all of the territory.

Mr. MOORE: You do not intend to testify that there are 1300 cars a month——
Mr. HILL: No, I asked him if he knew.
Mr. MOORE: Mr. McPherson says you are mistaken.
Mr. HILL: How many are there, Mr. McPherson?
Mr. MCPHERSON: I should think 15% of that.
Mr. HILL: Local trains run in a month.
Mr. MCPHERSON: Yes.

Mr. HILL:

Q. What do you define a terminal expense to be, Mr. Whittenton?

I find some difference of opinion about that, and I would like to get your definition of what a terminal expense is, as you have referred to it in your testimony here.

A. I understand by terminal expense, anywhere that freight originates. In other words, its initial and final destination—the point of origin and its destination.

1994 Q. That is your definition of a terminal expense?

A. Yes sir.

Q. How do the expenses of terminals compare one with another—extensive terminals, say of a city like St. Louis, with a terminal in a small country town?

A. I do not know; I have never had any experience in a terminal like St. Louis, Judge.

Q. Say Little Rock, then: how does the terminal expense at Little Rock compare with the terminal expense at Plummerville?

A. The terminal at Little Rock, in my opinion, would be more expense; a larger terminal as a general thing is.

Q. I do not mean that the terminal would be more expensive; I mean the terminal handling of a ton of freight.

A. That will depend, of course, upon the facilities. You might spend a great deal of money and get a facility that you could handle your business very cheap with, but if you did not have a modern facility your terminal expense for handling might be heavy.

Q. I am not talking about what might be. I am trying to get down to actual facts. In your experience as a railroad operating man, which do you think is the most expensive, a terminal like Little Rock, or a small country town like Plummerville?

A. Well, take our expense (and when I say our, I mean the Rock Island) at Little Rock; our terminal expense there is high because our facilities are not the best, and the terminal expense at Little Rock, compared with a place like Brinkley—local trains that run to

1995 Brinkley, it is higher at Little Rock, per unit, than it is at Brinkley.

Q. What do you say about that as a general proposition, whether the terminal handling at a small country town or at the larger cities, is the more expensive handling, per ton?

A. I expect that the cost at the smaller terminal is larger per ton, than at the larger terminal, because of the volume of business handled.

Q. Why is that?

A. It is due to the amount of business that is handled there.

Q. Would a larger terminal expense, distributed over larger tonnage, reduce the amount per ton at large stations to something like what it would be at the small stations? Is that the idea?

A. That is the idea.

Q. Of course you understand how cotton is handled in Arkansas?

A. Yes, I know something about it.

Q. How many terminal handlings does it have before it gets out of the state?

A. Well, it generally has about three handlings before it gets out of the state.

TORN PAGES

Q. Three terminals in the handling of cotton, as a general proposition, including its final shipment to the east?

A. I think that about covers it.

1996 Q. How is grain handled?

A. We have very little in Arkansas that is purely state business.

Q. Yes, I suppose intrastate grain traffic is what has been denominated in this case as a "negligible quantity."

A. I don't know just what that is. I know our grain intrastate in Arkansas is very little.

Q. I am speaking of grain shipped into the state and distributed throughout the state: that is very large, is it not?

A. Yes.

Q. How large is that?

A. Generally that comes into Little Rock; goes to an elevator; is unloaded, reloaded and shipped out again.

Q. How many terminal handlings in the state, taking the usual course?

A. If delivery is in the state—its final destination when it comes out of the elevator, it would have three, I guess.

Q. How is lumber handled that is carried into the planing mills on the rough material rates: how many handlings does that have?

A. You refer to the rates——

Q. I said carried in on the rough material rates. You of course understand that movement?

A. I don't know that I do; I don't profess to know anything about the rates; I don't know a thing in the world about them, but

1997 I know that lumber is loaded at the smaller mills, for instance, and some places loaded from sidings—mills in the interior, in the rough, and hauled to some larger planing mill and there unloaded; goes in and is planed and finally comes out and is loaded again and goes to its destination.

Q. A great majority of that goes to its final destination out of the state, does it not?

A. I expect that is true.

Q. It goes out of the planing mill (whether out of the state or not) or to some other point in the state, on a rough rate from the point of origin, does it not?

A. I do not know a thing about it, Judge.

Q. Is that out of your jurisdiction?

A. Yes, that is out of my jurisdiction.

Q. Well, assume that that would be the case; then how many terminal handlings would you have of that—say it started from some little place on your line and is carried to a larger place where there is a planing mill and there dressed and then shipped out to St. Louis?

A. There would be the same as in the grain; or cotton rather more nearly describes it. There would be the handling at the point of origin; it would have to be handled again where it was unloaded in the planing mill, and again when it was loaded up and shipped out.

1998 Redirect examination.

By Mr. MOORE:

Q. Mr. Whitenton, do you say a larger part of the expense incident to the handling of intrastate business is the switching that grows out of it; the terminal expense and the additional train cost involved in handling it, owing to the consumption of fuel and supplies of that character, which you say is increased by reason of the switching service and wear and tear of equipment? Those are part, at least of the elements that enter into the increased cost of handling state business, is that what I understand you to say?

A. Yes sir.

Q. Now, suppose, taking the example put to you by Judge Hill, that you have a local way train going from Little Rock to Van Buren; 50% of your loading on that train is interstate freight going to Van Buren, and the balance of the loading on that train is freight for local distribution; would the way freight going to Van Buren produce any expense in the way of switching or things that grow out of it, and the station service that is required—would there be anything of that sort required in hauling that freight through from Little Rock to Van Buren straight?

A. At intermediate points, you mean?

Q. Yes.

A. No, it would require there only the initial and the final.

1999 Q. There would be no service involving switching and delays, increased consumption of fuel and supplies on account of that through freight that was shipped from Little Rock to Van Buren?

A. No.

Q. And yet there would be a very large additional expense growing out of the necessity of intermediate service in distributing the local freight, would there not?

A. Yes sir.

Q. The average length of haul between state and interstate, would in that case, and generally, govern to a large extent the cost of handling the traffic, regardless of whether it was handled in a local or through train, would it not?

A. I think so, if, as I stated before, it was a question of long and short haul as to the distributing expense.

Q. Speaking of terminal stations—terminal service, the sense in which you use that word as between state and interstate business, is that service connected with receiving of freights at the places at which they are received for shipment, including everything incident to receiving them—clerical labor and every sort of labor and the service that is incidental to the delivery of it at the station to which it is consigned: that is what constitutes terminal expense, is it not?

A. That is the terminal expense, certainly.

2000 Q. In that sense, is it or is it not true that every station, as to the freights received or shipped at that station, is a terminal expense?

A. Most assuredly.

Q. You were speaking about terminal expense; Judge Hill asked you if there were three handlings on cotton in the movement he mentioned, and which I need not go over again; he said terminal handlings, and you stated there were three terminal handlings: are there three terminal handlings in the sense that you used that, in the cotton movement to which Judge Hill called your attention?

A. Well, there are three handlings——

Q. I know, but are they terminal handlings, in the sense in which you use that with reference to the difference of expense as between state and interstate?

A. When I answered Judge Hill's question I thought he was asking how the cotton was handled that moved out of the state. It is loaded at the local station, moved to the compress, there unloaded and loaded up again; there is some expense on both at the compress point to the railroad company.

Q. Speaking of grain: is that loaded by the railroad company or the owner?

A. That is loaded by the owner.

Q. In regard to the rough material, forest products: is that handled in loading or unloading, by the carrier or by the owner?

2001 A. By the owner, in carloads.

Q. I will get you to explain a little more fully in regard to the three handlings of cotton that you spoke of: just as far as you know, state what the handling and expense incident to the handling of each of the three handlings is.

A. Well, the expense at the initial point, or at the country station, we will say for instance, at Ola, going to Little Rock—we pay so much a bale for loading that cotton in the car; that goes to the compress; it is unloaded by the compress and we have a man there to check it out; the railroad pays that check clerk.

Q. That is service rendered by the railroad at the compress?

A. Yes, when the cotton is unloaded. Now, when that cotton goes out of the press we still have a man there to check it as it goes into the car.

Q. It is loaded by the compress, is it?

A. Yes, it is loaded by the compress; that costs the railroad at the compress—the unloading and loading at the compress does not cost the railroad, but we —at least the Rock Island—checks its cotton out to the press, and into the cars from the press again.

Q. Save the expense of the check clerk, that is one handling, so far as the expense of the handling is borne by the Railroad Company: that is, the handling at the place of origin?

A. Well, there is some other expense at the compress point to the railroad.

2002 Q. Please explain that.

A. Taking into account the way-bill, and then billing the cotton out again after it is compresed and loaded up.

Q. In shipping the cotton out from the compress you have pretty much the same service as at the point of origin, except that the compress loads it?

A. Yes sir.

Q. But in unloading it there you have a check man to take account of it?

A. We have a check clerk to check the cotton to the compress, to check over and receipt for it; when it is compressed and loaded we have him check it into the car and receipt to the compress for it.

Q. And bill it, I suppose?

A. It has to be way-billed.

Recross-examination.

By Mr. HILL:

Q. Mr. Whitenton, is not the company also at the expense of shipping that car to the compress, taking it into it and taking it out?

A. Oh, yes, a car has to be switched into the compress to be unloaded, and picked up by a switch engine again when it is loaded and taken out.

Q. Mr. Moore spoke about the car being loaded and unloaded by the compress: is not all carload freight loaded and unloaded by the shipper and consignee?

2003 A. What I call carload freight is—of course we load cotton ourselves at the local stations.

Q. That cotton goes into the compress less than carload, does it not?

A. I think that is true.

Q. Of course, you make up a full car of it if you can, but it will be made up of less than carload shipments constituting a car of cotton?

A. It is considered a less than carload commodity.

Q. Until after it is compressed and re-shipped; then is it not shipped as a carload commodity?

A. I don't know as to that, Judge Hill; I would not say positively.

Q. As a matter of fact, are not these three terminal handlings more expensive than the average terminal handling of commodities which your road handles in Arkansas, taking into consideration the less than carload movement, the casualty risk and the extra men you have there to check it out and in: would not that make the terminal handling on cotton more expensive than the average terminal handling on your traffic in Arkansas?

A. Well, it would be more expensive than some other traffic; I don't know how it would average up with the general line. I do not believe it would be more expensive than the terminals necessary for handling high class freight, such as merchandise package freight or freight of that character.

2004 Q. I expect that is true, but it would be more expensive than handling low grade commodities, such as coal, brick, sand and hay?

A. I think it would.

Q. Well, thinking over the difference, would you not say that

the average of each one of those three terminal expenses would be higher than any other one terminal expense on the average of your traffic?

A. I will answer that in this way:

I think regarding the handling of cotton, that the cost of handling it would probably be up toward the top of the list as compared with other commodities.

Q. And the terminal cost of handling would be up toward the top of the list?

A. That is what I refer to, the terminal cost; I had that in mind in the answer.

The MASTER:

Q. Who pays the compress for compressing the cotton?

A. I don't know.

Mr. HILL:

Q. You estimated the cost of handling state business higher in Arkansas, than you did in Missouri, did you not?

A. Well, I don't know about that; it has been some time since I testified in the Missouri case.

Q. I have a copy of what I believe is your testimony. This was a question and answer, as I find it here, by Mr. Hagerman:

2005 "Q. What is your judgment as to the extra cost of doing state freight business over the interstate?

"A. It is my judgment that the extra cost will run from three to six times as much.

"Q. Do you make that estimate upon a ton or revenue basis, or just generally leave the court to determine what is the true basis?

"A. I had in mind when I answered the question, a ton mile basis.

"Q. Putting it on a revenue basis, what would you say, if it makes any difference?

"A. My opinion on that would be it is about twice as much."

Q. Is not that a correct statement of your testimony?

A. I think that is probably correct.

Q. You stated over here that you thought the revenue basis was a better basis of dividing the expense between state and interstate, than the ton mile basis: why do you say that?

A. It would seem to me that you are conducting a business on the amount of money you get out of it, and you want to know what it costs you. It seems to me that you have got to take the money side on both ends of it to get at that.

Q. Why would you use the revenue derived from your state business as a factor to determine the cost of your state business?

2006 A. I am not qualified to answer that because I am not an expert on any of the theories that have been put forward as to the division. It just seems to me that if I was running a business, I would want to know what I was getting out of it and what my expenses were. I would take the money end both ways.

You understand, as an operating man I know nothing about the

revenue of the company, in so far as what we are earning on any class of business is concerned.

I simply have to do with the expense of conducting the business, and here, in keeping out tabulations and figures, we figure what it is costing us to do our business.

Q. As a business man, do you think that you ought to take the gross earnings to determine the cost of conducting that business?

A. As I said, I am not qualified—if I was running a dry goods business and wanted to know what I was making out of it, I certainly would want to know what the gross earnings and operating expenses were.

Q. But here the gross earnings are taken to find out what the operating expenses are?

A. I don't know what they are taking.

Q. Then you do not understand what theory they are basing this on, do you?

A. No, I do not.

2007 Redirect examination.

By Mr. MOORE:

Q. You made an affidavit in this case in August 1908, did you not, prior to the time the application for an injunction was made at St. Paul?

A. Somewhere about that time; I do not remember the exact date.

Q. Do you recall what your statement was then, as to the difference in expense—in that affidavit?

A. If my memory serves me right, my affidavit was to the effect that the extra cost was more than twice as much.

Q. I want to ask you if your views have undergone any change or modification since you made that affidavit and testimony in the Missouri case? If so, state fully in regard to it, and what brought it about.

A. When I made the affidavit in 1908, in the Arkansas case, it was at a time that I had not given the matter any special study or thought. I was simply basing my testimony on my experience, without having made any special investigation. I made what I believed was a conservative statement.

After I got into the matter and studied the various elements that go into the handling of the business, why, when I testified in the Missouri case, I thought that that was about the ratio in Missouri, being familiar with the Rock Island lines in Missouri, on account of having operated them for 2½ years. I put that figure,
2008 which I considered at the time a conservative figure of the extra cost in Missouri, for the Rock Island lines.

Now, my testimony in this case and the figures that I have given here, are based upon what I now believe, after having considered the matter further and taking into account various items of what seem to be to me, extra items of cost. For Arkansas my figures give about the same ratio that I think one bears to the other.

In other words, the more I go into this thing, the more thoroughly

I become convinced that there is an extra cost in handling the state business as compared with the interstate because it is largely a short haul business. That which I put in my first statement or first affidavit, was entirely too conservative, but it is greater than that first affidavit.

Mr. MOORE: We offer "The Western Classification No. 47" as an exhibit, which is accordingly marked "Plaintiff's Exhibit 49", and which exhibit is in the words and figures as follows, to wit:

For Exhibit 49, see Volume 8, page 5416.

2009 The Complainants here rest.

2010 R. E. KIMBELL, being recalled on behalf of defendants, testified as follows:

Direct-examination.

By Mr. HILL:

Q. You have been sworn as a witness in this case?

A. Yes, sir.

Q. I wish you would turn to your Exhibit #32; what does that show your revenue from State freight traffic to have been for six months ending Dec. 31st, 1907, in the State of Arkansas?

A. $173,064.45.

Q. What does that Exhibit show your revenue on interstate freight traffic in the State of Arkansas for that period?

A. $1,597,230.02.

Q. Please turn to Exhibit 35, that is one of your exhibits, what does that exhibit show the state tons carried one mile in Arkansas to have been for that same period; that is, six months ending December 31st, 1907?

A. 8,512,807.

Q. What does it show on interstate business?

A. 184,831,455.

Q. If you divide the revenue by the tons carried one mile, on which that revenue was earned, the result will give you the average revenue per ton per mile will it not?

A. Yes, sir.

Q. Please make these two calculations, and tell what was your average revenue per ton per mile in Arkansas, on these two classes of business, for the six months ending December 31st, 1907?

2011 A. On the State business, the average revenue per ton per mile $0.0203.

Q. That is 20 mills, to put it in mills?

A. Yes, sir.

Q. It would be 20 mills and a third, to put it in round figures?

A. Yes, sir.

Q. On the interstate business?

A. $0.0085.

Q. That would be 8 mills?

A. 8½ mills, you might say.

Q. We have 8.64 mills here, the way we figured it?
A. I have figured it over, it is 0086.
Q. That would be 8 mills and 6 tenths?
A. Yes, sir.
Q. I hand you what purports to be a statement of the St. Louis, Southwestern Railroad Co., for the State of Arkansas, statement of trans-State, Interstate and State freight, handled during the month of January, 1909, and ask you if you recognize that statement?
A. Yes, sir.
Q. Is that a correct statement of what it purports to be?
A. Yes, sir, it appears to be a copy of a statement I filed.
Q. You gave that statement to Mr. Wharton?
A. Yes, sir.
Q. I will ask you to attach this to your deposition and mark it Exhibit "A."

2012 For Exhibit "A," see Volume 9, page —.

A. I will do so.
Q. I call your attention to the statement that the average revenue per ton per mile shown in Exhibit "A" is 39.867 mills; that is on state business?
A. Yes, sir.
Q. And what is the average revenue per ton per mile of the interstate business?
A. 9.454 mills.
Q. During the time that your Exhibit- 32 and 35 were made up, that is, for the six months ending December 31, 1907, the State revenue was produced under Standard Distance Tariff #3?
A. Yes, sir.
Q. During the time that your Exhibit "A" was made up, that is for the month of January, 1909, your revenue was produced under tariff made by your own company, without any State regulation, was it not?
A. Yes, sir.
Q. That was the tariff that was put in November 2nd, after the injunction was obtained by you in this suit, was it not?
A. Yes, sir.
Q. You made an increase in your interstate rates, about the time or shortly after you increased your state rates, did you not?
A. That is true, yes, sir.
Q. Now, I will ask you to compare the amount of average revenue per ton per mile on your state business in January, 1909, of your state business in this period of six months, and com-
2013 pare the same figures with your interstate figures, and I will ask you if this is not a fact, that your interstate revenue per ton per mile was increased 9.4% and your state revenue was increased per ton per mile 96.1%; there is the calculation that might aid you?
A. The increase in interstate business was 9.4%; state business was 96.1%,: figured on the average rates.
Q. Turn to exhibit #33 please?

A. Yes, sir.

Q. It shows your gross freight revenue in Arkansas for the six months ending December 31, 1907, to be how much?

A. All sources $1,795,355.49.

Q. Now take the state?

A. State, $173,069.45.

Q. Now interstate?

A. $1,597,230.02.

Q. Now, if the rates which produced the increase in average revenue per ton per mile shown in your January, 1909 statement of 96.1 per cent on state freight and 9.4% on interstate freight had been in effect during the last six months of 1907, I want you to calculate the gross revenue of your freight traffic for that period. Assume now that that increase had been in effect during that period?

A. That is quite an assumption; to assume that that same volume of business and same rate would obtain for any period like six months. Now, is it necessary for me to figure this rate at

2014 this time.

Q. You want a little time to figure it?

A. Yes, sir.

Q. You have all the data necessary to make that?

A. Yes, sir.

Q. Now, I want you to show from that calculation, the increased amount of expense that would have been apportioned to the state traffic under that increase, and the decreased amount apportioned to the interstate traffic under that supposed increase, following the line of your Exhibit #23, except applying these actual figures to that six months,—to what was the illustration there?

A. You want an Exhibit 23, on the basis of that increase.

Q. On the actual figures of your six months, assuming the increase of your January business had obtained during that six months?

A. All right, sir.

Cross-examination.

By Mr. MOORE:

Q. When did the rates that were put in by the railroads, after the injunction granted in these cases, take effect?

A. November 2nd, 1908.

Q. That was the state rates?

A. Yes, sir.

Q. Was the adjustment of the interstate rates made at the same time, or did that come later?

2015 A. I do not understand it was made at the same time; it followed in the course of business.

Q. How long after November 2nd, 1907, did it take to make the readjustment of interstate rates, so as to form them and keep them in harmony with the changes that had been made in the state rates?

A. I am of the impression that it took quite a time to get them all adjusted.

Q. Would the re-adjustment be reflected in the business of the following January?

A. I think not, sir.

Q. What effect would that have on the value of the comparison that is made on these figures here?

A. My idea is that it would make them very disproportionate.

Q. I believe your statistics in this case, show the average haul of state and interstate business, does it not?

A. Yes, sir.

Q. What is it?

A. You want it for the six months we are discussing?

Q. Yes, sir, I will say for the six months ending December 1907?

A. On state business, 43 miles; interstate business, 232 miles; that refers to freight.

Q. Now, I want you to state, in view of that difference in the length of the haul, between state and interstate business, and of the difference that would naturally exist in the character of commodities involved in state hauls and interstate and trans-state hauls, what, in your judgment, is the value of the comparison ob-

2016 tained in the exhibits we have just been asked for?

A. Since the question has been raised, if there is no objection, I would like to have an opportunity to analize the question and answer it.

Q. You prefer to answer it later?

A. I would.

Witness excused to be recalled.

2017 G. W. SWAIM, being first duly sworn and examined, on behalf of the defendants, deposed as follows:

Direct examination.

By Mr. HILL:

Q. State your name, age, residence and occupation?

A. G. W. Swaim, 36 years old, I live here in Little Rock; I am rate clerk of the Railroad Commission.

Q. How long have you been rate clerk of the Arkansas Railroad Commission?

A. Since May, 1904.

Q. During that period of time, have you made a study of the rates prevailing in Arkansas, state and interstate?

A. Yes, sir, I have made somewhat of a study of rates, state rates especially.

Q. Are you familiar with the records of the Arkansas Commission, and of its proceedings, in regard to rate matters?

A. Yes, sir, fairly familiar, I think.

It is agreed, that no objection will be raised to this witness testifying as to the facts which he has obtained from the records; that

he is to give references so that they may be verified, and the records will be held accessible to the plaintiffs at all times.

Q. Mr. Swaim, have you prepared a memorandum of the changes which have been made in the Arkansas intra-state tariffs, since the joint rates were put in effect in 1903?

2018 A. Yes, sir.

Q. I believe 1903 is the correct date when the joint rates were put in effect?

A. Yes, sir, July, 1903.

Q. I wish you would commence with the changes that were made then and follow it up with all changes that were made in the tariff all changes that would affect rates from July, 1903, up to the time of the granting of the injunction in this case, September, 1908?

A. I have made a compilation in this form; I will give you the headings; the article and the reference to the amendment of the tariff or classification, where the change is found; the next column is under the head of remarks; I show what the change was from and what it was to, and the next column is the date effective of the change, and the basis that I used to determine the amount of the change, the extent of the change, figuring the rates for 25, 50, 75, 100 and 200 miles, at both the old rate and the rate to which it was changed, and I take the totals of those rates for those distances and from these totals, I figure the percentage of the reduction; I believe they are all reductions more or less. Which statement is as follows, and is made a part hereof as exhibit "B." For Exhibit "B," see Volume 9, page 5762.

Q. The first item I see in your statement, is L. C. L. rate on bagging and ties, which amounts to a reduction of 39% on that rate, calculated as you have explained; I will ask you if you know

2019 the extent of the movement of that commodity, under this rate?

A. No, sir, I do not.

Q. Have you any data by which you could make an estimate of the extent of that movement?

A. No, sir, not so as to give you a figure, but I can give some data that will throw some little light on it.

Q. Give us that.

A. The railroads in their reports to the Commission, make what they call a tonnage statement, uniform in all the reports, and they report the tonnage under the following general headings: Products of Agriculture, animals, mines, forest, manufactures, merchandise and miscellaneous; in Products of Agriculture they include grain, flour, hay, tobacco, cotton, fruit and vegetables and other products, and Products of Manufacture; they include petroleum, and other oils, sugar, naval stores, iron, pig and bloom, iron and steel rails, other castings, and machinery, bar and sheet metal, cement, brick and lime; agricultural implements, wagons, carriages, etc.; wines liquors, household goods and furniture; now, they are drawn out that fine; they are classified into that many classifications; on this report, there is no item which covers bagging and ties; I suppose it

is included, on account of its insignificance, with merchandise shipments; I will give you the percentages of merchandise.

Q. This is an L. C. L. movement; do you know what the percentage of L. C. L. intra-state movement is to the entire movement?

2020 A. No, sir, I do not; I have heard it variously estimated. I think it is a very small part of the carload.

(Mr. Johnson, do you remember the statistics of your road, as to the percentage of the L. C. L. movement?

A. Yes, I remember it for one month, October, 1907, which I consider a fairly representative month, of the total movement, and it is 4½%, but I do not know that it is an exact apportionment between carload and less than carload.)

Q. Mr. Swaim, assuming that the L. C. L. movement is approximately 4½% of the total movement of the state, I will ask you if you could make any estimate of what proportion of that 4½% bagging and ties movement would be?

A. I have a report here for the Iron Mountain, for the years of 1908 and 1909, and for the Cotton Belt for the same years; these are percentages that I am dealing here in; the heading for 1908 report for the Iron Mountain is State of Arkansas estimated; 1909, is Arkansas intra-state; the Cotton Belt 1908 heading reads "Arkansas interstate and intra-state" and the same heading for the year 1909; now, the merchandise——

Mr. MOORE:

Q. What are you reading from?

A. I am reading from memoranda I made from the reports.

Q. Where did you get those headings you read?

A. They were taken from the headings as made in the report, quoted; we have those reports; I didn't bring them over, but they are accessible; I just took off the percentage because we could

2021 deal with anything but percentages; the merchandise part of this traffic for the Iron Mountain is 17 per cent for one year, and the other year is 16 per cent.

Q. What are you speaking of now, the percentage of what?

A. The percentage of the total traffic, which is assigned to merchandise shipments.

Examination resumed by Mr. HILL:

Q. That is both state and interstate?

A. Yes, sir.

Q. Do you think that same proportion would hold good as to intrastate business?

A. It shows here on the Iron Mountain—it says "State of Arkansas;" it does not say intra-state; the next year it says "intrastate;" one year is 16 and the other, it is 16.19.

Q. Take it that the merchandise is about 17% of the entire traffic, and that is not divided into carloads and L. C. L.

A. No, sir, that includes both.

Q. Would there be any difference, in your opinion, as to the movement carload and L. C. L., as to this particular item of bagging and ties?

A. I do not understand that question.

Q. Would the same proportion hold good as to carload and L. C. L. movement of bagging and ties, or would it be different?

A. I think it would hold good.

Q. We have then, an estimate that all mercandise is 17% of the total traffic, and that proportion would hold good in carloads and L. C. L., and that reduces your estimate to this, that the L. C. L. movement is 4½ per cent of the whole, and of that 4½%, 17 per cent is merchandise, is that right?

2022

A. Yes.

Q. Now, what percentage of the merchandise would bagging and ties be?

A. I was going to get it down just as far as I could, and then guess at it; it is not appreciable, but it is some small fraction of the 4½% of the 17% ; it is too small to equal any percentage at all.

Q. At any rate this movement, from the data you have and your knowledge, is very insignificant, comparatively speaking.

A. Yes, sir.

Q. Take your next, cotton seed, cotton seed meal, and cotton hulls; there seems to have been a change in that of 26%; that is L. C. L. movement; what is the extent of that?

A. That would be included under the head of products of agriculture, and that runs from about 12% up to 17%, and of course, that includes such items as grain, flour, hay, cotton and other products, and necessarily, this would be a very insignificant movement.

Q. Wooden cross arms is the next change I find; there is a change of 49% on that, another L. C. L.

A. That would be very little; there is some little movement but it is very small.

2023

Q. They have coined a word in this hearing—"a negligible quantity," would that describe that?

Mr. MOORE: I think you had better educate him a little, you and I haven't been able to comprehend it fully yet.

Q. How about infinitesimal; this would rather come in the classification of infinitesimal?

A. Yes, sir.

Q. The next item is fire brick; change in carload rate of 28%, and change in L. C. L. rate of 29%; state what you know, if anything, about the extent of the movement of that?

A. I don't have any special knowledge about the extent of any of these movements, but I am sure, from my general experience, that it could not be much; it is not used much; shipments are very light.

Q. That is usually a few stray cars here and there?

A. Yes, sir, it moves sometime in L. C. L., where a man wants to build a chimney back, or something like that; I guess they keep it in small quantities in little towns.

Q. There are a few occasional movements?
A. Yes, sir.
Q. The next item is wagons, farm and logging?
A. Yes, sir.
Q. There is a change on the carload rate, of 30%, and L. C. L. rate of 25%?
2024 A. We have here in the Cotton Belt report for 1908, under this head, including wagons, carriages, tools, etc., they make a report here that it is .92 of 1%.
Q. Of the whole movement?
A. Yes, sir
Q. What is included in that?
A. Wagons, carriages, tools, etc.
Q. That is, farm wagons, and farm and log wagons, would be only a small proportion of that classification?
A. I don't think it would include any large part of it.
Q. The whole business is less than 1%?
A. Yes, sir, about .9 of 1%.
Q. The next rate change is cider, ginger ale, and pop soda, and mineral springs water; that seems to have been changed to class "C"?
A. Commodity rate.
Q. What was the effect of that change?
A. Of course, there is a right smart movement of that, but that case goods, I think, moves largely by express; cider in barrels, there would not be much of that.
Q. You don't give any percentage on that?
A. No, sir, and I don't see anything here on that.
Q. In this total, you don't give the percentage of change of that rate?
A. No, sir; that was changed from class "D" to commodity rate; I will complete that.
Q. You think most of that stuff moves by express?
A. Yes, sir, that case goods, I am satisfied, it does.
2025 Q. Here is a matter that don't seem to be a rate, but it is changed; agricultural implements, stop allowed in transit for $5. charge?
A. Yes, sir, we followed an interstate arrangement; it does not change the revenue but gives the shipper better advantages, so he can ship a car to two or three destinations, instead of one.
Q. And they put a charge on that of $5. to the Railroad Company, to cover that privilege?
A. Yes, sir.
Q. The next item I see is plow points?
A. That is what that item is, plow parts, or points, etc.
Q. Is that L. C. L.?
A. Yes, sir.
Q. There is a change of 13% in that? Do you think that change would be of any moment?
A. No, sir; there is nothing here in these items, even a small item,

that would even include that; the nearest to it is bar and sheet metal, and they don't divide that—done far enough.

Q. Would it come under agricultural implements?

A. It may be included there; that is .92 of 1%.

Q. This would be necessarily an extremely small part of that?

A. Yes, sir, this is just plow irons.

Q. The next seems to be canned goods, L. C. L., construes pickles to include catsup, and horse radish.

A. Those are the only items affected by the reduction.

Q. That was a change in the classification, was it not?

2026 A. It was adding some other items to the canned goods mixtures, putting those items in commodity rating; it was more of an interpretation, whether they were all included under the word "pickles"; there was a question came up about it, and the Commission included it, to settle that; I think there had been some question about it before that.

Q. That was more of a ruling than a change of rates?

A. Yes, sir.

Q. Portable houses, seems to be the next; that was changed to lumber rate, plus 3 cents?

A. Yes, sir; I thought there would be so little of that, I didn't figure it at all; I know there came a demand for the rate; there must have been some movement.

Q. This was knocked-down houses?

A. Yes, sir, houses built at the mills.

Q. The rate was made just for some occasional movement?

A. Yes, sir, camping outfits or something like that.

Q. Hay is the next, may be shipped with flour or grain at the highest rate of any items; not a reduction, but provides for larger mixture.

A. Yes, sir, hay and flour rates were about the same, but they could not be shipped together, and the effect of that was to allow them to be mixed together; of course, it gave a rating on less carload, carload rating on less carload shipments, by making these two items the same; it was of some advantage to the shipper, of course.

Q. That was L. C. L. movement?

A. No, sir, carload; L. C. L. would not have been any dif-

2027 ferent because the rates were about the same.

Q. This amounts to waiving two separate minimums and allowing the car to be loaded, part with flour and part with hay?

A. Yes, sir.

Q. The next I find here is rule in return shipments; I wish you would just explain that?

A. That is just an interpretation of the rule; there is no change there; both sides agreed to that.

Q. Here seems to be another bagging and ties?

A. In the former instance, it was reduced to 2½ times the carload rate, and there it was reduced from 2½ times, down to 1½ times.

Q. That involved a reduction of 40%?

A. Yes, sir.

Q. You have already explained what you know about the extent of that movement?

A. Yes, sir, it is L. C. L. again.

Q. The next is sugar rate?

A. That is a change in the maximum rate from 15 to 13 cents; that did not affect distances not greater than 250 miles; it is change in carload rates for long distances, and did not affect short distances.

Q. There is practically no movement in that, from 250 to 300 miles?

A. No, sir; I don't think there was; it was made to cover some movement anticipated, but I doub't if the shipments in view were ever made.

2028 Q. You could pretty safely say that the state movements of from 250 miles to 300 miles belong to this negligible quantity?

A. I believe so.

Q. The next is mince meat, in carloads; that seems to be reduced 41%, what do you think about the carload movement of mince meat?

A. The provision there was to allow mixing of mince meat into carloads of canned goods; of course, some shipping was done under it, but it seems another one of that kind of quantity.

Q. It was just a rule, permitting cars to be loaded——

A. Permitting mince meat to be loaded with other kinds of canned goods, already mixed.

Q. That is a change on the L. C. L. rate?

A. Of course, that was changed from class rate to L. C. L. canned goods rate.

Q. Is that a movement of any extent?

A. No, sir; of course my idea about a good many of these things is no better than or not as good as some of the business men would be: I am just testifying about my idea of it.

Q. You have been in close touch with shipping interests of the state for the last six or eight years?

A. Yes, sir, for ten years.

Q. Here is a three mile rate, I wish you would explain that?

A. That was a rate of 1¢ per hundred pounds, maximum charge of $5. per car, made to cover shipments not included under

2029 switching rules, and where the distance was not greater than three miles; before that ruling was made, the 5 mile rate per hundred pounds ran to 2, 3, and 4 cents a mile, and the minimum was about 30,000 pounds; it did not include very many shipments, because the switching rate is less than that.

Q. This would apply where the switching rate did not extent three miles and where the movement was three miles and under five?

A. Yes, sir.

Q. That was to make a rate for three mile movement?

A. Yes, sir, it was five mile minimum movement before.

Q. The next item I find is concrete building material, carload

lots, change of 66%; have you any data to give an approximation of the extent of that movement?

A. No, sir, I have not; it shows here, stone and sand and other like articles; the only percent I found was that which included stone and sand movement, for one year, which was .8 of 1%; for the other year, it was just 1% of the total traffic; of course, that is an inappreciable part of that movement.

Q. Concrete building would be an inappreciable part of that classification?

A. Yes, sir.

Q. It altogether amounts to about 1%?

A. Yes, sir.

Q. Vinegar and cidar seems to be the next change, added to the vegetable mixture?

A. Of course, that permitted sometimes the movement of
2030 a barrel of vinegar or a barrel of cider along at a little cheaper rate, but in the very nature of the commodity, it could not have been changed much.

Q. The next item is machinery to be repaired, and there is a change of 35% on that; do you know anything of the frequency of that movement?

A. No, sir, of course, that is where machinery is to be shipped in for repairs, and for a long time, it was covered by special rates, but it got so after awhile, that they were more careful about special rates, and it made a demand for this rate, and it was put it; I don't believe there was a great amount of it; there was some shipping under it.

Q. Have you any data before you, by which the railroads have kept any memorandum of the extent of the movement of that kind?

A. No, sir; they put everything under the head of machinery and the movement under that head was .61 of 1% of the Cotton Belt, in 1908, and .59 of 1% in 1909. I don't know whether that would include that tonnage or not; you will see how small is the percent of the whole class it comprises.

2031 Q. The next movement I see is L. C. L. on machinery. What is that?

A. That was the third-class rating put in on saw-mills, put in by the railroads and approved by the commissions. It reduced the rate from first-class to third-class.

Q. So that was a voluntary change?

A. Yes. It was just merely approved by the commission.

Q. And there was no action taken by the commission making that change?

A. No, sir.

Q. Other than their approval of the railroads in doing so voluntarily?

A. Yes, sir.

Q. Millet seed per car-load and millet seed L. C. L. seems to have been the next change.

A. That is a change that was effected on millet seed and that like.

It amounted to a considerable reduction, though I don't think the movement was much; that is, there was not much movement of it.

Q. The next is iron grates. Were there any movements to any extent under that?

A. That had special reference to heavy grates and they were only shipped to saw-mills out in the country and other industries etc.

Q. There is alfalfa, broom-corn, clover, etc. per carload lots and L. C. L. on which the rate seems to have been changed. Have you any idea od that?

A. No, sir. I know it couldn't be much. I don't think we
2032 have much to do with them.

Q. The next is wire nails, wire fencing and some other things there. What do you know in connection with that?

A. Yes, there is considerable change. That is one of the changes that was made on account of the interstate mixture; that was enlarged on account of the interstate mixture. There is nothing here that gives us a fair idea of the amount of the traffic, barring sheet metal, here, take iron and steel rails. Barring sheet metal the whole group was less than one per cent of the traffic for either year.

Q. Is there not a separate head for wire nails?

A. Yes, sir.

Q. But in that grouping made by the railroads does any car bill separately?

A. No, sir.

Q. That is made along with the merchandise?

A. Well, there is no idea you could have to form an opinion of that with advantage. That didn't change the rates on the common articles that generally move under the iron rates.

Q. Now, you refer to conforming to the interstate mixture. What do you mean by that?

A. Well, we have the interstate group of articles with the metal rates, and whenever it is enlarged generally, whether with or without sufficient reason, you generally have reason to conform to it.

2033 Q. So as to make the state mixture the same as interstate?

A. Yes, sir.

Q. Now, here is saw-dust added to cord-wood rate.

A. Well, somebody had a shipment of saw-dust they wanted to ship, and would ship if they could get cord-wood rate. I don't know the origin of it.

Q. The saw-dust movement is not very heavy in this state?

A. No, sir.

Q. Here is rice products, and rice hulls, added to corn mixture, what do you know of that?

A. I don't know, Judge Hill, I don't believe it has been changed; I never have seen any of it in the markets; I guess it could have been.

Q. There is not but one rice mill in the state, is there?

A. Yes, three or four, but they are not shipping much.

Q. Now, the next is wheel-barrows carload, 16% change.

A. I doubt if that rate was ever effective for more than five cars; it was effective at Ft. Smith, and one at Hartman.

Q. Here is sawed and bent shapes for agricultural implements, change of 23½% on that rate per carload, do you know anything of the extent of that, why it was made?

A. No, sir, I know less about that than of the others, but I don't think it is much.

Q. The next rate is clariforce and Mexiota?

A. That was made to include some new brands.

Q. Adding some new brands to an already existing similar
2034 class, I presume?

A. Yes, sir, they were not provided for, and they didn't have any rate, so they made one.

Q. The next is the minimum charge, the rule was changed, what was that change?

A. The minimum charge is, of course, the minimum amount for which a shipment can be shipped; before that rule was made it was 25 cents for each line that participated in the haul; after that rule was made, it was 25 cents for one line, 40 cents for 2 lines and 60 cents for three lines, just a slight reduction. A good many shipments move but not many joint shipments; for a single line, it was not changed at all.

Q. This was just making application of that rule for the joint line movement?

A. Yes, sir, but reducing the minimum, where there was more than one line participating.

Q. Would that apply to the Cotton Belt Road?

A. There is no way to get at that.

Q. Well it is already in the evidence that that movement is a negligible quantity. Handles—car loads deduction of 2¢. Do you know anything of that?

A. Scarcely anything of that.

Q. The next change is Dowell-pins goven on the lumber rates plus 5¢. Do you know what a Dowell-pin is?

A. I have found out today.

Q. Tell us?

A. It is a pin used to fasten different parts of the barrel
2035 tops together. They fit in the holes and fasten them together. I reckon there must have been some movement or the rate wouldn't have been put in, but I can't conceive of a car load.

Q. The next is mining cars added to farm wagon rates. What do you know of that?

A. I don't know there couldn't be any shipment except in the western part of the State.

Q. Well that is just adding mining cars to farm wagon rates?

A. Yes, sir.

Q. The next change is plow handles—shallack?

A. Yes, we didn't make any difference in the rate. The shippers would quarrel with the agents, some would apply the rating and some wouldn't, and they just made the rule so the agents would all give the rate.

Q. Now the next movement is, I believe, of more importance; coal and coke and slack movement—there seems to have been a change of about 6%—no 11%—no 6% is right. I wish you would explain that coal rate?

A. The principal change in the coal was in November 1906, They changed the single line rates for two or three distances only, and they were not negligible distances. They were distances that made some differences in the rates, so the percent that is figured there is no more than fair.

Q. About 6%?

A. That is, on the coal itself, 6%. But on the slack it is 11%. Now that is the change in the single line rates, and at the same time the commission adopted a rule to cover railroads who applied
2036 single mile mileage in their rule. I figured the result of that for a distance of 200 and 250 miles, the distance I thought it ought to be figured to give the rule effect, and on coal it was 12, 10, and 8. For slack it was 10, 15, and 11 per cent.

Q. Was not that coal rate made on conference between railroads and shippers and practically agreed upon by all parties?

A. No, sir, there were a good many diverse interests, I think appeared in the hearing of it, but I think you cannot quite say that on the face of it any railroad advocated the change. Some of them didn't enforce it after it was made.

Q. I believe as a matter of fact some wanted it and some didn't?

A. I think if you go behind the record that is the opinion; that it had something to do with the action of the commission at the time.

Mr. KIRBY:

—. Did you go behind it to see?

A. No, but the railroad Company, as they generally do, stuck together.

Mr. HILL:

Q. Does that cover materially changes, you have explained?

A. Yes, sir.

Q. Now the oil car load rates, and the oil L. C. L. was changed. I believe that was one of the largest changes made?

A. Yes, that was changed back and forth, and the final change since they first adopted has amounted to about one half per-
2037 cent.

Q. Now have you any data from which to ascertain the state of the oil movement?

A. Only from the Cotton Belt report for the last two years. One year it was .93 of 1% and the other year 1.93 of 1%.

Q. Since you have been connected with the commission, what is the change that has affected the rates so far as you know. I mean the revenue appropriations?

A. I have not thought about that question at all.

Q. Now on excelsior is the next change. I see here a change of 19%. That seems to be a change only in certain distances in the excelsior rate?

A. Yes, sir, that is not a negligible quantity though, because it

was made in reference to a movement that it was thought that it would produce. I don't know whether it ever did or not. There was just one plant and if it did it couldn't have been more than a car load of it ever moved at all.

Q. The next change seems to be certain articles added to the iron list; angle-bars, hoops, and various other items that were added to the iron list. You have it all marked here on account of interstate mixture. Explain that?

A. It was another one of those same instances where they just made the commission tariff conform to the interstate tariff on the the same goods.

Q. Now the next change is on rough rice. I don't know whether it is changed or not. I believe it is a new rate, is it not?

2038 A. Yes, sir, made on account of the movement of rice from the mills. I think Rock Island expected the most movement over their road. I think the Cotton Belt have about the same rate. That is reduced from the commercial rice rate.

Q. That was made just to meet a new industry that has just recently sprung up?

A. Yes, sir.

Q. Did you have that rough material rate?

A. No, sir, the best that was in effect under the Commission's tariff was the same as the Iron Mountain tariff. The Cotton Belt rate was made, in some instances, higher, but the Commission never did consider that change at all.

Q. You did not find any record of it?

A. No, sir; it just came up this way. The Iron Mountain had been for a long time protecting the rough rice rate with a special tariff they published themselves, and the- neglected to withdraw that tariff. That is how the issue was made between the Commission and the railroads and when the other railroads joined it made considerable splash, but the Commission never made any rate at all.

Q. That was to enforce the Iron Mountain Railroad?

A. Yes, sir.

Q. Well, now, these changes and additions that you have gone over comprise all actions of the Railroad Commission from

2039 July, 1903, to September, 1908, so far as the intra-state rates are concerned?

A. I think they are. I went carefully over it and made a note, and copied it as I have the ability to do it.

Q. You have gone over this carefully and made it up the best you could?

A. Yes, sir.

Q. What difference, if any, was there between Standard Distance Tariff #2 and Standard Distance Tariff #3? I don't want you to go into detail, but state generally what difference there was.

A. Tariff #3 was not issued to embody any new rates at all.

Q. It just embraces the amendments up to the date of its issue?

A. Yes, sir.

Q. And are these the amendments you have referred to in your testimony here?

A. Yes, sir.

Q. And are all that were included up to the time of the issue of Tariff #3?

A. Yes, sir.

Cross examination.

By Mr. MOORE:

Q. Mr. Swaim, in what business were you engaged before you became connected with the Railroad Commission?

A. I was in the railroad freight offices.

2040 Q. Where?

A. I came immediately from Mr. Bragg's office—the Freight Bureau—to the Commission. Prior to that I was with the Cotton Belt a few months; and I went to the Iron Mountain Division Freight office in 1898. I was there about five years.

Q. You were never engaged in business on your own account were you?

A. Not very much.

Q. What opportunities have you enjoyed of knowing the movements of the different kinds of commodities and classes of freight throughout this state?

A. No more than I would glean in this business that I have just referred to.

Q. Well, to what extent would that give you the opportunity of informing yourself on that subject?

A. Well, I don't think the opportunity is excessive. I am not as well qualified to answer some of the questions I have attempted to answer as a merchant would be who was directly in the business, but I have an idea.

Q. For instance, you never have been engaged in the mill business?

A. No, sir.

Q. On what basis do you estimate your means of knowing?

A. Just the conception I have of it and what I have heard.

Q. Well, you would have about the same conception if you lived in St. Louis, would you not?

2041 A. Well, I believe I would have a little better.

Q. What additional means of knowing these things have you in living here from a man living in Memphis?

A. Well, just living here.

Q. Have you paid any particular attention to the movement of mill products?

A. No, sir, not any more than my general observation.

Q. Now, I have lived here a good many years, probably, more than you. I hardly think I could. Now, what particular advantages have you over me?

A. Not much. There might be a little bit, but not much. You might testify as well as I.

Q. Your testimony then is somewhat of a guess?

A. Yes, sir, somewhat.

Q. Have you ever been a farmer?

A. Not since I was a boy.

Q. What is your source of information as to the movement of plow handles in this state?

A. Well, I worked in a store as a boy and around plows, and this business I have worked in for the last 12 years is all the basis I have for the guess.

Q. Is it not a fact that it is very largely a guess, to use the word you used just now?

A. A good deal of a guess. I answered just as I would have answered any question.

Q. How many commodities and classes of freight do the changes to which you testified affect,—the changes that were made
2042 by the Commission?

A. How many?

Q. Yes.

A. I would have to count them.

Q. Well, I wish you would count them.

Mr. HILL:

Q. Did you ask the total changes or just the number of changes on rates?

Mr. MOORE:

Q. The total number of changes affecting rates. Have you finished counting them?

A. Yes, sir; according to the best addition I can give. I have counted some things as changes where they are just rules. There are 75.

Q. Between what periods of time were those changes made?

A. Well, the last was made in April, 1908, and the first in June, 1904.

Q. How many of those changes produced increases in rates?

A. I don't believe any of them increased it. I don't see any increases.

Q. So all the changes made during that period resulted in diminishing the rates, did they?

A. Yes, sir.

Q. You have testified, in fact, as to a great many of the articles that are made the subject of changes, that the movement is very small. What is the object of the Commission in changing the rates affecting movements of so little importance as your testimony shows them to be?

2043 A. A great many times a very small matter will bring up a demand for a change in a rate or some particular item. May be it is a movement between two points, and the policy of the commission is to only change a rate that will embrace an article in the joint distance tariff. And I think the most of these changes were just in answer to a demand for some movement intrastate.

Q. A demand from whom?

A. From shippers. Most of these, fairly all of them, were made on the demand of shippers.

Q. How many demands were made for changes during that four years' period covered by your exhibit?

A. Why, in just practically all cases. I don't know of the Commission ever making a change only upon complaint.

Q. Exhibit "B" then covers practically all demands for changes during that period?

A. I thought you meant how many demands as to those changes. No, there were other demands that were not granted.

Q. How many?

A. I don't know, but we have some data compiled on that.

Q. Well, state approximately,—if you have it.

A. I wouldn't like to guess at it, because in a little while I could go and get many of the instances, a considerable number.

Q. Well, I want to call your attention to an item. For instance, take saw-dust. How came that change to be made?

2044 A. A man had some saw-dust and had an opportunity to sell it at some certain point. There was a class rate—I forget the particular instance—but there was never any movement before that and a class rate applied. The reason for the absence of the rate was there never had been any movement. And as soon as he applied for the cord-wood rate—He said it would be used as cord-wood would be used, to burn—But of course the cord-wood rate was prohibitive. There was no rate because there was no movement and the rate was made.

Q. I believe you testified as to the change of the rate on sugar. I believe you said that affected a haul of 250 miles?

A. Yes, about that.

Q. What did you say as to the extent of the movement of sugar on hauls of that length in this state?

A. I said I didn't think there had been very much of it.

Q. On whose application was that change made? At whose instance was that change made?

A. I can't tell you the name of the party.

Q. Will your records show?

A. I think they will.

Q. Well, I want you to look that up. Now, what was the object of the commission making that change?

A. Well, their object was to reduce that maximum rate to 13 cents. They thought it ought not to be higher than that.

Q. Why was it necessary to reduce that maximum rate?

2045 A. My recollection is it was thought it would affect the movement from Helena to Little Rock or to Texarkana and they thought the state rate was too high.

Q. Was the movement from Helena to Little Rock embraced in that? Is that the distance?

A. Yes, sir.

Q. 305 miles?

A. Well, that couldn't affect that.

Q. Yes, but you misunderstood me. You say it is 305 miles from Helena to Little Rock?

A. Yes, by that road.

Q. By what road?

A. By the Iron Mountain .

Q. How much sugar is sold and distributed from Helena and Little Rock in the course of a year?

A. Why, I don't reckon there is any.

Q. How much is there shipped from Helena, originating at Helena, to the distance of Little Rock in the course of a year?

A. There would be very little of that.

Q. Well, would there be any? Do any of the Little Rock merchants buy sugar at Helena?

A. No, sir.

Q. There is no movement any way then between Helena and Little Rock?

A. No, sir.

Q. Well, then, that illustration doesn't apply, does it?

A. No, I said Helena to Texarkana.

2046 Q. Do the Texarkana merchants purchase sugar at Helena?

A. I don't know. That is the rate.

Q. Now, don't you know, as a matter of fact, that there is no interchange in the way of buying and selling between Helena, Little Rock and Texarkana, or any jobbing point of Arkansas,—between them and Helena?

A. Yes, I think that was why it was made.

Q. You think then that rate was put in for the purpose of promoting the jobbing interests of Helena by creating a market at other jobbing points in Arkansas, by which the merchants at other jobbing points in Arkansas would buy from Helena. Is that the object of it?

A. No, sir. They stated they wanted to ship sugar from Helena to Texarkana.

Q. Who stated that?

A. Whoever it was. I forget.

Q. Where did that sugar come from they wanted to ship?

A. I guess from where it all comes from.

Q. Where?

A. From Louisiana.

Q. Wasn't that rate made for the purpose of influencing the interstate rate on sugar?

A. No, sir.

Q. You say it was not made for that purpose?

A. No, sir. I can't answer that question any other way.

Q. Now, what was the object, assuming there was no trade between Helena and any other jobbing point, you have referred to Little Rock, Texarkana and other points—assuming there

2047 was no trade between those points and Helena was not an originative point for the purchase of sugar by the merchants of this state, what could have been the object?

A. I would say this, to promote trade between these two points. You can't go clear back, Colonel. Of course sugar that comes from Helena comes from somewhere else. They don't raise any at

Helena. Nearly all the sugar marketed in Arkansas comes from Louisiana.

Q. Was that application made by the people of Helena or Texarkana?

A. I can't remember. I remember the circumstances.

Q. Can you remember whether the application for that reduction was made by the merchants and shippers of Helena for the purpose of building up a jobbing trade from that point?

A. I don't think it was. I think it was Texarkana interests.

Q. Don't you know the Texarkana interests, either before or after that order was made, purchase their sugar at Helena?

A. I don't know what the effect was.

Q. Speaking on the same basis, speaking from your impressions, as you have testified very largely in regard to other matters since you went on the stand this morning, from your general knowledge and views as a citizen of the state, what would be your opinion about that, as to whether there has been any trade between Helena
2048 and Texarkana in sugar, either before or after that order?

A. I don't think there is. I doubt it. I might miss it a little on that, but I doubt it.

Q. Now, I will ask you if it is not known to the members of the Commission and to yourself and to those that are familiar with traffic arrangements that that cut in the rate on sugar would affect the interstate rates under the rule that prevails, when the interstate rate is made up of a combination of locals: that is, local rates?

A. I would answer for myself. I wouldn't answer for the impression the Commission has acted under.

Q. Well, just answer from the common knowledge of everybody connected with that subject.

A. I am satisfied that they knew what the interstate rate was New Orleans to Texarkana and what it was from New Orleans to Helena.

Q. But, is it not true that, in a general way, the interstate rate was made up of a combination of locals—local rates, and to that extent influenced by the local intrastate rates?

A. It might in that instance. I forget just the details.

Q. I am not asking you for details. I am asking if the general rule applied to interstate rates, whether they were not as a rule made upon a basis of a combination of local rates within the states.

A. They look like it sometimes, but I don't think that is the basis for making the interstate rates.

2049 Q. Well, wouldn't that necessarily be the maximum rate?

A. Oh yes, it would be the maximum rate.

Q. During your long connection with the State Commission you have endeavored, have you not, to familiarize yourself with the rulings of the Interstate Commerce Commission in so far as they may affect state rates? Have you not?

A. Yes, sir.

Q. Well, you are aware, are you not, that the Interstate Commerce Commission have adopted a rule by which the through rate

should not exceed the sum of the local rates of freight hauled, but retain its prima facie reasonable rates?

A. Yes, it amounts to that.

Q. Now, in view of that rule of action governing the Interstate Commerce Commission, is it not a fact that the local rates do affect the interstate rates?

A. Why, yes, they do.

Q. Then we have a case now in which an interstate rate applies upon sugar for a distance this sugar does not move in the state. There is no traffic in it covering this distance. And there is a material reduction made in it. All the trade at that time was between other points and was constituted of interstate shipments. Now, in view of these facts, I want you to state if that was not made for the purpose, obviously, of affecting the interstate rates, and if that was not the purpose of the man who made the application for the change?

2050 A. I think it was made to get a cheaper rate. I don't think the Commission made the rate in order to influence interstate rates, but the application was made to get a cheaper rate on sugar.

Q. I believe you said that application came from Texarkana.

A. I said I thought it did.

Q. And the object of making the application was to get a cheaper rate on sugar?

A. Yes, I think so.

Q. And the merchants down there purchase their sugar from New Orleans and Mobile; that is, Louisiana points?

A. Yes, I think so.

Q. What is the extent of that change? What is the amount of the change? What was the rate before?

A. 15 cents.

Q. And reduced to 13. What is the rate between New Orleans and Helena?

A. I have forgotten. I didn't take any record of the interstate rates at all and it has been several years ago and I don't remember anything except the change that was made on the state rate.

Q. Well, at that same hearing, wasn't the railroads represented at the time that change was made?

A. Yes, I think so. Oh yes, I know they were.

Q. Didn't the railroads furnish the commission with information as to the rates from New Orleans and other points from which

2051 the merchants who were making the application obtained their sugar?

A. Yes, I am sure they did.

Q. Well, if they did and the rate from Helena to Memphis was 10 cents and the rate from Memphis to Texarkana was 13 cents, they had that information, didn't they?

A. Yes, I said so a while ago.

Q. And they were also informed of the through rate from New Orleans to Texarkana?

A. Undoubtedly.

Q. Do you know what that was?

A. No, sir.

Q. While ago you said that the distance from Helena to Little Rock was about 320 miles. I will get you to take this time-card here and see if it is not 160.

A. I said Texarkana.

Q. You didn't mean to say it was 320 miles from Texarkana to Little Rock?

A. No, sir, it is 160 to Little Rock.

Q. Now, is there any intrastate shipment that covers a distance of 250 miles of sugar in the State of Arkansas?

A. Why, yes, if the shipment moved from Helena to Texarkana it would apply to that.

Q. Well, do intrastate shipments move from Helena to Texarkana?

A. I don't know. I might guess.

Q. I am not asking you to guess. I would prefer facts.

2052 A. I wouldn't think they did, but I wouldn't have any reason to say they didn't. I doubt whether they would or not under ordinary conditions, but they might.

Q. Any other shipments?

A. Let's see. Shipments from Texarkana to the north end of the Iron Mountain. What is that town? Moark. Of course that would.

Q. That is to say, from Texarkana to Moark. Now, is there any shipment of sugar made from Texarkana to Moark?

A. No, sir, not that I know of.

Q. What is your object in making that statement then?

A. I thought you wanted to get at the distance.

Q. Well, that doesn't have any bearing on this proposition. The effect of this then was to reduce interstate rates from Louisiana points to Texarkana. Now, what effect would it have on the rates from Louisiana points to Fort Smith?

A. I didn't say that.

Q. You didn't say what?

A. That the effect was to reduce the interstate rate. It might have been reduced but I don't think that was the effect.

Q. Well, give us your best judgment?

A. I think the interstate rates bear some relation, in some way affect state rates, but I don't think it is as much as is lots of times asserted.

Q. Well, give us your best judgment as to the effect that a reduction of the rate on sugar in this state, that you have shown
2053 as an exhibit, had on the interstate rates from so many Louisiana points to points in this state?

A. Do you mean my judgment of what would be the effect of reducing that rate two cents?

Q. Yes.

A. Well, if the interstate rate were so adjusted that it reduced the through rate it would eventually reduce others. No question about that. Whether it did I can't say.

Q. And if it did that it would do so?

A. Generally. But how much it would take to do that I can't say. Of course, it would reduce it sufficiently after a while.

Q. What was the change in the hay?

A. The hay rate was not appreciably reduced. It was just simply an action there allowing them to ship hay and flour together. Prior to that time the rate on either commodity was about the same, but they couldn't be mixed. And in that way you could ship less than carload shipments.

Q. You mean it could be shipped in the same car in carload movements?

A. Yes, sir.

Q. Why?

A. Because the classification would permit the mixing of them.

Q. What are applied to hay and what to flour—commodity
2054 or class rates?

A. Commodity on both of them prior to that time.

Q. You said a moment ago there was no appreciable change made in the rate on hay. What change was made?

A. Just simply to allow it to load mixed. It was shipped out at the same rates, but in smaller quantities. Before you would have to have had a carload of each. Under the latter you applied the L. C. L.

Q. Don't you know the result of that rule was to force the railroads to carry hay in less than carload lots at carload rates?

A. Yes, sir.

Q. Now, what is the difference between carloads and less than carload lots on hay?

A. Well, there is a considerable difference.

Q. Just state in figures what the difference was. Give each rate. The rate on carloads and less than carloads on hay.

A. Well, it was this way——

Q. Well, answer my question.

A. Can I make this other statement——

Q. Well, answer my question and then do so.

A. Well, what I wanted to say was—for fear I had overlooked that—If they had not made the change they would have continued to ship each commodity in carloads. Sometimes it might have been inconvenient to ship, but they would have continued to ship each in carloads.

2055 Q. Now, I understand that. You mean to say that when they shipped a car load of hay they charged carload rates and when they shipped a carload of flour they charged the carload rate applicable to flour,——

A. Yes, sir.

Q. But, under this rule, if they put the two into one car, that, under the carload movement, they had to apply to that the carload rate?

A. Yes, sir.

Q. Now, give me the difference in the rates,——

A. But what I said further was that, for instance, if they had not made the rate both commodities would have moved in carloads and at the same rate as they did mixed. Now, you take 50 miles,——

Q. Just figure it out on the basis that you got your average in this exhibit you filed.

A. Well, take 25 miles,—the carload rate on flour is 6 and on hay it is 4; the L. C. L. rate for the same distance is 12 on flour and 10 on hay; 50 miles——

Q. I just want you to state the rate on hay in carload movements and on less than carload lots.

Mr. HILL:

Q. For what distance.

Mr. MOORE:

Q. Just the same as in that exhibit. I think he took four distances and made the average.

2056 Q. Are you acquainted with the location geographically of the different railroads of the State?

A. Yes, sir, in a very general way; I have been out over the State a great deal.

Q. Isn't it necessary for the Railroad Commission, of which I believe you are secretary, to become familiar with the location of the different roads?

A. The commissioners do travel a good deal.

Q. You acquired that information from the maps, I suppose, more than from travelling; do you know it from the maps of the roads?

A. Yes, sir, I think fairly well.

Q. Is there any line of road in this state that has, within the limits of the state, a continuous straight mileage of 300 miles?

A. Yes, sir.

Q. What road is that?

A. There was a distance over this line that we referred to, from Helena to Texarkana.

Q. What continuous line of road extends from Helena to Texarkana?

A. The Iron Mountain.

Q. In what way?

A. Around by Wynne and Little Rock.

Q. What is the most direct route from Helena to Texarkana?

2057 A. It is 305 miles.

Q. What is the most direct route, in view of the various railroads that are between the two places? I take it, it would be the Cotton Belt and Iron Mountain, wouldn't it?

A. Yes, sir; I don't know without figuring; it is not very much difference, I would not think, either way.

Q. What other road is there that has a continuous mileage in one direction of 300 miles?

A. It is nearly that far across the State from the Southwest to the northeast, on the Iron Mountain; that is 300 I believe, and a little more, and then it is 300 miles up to Fort Smith from Texarkana, and 300 miles from Fort Smith around to a good many points south.

Q. What is the distance of the Choctaw road across the state?

A. It is about 290 miles.

Q. Those are about the lines that would extend 300 miles?
A. Yes, sir.
Q. I believe you say this sugar rate is 13 cents on distances of 300 miles?
A. Yes, sir.
Q. In the ordinary course of transportation throughout the State, there is only a few lines on which there could be a continuous shipment for that length?
A. Only a few instances.
Q. Now, what would be the joint rate on two or more lines, under your tariff, on a shipment of ten or fifteen or twenty or
2058 twenty-five or forty or fifty miles of sugar, just look at your tariff and see?
You will find the rate on sugar there on page 9.
A. On two line rate?
Q. Yes, two line rate.
A. The differential is five cents on carloads.
Q. Now, turn to the other rates and see what it would be for those distances?
A. For 25 miles, the two line rate is 13 cents.
Q. What is it for 30—it is so on up to 50?
A. Yes, sir.
Q. What is it for ten ?
A. Ten miles is 13 cents.
Q. So the rate is the same on two or three lines, 300 miles; I mean on two lines, ten or fifteen miles up to 50, that it is the same as it is for 300, up to two or three lines?
A. On two lines, yes, sir. The maximum rate for two line shipments is the same; of course, three line shipments are different; on two line shipments, the maximum rate is 13, and the rate for ten miles is 13.
Q. You call that a distance tariff, don't you?
A. Yes, sir, that is the title of it, "Standard Distance Tariff."
Q. I believe you said there was a rule there, providing that agricultural implements, giving the right to the shipper to remove, make one stop and remove from the carload during the journey?
A. Partially unload, yes, sir.
Q. Tell me in a few words, just what that rule is?
A. For instance, you go to ship from here to Hope, a car-
2059 load of agricultural implements; that permits you to unload it,—say you can stop for instance, and unload part of it at Benton, and stop and unload a part at Malvern, and finish unloading at Hope; you get your carload rate.
Q. The railroads are required to charge a carload rate?
A. Yes, sir, to Hope.
Q. What is the difference between the carload rate of agricultural implements and less than carloads?
A. It all takes class rates; take that instance, for 120 miles, using for the basis class "A," and that is about the correct basis, 28 cents for that distance, and the L. C. L., it runs 1st, 2nd and 3rd class——
Q. What is the L. C. L. rate for the same distance?

A. From 40 to 53 cents for the same articles.

Q. That would be from 12 to 23 or 24 cents difference.

A. Yes, sir; there is this difference; if you ship it L. C. L., the L. C. L. rate to Benton, the first point would be from 19 to 24, and to Malvern, a distance of 50 miles, would be from 27 to 52; they wouldn't charge this Hope rate on an L. C. L. shipment in addition to that, but they would charge $5.00 for each stop.

Q. Suppose they stopped at Prescott?

A. The L. C. L. rate would be from 37 to 47, and the carload rate to Hope is 27.

Q. Now, Mr. Swaim, by enabling parties to carry, load and unload in less than carload lots, and applying the carload rate to it, isn't there a very material reduction in rates affected?

2060 A. I doubt it.

Q. Do you doubt that there is a material difference between 28 for instance,——

A. You mean on the movement?

Q. Yes, sir, doesn't it make a very material change in the rates?

A. It makes considerable change in the figures I read, yes, sir.

Q. And so far as loading, and unloading, and so forth is concerned, it is a less than carload movement?

A. Yes, sir.

Q. You spoke about mixtures, I want you to explain to me what you mean by mixtures; you said for instance, that they mixed mince pies or perhaps mince meat with canned goods; explain that to me?

A. The rate before that was done, provided for mixing of nearly all kinds of canned goods, and some other articles and when they enlarged the mixture, they just provided that mince meat should be shipped at the canned goods rate.

Q. What is the effect of that upon the rates?

A. That changed the rate from the class rate to the mixed commodity rate.

Q. Is there a material difference between the class rate and commodity rate?

A. Yes, sir.

Q. By doing that, every article to which a commodity rate is given, that you added to the mixture, that is withdrawn from

2061 class rate and put under commodity rates?

A. Not every one.

Q. Take the case—you may have mentioned a number, but I happened to remember the mince meat, which you said was added to canned goods?

A. Yes, sir.

Q. That had the effect of taking the mince meat out of the class rates and putting it in the commodity rates, where it was shipped in a car with canned goods?

A. Yes, sir.

Q. That illustration runs through all the cases that are affected by that rule?

A. Not all of them; most of them though.

Q. Give me one that was not?

A. The classification was changed on plows, etc.; it was not made a commodity rate, but the classification was changed and the rate reduced somewhat.

Q. Just tell me what the change was on plows?

A. Plows, plow points and so on, was reduced to third class, and formerly it took second class, and some of them third class, some first class.

Q. Did that make a considerable difference in the rates?

A. Yes, sir; you know I figured out the rate percentages.

Q. I know; we will get to that later; I just want you to tell me the difference between the two classes that you mentioned a moment ago.

A. It made a difference of 13% in that item.

Q. That is not what I am asking you; I am asking you the
2062 difference between the rate prescribed for second class and third class, and you said they were changed from second to third?

A. The difference is 13%

Q. As you stated it there?

A. According to the way I figured it.

Q. What is the difference on a haul of five miles?

A. Between the second and third is one cent.

Q. Ten miles?

A. It is 1 cent.

Q. Now, what is the rate on each class, second and third, you say there is 1 cents difference?

A. 15 and 14.

Q. 20 miles?

A. 19 and 17.

Q. 25?

A. 21 and 19.

Q. What is on 40?

A. 27 and 24.

Q. And for 75?

A. 37 and 32; the percentage don't vary very much for class rates.

Q. You stated that bagging and ties were reduced from fourth class to 250 per cent of the carload rate, and then it was reduced again to 150% of the carload rate; now, tell me what was the result of that reduction?

A. The 1st one was 39%; the next one was 40% more.

Q. What was the fourth class rate for, take some representative distance, say fifty miles?

A. The fourth class was 22, and it was changed from 22 to
2063 10½.

Q. Reduced less than one-half?

A. Reduced from 22 to 10½, yes, sir.

Q. Now, take at 100 miles.

A. It was reduced from 32 to 13½.

Q. What would be the rate on canned goods for the same distance?

A. Carload?
Q. 100 miles, yes, sir.
A. 14 cents.
Q. Were you giving me the carload or less than carload?
A. Carload, 14 cents.
Q. Did you give me the carload rate on bagging and ties?
A. No, sir, that was L. C. L., bagging and ties, 13½.
Q. Now, let me see if I understand you, you reduced bagging and ties first, to 250% of the fourth class rate, carload rate?
A. We reduced it from fourth class to 250% of the carload rate.
Q. Tell me what that reduction involved on 100 miles.
A. About 39%.
Q. Just tell me the difference in cents, per hundred weight.
A. For fifty miles?
Q. No, 100 miles.
A. The rate was 32; 250% would make 22½.
Q. And then you reduced it below that, about 150% of the carload rate?
A. Yes, sir.
Q. What would that be?
2064 A. 13½.
Q. You reduced it from 32 to 13½?
A. Yes, sir.
Q. You said awhile ago, from 22½ to 13½, that is what I wanted to get corrected.
A. There were two reductions.
Q. How did you reach—you stated the dimunition in rates that had been made by the Commission, during the period covered by your testimony in percentages, taking one item of per cent, how did you arrive at that?
A. No, sir——
Q. You averaged it and said it was an average of 20% for an illustration, how did you reach that average?
A. You mean on each single article?
Q. Give me your basis?
A. Here is the basis; I took the rates for 25, 50, 75, 100 and 200 miles, added them together and then took the difference from the sums; assuming there is an equal movement for the distances, of course that is the average reduction; of course that won't always be true.
Q. You took those five distances?
A. Yes, sir.
Q. Took the distances and then added them together and divided them by five?
A. No, sir, added them together and took the relation of the sums to each other.
Q. You have been making statements here frequently, of a percentage; you stated that just now, that is what I am asking
2065 about, how did you arrive at that?
A. Just as I stated there, but I took each item, and I figured the rates for those five distances under the old basis and

under the new basis, and then the relation of the sum of those rates to each other; for instance, bagging and ties, the old rates amounted to $1.69; they were reduced so that they amounted to $1.02; that is 61% or 39% less than the original.

Q. As I understand, you took the sum of all the rates for the five different distances mentioned a moment ago, added them together, you then took the sum of the rates after the reduction had been made in the sum given, and stated the per cent of decrease on the basis of the ratio between the total reduced rate and the original rate?

A. Yes, sir, that is true as to each commodity; I haven't made any attempt to see what the reduction was in percentages or in per cent on all commodities taken collectively at all.

Q. You assumed, of course, in doing that, that the movement would be uniform those different distances, didn't you?

A. That assumption is involved, yes, sir.

Q. Can you state that the facts would bear out that assumption?

A. No, sir, I am not expert enough to testify about that, but those are the ordinary distances and about all the figures that I would make, would be based upon that.

2066 Q. If the facts did not sustain the assumption, the result would not be correct would it?

A. No, sir.

Further cross-examination reserved.

Redirect examination.

By Mr. HILL:

Q. In testifying this morning as to your knowledge of these various movements, and the information you have gathered about that, I will ask you if it is not a fact that various shippers came to the commission with their complaints and to discuss rates with the Commission and that you have taken part in those discussions and learned of these various movements, from talking with the men who actually handled the movements?

A. Yes, sir, in the majority of cases I have had something to do with it in the conferences.

Q. You have gathered information about the various movements in the State in that way, haven't you?

A. Yes, sir, whatever I could.

Recross-examination.

By Mr. MOORE:

Q. In adding articles from time to time to these group rates,—that is what mixtures come under?

A. The mixture, of course, is a commodity group.

Q. In adding various articles to commodity groups, the mixtures you speak of, is the commission governed by any rule?

2067 What rule does it follow, if any?

A. They have not any strict rule; if a case comes up, and

some rule is suggested, for instance, the instance we had, the mince meat and canned goods rate, they found out it had been applied on interstate shipments.

Q. Who applied it on interstate shipments?

A. The interstate railroads.

Q. Did the Interstate Commerce Commission approve it on schedules filed with them? Did it become a regulation with the interstate Commerce Commission upon the filing of schedules?

The above question was at the time objected to by the defendants. Question withdrawn.

Q. Is it true, that the State Commission in regulating these commodity groups in intra-state traffic, usually followed the interstate practice?

A. Yes, sir, often enough. I think, to call that the rule; of course, if a case comes up and there is no precedent, they do not refuse to do anything about it because they cannot find a precedent.

Witness excused.

2068 J. E. HAMPTON, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. Will you please state your name, residence and present position?

A. J. E. Hampton, Fordyce, Ark., I am Chairman of the State Tax Commission.

Q. Were you a member of the Arkansas Railroad Commission?

A. Yes, sir.

Q. During what period of time?

A. From January, 1903, until May 18, 1909.

Q. Did you serve as chairman of the Commission during that time?

A. Yes, sir, I did one year, 1907, I believe was the year.

Q. During the years that you were a member of the Railroad Commission, were you familiar with its work?

A. Yes, sir, I was in the office all the while.

Q. Did you attend all the meetings of the Railroad Commission during that period of time?

A. Yes, sir.

Q. Did the railroads, while you were a member of the Commission, any of them, ask you to raise any rates?

A. The Hot Springs Western did; as I remember, several of these short roads did.

Q. Did you do so?

A. Yes; we allowed them to change their local, which was an increase; that is, this was done after we put in joint rates;
2069 there was no request of that kind while we had single line rates.

Q. When was it you put in joint rates?

A. In the summer of 1903, July I believe.

Q. Did the Iron Mountain Railroad or Cotton Belt Railroad ever apply to the Commission while you were a member of it, for a readjustment of any of its rates or all of their rates?

A. No, they did not, and I do not remember now of any request of that kind at all.

Q. They did not file any complaints with you about the injustice of any particular rates or of the rates as a whole?

A. No.

Q. Did either of these roads, the Iron Mountain or Cotton Belt, make any application to the Commission while you were a member of it, for a restoration of the rates, in whole or part, which had been in force prior to the Commission putting in its Standard Distance Tariff?

A. They did not.

Q. Have there been any material changes in the tariff as a whole; by material changes, I mean changes that would materially affect the revenue of the railroad, comparing the changes with the whole revenue, since you have been a member of the Commission.

A. I think not.

Q. Are you familiar with the Commission rates that were put in before you became a member of the Commission?

A. I think not.

Q. Are you familiar with the Commission rates that were put in before you became a member of the Commission?

A. In regard to that other question, when you asked about
2070 the material change, you were not referring to the joint rates?

Q. I was referring to that, but probably we had better clear up that question about the joint rates? Your answer to the question a few moments ago, I understand you to be referring to the distance rates and not to the question of the joint rates?

A. Yes.

Q. I wish you would, in this connection, state the history of the making of the joint rates by the Commission?

A. The Legislature of 1903 gave us authority to make joint rates; previous to that, our predecessors had put in joint rates, but they were enjoined and the joint rates,—the injunction, was sustained, because it was shown that the Commission did not have power to put in joint rates up to that time; after the Legislature gave us authority, we took up the matter with the railroads in the spring, and we finally issued the joint tariffs in the summer of 1903.

Q. Was there any material change between that tariff as issued then, the joint tariff, and the tariff issued by your predecessors, other than the joint rates as issued by your predecessors had been rendered nugatory by an injunction?

A. I don't remember particularly that we put in the joint rates our predecessors had, but it was a revision from what the railroad was using at that time, because they were allowed then to use the sum of the locals.

2071 Q. When you put in the joint rates, upon what basis were they established?

A. Well, we had a hearing before the Commission and the railroad representatives were present, and from the best information we could get, in regard to the rates put in in other states, and from the railroad people present, we thought the joint rates should be about 80% of the sum of the locals, and in making the rate, we endeavored to put in such differential figures as would produce 80% of the sum of the locals.

Q. Instead of making joint rates 80% of the sum of the locals, you put a differential there which you considered would be equivalent to that?

A. Yes.

Q. Was there opposition to these joint rates, at the time they were put in?

A. There was no open opposition; I presume that the railroad preferred that the rates remain as they were, but they recognized the fact that we had the power to put in joint rates then, and didn't offer any open opposition to it.

Q. I am referring more particularly to the rates you established; if they had to have joint rates, did they object to the particular schedule which you put in?

A. Well, in regard to the sum of the locals, I asked Mr. Stith, who was at that time general freight agent of the Iron Mountain, what he thought the rate should be and he said he thought it should be 80% of the sum of the locals.

2072 Q. The rates put in were approximately what the railroads suggested themselves, were they not?

A. Yes.

Q. Did they oppose the differential basis or just went it straight 80% of the sum of the locals.

A. There was no strenuous opposition, but I think they preferred the sum of the locals.

Q. Why did you take the differential method of arriving at that, instead of 80% of the sum of the locals?

A. My idea was that the country merchants could understand how to estimate the rate better in that manner, than they could by the sum of the locals.

Q. That it was a simpler system?

A. Yes, sir.

Q. The revenue producing effect would be the same?

A. Yes, the revenue would be the same.

Q. Mr. Swaim has put in evidence, and I presume you have not heard quite all of it, as to the various changes that have been made in the tariff, and in the rules affecting rates, from the time that the joint rates were put in effect, until the injunction of Judge Van Devanter; I will ask you to state generally, without going into details, what brought about the various changes that have been made?

A. It was brought about on petition from the shippers.

Q. Did you have hearings in all instances?

A. Yes, we always gave notice to the railroads and had hearings on it.

2073 Q. Some of these changes, Mr. Swaim has stated were brought about by adjusting your rates to the interstate rates, I wish you would explain that?

A. I don't know that we always adjusted rates that way but we had certain articles in the same group they used in interstate rates; in some instances, the rate we made was lower than the interstate rate.

Q. I am referring particularly to making groups and mixtures.

A. We did always confine ourselves to the groups they made in interstate rates, but whenever we found that they had an article in the interstate group, and the shippers applied to us for it, we thought it was a good reason why it should be put in the state group.

Q. If the railroads had voluntarily grouped the articles that way, and some interested shipper should ask that they be grouped in the same way, the railroads ought to make the same group on state shipments, you thought, unless they had a good reason for not doing so?

A. Yes, sir.

Q. In the various changes that have been made by the Commission on the rates, what has been the attitude of the railroad companies in the hearings before the Commission, while you were a member of it?

A. I don't know that I understand the meaning of your question.

Q. Have the railroads assisted the Commission in arriving at a fair determination of what the rates should be, when the question of change of rate has been up before the Commission?

2074 A. I will say that the first four or five years I was on the Commission, they didn't show much disposition to give us much light on these investigations, at that source to arrive at the proper rate; after that, they rendered us more assistance, and when we asked what the rate should be, they seemed disposed to give us their ideas about it.

Q. Was the Railroad Commission, while you were a member of it, so far as your knowledge went, ready at any time to change the rates so as to produce a better revenue to the railroads, upon a showing that the revenue then received, was unfair or non-compensatory?

A. If any instance had been shown us to that effect, we would have increased the rate, of course.

Cross-examination.

By Mr. MOORE:

Q. During the time you were a member of the Commission, did it take the most of the time of the members of the Commission to discharge their duties?

A. A man who is conscientious about giving his services to his state, it would.

Q. What I meant to ask was, if the duties of the office were such that it required the time of the members of the Commission pretty much all the time?

A. I thought so, so that I stayed there all the while, in the office.

Q. How often did the Commission hold meetings?

2075 A. Never less than once a month, and frequently two or three times.

Q. What was usually done at those meetings, what was the object of holding the meetings at those intervals?

A. To consider petitions from shippers, in regard to the freight rates, building depots, etc.

Q. Was a good deal of the time of the Commission taken up in hearing complaints about rates?

A. During the interval between these meetings, we considered that amongst ourselves; at these meetings, most of the time was taken up in discussions with regard to freight rates.

Q. Now, you made about 75 changes during the period of time covered by Mr. Swaim's testimony, and all of them were reductions of rates; do you recall any increase of rates you made during that period?

A. I do not now.

Q. You were asked if the railroads made an application to you at any time, to be allowed to go back to the old rates that were enforced before the Commission put this rate in operation in 1900; would you have listened to such an application as that, Mr. Hampton? Would the Commission have listened to an application or would it have granted an application on the part of the railroads, to be allowed to restore the old rates effective before the Commission came into existence?

A. I think if the railroads had made a good showing in their petition, we would have given them a hearing on it, but I doubt very much whether they would have been able to show it

2076 or not.

Q. You say a great deal of your time was taken up in adjusting rates; I believe you stated that a moment ago?

A. Yes, sir.

Q. And yet all your adjustments consisted of reductions, did they not?

A. The petitions we had were from shippers, and, of course, they would not have petitioned for an increase; if we acted at all, it was a decrease.

Q. Did the railroads at any time object, or did they come before you when you gave them notice of hearings?

A. Yes.

Q. Did they make any objections at any time about the changes you made in rates?

A. Indeed so.

Q. They frequently objected to your changes?

A. Most always.

Q. The reductions were made over their objection then?

A. In the majority of the cases, I would say yes.

Q. Did you understand the railroads as acquiescing in those changes, further than they had to carry them out?

A. After the changes were made, I think frequently they did, when they really realized that the rate would be compensatory.

Q. You think that; that is merely your opinion, is it not?

A. Yes, sir.

Q. Didn't the railroads frequently ask for re-hearings after
2077 you put in rates?

A. No, sir, not frequently, and I don't call to memory now where they did in any instance, except on the oil rates.

Q. What change was made in the oil rates?

A. In the first instance, the class rate we applied on oil was cut half in two; afterwards, it was raised by the Commission to 50% above that.

Q. Raised 50% above the rate after the cut?

A. Yes, sir.

Q. What regulations did the Commission adopt in regard to running oil trains by railroads running trains carrying oil cars?

A. They didn't make any in regard to oil cars; we made rules in regard to their receiving less carload shipments.

Q. Was there not a rule made, requiring the railroads to transport oil trains carrying oil, three times a week from Little Rock?

A. That is what I was leading to just now, that they should receive it on three days instead of one.

Q. That is a rule operating without regard to the tonnage the railroad received?

A. Yes, sir.

Q. That rule was an arbitrary one, and required them to carry trains out, without regard to the loading, isn't that true?

A. I don't understand what you mean.

Q. They required trains to go out three times a week?
2078 A. They required those oil shipments to be received three times a week.

Q. Didn't that impose, and wasn't there complaint made before the Commission, that that imposed a very great hardship upon the railroads?

A. I think the railroads did object to making it more than one day.

Q. Wasn't that showing made that sometimes a train would go out as far as Poplar Bluff, and the entire freight receipts would amount to a mere triffle, not more than enough to move the train?

A. That was a very flimsy showing they made on that.

Q. It didn't impress the commission?

A. No, sir.

Q. And wasn't that true in regard to the view the Commission took as to a good many objections the railroads made.

A. They sometimes made a reasonable showing; there was no reason in that at all.

Q. It was also true that the members of the Commission thought

the railroads failed to make a showing at the time the railroads made their application at St. Paul, that the rates were non-compensatory?

Question objected to at the time by attorney for the defendants.

A. I couldn't answer that, because I was not up there myself.

Q. You say the Railroad companies, during this period of time, were objecting and you were busy investigating the rates, and yet in a period of four years, you made 75 reductions and no
2079 increase you can recall; that is your statement, isn't it?

A. No, sir.

Q. What are the facts in that respect?

A. During a period of about seven years.

Q. During that period of 7 years you made no increase in any rate?

A. We made that oil increase that I spoke of awhile ago, but it was after reducing it, and then many short line rates, we increased the branch line rates.

Q. I believe you made a change in the rate on sugar, didn't you Mr. Hampton?

A. We changed that 300 mile haul on sugar.

Q. You changed it from 15 cents to 13 cents?

A. Yes, sir.

Q. What was the object of that change?

A. We thought probably it would force Mr. Perkins' road to give them a better rate to Texarkana from New Orleans.

Q. It was for the purpose of adjusting interstate rates?

A. We didn't think it would affect hauls in Arkansas.

Q. It was for the purpose of affecting and re-adjusting the interstate rate?

A. It was for the purpose, in my own mind, thinking it would have that effect.

Q. Why did you think it would have that effect.

A. Because the Texarkana people could ship around by Helena and over to Texarkana, and get a less rate than the Kansas City Southern were giving them.

2080 Q. How could they do that; explain to me how they could do that?

A. If the railroads built the rates as they sometimes do, take the rate from New Orleans to Helena and add the rate from Helena to Texarkana, the sum of those two rates would be less than they were coming the other way.

Q. At the time this order was made, the Iron Mountain Railroad and the Kansas City Southern hauled sugar from New Orleans to Texarkana at the same rate, prior to that time?

A. I don't remember.

Q. If your purpose was to force the reduction in the rate of the Kansas City Southern, it must have grown out of the fact that the Iron Mountain was at that time, charging the same rate as the Kansas City Southern was, otherwise, there would have been no need

to put compulsion upon the Iron Mountain, causing it to lower its rate.

A. Not necessarily.

Q. Why did you think it necessary to take that action in order to force down the rate of the Kansas City Southern?

A. The Kansas City Southern could be charging rates we would think would be too high, and yet be just in line with the Iron Mountain rate or the other rate.

Q. In what way did you think the reduction of the rate between Helena—of the intra-state rate between Helena and Texar-
2081 kana would bring about a reduction of the rate of the Iron Mountain from New Orleans to Texarkana?

A. I was not figuring on the sugar coming by the Iron Mountain from New Orleans.

Q. I understood you to state awhile ago, that your object was to force the Kansas City Southern to give a lower rate by competition with the Iron Mountain, though the Iron Mountain would bring the sugar further, from New Orleans to Texarkana, via Helena.

A. No, this sugar came up by Shreveport, over the Kansas City Southern, from New Orleans.

Q. Repeat then the statement made awhile ago in answer to my question, as to the manner in which the intra-state rate from 15 to 13 cents would affect the rate from New Orleans into Texarkana; I asked you that question; I wish you would repeat your answer to it?

A. My idea was if the railroad did as they sometimes do, build the rates on the sum of the locals, so to speak, that the direct rate would give them some rate that would be less than the Kansas City Southern had in.

Q. In other words, you thought the sum of the locals in the different states, between New Orleans and Texarkana, via Helena, would control the interstate rate, did you not?

A. Yes, sir. I thought it would give Texarkana a better rate.

Q. Why did you think that? What suggested such an idea as that to you?

2082 A. I had been informed that railroads sometimes built their rate in that manner, and rather than let the shipment be diverted around by Helena, they would rather give a rate by the other way.

Q. The Commission put in this state rate, for the purpose of forcing down the interstate rate?

A. We hoped it would have that effect.

Q. That was the purpose of it, wasn't it? That was the purpose of the order?

A. I guess it was.

Q. I believe you stated that the railroads acquiesced in this joint rate, did I understand you to state that? Did you mean to state that?

A. Yes.

Q. Isn't it a fact that the railroads were so much opposed to the application of a joint rate by the Commission, that they carried the

question, to the courts, and litigated the power of the Commission, and procured a ruling of the Court that the commission had no power to do that?

A. Formerly they did.

Q. Referring to your statement that the railroads acquiesced in joint rates on different lines, is it not a fact that the railroads litigated that question and carried it to the Supreme Court of the State before those rates were put in? That is true, isn't it?

A. That is my impression.

Q. They were not acquiescing at that time, in the Commission putting in joint rates?

A. No, sir.

2083 Q. When did they acquiesce? When did they have a change of heart and acquiesce?

A. It was when we put in a joint rate.

Q. I believe you stated the plaintiffs in these suits acquiesced, didn't you?

A. The Iron Mountain and Cotton Belt?

Q. Yes?

A. All the roads as I understood it.

Q. Did the Commission publish a tariff of those joint rates?

A. We did.

Q. It was an official publication, wasn't it?

A. Yes, sir.

Q. I hand you here a document marked St. Louis, Southwestern Railway Co., supplemental No. 22, Joint Distance Tariff, #3418, now I want you to state if that was not filed in the office of the Commission by the St. Louis, Southwestern Railroad Company, with the indorsement in red letters on it, which appears there now, on the paper which I hand you?

A. "Filed under protest"?

Q. Yes?

A. Yes, sir, all their tariffs they filed that way.

Q. The railroads, at the time you put in that joint rate, prepared a tariff based on it and filed it with the Commission, and that tariff contained a written protest across the face of it, didn't it?

A. Yes, sir, it is not my recollection that any of the others

2084 did that except the Cotton Belt.

Q. Will you read that indorsement on there to the stenographer, please?

A. "Published by the St. Louis Southwestern Railway Co., under protest, and the right to contest same is reserved."

Mr. HILL:

Q. What date is that?

A. That is not shown.

Q. The date of the tariff will show?

A. They didn't date it where they put that across it; I don't know when the tariff was published.

Examination resumed.

By Mr. MOORE:

Q. Read the date out of it?

A. July 10th, 1903; the Cotton Belt made that rule even if the rates were made three times higher than they were; they always had protest written across it. They may have had a mental reservation that they did not want the tariff, but as I take it, they accepted the tariff, and went on and put it in according to the order we made.

Q. You base that upon the fact that they did go on and obey the orders of the Commission?

A. Yes, sir.

Q. You would have been likely to have had the sheriff after them if they had not done that?

A. We would have made them pay a penalty.

2085 Q. What did I understand you to say was the basis of the joint rates? Did you say 80% of the sum of the locals?

A. We tried to make it so it would produce 80% of the sum of the locals.

Q. Did your joint tariff have that result?

A. I have never figured it to see; I think it did.

Q. What is the rate for 200 miles, we will say, on a shipment of sugar?

A. I couldn't say, unless I had a tariff before me.

Q. I have a tariff before me; it is 13 cents on carload lots, do you know what the rate for 100 miles is?

A. No, I don't remember any of those rates now.

Q. It is 11 cents; now, Mr. Hampton, suppose you made two shipments, one of 100 miles each, continuous shipments on one line of railroad, what would it come to at 11 cents?

A. 100 miles on each road?

Q. Two shipments on one road at 11 cents per hundred miles, would be about $22. wouldn't it?

A. You mean 20 miles?

Q. I say, two shipments of 100 miles each would amount to what, on a basis of 11 cents per hundred?

A. Passing over two roads?

Q. Passing on one road or two roads?

A. It depends on the weight.

Q. Well, assume that you shipped a hogshead of sugar from Little Rock to a point 100 miles distant, on the Iron Mountain Railroad; its destination is 100 miles further than that point; now, your tariff rate for 100 miles on a similar shipment is 11 cents; now, if

2086 it is transferred to another line of railroad and carried 100 miles further on that, each one of those roads, under the single line tariff, would get 11 cents; that would be 22 cents, for transporting it on single line rates for 200 miles, isn't that correct?

A. If there were no joint rates.

Q. Under your joint rates, it would amount to 13 cents, wouldn't it?

A. What did you say the rate was for 100 miles?

Q. 300 miles is the maximum; we haven't got to that. The point I want to get at is this; your basis of 80% was not observed there?

No, not where the maximum is reached.

Q. That would be instead of 80%, that would be about 17 cents, 80% of 22; your rule didn't work out that way, did it?

A. It worked out in no instance where the maximum was reached.

Q. I will put the matter in another way; under your rule, it provided that the total htrough joint rate shall not exceed that charged on a single line haul of 300 miles, on any of the commodities mentioned?

A. Yes.

Q. Your rate for 300 miles on sugar is 13 cents?

A. Yes, sir.

Q. Now, your rate for 5 miles is 13 cents?

A. No, I reckon not.

Q. I have that before me here; commodities, carloads, it is 8 cents?

2087 A. You said 13.

Q. I said for 5 miles; the differential is 5 cents; that makes 13 cents; you have the same rate for hauling sugar 5 miles as you have for 300 miles, under your tariff?

A. No, sir.

Q. If it happened to go over two lines of railroad?

A. If it happened to go over the distance on one road, that would make it 8 cents.

Q. To put it at a distance that might cover two lines, say 25 miles, the joint rate on two lines of railroad for 25 miles is the same that it is for 300 miles?

A. You mean 25 miles on each road?

Q. I mean a shipment going over two lines of road.

A. For a distance of 25 miles?

Q. Yes; here is the 25 mile rate; it is 8, with a differential of 5 cents?

A. It would be 13 cents.

Q. Your rate of 13 cents applies on a joint rate of 300 miles, as well as on a single rating, doesn't it?

A. Yes, where it reaches the maximum.

Q. What is the theory of distance tariffs; on what theory is it made? Why did the Commission adopt that theory?

A. Because they wanted to give every shipper the same rate for the same distance.

Q. Does that illustration I give you give every shipper the same rate for the same distance?

A. Every point for the same distance, would give the same rate.

Q. Do you count 20 miles at 13 cents per hundred weight

2088 for sugar, the same as 300 miles?

A. Any town in this state, for a distance of 25 miles, would get exactly the same rate; any town where the 300 maximum applied, would get the same rate; that is what I meant by every town getting the same rate for the same distance.

Q. The intermediate points, intermediate distances, are not uniform then?

A. That is not what we intended.

Q. Isn't it the intention of distance tariffs to be constructed upon a scale?

A. My idea is to give every town the same advantage for the same distance?

Q. Give every town the same rate for the same distance; take a town that is 5 miles away from the commercial center, and you give it a rate of 13 cents a hundred pounds, and take another town that is 200 miles away, and give it the same rate, is that carrying out your principle?

A. Yes, because they get the same rate as another town the same distance away.

Q. What you call a distance tariff is one that makes the rate uniform between different points; uniformity of distance between different points and the common market, but it takes no account at all of the distance of the transportation?

A. They do take an account of the distance in transportation, so far as the rate is concerned; otherwise, our tariff would have a straight line haul 13 cents.

Q. You would give a town 300 miles away the same rate as one 25 miles away?

2089 A. Where it passes over two roads,—yes, we did in that instance.

Q. Where is lime produced, in what part of this State?

A. It is produced up in Washington and Benton County, and just above Batesville.

Q. And where is the market for it, what part of the State is the market in?

A. All over the state I guess.

Q. The markets then are some of them your maximum rate distance, 300 miles from the producing point? Your markets are 300 miles away from the point of production?

A. There are a few that far.

Q. Some of them are?

A. Yes.

Q. Your maximum rate for 300 miles is 9 cents per cwt. Now, your rate for 55 miles to 75 is six cents; your differential is 3; that is 9 cents?

A. Yes, sir.

Q. Now, in any market that has to be reached by two lines of railroad, the rate is the same for from 55 to 75 miles that it is for 300 miles?

A. In any instance where the maximum is reached, that would be the rate.

Q. Is it not necessary, to reach any point on the Frisco road in the extreme northwestern part of the State, to go over two or more lines of road, in transporting *lime* to market in this State?

A. Yes, when you go any distance.

2090 Q. Do you regard that as a logical tariff, a tariff that has an effect such as I have called your attention to?

A. Well, yes, because it does not cost much more to haul for two or three hundred miles than it does for one hundred miles; if you make the difference according to the distance all the way, it would be prohibitive, and no shipments could be made, and it is better for the railroads and for the shippers both, to have them ship at these rates.

Q. The result of it, however, is to give some for a certain distance, the same precisely that one line would get for a shorter distance?

A. It has that effect in many instances.

Q. Now, do you mean to say that that scale of rates was suggested by the railroad companies?

A. I mean that Mr. Stith—I asked him the question, what he thought the joint rates should be, and he said 80% of the sum of the locals.

Q. I am asking you the question, if you mean to state that a tariff, if the joint tariff, operating as I have just illustrated by questions I have asked you and by the instances I have shown, was suggested by the railroad companies?

A. We did not go into the effect of the maximum haul; that was not brought up at the hearing.

Q. It is a fact that these details were not discussed at the time you arranged this tariff, and that you had the meeting with the representatives of the railroads?

A. I do not remember that that maximum question was discussed.

2091 Q. Can you point out a single instances on this tariff, where the joint rate is 80% of the sum of the locals?

A. I don't know whether I could or not, without going over it; the rate clerk was instructed to get up such figures for differentials as would produce that effect, and we depended on him to a great extent.

Q. Why did you follow the interstate practice of railroads in the particulars which you referred to a while ago?

A. Because we thought the railroads would be fair to themselves, and would not make such mixtures in interstate shipments as ought not to be mixed.

Q. Tell me what you mean by that statement, that you thought they would be fair to themselves?

A. I did not think they would put in such articles as ought not to go in interstate shipments, because we had no power to make them do it.

Q. Don't you mean by that this: You thought if the railroads could afford, with reference to the cost of transporting this commodity, to add the particular item or particular commodity to the group —commodity group—if they did it, it indicated they could afford to do it, with reference to the cost of transportation, and if they could afford to do it in interstate transportation, they could afford to do it within the limits of the state; isn't that what you mean?

A. The mixing of those groups gave St. Louis and Memphis an

advantage over Arkansas cities in some instances, and we felt like we ought to be protected, and if they could afford to do it in interstate business, they could afford to do it on state busi-
2092 ness.

Q. Your intention was to do it by adjusting your rates to interstate rates?

A. That governed us frequently in making the mixtures.

Q. You did that because you thought there ought to be, in justice to the shippers of Arkansas, a just and fair relation between the state and interstate rates, that is what you did it for, wasn't it?

A. I don't believe I understand that question.

Q. You stated a moment ago, in shipping from Memphis to St. Louis and adding different commodities to the mixture and in not doing it within the state, there was unfairness practiced against the shippers of the state; if that is true, you recognized that there is a relation between state and interstate rates, that must be kept fairly adjusted in order to avoid injustice to the state shipper.

A. We thought that the railroads, in moving a shipment for 50 miles in Missouri and 50 miles in Arkansas, if they had a certain rate for that, they could afford to move it 100 miles in Arkansas at the same rate, that crossing the line did not cut any figure in the revenue.

Q. What they could to do on a haul of fifty miles in each state, they could do on a haul wholly in Arkansas?

A. Yes.

Q. What do you mean by "afford to do"?

A. If it produced them revenue for 100 miles, half in Arkansas and half in Missouri, it should produce them revenue for a haul of 100 miles wholly in Arkansas.

2093 Q. You were assuming the rate was based on the cost of transportation?

A. Yes.

Q. And that they should be just, on account of the fact that they were supposedly based on the cost of transportation—that was your idea, was it?

A. The railroads themselves do not always adjust rates on the cost of transportation.

Q. But you acted on that theory in that instance, didn't you?

A. As I stated awhile ago, we considered it a discrimination against Arkansas shippers, for those interstate mixtures to come in, and we didn't see why, if it was right in that instance, it was not right in Arkansas.

Q. When did I understand you to state you began your duties as railroad commissioner?

A. January, 1903.

Q. I believe you say the railroads showed no disposition for four years, to render any assistance to the Commission?

A. They didn't seem to, as much so as they did the latter years.

Q. What did they do in that direction, in 1907?

A. Frequently we tried to adjust the rates here in Arkansas;

Mr. Calef and Mr. Stewart would help us in trying to arrive at what was right between the shipper and the railroad.

Q. In what way would they help you?

A. Give us their opinion; the first three or four years, they seemed to be afraid, and wouldn't give it.

2094 Q. Did you usually act upon their opinion when they gave it to you?

A. Not altogether; it would have its influence with us, and not only that, but we would get up tariffs from other states, and tried to arrive at what was right.

Q. I think you stated on your examination in chief, that in basing your joint rate on 80% of the sum of the locals, you had reference to the practice in other states, did I understand you correctly?

A. No, sir.

Q. You referred to the two things in the same connection; you said you made inquiry as to what prices were in other states?

A. We made inquiry as to what rates were in other states.

Q. I mean the practice in fixing rates?

A. Yes, and what the railroads were doing in interstate business.

Q. And it was on that basis that you reached the conclusion that 80% of the locals would be a fair basis, was it?

A. Mr. Stith's remark had more to do with me than any other investigations I made.

Q. If it turns out your tariff does not yield, or does not turn out that way in actual practice, then you did not accomplish what you intended when you started out?

A. No, as a whole, if the tariff does not produce in the neighborhood of 80% of the sum of the locals, we did not do what we thought we were, because the rate clerk was instructed to make up the

2095 tariff that would bring that effect.

Q. Who was the rate clerk?

A. Conley.

Q. You stated a while ago that it did not cost much more to transport commodities 200 miles than 100. What, in your opinion, enters into the cost and into the——

A. I have never studied out that question, but I just got that from general information. I have heard railroad men say that themselves; that it didn't amount to a great deal more for the longer distance than for the shorter.

Q. What are the principal factors that enter into the making of commodity rates?

A. Well, you should consider the revenue to the railroads, and you should also consider the interest to the shipper.

Q. Well now, treating it from a standpoint of——

A. And you should also consider what the commodity is.

Q. What do you mean by that?

A. Well, you might get in a rate which would be prohibitive.

Q. Now, in determining what is the revenue what factors enter into your consideration in fixing commodity rates?

A. Well, I have an idea what factors entered into it, running trains and things of that kind; that is, the expense, but we never

attempted to do anything of that kind. We got our information from the railroad people themselves. Talking to them we got the best information we could and just guessed at it and put in the rate we thought was right.

Q. What characteristics—inherent characteristics—in the business of transportation entered into the consideration of the Com-
2096 mission in fixing commodity rates?

A. I don't understand just what you mean by characteristics.

Q. Why, what difference would you make, if any, and on what grounds between two articles, one of which was bulky and light and the other dense and heavy?

A. Well, of course, we were governed by the differences the railroads had been making themselves.

Q. What I want to know is did the Commission itself study these subjects and consider them in fixing the tariffs for themselves?

A. Well, we knew 100 pounds of corn should bear a less rate than 100 pounds of dry goods or calico.

Q. Why?

A. Well, corn is heavy and a less valuable article and the shipper can not pay as high a rate.

Q. Well, that is the commercial condition you are considering there now. What considerations were covered with reference to its effect in compensating the railroad company for the services rendered. Did you take that into consideration at all?

A. I didn't hear that.

Q. I say did you take into consideration the compensation that would accrue to the railroads in fixing the rates?

A. Yes, sir.

Q. Now, take the two instances you spoke of, for instance, corn and calico, in what respect did those two articles differ in the opinion of the Commission as to a rate that would be compensatory to the railroads?

2097 A. Well, if we didn't have the benefit of the experience of others and of railroad men themselves, and tariffs we got from them and from other states, we wouldn't know anything about it at all.

Q. Does the fact that the movement is small have any effect on the Commission in fixing their rates?

A. Why, of course, we made less than carloads higher rates than carloads.

Q. I am not speaking now of it in that respect, but, taking a commodity, the entire movement of which in a state was small, infinitesimal, to use a word that was used here today, did that have any effect on you in fixing the rates of that article as against one of much larger tonnage?

A. I presume it did, but if it hurt the railroad it wouldn't hurt much and I would be willing to take chances on it. While if it was an article that moved in larger quantities, if it was a rate they couldn't stand, it would hurt them worse.

Q. You thought you would do them less injustice on tonnage of a smaller bulk or volume than on larger?

A. If we happened to make a mistake it would be less injustice, of course.

Redirect examination.

Mr. HILL:

Q. In making joint rates is it not customary in all tariffs,
2098 both state and interstate commission tariffs, to allow a higher rate where the given distance is over two roads than where it is over one road?

A. Yes, sir.

Q. And in putting in those joint rates you were trying to conform to that practice?

A. Yes, sir.

Q. You think that is a just tariff, where commodities move 25 miles on one road and 25 miles on another road to give a higher rate than if it moved 50 miles straight away?

A. If there is more expense attached to the handling by reason of the junction point the railroad should have more compensation.

Q. And that is the theory upon which you put in these joint rates?

A. Yes, sir.

Q. Now, if the railroads had shown to the Commission while you were a member of it that your rate clerk had made mistakes and that your joint tariff as a whole did not represent approximately 80 per cent of the local would your Commission have corrected that rate?

A. Yes, I think they would.

Q. Mr. Moore has questioned you about these 75 instances of changes in 5 or 6 years. I will ask you if, in addition to these 75 instances of changes, the Commission did not pass upon other complaints where they did not make reductions?

A. Yes, sir.

2099 Q. Have you any idea how many?

A. No, I can't recall now.

Q. As many or more than where you granted the petitions?

A. No, I guess petitions were granted in more instances than were turned down.

Q. You did turn down a great many did you not?

A. I don't remember how many now.

Q. You discussed informally with shippers many questions upon which, after discussing with you, they did not file formal complaints, did you not?

A. Yes, sir.

Q. That has been the practice of the Commission always, has it not?

A. Yes, sir.

2100 J. D. WATSON, being first duly sworn, on examination deposeth as follows:

Mr. HILL:

Q. Mr. Watson, when you were on the stand in St. Louis you were requested to furnish a statement of interstate adjustments to meet the court tariff. Have you prepared that?

A. I have entirely overlooked it until you called my attention to it just now.

Q. Will you get that up for me?

A. I will endeavor to do so as promptly as possible.

Q. You will find on page 310 of your testimony where you were to prepare that. I believe there was one other thing I thought was here, but I don't see it. I want you to also give me your interstate tariffs, not to put into evidence, but the dates from your tariffs from November 2nd until the court tariff was made, which I believe was June 1st.

A. You want the interstate tariffs to cover readjustments made between November 2nd and June 1st?

Q. Yes, sir.

A. You mean all the various interstate tariffs?

Q. That would affect the Arkansas tariff.

A. Interstate traffic?

Q. Yes. Now what was called for at St. Louis at this one page was this, those that were just rates according to the court tariff.

2101 A. Well, the tariffs were not readjusted to any very great extent between November 2nd and June 1st.

Q. Well, I would like to have those tariffs. How soon can you get them up?

A. I guess I can possibly have them here next week.

Q. You understand I want all interstate tariffs that would affect the Arkansas traffic to November 2nd?

A. Yes. There will be quite a trunkful of them. You want the tariffs themselves, as I understand?

Q. Yes. You can indicate in the tariffs where these adjustments are. You see I don't want to encumber the record with too much tariff material. I suppose we will have to have the tariffs here for examination and you can show it more clearly on the tariffs themselves than any other way, can you not?

A. Yes, sir.

Q. Well, you will have them for us next week?

A. Yes, sir.

2102 A. R. BRAGG, being duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. Will you please state your name, age, residence and occupation?

A. A. R. Bragg, residence, Little Rock, Ark., Manager of the Little Rock Merchants Bureau.

Q. How long have you been manager of the Little Rock Merchants Freight Bureau?

A. Five years.

Q. What are your duties in that bureau?

A. My duties as manager of the Merchants Freight Bureau are really as a traffic manager for the merchants and manufacturers, to give them their rates, see that they are protected against other jobbing centers, or manufacturing places, in the matter of freight rates, and act as their agent in a general way, so far as traffic is concerned.

Q. Your duties in this freight bureau necessarily render you familiar with the existing freight rates in the state?

A. Yes, sir.

Q. Prior to your connection with the Merchants Freight Bureau, what was your occupation?

A. I was in the service of the St. Louis, Iron Mountain Railway for 25 years; I was in the freight department all the time,
2103 all the way from local freight agent to division freight agent.

Q. I wish you would state the various positions you held in the railroad service?

A. That would be pretty hard; I might say practically from messenger boy, almost.

Q. To Division Freight Agent?

A. Yes, sir.

Q. How long were you division freight agent?

A. About fifteen years.

Q. You are familiar with the freight rates, state and interstate, in the State of Arkansas, and have been for a number of years?

A. Yes, sir.

Q. In fact, that has been your study for the last 25 years, ha-n't it, or something like that?

A. Yes, sir, I have been more or less connected with it all the time, in both capacities, as an employee of the railroad, and an employee of the merchants.

Q. Your employment by the merchants causes a familiarity with the rates, equal with that of an employment by the railroad, doesn't it?

A. I think so; that is, in a general way; I am not probably as familiar with the details as some of the traffic men.

Q. I wish you would state from your knowledge and familiarity with the freight rates prevailing in this country, the manner or system on which they are constructed?

A. You mean the method of making rates?

Q. Yes.

2104 A. Well, they have two methods—one is by conference among themselves; that is, with reference to competitive rates; the individual or local tariffs, I think, are made up in their offices, by their rate people.

Q. Their competitive rates are made in conference?

A. Yes, sir, altogether; they are promulgated by a chairman or agent.

Q. You are referring, I presume to the interstate rates?

A. Yes, sir.

Q. Prior to the adoption of a commission tariff, how were the state rates made?

A. They were made in practically the same way; they didn't, however issue—their tariffs were not—I don't think their tariffs into Arkansas were issued by a chairman, not all of them, some of them were, and some were not; some of the tariffs even to competitive points were not issued by a chairman.

Q. Prior to the commission rates were there any what was known as jobbing rates? to commercial centers in the State?

A. Yes, sir, between certain points; that is, from jobbing centers to local territory, what is known as non-competitive points.

Q. In other words, the territory tributary to a common jobbing center, had rates made for that particular territory, was that it?

A. Yes, sir.

Q. Did much of the traffic of the state move under those jobbing rates, prior to the Commission's tariff?

A. All of the traffic originating at points from which these
2105 rates applied; of course it was all intrastate traffic, and it was of course, all moved under those rates.

Q. The point that I am getting at is this, what proportion if you could estimate it, of the traffic of the state, intrastate traffic, moved under the jobbing rates?

A. A very large percentage of it; at the time those tariffs were in effect; I could not approximate the percentage, but it was a large percentage, because there was just a few jobbing centers at that time, that supplied the territory adjacent.

Q. Most of the intrastate traffic moved on these tariffs for jobbing centers?

A. Yes, sir, that is merchandise; they had, at the same time, tariffs covering other commodities, such as coal, cotton, cotton seed, and things of that kind.

Q. Were there in effect in this state prior to the Commission tariff, many special rates?

A. These were all special rates.

Q. I wish you would define just what you mean by special rates.

A. Well, a rate that is made, what is called a jobbing tariff, a jobbing tariff, of course, would be a special tariff, that would cover classes and commodities, because it would be different from a mileage tariff, and a great many articles would be taken out of the classification. The classification of that article would be ignored, and it placed under a commodity, just as it is in all the tariffs today; that is what the railroad people call a special rate.

2106 Q. Wasn't there another kind of special rates; these rates from one given point to another given point on certain commodities?

A. Those are the tariffs I am speaking of now; for instance,

there was a tariff from Pine Bluff, over the St. Louis, Iron Mountain & Southern, I think over the Cotton Belt, I wouldn't speak advisedly as to that—there was one from Little Rock and one from Ft. Smith; one from Van Buren, and one from Texarkana; those points at that time were the principal jobbing centers in the state.

Q. Those were what were commonly called jobbers' rates?

A. Yes, sir.

Q. What I wanted to call your attention to, was this, wasn't there rates on lumber, say from Pine Bluff to Fort Smith and other given points, on given commodities?

A. Yes, sir, there was a lumber tariff.

Q. Were there many of those special rates, I am taking lumber for an instance?

A. Nearly everything moved under special rates in those days.

Q. I wish you would mention some you call to mind, that moved under special rates?

A. Practically everything moved under special rates, that is, tariffs prepared for the business.

Q. Those tariffs were then prepared to meet some particular industry or commercial condition?

A. All the time; that is, the jobbing business in those days, was adjusted in its incipiency, and the lumber business was practically the same and the cotton seed oil mill business, and the cotton business, and it was the policy of the railroad people at that time,

2107 to build tariffs that would take care of the business.

Q. Take for instance brick; I believe it has been shown here in some of these proceedings, that a brick industry sprang up here, and probably at Malvern, and other places, was there any special rate put in effect, to take care of that industry?

A. Yes, sir.

Q. Very low rate, wasn't it?

A. Yes, sir.

Q. Were there many instances of that kind scattered over the state, where there was a very low rate given to take care of some given commodity or some new industry?

A. Yes, sir, as I say, it was the policy of the railroads to make rates they found necessary to take care of these different industries.

Q. Now, in framing these various rates, jobbing rates and special rates, and various rates that were in force in this state, what considerations were controlling in fixing a rate?

A. What period?

Q. I am speaking generally, say before the Commission tariff, and then I will take it up later?

A. There were commercial conditions, both commercial conditions and competitive conditions, that brought about a good many of those rates; those rates were a kind of patched up, all over the state.

Q. What consideration, if any, was given to the cost of the service, in fixing these rates, that you are referring to?

2108 A. I can't answer that; I don't think that that always entered into it; I couldn't answer it definitely, but I don't think that that always entered into it, at the time that these merchandise rates were made; a good many of them were what was called merchandise rates.

Q. What data, if any, did the railroads have in order to determine what was the cost of the service upon any given commodity or any series of commodities?

A. I couldn't answer that, I don't know that they had any.

Q. Take for instance coal, in making a coal rate, or a lumber rate or merchandise rate, would the railroads have before them in the formulation of those rates, any data by which they could determine the cost of carrying that coal or that lumber or that merchandise?

A. I don't think they have ever been able to ascertain just what it does cost them; that is, on each given commodity.

Q. After the Commission tariff went into effect, which I believe was in 1900, wasn't it, the first?

A. 1901, I think it was.

Q. What change took place in rate making in Arkansas?

A. You mean the interstate or intrastate?

A. I mean both?

A. Of course, the Commission's tariff fixed the intrastate rates.

Q. Took that out of the control of the railroads?

A. Yes, that practically cancelled all the rates that had been issued prior to that applying on strictly intrastate traffic.

2109 Q. Cancelled all these jobbing tariffs, all these special rates and put in force a distance tariff?

A. I think practically all of them were cancelled.

Q. What change, if any, took place in the formulation and manner of formulating the interstate tariffs, after the Commission tariff went into effect?

A. I can only speak for the St. Louis, Iron Mountain & Southern, because I was in their employ; I only know in a general way about the St. Louis Southwestern; I think possibly—I don't know just how much time elapsed before they revised their interstate rates, that is, to their local territory, points that were not competitive; they adjusted those rates to practically the Commission tariff in mileage from Memphis.

Q. There has been a good deal said in this testimony about the Memphis adjustment, to which you are now referring; I wish you would explain that.

A. The rock Island was then the Little Rock and Memphis road, and they followed this commission tariff out of Memphis by practically placing Memphis on the west bank of the river. The St. Louis, Iron Mountain & Southern protested and it was a year and a half, I think perhaps, after the Commission tariff went into effect, before the Iron Mountain placed their rates on the same kind of a basis; that was done by reason of a suit brought against them or a complaint in the city of Memphis, on some alleged agreement with the City, which, for a consideration of certain valuable franchises

in Memphis, they agreed to make any rate from West Memphis to points in Arkansas, that obtained within the State, intra-
2110 state.

Q. About when was that adjustment reached, if you can recall the date, approximately?

A. I think it was in 1902, over the Iron Mountain.

Q. Now, there has been some testimony in this case about other rates from St. Louis and other points being fixed on the Memphis rate; I wish you would explain that.

A. Well, away back twenty odd years ago, they fixed— the St. Louis, Iron Mountain & Southern Ry. Co. into Memphis, and the Frisco, or the Kansas City, Springfield and Memphis as it was at that time, fixed a differential basis between St. Louis, beginning— really it began at the Missouri River, and came on down and came to New Orleans; all these rates were predicated on the Memphis basis, St. Louis was 30 cents, Cairo was 20 cents over Memphis, and St. Louis was 30; in other words, the St. Louis basis was fixed first, and Memphis was fixed at 30 cents per hundred; we are using one class as an illustration, under the St. Louis rate; they went on down below and made the New Orleans rate the same as St. Louis. I am speaking of rates over the line into Arkansas, interstate rates.

Q. Let's get that a little more clear; the Memphis rate was fixed at 30 cents, using one class as an illustration?

A. No, St. Louis.

Q. What was New Orleans fixed at?

A. At the same as St. Louis. If St. Louis was a dollar to Little Rock, it would be 70 cents to Memphis, and a dollar to
2111 New Orleans; Kansas City was ten cents higher than St. Louis; those differentials applied all the way down, and were the basis then and are today the basis of fixing the rates to Little Rock from that territory.

Q. How was that arbitrary or differential arrived at? Was it based on the cost of service or commercial conditions, or what was it based on?

A. No, sir, it is a system that obtains all over the country, and it is used,—it is an arbitrary made by traffic people. If they get together and they find that two rates added together are against the movement of traffic generally, they fix a basis for making a through rate; for instance, from Chicago, Cincinnati, Louisville or Pittsburg, or from any point beyond the river.

Q. Are those arbitraries or differentials determined by differences in costs in moving that commodity or are they determined by other considerations?

A. The cost, I don't think, enters into the basis of making those rates.

Q. What does enter into it?

A. The territorial location is largely the reason for it.

Q. What you might term commercial, competitive and geographical conditions?

A. Yes, sir.

Q. Trade conditions?

A. Yes, sir; in all those rates, I presume, they tried to keep all markets on a parity as far as possible.

Q. That is the object of these arbitraries, to keep these various markets on a parity?

2112 A. Yes, sir, that is the only object; of course, the cost of doing business, I presume is thought of, at the time these rates are made.

Q. Is it any more than thought of?

A. That is all.

Q. Is there any data before them by which they could act upon any more than thinking about it?

A. I don't think so; I would like to explain a little further about this basis; it is followed very closely in making all through local rates; the same basis; Little Rock is the hub, is the axle that controls the entire rates of this state.

Q. You are referring now to interstate rates?

A. Yes, sir; in making rates out of Memphis and St. Louis to local territory, like Arkadelphia or Malvern, or some of these points down here, they hug pretty close to the same basis, the differential between Memphis, St. Louis and New Orleans, that they do to the common points.

Q. Now, take the rates that have been denominated in this hearing as trans-state rates, that is, freight moving across Arkansas that does not stop in it; for instance, lumber from Louisiana North, from states west to common points, such as fruit, from California to the east, and live stock, and various freights that move across Arkansas, without having any destination in the state or originating in the state, what effect, if any, do the state rates have upon those rates?

A. None whatever; you have business from St. Louis to

2113 Louisiana and to Texas and to Mexico.

Q. Business passes through Arkansas, without any destination or origin in Arkansas, and for convenience in this case, it has been termed trans-state business.

A. I don't think Arkansas rates have any effect on those rates.

Q. It is in evidence here, I believe, that the volume of traffic of that class, trans-state traffic on the Iron Mountain is 51% of the total traffic, of the remaining 49% of the traffic; I would ask you if you could estimate what proportion of it is affected by this Memphis adjustment of which you have been speaking.

A. You mean the interstate traffic?

Q. Yes, sir.

A. The traffic affected by the Memphis adjustment?

Q. Yes, and both these other adjustments.

A. That would have reference to only freight that went to non-competitive points.

Q. I want you to make an estimate, if you can, of the 49 per cent of the entire freight traffic now remaining, after the trans-state traffic is taken out of the whole, that would be affected by the Memphis adjustment, which you say is controlled by the state rates; what proportion of this remaining 49% is controlled or affected

by that Memphis adjustment on these arbitraries, based on the Memphis adjustment?

A. The rates to the common points are not made on the basis of the State Commission tariffs, but I should say that that pro-
2114 portion of the traffic that is strictly local on the Iron Mountain railroad, affected by those rates, would be about 15%.

Q. How do you arrive at that 15%.

A. Of course, I can only approximate it; it is merely guess-work; long experience and knowledge, and of course, the amount of traffic that moves out of St. Louis and Memphis and New Orleans, and other points, to what is known as local points, would warrant me in believing that that would be about a fair estimate.

Q. All the traffic moving into common points is not affected by this?

A. The rates are not made on that basis, no, sir.

Q. How many common points are there in Arkansas?

A. I could only approximate that; there is about 25 or 30 of them.

Q. They are all of the larger towns of the state?

A. All points where there are junctions of two or more railroads, are common points.

Q. They are not affected?

A. No, sir; to some extent they are, of course.

Q. How about the freight passing the line like to Poplar Bluff, say from Hoxie to Poplar Bluff; is that affected by this?

A. No, sir.

Q. How about freight originating in the state, that is shipped out, like coal, cotton, cotton seed, cotton seed products, and things of that kind; are they affected by the Memphis adjustment and these state rates?

2115 A. The coal tariffs?

Q. Yes, sir.

A. Not to my knowledge.

Q. How about cotton and cotton seed products?

A. Well, the cotton seed products—no, neither cotton or cotton seed products are affected by the Commission tariffs, that is, interstate.

Q. How about the cotton, I believe you say it is not?

A. No, sir.

Q. How about lumber?

A. I consider it in the same class with coal; it is covered by its own rate

Q. Then, when you go to consider the amount of traffic affected by the rates based on Memphis rates, which are controlled by the Commission rate and others controlled by Memphis, you exclude the products of the state, you exclude the common points, you exclude these intermediate shipments, and you exclude the transstate, and the remaining part, you estimate as something like 15%?

A. I would say that would be a very fair estimate; there isn't anything that goes into the state except merchandise, agricultural im-

plements; there is some coal, but it is not governed by the state rates.

Q. In fixing interstate rates, what effect, if any, has the combination of the locals on those rates?

A. Well, there have been instances where, by using the common point rates, plus the commission tariff rate, that the through rate could be disturbed.

2116 Q. What is the extent of that, speaking generally of the whole rate fabric?

A. I don't think there has been very much of that.

Q. You find instances here and there, I presume, where that is the effect?

A. That has been done; it has been done by shippers of St. Louis and Memphis and other points, and I think possibly that that had its effect on a few commodities into Hope, the only point I know of right now which I have in mind, where it affected the through rate, where they were forced to reduce the through rate which they had established on the regular basis, in order to meet this combination. There were such safe-guards thrown around using those combinations that it was impossible for anyone to use them unless they made a local shipment of a car or less than a car, whatever it might be, out of a point where it was first stopped.

Q. In 1906 and 1907, were there any general advances in the interstate rates in Arkansas?

A. Yes, sir, the first advance that was made to common points, was in February, 1907.

Q. You say the first advance,—by that, what do you mean?

A. I mean the first in number of years.

Q. Was that a general advance all along the line?

A. It was a general advance to common points.

Q. What I mean to say, it was a general advance of all the commodities and classes to common points?

A. Yes, sir.

2117 Q. Or was it to adjust a few?

A. It was an increase on practically everything, probably only of the first three classes in the tariffs, were not included.

Q. To all common points?

A. Yes, sir.

Q. That was in February, 1907?

A. Yes, sir.

Q. Could you estimate the percentage of that increase?

A. The average, I think, at that time was about 15%.

Q. Was there another increase in 1907, prior to obtaining the injunction in this case?

A. The next increase in the rates to common points, was made in September, 1908.

Q. That went into effect before the injunction went into effect?

A. They both went in about the same time.

Q. The injunction went in, if my recollection serves me, the 31st of August, but did not become effective until about the 1st of

November, did the interstate increase become effective before November 2nd?

A. Yes, sir, I think the tariff was issued to be effective September 1st, 1908, and was rejected by the Interstate Commerce Commission, for some reason, and then it was re-issued effective September 24th; I may be wrong in my dates, but I think that is correct.

Q. Could you estimate generally the extent of that advance?

A. That increase, if we had permitted it to go into effect,
2118 to the merchants and manufacturers, would have been about fifty per cent.

Q. That didn't become effective?

A. Not all of it; we had a conference with railroad people, after filing a complaint against them at Washington, at which they did withdraw some of these proposed advances.

Q. I believe that was after the injunction became effective; I don't care about going into any of the matters since then.

A. That was after No. 3 was enjoined.

Cross-examination.

By Mr. MOORE:

Q. Will you explain the system upon which rates are made through conferences, and the instances in which that is done, and the instance in which it is done through individual action of the railroads.

A. How they are made?

Q. Why it is done, what are the controlling considerations affecting the co-operation in the one class of instances, and separate actions in the other?

A. In the making of the rates at common points, which is done by conferences; I don't suppose you want the detail of how they do that?

Q. Oh, no.

A. The rates to local points are made in the general freight office where the clerks make up the rates; the conditions are dif-
2119 ferent of course; one is competitive and the other is non-competitive.

Q. Do I understand you to state that rates to common points are made through conferences between representatives of different roads?

A. Yes, sir.

Q. Why is that true?

A. Well, for uniformity; two lines reaching the same point from the same point, would not want to have different rates; that would not be to their interest, or to the interest of the public.

Q. What would be the effect of rates to common points through independent actions of common carriers, without regard to the rates of others?

A. That would depend upon whether each line adopted the other's rate or not.

Q. Suppose they happened not to do it?

A. They would have two or three different rates.

Q. Would that be beneficial to the public?

A. No, it would not.

Q. If they acted independent of each other, and without conference, there would be different rates upon different lines?

A. Yes, sir.

Q. That really is the reason that conferences are held, for the purpose of adjusting rates to common points, isn't it?

A. That is one reason, and one line couldn't adopt a different rate or reduce a rate, without the consent of the other one, unless they did it arbitrarily.

2120 Q. What were the jobbing centers in this state, at the time the State Railroad Commission began to make tariffs; I believe that was in 1900 and 1901?

A. Little Rock, Pine Bluff, Fort Smith, Van Buren, Texarkana, were the principal points; there were only four or five of them; possibly Camden.

Q. I understand you to state that special rates, which you call jobbing rates, were given by the different railroads, from those centers to the territory in which they obtained?

A. Yes, sir.

Q. What was the purpose of that?

A. As I stated, the purpose was to encourage the building up of the business I suppose.

Q. Could jobbing points be built up and developed on any other system?

A. Well, the jobbing points at that time, the conditions were entirely different from what they are now.

Q. Could jobbing points have been developed in this state under any other practice than that?

A. Well, no, except there might be termed a jobbing point, a little town which had a small wholesale house, one house.

Q. I am speaking in a general way.

A. No, not larger points.

Q. Did the Railroad Commission take any action that affected that practice? The practice, I mean, of establishing special rates for jobbing points?

A. It practically wiped out all special rates.

2121 Q. What was the system inaugurated by the commission?

A. Mileage system.

Q. What was the basis, the central point, the central idea, upon which that mileage system was based?

A. That I could not tell you; of course, all of the railroads at that time, had a mileage tariff, which they used where these points were not taken care of by these special jobbing rates. There might be a shipment move from Russellville to Morrillton, or from Prescott to Arkadelphia; that was taken care of by a mileage rate.

Q. How did it operate in practice, what was the effect upon rates, did it operate uniformly; that article was changed upon distances, the rates predicated upon distances the commodities were hauled?

A. Yes, the further you hauled it, the more the rate was, or the shorter the mileage, the less it was.

Q. What I want to understand, was whether the application of the mileage rate was for the purpose of producing uniformity of rates between different sections or different localities, or uniformity in respect to distances the commodity is hauled; which is the principal and controlling idea in distance rates?

A. Well, I could only answer that personally; I don't believe in mileage rates.

Q. I am speaking about the operation, with reference to the practical operation of the commission rates?

2122 A. A mileage schedule confines the traffic, the state traffic, to a less area in miles; for instance, jobbing centers like Little Rock can reach out under a mileage tariff the same distance as they could under the old jobbing rates.

Q. The rate increases in proportion to the distance of the haul, as it increases?

A. Yes, sir.

Q. Did the result which flowed from the Commission rate, sustain that idea? Did the rates put in by them in effect, constitute a mileage rate, or result in cha-ges or rates in accordance with distance that the commodities were hauled.

A. It could not be anything but a mileage basis, because they had no other in the tariff; everything moved under a mileage schedule.

Q. In order to illustrate what I want to know, I will cite an instance. For instance, the rate on sugar is 13 cents for 300 miles; there is no point in the state scarcely in which a distance of that kind would not have to be covered by two or more lines of railroad; now, the rate for 15, 25, 30, 40, and 50 miles, as has been shown in the testimony of other witnesses—I am speaking now of joint rates—if you had a differential prescribed by the Commission to the state haul for those distances, that would make about the same distance, that destroyed the theory upon which the Commission were building up their rates?

A. You mean, when it reaches a certain point, it goes back

2123 to the single line basis?

Q. Yes?

A. I don't know; I couldn't say that.

Q. What is your view about that, as a railroad man, you say you have had a lot of experience.

A. I don't think I catch what you are trying to arrive at.

Q. I will state a case, then, so you will; we will say a rate on sugar, the maximum rate is 13 cents, covering a haul of 300 miles; we will say the rate for 25 miles on a single line is 8 cents, and if it is hauled on two lines, there is a differential of 5 cents, which would make 13 cents for hauling 25 miles; now, is that an adjustment that, from your experience, will prove out?

A. Not altogether.

Q. Did the commission have any regard to the rates that had been enforced, prior to the time that they put in their first tariff in 1901, in preparing their schedule of rates?

A. You mean do they consider the rates that had been in effect?

Q. Yes?

A. I couldn't answer that, because I do not know upon what theory the rates were made.

Q. What effect did the schedule adopted by the Commission have upon the rates as a whole?

A. It was a reduction; it was a general reduction.

Q. And wasn't the reduction on the whole, as much as about 22½%?

2124 A. I never have had occasion to make an estimate of what the actual reduction was; I couldn't answer that question intelligently; that is a reduction as a whole.

Q. At the time the first commission rate was put in, in 1901, you were Division Freight Agent of the Iron Mountain Railroad?

A. Yes, sir.

Q. Wasn't it shown at the time the commission rate was put in, that it resulted in a reduction in the revenue of the Iron Mountain road of 22½%?

A. I don't remember; that may have been worked out, at the offices in St. Louis.

Q. Were you present during the time the deliberations and conferences were had between the representatives of the railroad companies and the commission?

A. Not all the time.

Q. Was there not a representative of the Iron Mountain Railroad here in conference for some days with the commission at that time?

A. Yes, sir, all the railroads were represented at the time.

Q. What was your information at the time, arising from your connection with the Freight Department of the Iron Mountain Railroad, as to the amount of the total reduction that would result from the schedules adopted by the Commission below the former rates?

A. It was a reduction, and it was protested against by all the railroads, but I can't say that I ever did make any figures on what the average reduction was at that time?

2125 Q. Do you think the average reduction would amount to as much as 20%?

A. I expect it was fully that much; when I say that, I mean it was a reduction in the rate.

Q. The schedule contained the provision also, didn't it, that where a class rate, carload and less than car loads, and commodities, in effect from jobbing centers to local points, and in effect between jobbing points and other points within the state were lower than the rates prescribed by the commission tariff that such lower rates should govern?

A. Yes, sir.

Q. There is a provision then, providing that the rates prescribed by the commission should not be lower than the lowest rate that was in effect at the time the commission rates were put in effect?

A. There rates should not be higher.

Q. That is what I mean; I will call your attention to page 14, of

Standard Freight Distance Tariff, which was adopted April 10, 1900, and ask you to read the regulation in that respect?

A. There is one of those tariffs that did not go into effect; I think the first one they got out; they subsequently issued another; which clause is it?

Q. That in heavy type.

A. I just answered that.

Q. Just read it into the record.

A. When the class rate, carloads and less carloads, commodities, carloads and less carloads, now in effect from jobbing centers
2126 to local points and between jobbing points and other points, within the state, are lower than the rates prescribed in this tariff, such lower rates shall govern. That rule was subsequently withdrawn, I think; I don't think it was in the last tariff.

Q. What tariff do you refer to as the last?

A. No. 3; I am not positive, but I think they did take that out.

Q. No. 3 was adopted in 1908, wasn't it?

A. Yes, sir.

Q. Eight years after the railroad tariffs?

A. I couldn't say how long that rule was in there, but my recollection is that the railroads eventually got them to withdraw it.

Q. They had gone a good ways from the old railroad tariffs when #3 was put in effect?

A. Yes, but there was No. 2; I think that was issued in 1905.

Q. Now, were there any railroad tariffs in effect at the time the commission's schedule was adopted, lower than those that are recited in the quotation you have just read from the 1st Standard Distance Tariff?

A. Yes, I think they found a few rates.

Q. What I want to understand is this, aren't the rates that are referred to in the extract that you read into the record a moment ago, from the Standard Distance Tariff, of 1908, supposed to represent the lowest rates that were in force, prior to the time the commission tariff book effect?

2127 A. You mean on jobbing rates?

Q. Yes.

A. Yes, there were some a little lower.

Q. What do you refer to?

A. Jobbing rates.

2128 Q. Well the point I am asking you about is this: if the rates you gave in that abstract were not the lowest before the Commission tariff was put into effect?

A. Oh, certainly, yes.

Q. I believe you stated that the Memphis rate was based on the state rate did you not?

A. Yes, sir.

Q. And the rates from St. Louis and New Orleans and other large jobbing centers which ship into this state were based on the Memphis rate, with the differential?

A. Well, yes. Didn't disturb the rates at common points. It only affected rates at local points, practically. This basis out of Memphis

was predicated with the figures on this tariff, on the distance, until they got to a point where they attempted to maintain the distance between St. Louis and Little Rock, I mean St. Louis and Memphis just the same as to Little Rock.

Q. Let me see if I understand what you mean by common point. You say there is a similarity between the Memphis rate and the state rate. Now, what do you mean by a common point?

A. I mean jobbing centers—common points—as at a junction.

Q. I want to ask you how rates are adjusted with reference to how rates at jobbing points—trading centers—in this state—how rates are adjusted. What are the considerations that enter into the adjustment of interstate rates?

A. Well, do you mean Mississippi rates?

Q. Well, take Memphis. You have taken that as a point upon which rates are built up upon differentials. Upon what distance are jobbing rates allowed? What is the object of it?

2129 A. Well, the basis that has been used has been used for a number of years for making rates from the Mississippi River across to Little Rock and it has not been changed—the basis for it—The rates have been changed. But the real basis is between points where one governs the other. They have not been changed

Q. What is that basis?

A. Well, the rate from St. Louis to Little Rock on one class is a dollar a hundred and from Memphis to Little Rock it is 70 cents. That makes a difference of 30 cents. That is called a differential. * * * That goes on down. I have a memorandum of the figures making these rates. The- were fixed along together. I don't think the railroad people denied them. They are still using them And they have no connection with the rates that are made out in Memphis, protected on the Commission's tariff. They don't follow it at all.

Q. Now, let me see if I understand you. What is the basis of the common rate from Memphis to Plumerville?

A. Well, it is practically the mileage scale, plus——

Q. Well, what?

A. Well, I haven't the tariff before me. Don't understand me to say though that it is the actual mileage, but it is the basis for the rate.

Q. Does that—Does the rate from Memphis to Little Rock enter into the rate from Memphis to Plumerville?

2130 A. No, sir.

Q. Well, let's estimate that the rate from Memphis to Little Rock on a commodity is thirty cents per hundred pounds——

A. Memphis to Little Rock?

Q. Yes. Now, what is the rate to Plumerville?

A. That would depend on the distance.

Q. Would the rate from Memphis to Little Rock and the rate from Little Rock to Plumerville enter into it in any way?

A. No, sir.

Q. How would a merchant in Memphis who applied to a railroad for a rate from Memphis to Plumerville,—how would a representative of the railroad,—on what basis would he figure it?

A. Why, he has a tariff with the rates from Memphis to Plumerville.

Q. Now, is there not some system by which the local jobbing centers in this state are protected against direct shipment from other territories; that is, jobbing centers outside this state?

A. Very little. As long as they make through rates as they do now there is practically no protection.

Q. Can a Memphis merchant—I mean, can a merchant of Plumerville get the same rate, the same rate upon the same ratio, that a merchant of Little Rock can get?

A. No, the rates are not made upon the same basis; that is, the same principle.

2131 Q. Now, are not the common points you spoke of in your answer in which you say the Memphis rates are adjusted with reference to the Commission rates, so adjusted in order to enable local jobbing centers to compete with these foreign jobbing centers?

A. Well, I think they try to do that but they don't always accomplish it.

Q. That is the theory upon which the rates are built up, is it not?

A. I think so. I would like to get clear in your mind, Colonel, about the basis of this rate out of Memphis before the Commission tariff was in effect. The rates out of Memphis were made on a different scale. Now then, they claim they have to make these rates beyond us on a mileage scale,—some of them, the Iron Mountain, as far as Little Rock, fifty miles beyond us, because of the mileage scale—Memphis being on the bank of the Mississippi River.

Q. Texarkana, in Arkansas, is a common point, is it not with reference to Memphis?

A. Yes, sir.

Q. If a merchant wants to make a consignment from Memphis to Texas how does the rate apply on that?

A. Well that rate is, when they go through Texarkana the rate for northern Texas.

Q. I am not talking about Texas at all?

A. Well, I am telling you they apply on it.

2132 Q. Explain what the rate of northern Texas has to do with it? I am ignorant about these things and am trying to get the information?

A. Well the rate through Texarkana is kept sufficiently high to prevent the reduction of the rates in Texas.

Q. In what way is that result brought about?

A. Arbitrarily I suppose.

Q. Is there any connection between the intrastate in Arkansas and the Memphis rate to Texarkana?

A. Well, there is some——

Q. Well, do the commission rates from Memphis fix the rates to common points in this State?

A. No, I think not.

Q. Well, is the rate to Little Rock, and other common points, I mean from Memphis to Little Rock, affected by the state rates?

A. Well they never have changed the basis, I don't think, that the state commission made.

Q. Well, you stated awhile ago that Memphis was practically west of the Mississippi River?

A. In making certain routes.

Q. In making certain points?

A. No, I didn't say that. I said lone points—points that are not competitive.

Q. Then I will ask you if the rates from Memphis into Little Rock are not the same, or less than the commission rates for the same distance?

A. Well, some of them are on some commodities.

2133 Q. Is it not necessary that be the case in order to promote jobbing points in this State?

A. I think so.

Q. If that were not the case it wouldn't be a jobbing point, would it?

A. It depends upon the practice.

Q. Does some relation exist with regard to rates from Memphis to Texarkana?

A. No, I think the basis they use at Texarkana now, was fixed most of it, before the Commission tariff had effect.

Q. What is that basis?

A. That is arrived at arbitrarily like other junction points. There are some rates at Texarkana, as I understand it, one or two commodities, that were made on the maximum mileage.

Q. What are those commodities?

A. I think sugar was one.

Q. Where from?

A. New Orleans. That is the only one I know of that amounted to anything.

Q. Did the tariff fixed on sugar—maximum tariff—influence the rates from New Orleans to Texarkana?

A. Yes, sir.

Q. In what way?

A. Why they reduced them.

Q. In what manner? I mean, what brought about the reduction?

A. Well, what brought it about was they found Texarkana shippers bringing their sugar into Helena and re-shipping it.

2134 Q. That is not answering the question. I asked you how the maximum rate on sugar prescribed by the Commission affected the rate from New Orleans to Texarkana?

A. The rate from New Orleans to Helena was 12 cents and the maximum rate in the Commission tariff was 13. That made a possible combination of 25 cents—no, 23—no, 25 cents, and the railroads had a rate of 27 cents from New Orleans, so they had to reduce it to meet this.

Q. That was a combination of the local rates in Arkansas and the interstate rate to Helena?

A. Yes, sir.

Q. Would that effect a combination of locals?

A. Well, yes, it would form a combination of locals, one state and the other interstate.

Q. Mr. Bragg, could the railroads maintain a rate from Memphis to Little Rock, plus the local rate from Little Rock to Texarkana?

A. I don't think they would attempt it.

Q. Well, could they do it? I mean, in their business.

A. Oh no, certainly not.

Q. So the rate then from Memphis to Texarkana could not exceed then practically the rate from Memphis to Little Rock, plus the rate from Little Rock to Texarkana?

A. Well, there was no such condition.

Q. Well, let me illustrate. There was a suit brought against the Gulf Colorado & Santa Fe in regard to a shipment from some point in Nebraska or Kansas which was billed to Texarkana. The
2135 shipper re-billed it to some point in Texas and a controversy arose about the rate. There was a difference in the interstate rate from the point of shipment to the destination in Texas and the sum of the two rates to that point in Texas plus the local rate to Texarkana. Now, the party had a right to re-ship it and get the benefit from the Commission rates?

A. Yes, sir.

Q. Now, is that not practical in every instance?

A. No, it is not practical everywhere. If there is such a combination prevails though, he can do it.

Q. Well, if you had a large consignment from St. Louis to Texarkana or from Memphis to Texarkana, and you could rebill it from Little Rock to Texarkana at a lesser rate, you would do it, wouldn't you?

A. Well, I would have to pay the freight and re-bill the car.

Q. Well, I say, doesn't that force the railroads to take into consideration the sum of these local rates in fixing rates of that sort?

A. Well, they usually do.

Q. Now, for a shipment from some point in Louisiana to a point in Texas, via Texarkana, the same condition would prevail, would it not, as in that case I have illustrated against the Gulf Colorado & Santa Fe?

A. Yes, there are some rates in the Texarkana combination, I presume can be handled that way, but I don't know that they——

Q. I was only asking you if the Texarkana combination does not influence the interstate rates say to Marshall and other points in Northern Texas?

2136 A. Well, there might be a few points right in the vicinity of Texarkana, but as a rule, there is an interstate rate that covers the whole state of Texas.

Q. I know, but you are not answering my question. Doesn't it influence the interstate rate to Marshall and other points?

A. I don't think so.

Q. Are you familiar with the conditions?

A. I used to be.

Q. And you say that is not the case?

A. I don't think so.

Q. Are you familiar with tariff #1 of the Southwestern Tariff Committee?

A. Yes, sir.

Q. Is there not a section of Northern Texas in that tariff that is controlled by the combination?

A. I tried to answer your question on that a while ago and you wouldn't let me. I said there were a few points in the vicinity of Texarkana,—Atlanta, Marshall, Weston and a few other points—unimportant some of them—that they do make less than the Texas rate.

Q. Have you a copy of that tariff?

A. Sure. Yes, sir.

Q. I wish you would bring it up this afternoon.

A. I would like to answer a question that you asked me about this Texarkana rate.

Q. All right.

A. To show that it was not controlled by the State Commission tariff altogther. When the maximum rate #3 was 82 cents
2137 first-class, the first-class from Memphis to Texarkana was a dollar.

Q. Now, what was the maximum rate of 85 cents you spoke of?

A. 82, from anywhere over the state by a single line. So the Texarkana rate could not be governed entirely by the #3 tariff.

Q. Now, you said, as I understand it, at the time the maximum rate in Arkansas was 82 cents the rate from Memphis to Texarkana was——

A. A dollar. I know that is right.

Q. What was the sum of the rates Memphis to Little Rock, plus the rates from Little Rock to Texarkana at that time?

A. Oh, they would be about $1.25, something like that.

Q. Was it practicable for railroads, in view of commercial conditions and other conditions that affected transportation, to put in a rate that would exceed the sum of those two rates that I asked about formerly?

A. Well, it could be done.

Q. I know it could be done. Many absurd things could. But, in practice, was it done?

A. Hardly ever.

Q. Could railroads maintain a system by which they could operate under rates between two given points that were greater than the combination rate from the initial point to the initial point of the combination rate to the destination?

A. They don't do that.

Q. Would shippers assume that without consideration?

A. They don't do it.

2138 Q. That is what I want to know. They don't do it. But on the other hand they make their rates very close together——

A. It is impossible under the tariff existing today to do that.

Q. You say they make the rates very close together?

A. You couldn't ship anything into Little Rock and ship it out of here except by the through rate.

Q. Why is that?

A. Because, as I told you before, they protect the rate by this court tariff.

Q. But upon the Commission tariff before the court tariff was adopted?

A. If they reduce the rate of Memphis to Arkadelphia, in a St. Louis shipment, they maintain the difference between St. Louis and Memphis by reducing the rate from St. Louis to that point. There is no rate out of St. Louis.

Q. And by that method they observe a parity of rates?

A. Yes, sir; between St. Louis, Memphis and Texarkana, or Arkadelphia.

Q. Now, if there were a change made in the rate between Texarkana, Hope or Fulton a corresponding change would be made in the rate between St. Louis and Memphis?

A. Certainly, they would have to come to that.

Q. Now, would that be true between St. Louis and Texarkana?

A. Yes, with a little difference.

Q. What would be the difference?

A. Well, I don't know. I have never considered it.

Q. Well, to go back to the matter I called your attention to a while ago, I will ask you again, with reference to the actual,
2139 practical working of transportation rates, if a change were made by which there was a material reduction in the rates from, say, St. Louis to Hope and no change made in the Texarkana rate, as a result of which the rate from St. Louis to Texarkana would be considerably higher, would that sort of arrangement work out?

A. Well, the Iron Mountain has a rate to Fulton, nine miles north of Texarkana, that is higher than the Texarkana rate.

Q. You mean from St. Louis to Fulton?

A. Yes, sir.

Q. How does that compare with the rate from St. Louis to Little Rock plus the rate from Little Rock to Fulton?

A. Well, there are no combinations from Little Rock, no, from St. Louis to Little Rock that can beat the through rate.

Q. I want to ask you if that statement you made a while ago as to the effect of reduction does not apply generally in the adjustment of rates?

A. Yes, sir. You can hardly reduce from one point without affecting another, or advance the rate from one point without affecting another.

Q. Are you familiar with the rate situation in this state generally?

A. Yes, sir; I think so.

Q. Now do you know what is the rule,—We will say that the Kansas City Southern has, as to preserving the relation between rates as to intermediate places, say Hope and Texarkana,—whether they would carry goods cheaper to Hope than to Texarkana?

2140 A. Well, the Kansas City Southern has the reputation of keeping the Texarkana rate in line with all points. In fact, the time that this rate—on sugar, I mean—was in effect only over

the Kansas City Southern. I think that is the line that published the combination.

Q. If that is true on the Kansas City Southern or any other line or road on rates to intermediate points—between Texarkana and other points—would it not force railroads to regard the Commission rates to points in northern Texas?

A. Well, it doesn't force them to do it, but they usually do.

Q. They do it, however?

A. Yes, sir.

Q. Is that not a practice that prevails pretty generally in the adjustment of railroad rates?

A. That prevails at common points.

Q. What effect would the reduction in state rates between given points, to what extent would it impair or destroy the parity as between state rates and interstate rates—what effect would it have upon the interstate rate in the same territory?

A. Do you mean a reduction in the state rate?

Q. Yes.

A. Why, it would, of course, reduce the interstate rate; that is, if they followed the line they have been following ever since the Commission went into effect.

Q. Well, that is what I speak of.

A. Yes, sir.

2141 Q. Do you know how rates on grain from Kansas City to points south of Pine Bluff are fixed?

A. In Arkansas?

Q. Yes.

A. I haven't a grain tariff with me, but I believe south of Pine Bluff, I think the rate is the same at Pine Bluff.

Q. I will ask you if it is not the rate from Kansas City to Pine Bluff, plus the local rate out of Pine Bluff to the destination, take Rison for instance?

A. That is on the Cotton Belt; they make those rates on a certain fixed differential over the Pine Bluff rate, on through tariffs.

Q. The question I want to ask you, take Rison for instance, that is a station on the Cotton Belt line?

A. Yes.

Q. If the rate to that point is not the rate between Kansas City and Pine Bluff, plus the local from Pine Bluff to Rison?

A. You mean this local court tariff.

Q. Whatever the local is—take the commission tariff.

A. That may be true; I presume they make a rate that way, if the local was less than the fixed differential which they usually use in making those through grain rates.

Q. Isn't that true all along on the Cotton Belt line?

A. I guess it is; I don't know; it is not true on the Iron Mountain though.

Q. Have you produced the Western Committee Tariff #1, that I asked you for this morning?

A. That is No. 1-B; I think that is the one that is in

2142 effect now.

Q. Will you take the tariff and state what points in North-

ern Texas the rate described by the Texarkana combination reaches, that I asked you about this morning?

A. I could not tell unless I had the Texas Commission tariff; I do not know whether this is a combination of the locals or not; there is a difference here to some of those near-by points on the commodities, but very little on the classes.

Q. What are the points?

A. Atlanta, Jefferson and Marshall; the difference in the class rate is only two cents between common points.

Q. I will take the commodity rates, you say Atlanta, Jefferson, Marshall and Waskon and points taking the same rates as those, those are large business centers?

A. I wouldn't consider them so.

Q. Aren't Jefferson and Marshall?

A. They are pretty good little towns; they are not wholesale towns.

Q. What are the commodity rates; is there not a large list of commodities there that take that rate?

A. Yes, sir.

Q. How many sheets of that tariff do they cover?

A. They don't cover very many, about six or seven pages; there is a difference between those commodity rates, and the common point, Texas common point rates.

Q. What is the difference?

A. On agricultural implements, the first item I see here,
2143 is 12 cents to Atlanta, and there is only four cents on Jefferson; 1 cent on Marshall, and Waskon, that is the same; the greatest difference appears to be at Atlanta, and points common therewith.

Q. What are the relative distance of those places; the difference grows less as the distance increases?

A. I think Atlanta is the nearest point to Texarkana.

Q. Doesn't the difference grow less as the distance increases?

A. Yes.

Q. Doesn't that show it is based on the Texarkana combination?

A. It might be that, or it might be the grading that led up to the common point rate, that might be the basis for it.

Q. What do you mean by the common point rate?

A. Zone rate; it applies all over Texas.

Q. Isn't that a different rate from the zone rate?

A. Yes, sir.

Q. And that conforms more nearly to the Texarkana combinations?

A. I don't know whether that is based on Texarkana combinations or not; there must be some basis, but I don't know whether it is the commission tariff that applies, plus the Texarkana rate or not; I would have to check a few to give you that information; it would have to be a pretty low rate from Texarkana to Atlanta; only eleven cents, and I hardly think the commission rate carries as low a rate as that.

Q. These schedules we are talking about, represent a pretty large number of commodities, don't they?

A. Yes.

2144 Q. And a heavy traffic movement?

A. I expect there are some items in there that there is a pretty heavy traffic on.

Q. Did you say you could figure out the rates and tell me definitely whether it is the Texarkana combination or not?

A. Certainly.

Q. Will you do that?

A. It will take me several hours.

Q. Will you do it and furnish me the information later?

A. Yes; if it is the Texarkana combination, I can give it to you by making the figures.

Q. You would have to have the Texas tariff to base that on?

A. I have that Texas Commission tariff; it does not stand to reason that it would be a combination though; you mean you want me to take the rates from Texarkana on those commodities and add the commission tariff and see the sums of the two?

Q. Yes. How do the rates to common points which you have referred to in your testimony in this case, compare with the local rates which I suppose would be governed by distance tariffs?

A. The mileage?

Q. Yes, which are the lower?

A. Some of the common points are based—take Little Rock for instance, the rates are somewhat higher than the court tariff.

Q. I am not speaking about the court tariff.

A. Well the commission then.

2145 Q. I mean usually, as a rule, how do the rates at common points compare with mileage rates?

A. They never have considered them in the making of rates; those through rates to the junction of common points have not been based on the intrastate rate in hardly any instance.

Q. When I say common points, I mean jobbing centers, like Little Rock.

A. Yes.

Q. What I want to get at is your knowledge, if you have any knowledge, as to which is usually as a rule the lower rate, that is the jobbing point or the mileage rate?

A. I would like to have a little time, I would have to look a little bit before I can answer that question.

Q. I want to direct my question to a period covering along about when the Commission tariff was in force, from 1900 to 1906 or 1907; to give you a sample of what I mean, take wire nails to Little Rock; how do the rates on that commodity from Memphis to Little Rock, which is the common point, compare with the mileage scale.

A. Practically the same, except that this tariff extends the rate for distances of 150 miles; the rate in this tariff, in this court tariff.

Q. I am not speaking of the court tariff.

A. This is not the court tariff; this is #3, the tariff that was enjoined, the rate in that tariff between Memphis and Little Rock is the

same as the rate today from Memphis to Little Rock, that is in the carload rate.

Q. What was the rate from Memphis to Little Rock on wire nails under this distance tariff #2 of the State Commission?

2146 A. Well, the rates were not made on this tariff #2, at the time the first tariff was issued.

Q. I perhaps put that question wrong; what was the mileage scale on that commodity, for a distance of 133 miles, under distance tariff #2?

A. I have #3, I don't think there was any change in it.

Q. What was #3?

A. 13 cents.

Q. What was it from 1900 to 1906, the rate from Memphis to Little Rock?

A. 10 cents.

Q. That is a difference of 3 cents?

A. Yes, sir.

Q. That illustrates the information that I want, as to how the scale ran; how did it run usually, which was the higher rate usually, the interstate rates to common points, or the intrastate mileage scale?

A. Some of the interstate rates were lower and some were higher.

Q. On what commodities were the interstate rates to common points higher than the intrastate mileage rates, rates on the mileage scale?

A. The first commodity in here is produce; the interstate rate at the time this was in effect—was issued, from Memphis to Little Rock, was 16 cents. This is 12,—the mileage scale.

Q. How was it from St. Louis?

2147 A. St. Louis was the differential higher, about eight cents, six cents may be.

Q. On merchandise what was the difference?

A. The rates from St. Louis were not predicated on this tariff at all.

Q. On Memphis how was it?

A. I just say there was a difference of four cents a hundred; the interstate rate was that much higher.

Q. You stated this morning, in speaking of jobbing rates, that some very low rates were put in; I understood you to say, for the purpose of building up trade centers?

A. That was the primary object of the railroad people.

Q. What was the policy of the state commission, in fixing their rates?

A. I am sure I couldn't tell you.

Mr. HILL:

Q. You were not a member were you?

A. No.

Mr. MOORE:

Q. You had occasion to give a good deal of attention to the commission's rates during that period?

A. Yes, sir.

Q. From your experience and judgment, growing out of your occupation, what would you say in answer to that question, I mean as to the effect of the commission rates?

A. I stated this morning, it had the effect of reducing the intrastate rates, incidentally, the interstate.

Q. In what way did it reduce the interstate rates?

2148 A. My reason of the contract they had at Memphis.

Q. What was that contract?

A. That contract was that for a certain consideration, that is the vacation of streets and alleys, they agreed to forever maintain the same rates from Bridge Junction or West Memphis, from Memphis proper to points in Arkansas.

Q. The Memphis rate was made the basis through the medium of a differential, of the interstate rates from St. Louis and New Orleans, and other large jobbing centers, into Arkansas?

A. Yes, sir, that is true.

Q. Speaking of it broadly, in the aggregate, I will ask you if the interstate rates to common points from jobbing centers in Arkansas, were not, during the period that the Commission rates were in force, lower than the mileage rates and the rates upon the mileage scale?

A. Not altogether. Some of them were higher and some were lower.

Q. I mean in the aggregate.

A. In the aggregate, they may have been about the same.

Q. I asked you awhile ago to name some of the commodities in which the interstate rates to common points were higher, and you mentioned produce, I wish you would mention any others that you can?

A. Bagging and ties; my recollection is there was a difference of about 2 cents between Memphis and Little Rock.

Q. Which was the higher?

A. The interstate rate.

Q. What else?

2149 A. On canned goods, the state rate was higher than the interstate rate.

Q. It is those cases in which the interstate rate was the higher that I want you to state.

A. There are very few of those; grain and grain products are not considered in this tariff at all.

Mr. HILL:

Q. You didn't consider that because the grain and grain products moved under interstate rates?

A. Yes, sir, as I have stated before, the rate on iron and steel articles was higher in this tariff than the interstate rate, 2 cents a hundred.

Mr. MOORE:

Q. Have you found any other commodity in which the rate was higher?

A. There was a reduction on petroleum; that is, this tariff was lower than the interstate; I am not clear as to just what the difference was; there was a difference.

Q. That is the third; is there any other?

A. I think not; there were a good many carried in the common point tariff that are not in this.

Q. Have you examined the supplemental tariff put out by the Commission on petroleum; I think they raised that?

A. Yes.

Q. Are you speaking from the supplement?

A. I am speaking of this tariff made in 1908; I think that carried all the changes; there were some less than carload rates made in this tariff, which are not carried in the other.

2150 Q. Didn't the Commission in reality very materially lower the rate on petroleum products, after that rate you have before you?

A. I believe they did; I take it this was the rate that was in effect at the time the injunction proceeding was had, because it is #3, dated 1908; I presume that is the lowest rate and the last rate.

Q. State what the relative rates were?

A. That I can't say; this may be a rate of 13 cents on the mileage scale for the distance between Little Rock and Memphis; there is a difference there of about three or four cents.

Mr. HILL:

Q. Which is the highest?

A. The interstate rate was the higher.

Mr. MOORE:

Q. Just state what each rate was, what the interstate rate was, and what the state rate was?

A. I haven't got the Memphis tariff: (After looking at tariff handed him) It makes a difference of 2½ cents a hundred; it is higher on interstate than state for an equal distance.

Q. What do you say was the rate from Memphis and the state rate on wire nails?

A. Prior to 1907, the rate on nails and wire from Memphis to Little Rock was 10 cents.

Q. What was it for the same distance?

A. It was 13.

Q. What was it from St. Louis?

2151 A. It was 20; no, it was 18; that rate was advanced 5 cents in 1907, the interstate rate.

Q. Prior to 1907, what was it?

A. It was 18 cents from St. Louis and 10 cents from Memphis.

Q. That was prior to the change made in February, 1907?

A. Yes, sir.

Q. What was the change in 1907?

A. 5 cents a hundred increase.

Q. From which point?

A. Both points.

Q. Aren't you mistaken about it being the same from both points, wasn't it 3 cents from Memphis and 5 from St. Louis?

A. Yes, that is right; it was 3 cents from Memphis and 5 from St. Louis; it was 18 cents to St. Louis and they raised it to 23; it was ten to Memphis and they advanced it to 13.

Q. Did you have any connection or participate in any way, in the increase in interstate rates in February, 1907, further than to apply the rates?

A. I was at that time, with the freight bureau.

Q. You have no connection with that rate?

A. Not with the making of it.

Q. You don't know the reasons that the traffic men who participated in making that, had for that raise?

A. Yes.

Q. What was it?

A. They said they needed the money.

Q. That the rates were too low?

A. They didn't say that; they said that they had to in-
2152 crease their rates.

Q. Did they tell you why they had to increase them?

A. They said they had to have more revenue.

Q. Didn't they also say to you that the change ought to be made for the purpose of adjusting the interstate rates to the state rates for equal distances?

A. There was nothing said about that at all.

Q. Who did you confer with?

A. There was a representative of the Cotton Belt and Iron Mountain——

Q. Give their names?

A. Mr. Watson was present and Mr. Stith of the Iron Mountain and Mr. Farrell, I believe, of the Cotton Belt, and Mr. Park—about the same officials that are here with the roads now were there—Mr. Johnson of the Rock Island was there.

Q. You stated there was a raise of about 15% in inter-state rates at that time?

A. Yes, sir.

Q. Do you state that as a matter of fact or simply as your idea?

A. I made the figures; I know what it was; the average was about 15 or 16%; some were 20, some 25, and some 5; the average was about 15%.

Q. What class of commodities was the highest rate made on?

A. It covered all classes.

Q. The highest did not cover all classes did it?

A. I say it covered all commodities.

Q. I asked you on what particular commodities the highest
2153 rate was made?

A. They raised it on everything.

Q. You said it ran from 5 to 25%; state what that was in figures?

A. 5 cents a hundred.

Q. What was it from Memphis?

A. Memphis was increased about the same proportion.

Q. What I asked you was what was the original and what was the larger rate?

A. It was first 10, and they raised it to 13, and then some of the heavier groceries, sugar, I think was advanced 10%—2 cents a hundred; sugar and molasses; there were other increases aside from the rates, by increasing the weights.

Q. I believe you stated this morning that the commission tariff cancelled prior tariffs that had been put in force by the railroads?

A. Yes, intrastate tariffs; I think the railroads voluntarily cancelled all these rates out.

Q. How did the commission rates compare with the special rates to jobbing centers on the special commodities such as you mentioned this morning, coal, and grain and commodities of that sort,—lumber?

A. That was all practically interstate business; the cotton seed rate was reduced in some instances, and in some increased, by reason of this tariff.

Q. How was it on coal?

A. Well, the coal rates were reduced some.

Q. Can you tell me how many commodities, if there were any at all, upon which the rates were not reduced by the com-
2154 mission tariff, below the tariffs that had theretofore been in force?

A. I could not.

Q. I will ask you, if as a whole, the rates were not reduced on all commodities?

A. Yes, in less than carloads they were, not in carloads, but in less than carloads they were reduced.

Q. And didn't the commission rates practically supersede the previously existing special rates, by reason of the fact that the commission rates were the lower, and it necessarily operated to do away with the prior rates?

A. I don't remember any jobbing tariffs that were kept in effect, or special tariffs that were kept in effect, very long after this tariff went in.

Q. And the reason of that was that the Commission tariff reduced the rates wasn't it?

A. As a rule it did; that is, understand me now when I say it did, it is on the less than carload commodities; carloads were, in many instances, higher than the railroad rates.

Q. Were the special rates put in force by the railroads regarded by you as high or low rates?

A. During the period that they were made, it was thought necessary to make them; they were largely experimental.

Q. In what sense?

A. The railroads wanted to take care of the business, but the traffic from the jobbing centers, like a great many other rates, it was pretty hard to figure out, just what you wanted to do, and they had to experiment with it.

2155 Q. Isn't it a fact that many of those rates were made for the purpose of building up and developing trade centers of the state, and weren't they made exceptionally low for that reason?

A. That was the object unquestionably.

Q. And to facilitate that object, the rates were made very low in many instances?

A. I don't think that they were any too low at that time.

Q. When you say you don't think they were any too low, you mean in reference to commercial conditions of the country?

A. Yes, sir, as they existed at that time.

Q. And when you say that, you speak of the fact that the country was new and needed developing?

A. Yes, sir, sparsely settled, and the roads favored the outside points until the time that these jobbing centers—until the merchants began opening up wholesale houses in the state; that is customary everywhere.

Q. Then it became their policy to build up local trading centers?

A. Yes, sir.

Q. Did you regard at the time this first distance tariff was put in, in 1900, did you regard the rates established by the commission as reasonable and fair, and just to the railroad?

A. I was working for a railroad at that time.

Q. I am asking you what was your view about that?

Mr. HILL: I think he has answered that; I don't think that is a fair question, Judge Dooley.

2156 Mr. MOORE:

Q. You have already testified, I think, that you didn't approve of the mileage scale adopted by the commission?

A. I don't think it is a proper basis.

Q. Wasn't that the foundation of the fabric of rates that the Commission built up?

A. When I say that, I don't think it should be the basis for making through rates for long distances, or interstate rates; it is absolutely necessary to have a mileage scale somewhere, and in some way, because you cannot cover every point with terminal tariffs.

Q. What you objected to in the commission schedule was the generality of the mileage scale they adopted?

A. Yes, sir.

Q. If that was faulty, it affected the entire fabric they built upon it, didn't it?

A. It affected all rates predicated on it, of course; I would like to qualify that, by saying that I think some rates that followed the commission rates were unnecessary.

Q. Do you know whether any proposition was ever made to the Railroad Commission to increase the rates?

A. Informally, yes, sir.

Q. What was done in that respect?

A. I was one of the parties that made a suggestion to them.

Q. When was that?

A. That was when Judge Hudgins was chairman of the commission; I don't remember the date.

Q. What was the suggestion, please.

2157 Mr. HILL: You are making this witness your witness now.

Mr. MOORE: That is all right, judge.

(WITNESS:) The gentleman and myself prepared a tariff, a mileage tariff, made on what we thought,—and in fact he was a scientific tariff man,—was on a broader basis; that is, not so much as to figures, but it was lined up better, more like a tariff; it made some reductions, and it made some advances. Judge Hudgins said that the Commission would not entertain it if it meant an increase in these rates; it was never presented to the commission except informally.

Q. Judge Hudgins was Chairman of the Commission at that time?

A. Yes; he said they didn't care to entertain anything that would change their tariff.

Q. By whom is this "Southwestern Lines Tariff" prepared; in order to make it compare with the language used heretofore, the tariff prepared by the Southwestern Committee; who is that committee, of whom is it composed?

A. All of the Southwestern railroads.

Q. You had no connection with that committee?

A. Not since I left the railroad.

Q. Who prepared the schedule of rates put in by the railroad companies, how are they prepared, and who does it?

A. Unless they have changed the method, the railroad designates a representative to attend these meetings; they meet once
2158 a month or oftener, if necessary, and they check out these rates and instruct the chairman to issue them.

Q. What is done then?

A. He issues them.

Q. Who issues them?

A. They are issued in this tariff.

Q. That tariff is then put in the hands of the representative who applied them, the traffic manager?

A. Yes, sir.

Q. When you were division freight agent, did you have any connection with the meeting of the committee and the making of the rates, or was it your duty to apply them to the business that was in your jurisdiction?

A. It was my duty to apply them; I have attended some of these meetings.

Q. What meetings did you attend?

A. Several in St. Louis, when Mr. Cale was chairman.

Q. How long ago was that?

A. Six or seven years.

Q. Were those general meet[illegible]s of the representatives of different roads, or was it a meeting of the officials of the Iron Mountain road?

A. All the Southwestern lines were represented.

Q. Were the differentials that you have referred to in this case, fixed at any of the meetings you ever attended?

A. Yes, but it has been so long ago I have almost forgotten it; those differentials were fixed at a meeting in the Southern Hotel, twenty years ago; I don't think they have ever been
2159 changed; if they have, it is not a very material change; there has been no radical change in any of them.

Q. Are you familiar with the proceedings and work of the Western Classification committee?

A. Only in a general way; I have attended one or two meetings, not as a railroad representative, but as a shipper.

Q. When did you attend those meetings?

A. I attended two meetings, both at Hot Springs.

Q. What year?

A. The year they met there, I think it was in 1906.

Q. For what purpose did you attend the meeting?

A. I wanted a reduction in several commodities in the classification.

Q. Why did you want that?

A. Because I felt that the classification on certain articles was unjust.

Q. I wish you would explain just in a few words, what the complaint was, and what it was predicated upon.

A. I can't mention the articles now, but I think some were iron and steel articles, and some other commodities, probably grocery commodities; you have to file an application there, setting forth the reasons and all about it, and then they give you a hearing if you are lucky enough to get in.

Q. Did the classification affect the rates upon the commodities you were complaining about?

A. Yes, indeed; the classification affects every rate, unless it is covered by a special commodity that takes it out of the classi-
2160 fication.

Q. Does the classification prescribed by that committee obtain in the classification made by the State Commission?

A. Largely so; they have an exception to it which is probably in the tariff.

Q. I believe you said you did not present your scheme for changing the rates to the Commission, because Judge Hudgins, the chairman, told you that it would not be considered?

A. We just discussed it with him about five minutes, and he said he didn't care to take it up, or take up any question about changing the rates.

Q. That was the reason you didn't press it any further?

A. Yes; one of the railroads objected to it; we submitted it to one of the lines and he wouldn't give us any help on it.

Q. You spoke something this morning in reference to the causes that governed in fixing rates; are railroads different in that respect from other industries, isn't it necessary that they have some knowledge of the cost of the service they render, in order that they might

be able to fix their compensation, so as to have an assurance of earning a profit on their services and investment?

A. Yes, it should be that way, and I presume, in a general way, they try to do that.

Q. Did you ever know of a business, large or small, that was conducted successfully, in which the output of the business was not sold with reference to the cost of its production?

2161 A. I consider that the railroad corporations in that respect are entirely different from any other kind of business.

Q. Can any business be conducted successfully unless it sells its wares upon a basis that will enable it to make something above the cost of producing it?

A. Of course not.

Q. Isn't that true of railroads, the same as any other enterprise?

A. They are trying to make money, there is no question about that.

Q. Can they conduct their business intelligently with reference to results, unless they fix the price upon what they have to sell with some reference to the cost of producing it; isn't that true just as well with railroads as with any other industry?

A. I don't think so; I don't think they can calculate it very closely.

Q. If the cost of transportation is not an element that it is absolutely essential that railroads should consider, must they not consider it if they conduct their business successfully?

A. Of course, they must do that.

Q. You do not mean to say that rates are fixed without any reference at all to the cost of service?

A. About half of them are.

Q. How is it with the other half?

A. I don't see how they can figure a rate at all, on the cost of——

Q. Let me ask you, I believe you said awhile ago that the

2162 rates depended upon the classification; does the element of cost enter into the consideration of those persons who are charged with the duty of making the classification?

A. No, sir; in a general way, they make these classifications—they are inconsistent; they will classify a commodity, one of the very cheapest commodities, perhaps, which costs the smallest sum to handle, they will put it away up in a high rate.

Q. I will ask you, the classification given say to iron, with reference to the rate, that is fixed upon it, how does it compare with the classification of baskets?

A. There is no comparison in those things.

Q. What is the difference?

A. One is low and the other is high.

Q. Why do they make that difference?

A. They make that difference on account of—they always figure that baskets and bulky stuff, they figure that according to the space it occupies.

Q. The space that an article occupies is one element that is considered?

A. That is one,—it must be.

Q. Does the weight enter into it, is that an element that is considered at all, in classifying it?

A. I don't think so.

Q. Would they put pig iron in the same class as they would feathers?

A. I don't think they would; feathers would take more room than pig iron.

2163 Q. It would not weigh so much?

A. They make the rate sufficiently high to take care of that.

Q. Does the danger of injury and the value of the articles transported have any influence at all in the classification?

A. Yes, some.

Q. Why?

A. The value of an article is sometimes considered, and sometimes it is not.

Q. Why do they consider it?

A. Sometimes they do and sometimes they do not.

Q. Why do they consider it in the cases where they do?

A. They just forgot about it, I reckon.

Q. They just consider it from forgetfulness?

A. They don't figure it at all.

Q. Take a carload of pianos, and compare that with a carload of another commodity, that would be about the same weight, but would not be worth one-tenth in value of the pianos, would they class them the same way?

A. I can illustrate that to you by stating, that a carload of pianos would not be of any greater value than a carload of axes, yet they can get the weight on the axes, but thereby get a greater amount of revenue than they would on a carload of pianos, although the rate might be the same.

Q. How do you classify them?

A. Along with other first class freight.

2164 Q. Take fragile glass, valuable and fragile glass, take glassware which is very valuable, say Dresden china and crockery, is there any difference in the classification made on account of its value and fragility.

A. Yes, they usually limited the value in the bill of lading.

Q. Why is that?

A. Because they don't want to assume the risk.

Q. I am asking you about the classification, with reference to the rate put upon it.

A. I don't say they don't consider them sometimes, but as a rule they are inconsistent; some ought to be classed higher than they are and some ought to be lower.

Q. Have you ever been present and attended a meeting of the Western Classification committee?

A. I am a shipper and not permitted to be there; they do these things in closed chambers.

Q. You don't know from your own personal knowledge, what things they consider?

A. Yes, I do, because I have been using classifications for 25 years, and I know practically how they are made, and the matters they consider, because I have had a great deal of correspondence during my service with the railroad, and a great deal since with the classification committee.

Q. Do you know Mr. Becker, chairman of the Western Classification Committee?

A. Yes, sir.

Q. Do you know how long he has been engaged in that service?

A. He is an old railroad man, traffic man.

Q. He has been for a long time in that service?

A. I don't know that he has been with the Western Classi-
2165 fication Committee very long.

Q. You don't know how long he has been there?

A. Four or five years, I think; you understand there are three classifications in this country, and none of them agree.

Q. Yes, I know, but those classifications cover different territory, don't they?

A. Yes.

Q. But don't all of them make their classifications with reference to bulky and weighty articles and value and considerations of that sort?

A. I expect they try to do that.

Q. And it is just a question of capability as to how nearly they can succeed in doing it?

A. I think a great many of those inconsistencies creep in there by reason of the fact that the people who make these classifications are utterly without experience; some of them have never been out of the City of Chicago.

Q. Isn't it a fact that the subject is one of such large dimensions that it would be very difficult to avoid making some mistakes?

A. Certainly.

Q. You wouldn't say as a general rule, that they don't make their classifications, that as a general rule, the cost of transportation doesn't enter and have its influence with them in placing articles in different classifications?

A. I think a great deal of it is guesswork.

Q. They attempt to guess with reference to the cost of
2166 transportation?

A. Yes.

Q. Your view is caused by your *option* of the experience and capability of the men engaged in the work?

A. I think Mr. Becker is a very competent man.

Q. Would you regard his views with respect?

A. Yes, but he is not infallible.

Q. He has had a better opportunity than you have had to know the theory upon which the committee acts?

A. I don't think so.

Q. Hasn't he been present at their meetings and their deliberations?

A. In a detail way, I would consider he was; I consider any of these railroad gentlemen here, who have come in contact with these classifications daily as I have, would be just as competent to pass upon the classification of an article as Mr. Becker would.

Q. Your duties as division freight agent, I believe you stated awhile ago, were to apply the rates that were issued by those authorized to make them, in the territory that was in your jurisdiction?

A. If I found that the rates that were furnished me, were out of line, or were not in keeping with the conditions I would always notify the people at headquarters.

Q. What conditions do you refer to?

A. Sometimes the tariff was issued, and after you put it in effect, you found it was not the proper rate.

Q. For what reason, what would influence you in determining that it was not a proper rate?

2167 A. The fact that it would not move the business.

Q. That would be one thing?

A. Yes.

Q. If it didn't move the business, you would report that the rate was too high perhaps?

A. Yes.

Q. Suppose it came to your knowledge that a rate that had been put in was so inadequate as to be utterly unremunerative, and it would cost more to transport an article than the rate would yield, what would you do?

A. I never had any experience along that line; if I had I would have called their attention to it.

Q. Why would you have done that?

A. Because I wouldn't want them to haul freight for nothing.

Q. You would do that in consideration of the fact that the cost of service is an element that ought to be considered in determining the rate, wouldn't you?

A. Yes, if it is possible to do such a thing.

Redirect examination.

By Mr. HILL:

Q. When you went to Judge Hudgins with the proposition to reform the tariff, did you accompany it with any statement that the railroads were losing money under the existing tariff?

A. No, there was nothing said about that; we did not make any proposition; we didn't even show him the figures. We

2168 simply mentioned the matter to him informally, asked him if he would consider a revision of that tariff.

Q. You wanted to balance the tariff better than it was balanced, wasn't that the idea principally?

A. Yes, like all tariffs, there were some inconsistencies in it; while

we did not attempt to correct all of those, we thought that it would probably have been more satisfactory.

Q. You thought you would distribute the revenue more scientifically than it was distributed under that tariff?

A. It meant an increase in some things, and a reduction in others.

Q. There was no proposition made to Judge Hudgins at that conference, that the railroads were losing money under this tariff, and should have an increase for that reason?

A. We didn't make any statement of that kind.

Q. You stated one road objected to having these changes made in the tariff, which road was that?

A. It was the Iron Mountain; Mr. W. C. Stith, at that time traffic manager. I had some correspondence with him about it, and while he said it was a move in the right direction, at the same time he said he didn't feel that he cared to take it up.

Q. You referred in answer to a question of Mr. Moore, with reference to that Memphis situation, and if I understood it correctly, it confounded two propositions that I want to get clear; I believe you stated this agreement that was made by the City of Memphis or some parties representing the city, by which
2169 the Iron Mountain got terminal facilities there, was to the effect that the Iron Mountain was to maintain local rates out of Memphis, the same as the commission rates in Arkansas?

A. Yes, whatever rate might be applied in the state, intrastate, it would be followed by a similar rate out of Memphis.

Q. In other words, as you expressed it this morning, it was making Memphis an Arkansas point?

A. Yes.

Q. What only applied to the local rate, and not to the common point rates?

A. No, sir, it only applied to the local points.

Q. Now, Mr. Moore asked those questions practically together as I understood him, and there might have been some confusion there; these arbitraries that you described, based on the Memphis rate, had nothing to do with that agreement about the rates in Memphis did they?

A. You mean these differentials?

Q. Yes.

A. No, that was a matter entirely that affected the interstate rate; it was simply adjusting the rate as between Memphis, St. Louis, New Orleans, Cairo and Kansas City.

Q. That was simply a system of arbitrary differentials that grew up all over the country, and these were the ones affecting this territory?

A. Yes, sir.

Q. These arbitraries and differentials were almost pre-his-
2170 toric in their origin, aren't they?

A. Yes, sir, they simply maintained them; in fact they are bound to do it.

Q. I believe Mr. McPherson put in a schedule or diagram here,

showing that the cost has been an upward factor for a good many years; these arbitraries have remained during all that period of time, during all these years, notwithstanding the cost might have been going up?

A. Those arbitraries—those differentials would not prohibit advancing the rate out of St. Louis, Memphis or any other point; they are just there to maintain the relative difference between these various points.

Q. That would not affect the revenue as a whole, but would just disturb the revenue between these various gate-ways?

A. It wouldn't affect the revenue unless they abolished them entirely.

Q. And they haven't done that?

A. No, sir.

Q. And that would mean an increase in the rate?

A. Yes, sir, from points east of the Mississippi River; the abolishing of the differentials would—well, I don't see how they could abolish them; they are bound to maintain a difference between these points, and they had to fix a basis, which they called a a differential.

2171 Mr. HILL:

Q. Mr. Bragg, coming back to that question that we were discussing this morning of the effect of the sum of the locals on the interstate rate, Mr. Moore inquired of you quite a number of instances where they did and did not affect the rates. I want to know your opinion of the extent of the traffic affected by rates made on the sum of the locals.

Mr. MOORE: I object to that question unless you have Mr. Bragg qualify as to whether or not he knows.

Mr. HILL: Well, he can state whether or not he knows.

The MASTER: He is speaking as an expert is he not?

Mr. HILL: Yes, sir. And I don't know whether he knows or not. I am trying to find out.

The MASTER: Well, then, ask him whether or not he has any knowledge about it.

The WITNESS:

A. I can not approximate how much of the business is handled in that way.

Mr. HILL:

Q. What would be your opinion?

Mr. MOORE: I object. He has just disqualified himself.

2172 The MASTER: Are you asking him as an expert or as having personal knowledge of it?

Mr. HILL: Just as an expert. He has qualified as having had 25 years' experience.

The MASTER: Go ahead and ask him.

Mr. HILL:

Q. Now, that is the question. Could you give your opinion of it, Mr. Bragg?

A. I can give my personal opinion about it just as I have said before. I couldn't give any definite figures on it at all.

Q. Well, that is just what I am asking, is your opinion. I couldn't assume that you could give a calculation on it.

Mr. MOORE: Now, I want to ask a question based on that. Would your opinion be based on information or would it be merely a guess?

The WITNESS:

A. Well, partly information and partly guess.

Mr. MOORE: Then I object to it.

The MASTER: Answer it.

Mr. MOORE:

Q. What information have you?

The WITNESS:

A. Well, there has been some business of that kind
2173 handled here, but not recently. That, of course, I could speak about, but that was very small.

Mr. HILL:

Q. Well now, will you give an answer to the question? What would be your opinion?

A. I think it would be a very small percentage of the business.

Q. Are you familiar with the system of making rates to Texas common points?

A. Only in a general way.

Q. Do you know whether the rates from sea board territory to Texas common points through St. Louis or Memphis have been increased or decreased in the last two or three years?

A. To the best of my recollection all the rates in Texas have been increased.

Q. Do you know whether it is a part of that common point system that the rates to Galveston are supposed to be the same,—from Galveston to Texas common points, are supposed to be relatively the same?

A. Do you mean from the sea board to Galveston or to interior common points?

Q. No, I mean from Galveston to interior common points.

A. I don't know much about that situation. I think they carry some tariffs out of Galveston into Texas points, but just what the basis of them are I don't know.

Q. Do you know whether those Galveston rates to Texas points have been increased or decreased while this increase through St. Louis has been going on?

A. No, I don't. They have a common disturbance there
2174 once in a while, but I haven't kept up with it.

Q. In speaking of this question of the cost of the service,

which is supposed to be considered when rates are made, do you know whether the railroads have any cost accounting system by which they can determine the costs on any given commodities?

A. No, I don't.

Q. You never knew of any such statistics being used while you were in the service?

A. I wouldn't have known of it. That is generally a matter of the accounting department.

Q. You are not familiar with that?

A. No.

Q. Now, I understand your testimony about the classification is that, while the committees are supposed to take into consideration bulk and space and value and risk and things of that kind, that the result of their work is full of inconsistencies where those considerations are ignored. Isn't that about the effect of your testimony about that?

Mr. MOORE: I object to that.

Mr. HILL: I think that is legitimate.

The MASTER: Answer it.

The WITNESS:

A. That has been my experience.

Mr. HILL:

Q. You have had pretty intimate experience with the
2175 Western Classification too, have you not?

A. Yes, I have been handling it a long time.

Q. Mr. Moore brought out that you had been attending some meetings of the Western Classification. Did they give you a hearing on your matters?

A. No, sir.

Q. Kind of a hard crowd to get in to?

A. Well, it is usually out horseback riding and a few clerks do the work.

Q. Have a pretty good time down there, don't they?

A. Yes, they usually do. Incidentally a few games of poker.

Q. Are those meetings attended very generally by the intrastate shippers?

A. Oh, they are always besieged principally by manufacturers and people who are sometimes merchants—generally manufacturers though.

Q. Men that have very large shipping interests go down and have their meetings with them?

A. Well, they go down there and apply for changes in weight or rate or something of that sort.

Q. They go there and discuss changes in weight or *or* bulk and the rates as it refers to manufactured articles?

A. The rate; that is, the Classification sometimes fixes the *the* weight or rate on manufactured goods that become prohibitive perhaps, or with some other point that has the same goods possibly in a

territory covered by some other classification. They are get-
2176 ting around to as nearly perfect as they can. It is a good deal better than it used to be.

Q. Are you familiar with the Texas exceptions to the Western Classification?

A. Yes, sir.

Q. What is the extent of that? I don't mean in detail, but just generally speaking?

A. Why, they have the same thing that is applicable to Louisiana, Oklahoma and Arkansas.

Q. That is published by the railroads,—those exceptions?

A. That is published. In fact, it is advanced by the railroads, those exceptions.

Q. That is, where the railroads change those classifications by meeting those exceptions?

A. Yes. They don't go to the chairman of the classification but through themselves.

Q. Through the Southwestern Lines Committee?

A. Yes, sir; independently of the classification committee.

Q. For what purpose is that done?

A. Well, it is to cover up and account for inconsistencies in this Western Classification.

Mr. MOORE:

Q. Doesn't it grow largely out of conditions as local to that territory?

A. Well, that is true; yes.

Mr. HILL:

Q. There is a large volume of business out of Arkansas in the Texas classification to those points?

A. Yes, sir.

2177 Q. How is that?

A. Yes. You mean by the Iron Mountain?

Q. Well, no, my question is general. They apply to shipments out of St. Louis?

A. Yes, sir, those exceptions apply?

Q. And the traffic passing from St. Louis to the Texas common points would be moving under a classification different from those fixed by the Western Classification?

A. Yes, sir; everything that is not covered by that classification.

Q. Now, take a shipment moving from St. Louis to Texarkana and an interior shipment moving from St. Louis to some common point just beyond Texarkana, one of those shipments would move under the Western Classification and the other under the exception to it, would it not?

A. No, one would move,——

Q. This Texarkana tariff is governed by the Arkansas exceptions is it not——

A. If so, they would both be governed by that Texas exception.

Q. I was under the impression that that Arkansas exception applied.

A. Both tariffs are governed by the same exceptions.

Q. What tariffs are you referring to?

A. Those to Texas common points and those to Texarkana proper.

Q. Well, Texarkana is governed by Texas common point exceptions, isn't it?

A. Yes.

Q. Well, take it to Little Rock.

A. Little Rock is governed by the same exceptions, but they
2178 are applicable on the Arkansas tariff, interstate.

Q. Well, suppose two carloads of freight come out of St. Louis of the same kind; one goes to Hope, Arkansas, and the other to Texarkana. One moves under one classification and the other under the other classification?

A. If they are not covered by the commodity rate.

Q. Yes. I am taking some commodity not covered by the Texas exceptions.

A. Most all freight moving into these big centers is covered by commodity rate,—most all carload freight.

Mr. MOORE:

Q. Is there any difference in these exceptions that would obtain in Arkansas and Texas?

A. I think there is some, not much.

Q. Any that is material?

A. I don't think there is anything very material. I think there is more of them in the Texas than in the Arkansas exceptions, and practically——

Q. Practically about the same?

A. I think so.

Mr. HILL:

Q. Are the Texas exceptions governed by reason of the water conditions at Galveston?

A. I don't know.

Mr. MOORE:

Q. Mr. Bragg, your attention was called on re-direct examination to an exhibit filed in this case by Mr. McPherson showing an increase in the cost in the expense of transportation. Are you familiar with the increase that has occurred since 1900 in the cost of labor,
2179 material and supplies that enter into the transportation and the maintenance of railroads?

A. Only in a general way.

Q. You have no definite information?

A. No.

Q. You know, do you, that, take from 1900 up to 1908, there had been a very material, very large increase in the cost of everything that entered into the cost of transportation, don't you?

A. Well, I have heard that the cost of material going into construction had increased very materially.

Q. Did you ever hear that the cost of labor had increased any, to a very great extent?

A. Well, no.

Q. I believe you stated this morning there was at least 20%, in the aggregate, reduction in the rates fixed by the Commission below those that had been in force previous to the time they issue their schedule?

A. I don't remember whether I stated that. Believe you asked that question, and I told you possibly it was right.

Q. Has there been any material increase—was there between the date of the adoption of the Commissions's tariff in 1900, and the adoption of distance tariff #3 in June, 1908, and material increase in rate?

A. State rates?

Q. Yes.

A. Well, there had been no increase, I know of except this court tariff.

2180 Q. That was before the court tariff took effect?

A. Do you mean this tariff?

Q. Yes?

A. I can't say.

Q. Just state is it not a fact in the aggregate that the rates were not increased by the Commission from the time they established their first tariff?

A. No, I don't think there have been any material changes. I mean down to June, 1908. There were some changes made now and then but I can't tell you exactly what they were, without having the other tariff here to check against.

Q. Well, the secretary of the Commission has testified about that, and shown there was no reduction in the rates. Now what I want to ask you is this: You know there has been a very large increase in the cost of production of all commodities in common use in the country, and that all manufacturing and industrials,—that the cost of operating all industrial plants in the country has increased materially in the last 10 years?

A. I know the cost of living has increased.

Q. Well, hasn't the cost of manufacturing increased, in labor and in the cost of material that enter into manufactured articles?

A. I would imagine there has been some.

Q. Is there not also a corresponding increase in the price at which the output of the industrial concern have been consummated? Is that not what has increased the cost of living?

A. Lumber, I think: that is, the forest product, has increased. I can't say as to steel rails and things of that kind, because I don't know.

2181 Mr. HILL:

Q. While this increase in some lines has been going on, have not the facilities of the railroad to carry freight cheaper also increased?

A. Oh, unquestionably. Unquestionably they are seeking to do that all the time.

Q. In what way have they cheapened the cost of carrying freight and passengers?

A. Larger tonnage in trains, re-advancing freight rate and interstate rates.

Q. What about the increase size of the car?

A. Well, that is an increase of tonnage. Over the Iron Mountain I know of a time when 18 and 15 10-ton car was a train load to Texarkana. Now they average 50, I think, with an average of 20 tons to the car.

Q. They have reduced the grades matterially too, have they not?

A. They have reduced the grades considerably, in many instances.

Q. And straightened the curves?

A. Yes, sir, of course, they had to do that to pull bigger trains, I don't think though the train crew wages now are very much different than 10 years ago, but they do double the service.

Q. Then while there has been some difference in some direction there has been a corresponding increase in others, has there not. What is your opinion as to the comparative cost of hauling freight today with 10 years ago?

A. Well, I wouldn't like to answer that question. I have never examined any figures on it.

2182 Mr. MOORE:

Q. Just one question, Mr. Bragg: Have you any ideal what it cost the railroad company to produce these increased facilities in the transportation of freight, to get larger cars, reduce the grades, and streighten out the curves?

A. Oh, yes it cost something.

Q. Cost a good deal doesn't it, millions of dollars?

A. I expect, but in the mean time they have earned more.

Witness excused.

2183 F. P. JOHNSON, being recalled, testified as follows:

Mr. HILL:

Q. Some questions have been asked you heretofore about the terminal facilities in Fort Smith. I don't believe it has — made quite clear in your testimony heretofore. Do you know the extent of the Iron Mountain Terminal at Fort Smith?

A. Do you mean the mileage of tracks in the yards?

Q. Yes?

A. No, sir.

Q. Or the amount of property owned there for terminal purposes?

A. No, sir.

Q. Have you in your office a map or blue-print, of it filed where we can get it conveniently?

A. There ought to be a blueprint, not in the Auditor's Office, but in the engineering department of the Ft. Smith terminals.

Q. I would like a statement of the amount of property owned there

for terminal purposes, at the same time. You will furnish us with this will you?

A. Yes, sir.

Q. Now, Mr. Johnson how do you charge the expense of the Ft. Smith terminal? To what accounts does that go?

A. What expense accounts?

Q. Yes, I mean geographically, where is it charged?

A. The State of Arkansas. Now the train service that passes through Ft. Smith and Van Buren is divided on a mileage
2184 basis, but the station and yard service is charged to the State of Arkansas at Ft. Smith.

Q. That is what I am referring to—the exhibit in your testimony—it is charged to the State of Arkansas?

A. Yes, sir.

Q. Have you in your office any separation of the terminals expenses of Ft. Smith from other expenses?

A. No, sir.

Q. Is there any way that that could be ascertained from the books kept in your office?

A. I don't believe that the entire expense of the Ft. Smith terminals could be determined now over that period. There are certain items that could be, but others that come from labor and repairs—the same conditions prevails at Kansas City during the Missouri rate cases. We were unable to get that information during the entire period. These operating expenses are maintained by accounting districts.

Q. What accounting districts would cover these Ft. Smith terminals?

A. All mileage from the Okla. State line to Argenta, or Ft. Smith crossing, that is the central accounting district, the central division.

Q. These operating expenses would be swell*oad*ed up in the expense of about 165 miles?

A. Yes, sir, a hundred and sixty five miles.

2185 HENRY WILLMERING, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, age, residence and occupation?

A. Henry Willmering, aged 40 next birthday, occupation, employed by the Corporation Commission of the State of Oklahoma, designated as auditor in charge of its division of accounts and statistics.

Q. How long have you occupied the position of Auditor of the Oklahoma Commission?

A. My association with the Oklahoma Commission began with the beginning of statehood in Oklahoma, in November, 1907, and I have been continuously employed since that time.

Q. What are your duties in your present official position?

A. My duties are to check, in the first instance, my duties are to

prepare inquiries relating to statistics and accounts, of all public service companies operating in the State of Oklahoma, express companies, railroad companies, street railway companies, electric light companies, telephone, telegraph companies, and electric light plants, and to describe the accounting system under the direction of the commission, for such companies; to prepare forms for annual returns to the commission, to analyze such reports, check them for omissions and variations and discrepancies, to prescribe forms for monthly reports of revenues and expenses for such public
2186 service companies, and to investigate the various accounting systems throughout the United States, in use by such class of companies, and in a general way, to have entire supervision of all and any matters relating in any way to accounts and statistics.

Q. Prior to your engagement by the corporation commission, what business were you engaged in?

A. In railroad service.

Q. I wish you would state somewhat in detail, what experience you have had in railroad service?

A. I have occupied various positions in the operating department, as agent for railroad companies, beginning in the year 1892, with the Pennsylvania Company in the City of Chicago, and ending in the year 1907, with the Missouri, Kansas & Texas Ry. Co., in the State of Oklahoma.

Q. Just state the various positions you held with the different railroads; I want to show the line of work in which you were engaged before you went with the Corporation Commission of Oklahoma.

A. Beginning in the year 1892 for the Pennsylvania Co., as yard clerk in their 55th St. Yard, subsequently in the abstracting of their local office at Madison St., local car accountant's office and in billing freight; with the Wabash since that time as bookkeeper in the cashier's office, local station and station accountant; also, with the claim and tracing department as cashier, and as agent for the Wabash and subsequently with the Missouri, Kansas & Texas
2187 Ry. as agent at Cleveland, Ohio; subsequently as agent at Cleveland, Okla.

Q. Have you made a study of railroad accounting and distribution of railroad costs?

A. I have given much time and thought and attention to matters of that kind since becoming associated with the Corporation Commission of Oklahoma.

Q. Are you familiar with the accounting system put in force by the Interstate Commerce Commission?

A. Yes, sir, I am entirely familiar with it.

Q. Have you been engaged in investigating accounts of distribution of costs, distribution of the property, of revenue, between state and interstate traffic?

A. I have given much time and thought to these problems; I have heard the testimony of eminent railway accounting officials; I have read the testimony of eminent railway accounting officials; I have attended the convention of American Association of Railroad ac-

countants at Cincinnati; I have read the sense of the meetings of the National Association of Railroad Commissioners, and have read after Prof. Adams of the Interstate Commerce Commission, and as a matter of fact, I have endeavored to get everything relating in any way to matters of that kind that was printed.

Q. Have you kept in touch with the rate litigation involving these questions, in Missouri, Arkansas and Oklahoma?

A. I have read a great deal of the testimony that was offered in these cases, yes, sir.

2188 Q. Are you familiar with what is known as the revenue theory of dividing proper and dividing expenses between state and interstate traffic?

A. Yes, sir.

Q. Have you given study and investigation to that theory or basis, whatever you may call it?

A. I have.

Q. I wish you would express your opinion, as to whether the division of property between state and interstate business, based upon the gross revenue received from state and interstate business, is a fair division of the property devoted to these respective uses?

A. I do not think it is.

Q. I wish you would give your reasons for your opinion?

A. My reasons are that on a revenue basis, property assignable to any character of business, should be based entirely upon the rate of charge; if the rate of charge is increased or decreased, the value of property would correspondingly increase and decrease, and on the same volume of business of ton miles or passenger miles, or in volume, would be up and down, according with the rate of charge, as it increased or decreased, and in my judgment, it is too elastic; there should be some fixed basis that would in some way assign the property to any particular class of business that would be more rigid.

Q. The exhibits in this case show that the revenue per ton per mile on the Iron Mountain Railroad, in the period of our inquiry, on interstate freight traffic, is 6.750 mills, and the revenue

2189 on the intrastate traffic, per ton per mile is 13,377 mills; that is found in Exhibit #5 of the Iron Mountain Railroad. In the testimony of Mr. Kimbell, taken on behalf of the defendants in this case, it is shown that the average revenue per ton per mile on state business is 20 mills, and on the interstate is 8½ mills; that was for the period of six months, ending December 31, 1907, on the St. Louis, Southwestern Ry. In view of these facts, I wish you would state your opinion of the effect of using the revenue as a basis of dividing the property.

A. The effect would be, that owing to the revenue or rate of charge per ton per mile, all other things being equal, that it would throw an extraordinary burden upon the intrastate traffic, and would require the intrastate traffic to earn a great return upon the valuation of the property than would be required of the interstate traffic, and would result in unreal profits on interstate business, and would throw a very heavy burden upon intrastate business.

Q. I am confining this inquiry to the division of property upon the revenue basis.

A. Yes, sir, but at the same time, it would assign to the intrastate business, a greater proportion of the property than would be justifiable or than would be fair, in my judgment.

Q. On account of a larger revenue per ton per mile being earned upon that than upon the other?

A. Yes, sir.

2190 Q. It was shown in this case that after this period of which I have given you the figures, that the intrastate rates were increased 96%, and the interstate 9%; I am using the round figures, and leaving out the decimals; during the month of January, 1909, the St. Louis, Southwestern Railroad conducted its business with those respective increases, 9% on the interstate and 96% on the state, as compared with the period for which I have given you the figures heretofore; I will ask you what effect or influence that would have upon the division of property upon the revenue basis?

A. It would correspondingly increase the value of the property assignable to intrastate business, and would increase the burden for intrastate business; there would be no corresponding increase in the property assignable to interstate business, and the result would continue as it was in the first instance, that the burden was thrown on the intrastate business, and unreal profits and a heavy return on the property valuation would result from the interstate business.

Q. Would there be any real difference in value of the property used for state business and that used for interstate business, by reason of change of rates?

A. In reality there should be none, but it would result in increasing the value of property for intrastate business, when in reality there should be no such increase.

Q. And result in a relatively smaller increase in the interstate when in fact there was not?

A. Such assignment would result in a decrease of the valuation of interstate property.

2191 Q. When in fact, there is no such fluctuations in the property itself?

A. When in fact there should be none.

Q. In your thought, study and investigations on this subject, have you reached a conclusion as to what would be a proper basis of dividing a conclusion as to what would be a proper basis of dividing the property between state and interstate?

A. I have.

Q. What is that?

A. In my judgment, the division of property between state and interstate business, should be on the ratio that the intrastate expense is to the total expense within the state.

Q. Dividing it then upon the basis of expense, instead of a basis of revenue?

A. The cost of earning the revenue.

Q. Why is that?

A. After the expense is ascertained upon a fair basis, it is obvious that the expense would remain the same whether the rate was increased or decreased, and it is obvious that if there is a more rigid way of ascertaining the value of property, and it is not subject to ups and downs of rates, and to a decrease or increase of revenues, in order to ascertain the value of the property, it approaches the actual conditions to a greater extent than any other basis I know of; when the value is ascertained on that basis, in my judgment, it is nearer real than upon any other basis I have heard testified to or
2192 argued.

Q. I believe you have testified that you have given thought and attention to the division of expenses, as well as the division of property upon some proper basis?

A. I have.

Q. I will ask you what is your opinion of the method or theory of dividing the expense between state and interstate traffic, and upon revenue derived from each traffic respectively.

A. I worked out a form in numerous ways, and applied to railroads operating in Oklahoma, and I have found that it always results, owing to the higher rate of charge for intrastate business, it always results in showing, what, in my judgment, is unreal profits for interstate business, and that the extra cost theory, in addition to the revenue basis, it shows there could not ever be any rate by any state regulative or government regulative body, that might not be declared confiscatory by the courts; I believe the foundation was invented for railroad purposes only, and I believe some clever railroad lawyer is responsible for the invention.

Q. Is it used in practical railroad work at all?

A. In the real railroading I have done, I have never known it *to* be used.

Q. You spoke of the extra cost, are you referring to the extra cost which various witnesses in these rate cases have burdened the intrastate traffic with?

A. Yes, referring to the testimony of men like Mr. Carl Gray of the Frisco, and Mr. Dodridge and Mr. McPherson, and in
2193 the various cases heard before the Corporation Commission of Oklahoma.

Q. Are you familiar with the rates, state and interstate, prevailing in this section of the country, and have you made a study of them?

A. In a general way I am familiar with them, yes, sir.

Q. Are those rates so made that they reflect the cost of service, and that the rates can be taken as a measure of the cost or expense of handling the traffic?

A. In a general way, the rates are not made on the cost of service. I believe that railroad rates are made on tradition, not on condition, and from my investigation, I find that railroad rates, when they are made without restriction, are primarily made by the traveling freight agent or a contracting agent, and by up-to-date freight agents; they feel the pulse of the business around the territory occupied by their company, and in the past, it has been the

custom that if the business was offered and could not move at the standard rate, a lower rate was made, irrespective of the cost of service, to get the business. I have been present at the cross-examination and assisted in the cross-examination of many of the eminent railway traffic officials who are at the head of the traffic departments of those roads operating through the state of Oklahoma, and I have never heard one state positively that he had any regard for the cost of service in making rates.

Q. Could a railroad company operating in the section of the country, have any cost accounting system by which they
2194 could ascertain the cost of handling any given traffic?

A. I have never discovered it if they have, and I don't believe they have; if they have, it is a dark secret, locked up in the breast of some accounting official that I have never discovered.

Q. It hasn't come to the light of day in these investigations?

A. No, sir.

Q. What statistics have they, if any, upon the cost of doing their business?

A. The Pennsylvania Co. and Wabash Company ascertain their average cost per ton per mile and per passenger per mile, they have done that on the Pennsylvania road since the year 1867.

Q. That is, the aggregate cost per ton per mile of all the traffic?

A. Yes, sir, of all the traffic; in other words, feathers, coal, silks and sand, carload and less than carload, and gives the general average of cost.

Q. All of the railroads keep such systems as that?

A. Generally that has been the practice in the real art of railroading, yes, sir.

Q. But that general statement does not show the cost upon any particular commodity or class, does it?

A. No, that would be necessary to analyze the commodities that have to be segregated, separated and the ton miles determined for each commodity and average haul, and all such matters taken into consideration, in order to measure up the real cost.

2195 Q. That has not been done?

A. Not to my knowledge.

Q. Do you know whether the rates prevailing in this section of the country are made upon zone or blanket rates, and whether there is any considerable extent of them so made?

A. Yes, sir, that is one of my reasons for stating that rates are made irrespective of costs.

Q. I wish you would explain that; explain how those rates are made, and what effect it would have upon the cost?

A. In the beginning of our investigation upon rates in the State of Oklahoma, we found there was a lumber producing zone in Louisiana and Texas, and I found—I prepared a map for General West, which he used in the conference at Kansas City, and succeeded in having certain interstate rates reduced at that conference; the lumber zone in Texas and Louisiana, they apply from that zone to Omaha a rate of 23 cents, and the same rate is applied to inter-

mediate points in Oklahoma, and in Kansas and in Missouri, and in Nebraska, irrespective of the haul or the distance.

Q. Roughly speaking, how much territory would be included in that zone, where the rate is the same?

A. I don't recall the distance now, but I presume the maximum distance of the haul would be from Bowman, Texas territory to Omaha, via the Santa Fe, and its connections at Kansas City or Topeka, at Kansas City I guess; that would be the maximum in my judgment, about a thousand or twelve hundred

2196 miles.

Q. What would be the minimum haul of the same weight?

A. I believe we found the minimum haul was a distance of about 250 or 275 miles.

Q. Then roughly speaking, there is a haul of about four times the distance for the same rate, is that correct?

A. Yes, that again shows that rates are made irrespective of cost of service.

Q. Isn't there another factor entering into that, that is the division of the rate between different railroads?

A. Yes, sir, in some instances tap lines give constructive mileage or flat rate per car rate, which absorbs a great part of the revenue before the rate is pro-rated with the connecting lines, and results in a very low rate per ton per mile for the roads participating in the haul.

Q. Then there would be wide differences in the revenue received from rates made under such a plan?

A. Yes, there would be wide differences; the rate might range all the way from possibly three or four mills per ton per mile to 12 or 15 mills per ton per mile; in my investigation, I have seen cases of that kind.

Q. Is there a large traffic moving under this lumber rate that you are referring to, from that zone.

A. Yes, sir, a large volume of business.

Q. Are there any other commodities where there is a large traffic, that have their rates made in the same way, to your knowledge?

A. Yes, the grain rates from Kansas City to Gulf points;

2197 we discovered that the rate from Oklahoma points to the Gulf was the same rate that prevailed from Kansas City to the Gulf, plus the local rate from Oklahoma points to Kansas City, and that discloses the entire scheme of rates that obviously was made without respect to the cost of service.

Q. Explain what the difference would be there in the rate per ton per mile, speaking roughly of the different commodities moving different distances under that?

A. The rate would afford, in my judgment, all the way from say 5 mills per ton per mile to 20.

Q. Is there a large volume of traffic moving under such rates as that?

O. Yes, a great deal of Oklahoma grain moves under such rates, and grain from Western Kansas.

Q. What other instance do you call to mind, of rates made in that way, where there is a large volume of traffic moving.

A. The rates on crude oil and petroleum and its products, from Kansas refineries to the gulf.

Q. We are not producing oil in this state, and I will not pursue that; I will ask you about coal?

A. That condition prevailed on coal, and recently I have investigated and I have discovered, from reading a number of tariffs, that there are more than ten thousand rates in existence today, that are lower per ton per mile, for mines in Indiana and Illinois to points in Dakota, Minnesota, Iowa, Nebraska, Kansas, Missouri, Oklahoma, Arkansas, Texas, and a great many other states,
2198 that are lower per ton per mile than any rates ever made by our commission or by your commission, and they are made in the same manner; their groups of rates are made in about the same manner as Texas lumber rates, from group to group or zone to zone.

Q. Are you familiar with the coal movement from the Rocky Mountain region?

A. No, sir, only in a general way.

Q. Are the rates made in the same way, do you know?

A. I cannot recall from memory now, I am not prepared to say.

Q. How is cotton moved?

A. Cotton is usually moved into the compress upon first class rates; I have not made a very fair investigation in respect to cotton.

Q. Do you know whether cotton goes to the distributing points in the east for export, upon the same rate from one point in the east to another point; have you examined that?

A. I have not examined that thoroughly; I know that is the case in a general way, but I have not investigated it.

Q. Isn't there a difference in the absorption of compress charges and handling of cotton, where the handling expense would be the same, in one instance the compress charge is absorbed and in the other, it is not?

A. Judge, I haven't investigated that thoroughly, and I am not prepared to testify in regard to that.

Q. Are you familiar with the Texas common point rates; I mean, with the system; I do not mean with the individual
2199 rate?

A. In a general way, yes.

Q. What is that system?

A. Texas common point rates are built from the gulf to points in Texas; the general minimum haul reaches 200 miles, with a maximum rate at that point and the maximum haul is something like 7 or 800 miles, with the same rate applicable to the short haul and maximum.

Q. I believe it is in evidence in this case already, Mr. Perkins Exhibit 42, that there is about 2600 of those stations in Texas where the common point rates prevail?

A. From what points?

Q. Say from St. Louis and north and east.

A. Yes, those are all in the Leland tariffs and in the directory published by Mr. Leland; I know about those rates in a general way; I thought you were referring to the rates made by the Texas Commission.

Q. No, I mean the rates to Texas from the north and east, through the trade centers?

A. Yes, sir, there is a blanket territory or zone territory and also from Oklahoma, on which rates are made from Cleveland, and Dayton, and Detroit, Chicago territory, and St. Louis and Missouri river territory, and I believe most all those rates are made without any true regard to the cost of service.

Q. They are substantially the same rate, with variations in distances, with various divisions of the rate between the different railroads?

2200 A. Yes, sir.

Q. Now, not to pursue the illustrations into too much detail, I will ask you generally, what effect these various illustrations that you have given, have upon the revenue of a railroad, and what effect it would have upon dividing the expenses of the traffic between state and interstate business?

A. It would have the effect of assigning to a state like Oklahoma, or Kansas, Missouri or Arkansas, a very short rate per ton per mile for interstate business through these states, and would result in assigning to these states an interstate revenue per ton per mile, which in some instances, I believe would be less than the cost of service, and the aggregate interstate revenue assignable to these states, or to any of these states, would be in the first place, assumed to be upon an equality with intrastate revenues; that is, that it would not cost any more to earn a dollar of interstate revenue than a dollar of intrastate revenue, and the rate of charge being so much higher upon intrastate revenues than it is upon the pro-rata of interstate revenues, which would result in showing, for interstate business a too small profit, and would throw the burden upon intrastate business of unreal expenses.

Q. And that burden would not be real burden incurred by that traffic but an unreal one placed upon it by this method?

A. It would be an arbitrary burden, not real at all. The

2201 revenue basis assumes that it would not cost any more to earn a dollar of intrastate revenue than it would to earn a dollar of interstate revenue.

Q. If in addition to dividing your expenses that way, you go to adding to your interstate revenue 100% or from 100 to 125%, what effect would that have upon getting at the truth of that division?

A. It only results in the application of opinions of men, in order to ascertain the expenses, when the real and actual facts would be absolutely different from the opinions of certain men; preconceived notions of eminent men I have heard testify, have been destroyed by an application of real facts and figures.

Q. Suppose that you were directed to ascertain as near as possible, the actual cost of state and interstate traffic, not upon any theory, but

according to actual conditions as near as possible, to find the actual conditions and as near as possible to get the actual expense located to different classes of traffic, and where that could not be done, to get an approximation as near as possible, how would you go at that kind of work?

A. First, in the operating expenses, I would ascertain the actual expense for maintenance of way and equipment, within the state.

Q. Suppose that was a given factor, that you had the actual maintenance of way and structures expense, then what would you do with the division of that between these traffics?

2202 A. In making the division between the passenger and freight traffic, I would ascertain the actual revenue train miles, passenger, freight, and mixed train.

Q. Let me have you give an explanation there of what you mean by revenue train miles?

A. Train miles producing revenue for the road.

Q. Excluding work trains?

A. Yes, sir, and classified in accordance with the classification prescribed by the Interstate Commerce Commission.

Q. Go ahead?

A. Mixed trains carry both passengers and freight; I am not familiar with the operation of the mixed trains in Arkansas, but in Oklahoma, we have a number of mixed trains which are practically accommodation trains, which carry more than one coach, passenger coaches; for that reason, it would be fair, in my judgment, to assign 50% of the mixed train mileage for the ascertainment of the passenger expenses.

Q. That, of course, would be dependable upon local conditions?

A. Yes, sir.

Q. And suppose, as it is in Arkansas on the Iron Mountain particularly, that there are a very few of those trains?

A. Whatever the conditions are, I would be governed by such conditions.

Q. You would apply that according to the respective conditions?

A. Yes, sir.

Q. Do you know what the Interstate Commerce Commis-

2203 sion basis is, for that division?

A. I think that Prof. Adams or some of his associates, have indicated that 25% of the mixed train miles should be assigned to passenger expenses, and I would apportion the expenses upon this basis; I would ascertain the sum of the passenger train miles plus this percentage of mixed train miles, and get the ratio that is to the total revenue train miles, in the state and apportion that expense of the total operating expense, to the passenger business for maintenance of way and structures; the remainder would be assignable to freight traffic.

Q. Now, take up your freight traffic, how would you assign the remainder of that?

A. If, in view and in light of the testimony that has been offered in these various cases, in order to satisfy myself with respect to the operation of the so-called expensive local way freight trains, and the

through freight trains,—in my judgment the separation could be equitably made by finding the number of freight car miles performed by the local way freight trains, and such as were classified in the official schedule as local way freight trains——

Q. You would refer to the local trains as classified?

A. Yes, sir, in the official employee's time tables.

Q. But the real index to that, I presume, would be the actual work of each train, wouldn't it?

A. Yes, sir, that would be the real index, and that could be secured from the wheelage reports of the conductors and dispatchers and officers of the company, on established forms that the rail-
2204 roads would have.

Q. That is an ascertainable fact?

A. Yes, sir; after I ascertained from my wheelage reports or from time tables, or whatever I considered or found or determined to be the best index, I would find the number of car miles made by local freight way trains for a given period, and the ratio of that to the total car miles in the state, I would ascertain the per cent of that ratio, and that per cent of the total maintenance of way expense, I would assign to local way freight trains.

Q. That is for the freight?

A. Yes, sir.

Q. You have already excluded the passenger?

A. Yes, sir.

Q. Isn't there another unit that is used by railroads other than car miles?

A. Yes, the ratio of the local way freight train miles to the total train mile.

Q. That is the train mile, instead of car mile?

A. Yes, sir.

Q. Both of those units are in common use in the divisions of expenses by railroads are they?

A. They are in common use in the division of expenses between freight and passenger.

Q. Is the car mile used to divide between the freight and passenger, or is the train mile used?

A. The train mile is commonly used.

Q. Speaking of the freight traffic, I believe you say you would make it upon the car mile; I would like for you to give
2205 your reasons why you think that would be better?

A. I would give it upon the car mile, for, from observation I find that oftentimes a local freight train would pull more cars, have more cars in the train, than the following through freight train, and I find it vice versa, and in order to get a fair average, I believe that car mile should be taken in place of the train mile.

Q. You think it is nearer the actual results than the train mile?

A. Yes, sir, in my judgment.

Q. The train mile, however, is the unit which is used for this purpose?

A. Yes, sir, Mr. Nay endorses the train mile for the unit of expense in his testimony before our commission.

Q. Mr. Nay is comptroler of the Rock Island?
A. Yes, sir.

Mr. MOORE: We object to that.

A. He is a very eminent accounting official and I would be governed by his testimony a good deal.

Q. Now, with that explanation of your units, I wish you would proceed with your plan; that would cover that account, wouldn't it?
A. Yes, sir.

Q. Now, take the maintenance of equipment, how would you handle that?

A. I would ascertain the actual expenditures made upon each locomotive, I would identify the locomotive and from the conductor's and engineer's reports, I would determine the mileage made
2206 by each individual locomotive in the state if possible.

Q. Can that be done?

A. It can be done on the M. K. & T.; I am not sure that it could be done by systems and methods employed by other railroads.

Q. I want to state to you the state of evidence in this case, in regard to the Iron Mountain; Mr. Johnson, I think, has testified that they have a pooling arrangement with the entire Missouri Pacific system; that they have various shops, one across the river from Little Rock, and at various other points, and the repairs are pooled between the states; are you familiar with that method of handling that account?

A. I have heard there was such an arrangement; I am not entirely familiar with the method, but if such a method was in existence or in practice, then an apportionment of the locomotive repairs could be made upon the ratio of the locomotive miles in the state to the total miles upon another system.

Q. And then again between the trains?
A. Between the local and through trains.

Q. There has been some testimony in this case, that there was an extra expense on the local trains, by reason of the additional stops and starts and switching done by it, more than was made by the though train; are you familiar with that contention and the facts upon which they base it?

A. I am familiar with the contention, but from observation
2207 and experience in railroad business, I found that a great deal of that is imaginary; of course, more frequent stops made by any train, would have something to do with the expense of repairs.

Q. Suppose that that was real, and you have the opinion of some of these eminent operating officials as to the extra amount of that, could you, as an accounting proposition, take care of that extra expense in the location of these expenses between local and through trains?

A. Yes, that is possible; you would want to use the opinion of these eminent operating men, and that could be worked out and ascertained.

Q. How would you work it out, say 50% was allowed for that or 25% or any other given per cent.

A. As between local and through trains?

Q. Yes?

A. For instance, the local train miles were 100, and the through train miles was 200, and the total 300, you could add 50% to the local train miles, making it 150, and the through locomotive miles would remain the same making it 350 the total; the ratio, with 50% extra would be the ratio of 150 to 350, in place of 100 to 300.

Q. And in that way, you would take care of these extra expenses that these eminent gentlemen think attaches to that kind of train?

A. That would take care of it in my judgment.

Q. Now, we have been discussing locomotives principally; would the same principal apply to maintenance and equipment of

2208 freight cars?

A. Yes, sir, between local and through trains, the ratio of the car miles.

Q. Now, the next one of these primary questions, is the traffic expense, I believe, what is your idea—do you understand what that traffic expense is?

A. Yes, sir, it is the expense of maintaining foreign agencies and advertising for business, and for the solicitation of business at points on connecting lines, and a great many of such offices are maintained in San Francisco, New York, and important business centers throughout the United States, representing certain railroads at such points, and advertising superior service and soliciting business from competing lines.

Q. What proportion of that, if any, should be charged to intrastate traffic?

A. I should ascertain the part of the expense assignable to intrastate traffic, I would investigate and define what office expenses of each were chargeable to that class of expenses that were located within the confines of the state, and would exclude any expenses relating in any way to any business outside of the state.

Q. Do you think that that business, that those offices outside of the state, contribute to the intrastate traffic?

A. A man would have to work on his imagination if he found such to be the case.

Q. As a practical problem, you think it affects the interstate traffic, not the intrastate?

A. I don't see how it could affect the intrastate in any

2209 way, only for those located in the state.

Q. City ticket offices and things of that kind.

A. Yes, sir.

Q. In the division between state and interstate, some of these gentlemen have testified that that should be divided on a revenue basis, what do you think about that? Do you think that would be fair?

A. No, sir, I think it should be divided upon the basis that the locating expense is to the total locating expense.

Q. That is a general accounting proposition that is considered sound?

A. I have heard it commended very highly by cost accounting officials; I have read their treatises and text books,

Q. Now, when you come to transportation expenses, the station expenses, how would you divide that between state and interstate, or can it be divided between state and interstate, upon a fair basis?

A. It could be divided upon the basis of tons handled, intrastate and interstate; I would determine the average haul for interstate business, and the average haul for intrastate business; I would charge two terminals to intrastate business; I would double the tonnage for that purpose, after ascertaining the expenses properly assignable to intrastate business. For example, if the tons intrastate was 100, and the tons interstate were 200, total 300, I would double the 100 tons of state and make it double the tons of state handled, and make it 200, and then I would ascertain the average haul for interstate business; and if it was more than 100 and
2210 less than 200, miles, I would then charge the interstate with 2 terminal expenses.

Q. Why would you do that?

A. Because, from observation and experience, I find that the interstate cars are handled at terminals the same as intrastate.

Q. You mean division terminals?

A. Yes, sir.

Q. What is the usual distance of those division terminals apart?

A. They average about 100 miles.

Q. You would take that as a determining factor, as to the number of terminal handlings?

A. Yes, sir, division terminal handlings, and if the average haul was over 200 miles, and less than 300 miles, I would multiply the actual tonnage by three, and in case of that kind, you would have 3 times 200, or six hundred, and two times one hundred or two hundred, the ratio is as 200 is to the total 800.

Q. Suppose that the intrastate business moved more than 100 miles; how would you handle that?

A. You have originating terminals or local stations, and destination—that would be two terminal handlings.

Q. You have to add one more?

A. Yes, sir, for the division terminal.

Q. If it ran over 100 miles?

A. Yes, sir.

Q. That would be your judgment of the proper way to divide that expense?

2211 A. Yes, sir, that is my judgment and observation of the expense at division terminals.

Q. In these cases, these eminent gentlemen to whom we have referred, have testified that there were two handlings on state business and only one on interstate, and in some instances, none at all on interstate; that is what they call trans-state; in view of their views upon this subject, suppose you would allow two handlings, and double your tonnage at stations of intrastate business, would that be giving the railroads all they were entitled to, on that division?

A. Yes, it would be very liberal with the railroads, give them all they were entitled to.

Q. And more too?

A. Yes, in my judgment.

Q. Certainly, it would be fair from their standpoint to do that?

A. Yes, that is about the maximum they have claimed from the testimony I have heard.

Q. Would that extra cost you have heard them put upon that, be fully taken care of if a division of that kind was made?

A. In my judgment it would.

Q. The maximum of it?

A. It would produce the maximum, yes.

Q. This is the station we are discussing, and not yards and terminals?

A. That is the expense of station and station agents, and employees, help in the yard chargeable to that account.

2212 Q. Are the yards included in that; isn't that under another sub-division fixed by the Interstate Commerce Commission?

A. The yard clerks?

Q. The man at stations or at terminals?

A. At stations for instance, they would have a yard clerk on the station force that would check the cotton on the cotton platform, and the loading of cotton.

Q. Under the interstate commerce classification of that, wouldn't that go in as yard service, that clerk you have referred to?

A. Yes, I am quite sure it would; the yard employees,—yard clerks.

Q. Take up that next, yard expense, how would you handle that between the local and through trains?

A. I would ascertain from the records the number of cars handled for each class of trains, by the yard switching crews.

Q. I believe you and Mr. Dodridge would agree on that proposition, if I remember his testimony correctly; that is an ascertainable fact, isn't it?

A. Yes, sir, it can be ascertained; I am not sure it can be ascertained on all roads, but on roads I am familiar with, it could be ascertained.

Q. Could the fuel be ascertained and how could it be located.

A. We have the aggregate fuel expense, and we could get the aggregate mileage performed by the locomotives; we could get the average cost per locomotive and that could be multiplied by the number of locomotive miles in the state, or the ratio could be ascertained.

2213 Q. That is an actual ascertainable fact?

A. From the present accounting system, yes, sir.

Q. Now the train men, wages and things of that kind, can be ascertained actually?

A. From the pay rolls, yes, sir.

Q. Loss and damage to freight, could that be ascertained accurately?

A. Yes, sir, from an examination of the voucher.

Q. That could be ascertained actually between state and interstate?

A. It could be ascertained from the billing.

Q. The accounting expenses, do you know any approved method

that accounting expenses could be ascertained and apportioned to through and local traffic?

A. It could be taken care of on the same basis that traffic expenses are taken care of, on the ratio of located expenses to the total located expenses.

Q. In other words, the overhead on the basis of direct expenses?

A. Yes, sir.

Q. Loss and damage to freight can be ascertained directly between state and interstate from the waybills?

A. Yes, sir, and from the vouchers.

Q. Now, taking your train expenses here, between local and through trains, having ascertained them in the way that you have explained, how would you work that out between state and interstate?

A. I would ascertain the character of the freight carried by each class of trains, and I would carry that in ton
2214 miles.

Q. By character, do you mean whether it is state or interstate?

A. Yes, sir.

Q. That is an ascertainable quantity?

A. Yes, sir, it can be ascertained from the billing from the waybill; I would get the ton miles performed for state and the interstate part, by each class of trains, get the ratio and the expense could be divided upon that ratio—the percentage.

Q. When you work out your expense that way, it would be nearer a true basis, nearer the actual facts than if you worked out your expense by a revenue basis?

A. Yes, sir, it would be more accurate, and it would follow in line with the testimony of the railroad experts, testifying before our commission.

Q. It would enable you to take care of these extra expenses, according to their opinion of what they are?

A. It would be facts and figures, applied to their theory, in a great measure; not altogether, however.

Q. It would have a great many of these matters you have testified to, would be actually and the others approximation?

A. Yes, that is true; the degree of accuracy would be greater than the degree of inaccuracy, and would have the revenue basis skinned a city block, because there is nothing to the revenue basis, in my judgment.

Q. We have gotten through with the freight, I don't care about taking the matter in too much detail; I will ask you generally if the passenger business could be worked up the same way,
2215 allowing for differences in character of business?

A. Yes, sir, along the same line, allowing for differences in character of service and character of business.

Q. How would you take care of mail and express on the passenger proposition?

A. In the apportionment of passenger expenses, I would find the space occupied by that class of business, mail, express and baggage;

that is, on the ratio of the passenger expenses, and to be assigned on the ratio of the passenger to the Pullman car, dining car or the sum of those, if any, of such class of equipment, the sum of those to the total passenger train car miles.

Q. Take the train as the unit and dividing it up into express and mail and passenger?

A. For example, if a train was made up of five coaches, two of which were for mail, express and baggage, the ratio would be as two is to five, or 40% of the cost of operation of the passenger train, which would be assignable to miscellaneous passenger revenues, and the remainder would be assignable to the cost of carrying passengers, and the earnings of strictly passenger revenue?

Q. Do you mean to passenger revenue or to mail and express revenue?

A. As I stated, in a passenger train consisting of five cars, two of which were devoted exclusively to mail and express, and other miscellaneous passenger revenues, and the third was devoted to the earning exclusively of passenger revenue, account No. 2, I would assign to the miscellaneous passenger revenue, the cost of
2216 earning it, 40% of the total passenger expenses.

Q. Now, in miscellaneous earnings, there are other items than that made by train?

A. Yes, sir, there are a few others infinitesimal.

Q. Just to take, without going into too many details about that, your idea is about this, take a train made up of five cars, you would have a locomotive, mail and express car and baggage car, and your passenger equipment was three cars, then you would divide that into five parts, and carry them to their proper head, along the line you have done in the freight business, is that the idea?

A. Yes.

Q. Now, you stated awhile ago, that the best division that you knew of, of the property, was on the cost basis; do you mean that it is the best possible one to be worked out, or do you mean the best that has been presented to you?

A. Under the conditions that have been presented to me, yes, sir.

Q. Don't you think that by a direct accounting system, if the railroads kept or were required to keep an accounting system, and get at these matters actually, don't you think we could get nearer at the truth?

A. Yes, sir, it is possible; we are making rapid strides in accounting, in all branches of accounting, and particularly in railroad accounting, there having been rapid strides made and uniformity is the effect.

Cross-examination.

By Mr. MOORE:

2217 Q. In your explanation and in your formulas that you have described for dividing the expense of operation, you have omitted a number of items; naturally you would do that, your attention not being called to them; I want to ask you if you will pre-

pare a formula showing the manner in which you would divide all the expenses of operation, as between passenger and freight and then between the various items of expense that are incurred in freight operation, and between state and interstate, and I would suggest to you to follow the form of statement No. 5, Exhibit #3, filed by plaintiff in this case, and I will furnish you a copy of that form. Have you seen any of the exhibits filed by the plaintiff in this case?

A. In the beginning, I saw copies of the Rock Island and Frisco Exhibits, and I believe I saw copies of the Cotton Belt exhibits.

Q. That is, the exhibits that were used in the application for injunction?

A. Yes, sir.

Q. I mean the exhibits that have been filed since we began, to take testimony before the master in this case?

A. No, sir, I don't believe I have seen any of them.

Q. Now, I will ask you to prepare an exhibit covering the division between freight and passenger, and then the division of operating expenses, as between state and interstate, and follow the formula to which I called your attention a moment ago, namely, statement No. 5 to Exhibit #3, filed by plaintiff in this case, and I will

2218 furnish you a copy of that statement; I ask you to file that as Exhibit "C" to your testimony in this case, and I will ask you to file that as soon as possible after you prepare it; I wish to have it before I cross-examine you.

A. All right sir, I will do that.

For Exhibit C, see Vol. 9, page 5771.

Cross-examination continued.

2219 J. G. WALLACE, being duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, residence and present position?

A. I live at Russellville, Polk County, Arkansas, and am chancellor of that district, 9th Chancery District in this state.

Q. What connection did you have with the Arkansas Railroad Commission?

A. When the Legislature provided in 1900 for the creation of a commission to regulate the railroads, I was appointed on the commission by Governor Jones, on the 11th of March, 1900.

Q. That was the first Commission?

A. Yes, sir.

Q. You served as chairman part of the time, did you not?

A. Yes, sir, the second term; I served two terms; at the expiration of the first term I was re-elected; I was elected by the commission, chairman of the commission.

Q. How long did you serve on the commission?

A. Approximately about four years, not quite. I was appointed

in 1900, March 11th—it was 1899, March 11th, and served until about January 10th, 1903.

Q. You went off the commission at the same time Mr. Hampton came on, didn't you?

A. Yes, sir.

Q. Prior to the organization of the commission had there
2220 been any regulation of the railroad freight rates by the state?

A. None, no sir, not by a commission.

Q. Had there been any state control over freight rates?

A. No, practically none; they were free to make their own rates.

Q. What system of rates was in effect over the state, at the time you went on the commission, just describe the situation as it appeared to you at that time?

A. Of course, they had a distance tariff which provided in all cases where there was no other tariff that was applicable; that is, where they filed tariffs and fixed no through rate sheet applicable, the distance sheet is the tariff; that is, where the freight is moved strictly on a mileage basis, and you are supposed to pay for your mileage, but really that wasn't the prevailing tariff sheet; the distance tariff is supposed to be, and in fact is, the basis upon which the traffic is moved, that is, the mileage basis; now, they had superseded practically the distance tariff by their locals and specials; for instance, they had local rates prevailing between trade centers and outlying posts; that was the rate applicable between that trade center and a particular outlying post, and not applicable at all to intermediate posts, and there was a very substantial and vital discrimination sometimes as between these points, worked out through these locals. Then they had what was called jobbers' rates, that was a rate—their locals was a to and fro rate between trade centers and that particular
point, but jobbers' rates were rates that applied from the trade
2221 center out to the outlying post, but not back again.

Q. Not from the outlying point to the trade center?

A. No, sir, that was the distance between the locals and the jobbing rates, as their jobbing rates were even lower than their locals; then they had milling point rates that the commission never interfered with particularly; that was a rate on raw material into mills; the rule was that the road was at liberty to transport raw material into mills, and when it was manufactured, they were entitled to the out rate then.

Q. From the point of origin?

A. Yes, sir, and it took the Commission's rate, but into the mill we didn't try to regulate it; that was largely an interstate proposition, although many shipments were made to intrastate points from mills.

Q. Did you find any other objection to these tariffs than their discriminations?

A. Yes; we found this state of things; we found that they were discriminating against our trade centers, and practically, they were hampering their development; for instance, to illustrate, you take on packing house products, and in fact, all of the necessaries of life; they would ship from Memphis to points up the Ft. Smith road, that

is 75 miles distance from here, it was higher from Little Rock on all that class of goods than it was from Memphis, about 2½ cents, and so on up the road, and they competed with Little Rock, right from its doorstep, the first outlying posts, and when they got 75 miles above here, it was cheaper from Memphis. And then
2222 take the Iron Mountain; they hampered the growth and development of this city here so she could not go north for trade at all, on account of the interstate rate.

Q. From St. Louis?

A. Yes, and then they gave it some little advantage to points below, south, but yet when you took the combination rate, the rate from St. Louis here, and the rate to the points south, why the combination was much higher. So, it placed our trade centers at a disadvantage all over the state, that they could not possibly overcome.

Q. You say at a disadvantage——

A. Yes, sir, as compared with interstate points.

Q. Were the tariffs in such a shape that they could be understood by an ordinary shipper?

A. No, sir, not very well; an ordinary shipper, if he was a stranger—a merchant understood his rate ordinarily I suppose, but a man who wanted to make a shipment, who was not familiar with transportation or having freights billed, they could put him on most any rate they wanted to, and he would not know the difference; they had so many rates applying.

Q. They had so many tariffs they could put him on most anyone they wanted to?

A. Yes, and he would not know whether they were wronging him or not.

Q. That was pretty frequently done, wasn't it?

A. Yes, sir, they used to put him on the distance tariff; that was the highest tariff they had.

Q. What about the special rates; were there any such in force at that time?

2223 A. We found that every place in the state almost were favored shippers; those were secret rates that were not published.

Q. What were those rates, do you recall any particular commodity that they were on, how were they made?

A. Well, Morrillton got a rate, I remember that very distinctly, and the Commission came to know about it, they came and made complaint to the commission about a rate that was lower than anything above here; Plummerville could not compete with it at all, although it was in six miles of Morrillton; those were secret rates; those rates were not filed with the commission at all; we made an order on them to file all rate sheets of every character whatsoever with the commission, but those special rates they did not file.

Q. Wasn't there a great many individual rates, like milling plants starting out at some given point and they would get rates to some given city?

A. Yes, sir, I remember one very distinctly here; Mr. Denny owned some lime works out here about Batesville; he was one of

their favored shippers, and had a rate on lime, my recollection is from there here it was six cents, with the privilege of making a depot here, and then unloading it and storing it, and reshipping it — some other point, and still take another lower rate.

Q. Didn't a good many sawmills have special rates?

A. Yes, sir, a good many sawmill men and many merchants got many special favors; we ascertained all that, and in fact an industry could not start up, such as wood manufacturers,
2224 only by permission of the railroads; they would not give you a rate, whereas other men engaged at places where they didn't object to such an industry going up, could get a rate. We had factories up here, up the road here, could not go up at all on account of discriminations of the railroad; they would tell the fellow he was at the wrong place; I remember we had a mattress factory up there that could never prosper on account of the rates.

Q. At the same time then they had to have an industry and a pull both to get started?

A. Yes, sir.

Q. Were these rates, special rates, and rates to favored localities and shippers, much lower than published rates?

A. Yes, always, they were lower ordinarily, considerably lower.

Q. When you found that situation of rate affairs in the state, what did you and your associates do?

A. It took us a long time; we were at work a year; we had to first learn what the rates were, of course, because we couldn't revise or reform them until we knew about them; the people got out of patience with us, and the commission was very unpopular. The men who had been getting these favored rates, they were practically cut off; that is how we came to know so much about it; they would come to the roads and the roads would tell them they couldn't do that now, that this last legislature created a commission here, and we have got to work under their orders strictly, and they forbid and prohibit all tariffs like this, and we learned a great many
2225 of these rates in consequence; shippers would come to us, beneficiaries of these rates would come to us and make complaint.

Q. You had a pretty good size kickers' court?

A. Yes, sir.

Q. What did you do after you *find* this situation, to meet it?

A. The commission worked very hard; from the beginning, the first thing of course was to inaugurate some sort of system or arrangement, and we continued our labors until in January, before we got at all prepared to make any overt acts. Then, we prepared I believe it was in the month of January or early part of February; we prepared a rate sheet tentative in its character, and notified the roads, accompanying these notices with copies of these tentative rates. We had it prepared and served it on the roads, and notified them to appear before us for the purpose of revising—preparatory to the commission revising their rate sheets, and making a tariff covering transportation of freight in this state. They appeared, and as I have stated, the rate sheet we had accompanied with the notices was

tentative. We were not prepared to say just then that that would be the rate, but they appeared and that brought about a discussion between the roads and commission, which was continued from time to time, from about the latter part of January or early in February, meeting after meeting, until, as a result of these meetings and a thorough investigation, we promulgated a rate, known
2226 as the distance tariff, applicable to all freights in the State of Arkansas, or on railroad lines operating in this state, becoming effective, I believe, April 10th.

Q. 1900?

A. Yes. The roads met with us, and as a consequence of these meetings, of course, ideas were very freely exchanged both between the roads and the commission, and we promulgated that—we gave notice of the fact and promulgated the rate three times before we made it effective; each time they would come and show us where they thought it would be an injustice towards them; we would take out the inequality if we thought their point was well taken, and re-promulgate it, and the last meeting we had was about the last day of March, I think. That day all the lines were present, and we worked until about dark, it got so dark we couldn't see; we practically came to an understanding. I don't say that they agreed to it at all, but we came to an understanding; we had taken out and conformed to their notions in many particulars, and it was understood when we parted at heavy dusk, that we would promulgate that rate, reserving the right on the part of the commission to revise one or two commodities; we didn't want to be tampering with the rate all the time; when we put in the rate sheet, we wanted it to be a just one to the shipper and the road, and we recognized that to be constantly tampering with the rate would not be the proper thing to do; the roads would never know when they had a rate, so we
2227 wanted to put on something of a permanent character, and that was just to all, and that we could stand by, but as a final result, we reserved the right that we would revise two or three commodities at any time, which we did pretty soon afterwards, and with those exceptions the rate we promulgated seemed to be reasonably satisfactory to the road; it was to the commission, and those rates were effective when I retired from the commission.

Q. Was there much difference between the rate finally promulgated on April 10th, and that you issued as a tentative rate, about the 1st of February?

A. A very great difference; I would say the rates finally promulgated were at least a fourth higher than the first rates proposed, may be more.

Q. Why had you made this great increase, in your tentative rate, to the rate as finally promulgated?

A. The roads had stood aloof from the commission, and what we had learned from the roads, we had had to drag out of them, and when we issued notices that we were going to promulgate a rate at a different time, accompanied with this tentative sheet, that brought us together into a discussion, and that was thrown out somewhat *was* a feeler, for the purpose of getting light on the subject, and it

had the desired effect, and that brought us together in constant discussion during that time, and as a result of these conferences with them, we had arrived at just about the right thing we thought.

Q. They gave you all the information they had?

2228 A. Yes, they made figures with us.

Q. On what basis did they make these figures, and what basis did you consider in figuring these rates?

A. As a matter of course, the value of the properties had much to do with it; we considered they were entitled to a fair return on their investment, and the amount of traffic they were doing, and we thought would be done under our rate sheet; we thought it would very greatly increase traffic, because everything would move free and easy under it, and a man could locate anywhere in the state, and do as he pleased; he would simply pay as much as any other man; he would simply pay for his mileage; we believed it would greatly increase their revenues, that is, their carrying trade, and that way, they would make much more money, and at the same time, that it was a reasonable rate; that is, it was a fair compensation for their services.

Q. How did you determine or form an opinion as to what would be a reasonable rate, what data did you have before you or information before you in determining that?

A. We had their rate sheets, and their conferences with us as to what they could do the traffic for, and that influenced our action largely of course. I want to say when we parted, they were not particularly dissatisfied with the class rate; they rather, if anything, appeared to be satisfied with our class rate. Their objection was as to our commodity rates; they thought that the commodities ought to be higher, but we assured them—we had to come to some conclusion, and we ultimately did come to a conclusion, and we as-

2229 sured them at the time, that if the rates were not compensatory by an application, as that was the test at last, we would hear them, and we didn't want them to transport property in this state from one point to another at a sacrifice, and we wanted them to have a fair return on their investment, and if these rates were not compensatory, that we would revise them at any time that they could convince us of that fact.

Q. Did they ever come back, one or all of the roads, while you remained on the commission, with a statement or suggestion that the rates that you had put in were not compensatory, and that they needed revision, under your promise?

A. No, sir, we parted as I stated, with an assurance of that kind, late in the evening, and they never did complain*t* to us about the rate any more.

Q. How long did you remain on the commission after that rate was put in?

A. That rate was put in April 10th, 1900; I remained on the commission until about February 8th or 10th, 1903.

Q. Were they making you statements of their business while you remained on there?

A. Yes, sir, they made annual statements.

Q. Did you keep informed as to their returns, and form an opinion as to whether they were doing well under the rates?

A. Yes, sir, reasonable so; we had an expert that we de-
2230 pended on very largely, but still we didn't depend altogether on his statements, we investigated ourselves, and it seemed they were making a fair return on their investment; we had their annual returns.

Q. In making these rates, particularly after you got in conference with railroad people, did you have tariffs of other states before you to consider what was being charged under like conditions in other states?

A. Yes, sir, we had collected up that before we invited any conference with them; we had informed ourselves as to the rates prevailing elsewhere.

Q. How did your tariff, as finally promulgated, compare, speaking generally, with tariffs of other states situated similarly with Arkansas, and with about the density of traffic of Arkansas?

A. Well, our rate was a reasonable rate; that is, it was reasonable fair to the people, and we thought to the roads, as compared with that of other rates prevailing in other states; there were states that had lower rates than we put in, eastern states, but we had about as low a rate as any of these western states.

Q. About on a level with them?

A. I think we had a fairer rate than any of them to the people, but still I believe at the same time, it had the possibilities and potentialities of more money to the railroad than any of them.

Q. You thought it would be a better revenue producing tariff than that of the other neighboring states?

A. Yes, sir, I thought it was a better revenue producer,
2231 and better all around, both for the people and for the road, though it was in some respects lower but we found no other neighboring state that had a tariff made strictly on a mileage basis; that is, it was on a mileage basis, but it had its points where they had a right to charge so much differentials, etc., and it was so plain—our idea was that the rate ought to be so plain that just an ordinary man that was unskilled in anything of that sort, ought to be able to take his rate sheet, and see what he wanted to transport, and tell what he was entitled to, tell what the rate was; we claimed that was one of the virtues of our rate,—its simplicity.

Q. How did your rates compare generally with these secret and special rates?

A. Those special rates were much lower than anything we had; all their special rates were lower than our rates. We never got hold of many of their rate sheets; they didn't send them in.

Q. It was only as you learned it in individual cases?

A. Yes, sir.

Q. Do you remember the old distance tariff sheet of the Iron Mountain Railroad?

A. I believe I would know it if I would see it; I remember it was very high.

Q. Wasn't it a very old tariff?

A. I am told it was one of the first sheets that the old Cairo and Fulton, the rate sheet that they had promulgated and handed
2232 down; of course it had been often revised. That is history; I don't know that to be a fact, but I think it was so understood among railroads that that was the old ancient sheet first promulgated by the old Cairo and Fulton Railroad.

Q. You say it was quite high?

A. Yes, sir.

Q. When they applied it to some intermediate point that didn't have a jobbers' rate or local rate, a man operating under that would have to pay a much higher rate than other places?

A. Yes, sir; I don't say it was the first rate or a copy of it; that was the understanding, I think, in railroad circles; I so understood it, and they never denied it.

Q. Would you and your associates upon the commission, while you served there, been ready at any time, if the railroads had shown you that the rate sheet you promulgated was non-compensatory, to revise it so as to give them more revenue?

Question objected to by Mr. Moore, Attorney for the plaintiffs.

A. I could only answer that as I did before, that they never asked it; we assured them that we would, but they never asked it; I think the commission would have done what was just in the premises.

Q. You made that assurance in good faith?

A. Yes, sir, but at the same time, we would have required a showing.

2233 Q. If they had shown you it was non-compensatory, you would have?

A. Yes, sir.

Q. In making these various rates, didn't you have authority in their own rate sheets for more or less of them?

A. There is not a thing in our rate sheets that we didn't find either from their special or general rates; the only thing was that ours was general and theirs was not; that is the difference.

Q. You made yours apply to all alike and they made theirs apply to special interests?

A. Yes, sir, they had much lower rates than anything we published; I don't mean general rates, but considering their special rates; they wouldn't average lower, of course; they would average much higher.

Q. Did you observe the effect of your tariff upon the traffic of the state, as best you could?

A. Yes, sir, it was just like magic on this state; I don't know whether it was due to the rate or not, but something quickened the energies of the people, and our trade centers have been extremely prosperous ever since.

Q. It is your opinion that the discontinuance of that old system and putting in this one, was a factor in that?

A. Certainly, it very largely contributed to it; notwithstanding all the good times we have had, if our trade centers had been sub-

ordinated to these interstate points, they could not possible have developed as they have.

2234 Q. In making these rates, did you take into consideration the length of the haul, in fixing the rate, and graduate the rate accordingly?

A. Yes, sir; I want to say this, that you can only approximate, it is not like a mathematical problem, but you have got to take the data and judge what its influence would be from that; we couldn't figure it out—we thought we were establishing a basis which would make both roads and the country prosper, that the remotest part of the state could develope whatever character of industry they wanted to engage in, and their country was adapted to, that their energies would drift off in that character of production, and it would furnish increased freights to the road, increase their transportation, and at the same time, be good for the country, and everything moving free and easy, and we tried to make it as analogous to nature as possible, letting every man pay for his mileage.

Q. Do you remember a clause that you put in the tariff—I believe it was in the first one—to this effect, that where there was a published rate lower than your tariff rate, that that rate would apply?

A. I don't believe there was any such provision in the tariff, I am not sure.

Q. It is in one of those, judge; I want to call your attention to it; if I remember it correctly it provided that where there was a published rate in force, lower than the rate called for in that tariff, that that published rate would be the rate to control; do you

2235 recall that?

A. It don't occur to me at this time, no, sir; they may have had such a provision, but I cannot imagine a condition to which that applied; under the law, where they had to compete with water transportation, there might have been such a provision or something or other, that they would be allowed, where there was a water rate, they would be allowed to compete with that by reducing the tariff even below anything we had; that is, they might make their own tariff; they couldn't make it higher; they could compete with water rates; I know that was a uniform ruling with the commission; I don't remember whether there was any clause of that kind inserted in the sheets or not.

Q. I will refresh your memory by showing you the tariff when I get it.

A. I think may be that will be found in the rules about water rates, and the right to reduce their rates.

Cross-examination.

By Mr. MOORE:

Q. When were you elected to the commission?
A. I was first appointed.
Q. That is what I mean?
A. I qualified the 11th of March, 1900.
Q. Who were your associates on the commission?

A. Judge Neal and Judge Wells.

2236 Mr. HILL: I think you have your years wrong, Judge?

A. Yes, sir, it was March 11th, 1899.

Mr. MOORE:

Q. When did the commission organize?

A. We organized within a few days after, about eight or ten days, but we were a long time getting on a working basis; that is some time; we had to do a great deal of work before we could take action, more than to require the roads to send in their rate sheets.

Q. When did you get on a working basis?

A. It depends on what you call a working basis, or what I might term it; I will interpret it from my own standpoint; we went to work in a month, but we didn't know anything about rates; we had roads forwarding their rate sheets, and they forwarded everything in compliance with the order, except special rate sheets; I suppose they stopped that, and didn't consider them effective any longer, and we went to work first to arrange it and the organization of a body like that, not having succeeded an organized body, it took some time to arrange it, but we went to work and learned their rate sheets, just as soon as we got thoroughly installed.

Q. How long did it take you to get in their rate sheets?

A. They forwarded them in about ten days after they were ordered, within the time we had given them.

Q. None of the commissioners had any experience in rail-

2237 road matters?

A. None of us, I never had.

Q. You were a practicing lawyer?

A. Yes, sir.

Q. Didn't you say Judge Neal was also a member?

A. Yes, sir.

Q. He was also a lawyer?

A. Yes, sir.

Q. Who was the other member?

A. Judge Wells, a practicing lawyer.

Q. None of you had much experience as shippers?

A. None of us had been very large shippers over the road, just occasional shippers, I suppose.

Q. So it was an entirely new chapter in the experience of all of you?

A. Yes, sir.

Q. When did you get our your first tentative tariff?

A. I think that was about the latter part of January; it might have been some time about the 1st of February.

Q. That is 1900?

A. Yes, sir, nearly a year after our appointment.

Q. What data did you use in preparing your first tentative tariff?

A. We ordered the rate clerk to prepare a tentative tariff and we trusted that largely to him, although we had discussions all along;

Judge Neal, in the meantime, had retired from the commission, and Judge Hanley had succeeded him.

2238 Q. At what time did Judge Neal retire from the commission?

A. I think he retired some time recently before Christmas of the year he went on.

Q. Judge Hanley was then appointed about the last of the year 1899?

A. Yes, sir.

Q. I think I interrupted your statement as to the data upon which you formed your first tentative tariff?

A. We had all been studying; we had got the rate sheets of other states, Texas, Georgia and all of the surrounding states; we had all been laboring, but we had employed a man that we regarded as possessing some skill; we deferred largely to him; he prepared this tentative sheet; that tentative sheet was prepared more for the purpose of bringing the commission and the roads together, meeting face to face, and discussing the question; it was really not intended at the time, to make that effective, unless, after discussion and consideration, and having the benefits of what information we could receive from the railroads, we found it to be just, but I don't think any of us thought that that would be promulgated.

Q. Your conference with the representatives of the various railroads in the state began after the first tentative tariff sheet was prepared?

A. Yes, with respect to the promulgation of this rate now effective, although we had more or less conferences but not invited; railroad men were visiting the office all the time, and rates had been discussed with them, but not in invited conferences pre-

2239 viously.

Q. When did the conferences begin, about what time?

A. I think it was in February, my recollection is; of course, we get mixed up on dates sometime,—that this tentative sheet was sent out about the latter part of January, and it was something like 20 or 25 days perhaps before we gave notices that we would promulgate it; that led to conferences, conference after conference; in fact some of the railroad rate men was in nearly every day, and along the latter part, they would all come every day, in many instances.

Q. You had gotten in pretty much all the rate sheets, had you?

A. We got the rate sheets in recently after we qualified; the roads responded by sending them in when we notified them; we had learned what their rates were.

Q. You stated, if I understood you correctly awhile ago, that you didn't get some—perhaps you said many—of these special rate sheets? Now, I want to call your attention to a statement made in the affidavit which you filed in the hearing before Judge Trieber, and for the purpose of asking you if you cannot be mistaken in the statement you just made; you said in that affidavit "during all this time we were at work; we had their rate sheets; what they didn't furnish us with, we managed to get; we got pretty nearly all they

had, both special and general." I am reading that for the purpose of calling your attention to it, and to ask you to reflect a
2240 moment and tell us what your recollection is?

A. That statement there is true; what I meant in that statement is, that what we didn't get from the roads themselves, we got from others; those special rates ordinarily they came to light by complaints of shippers.

Q. And you did, in fact, get pretty much all the special rate sheets?

A. Yes, sir, but we didn't get them from the railroads; they sent in some; my recollection is that worked out a discrimination, but ordinarily, we got them from the shippers, or from other sources than from the roads.

Q. I believe you said you also examined rates in effect in other states, both east and west? Those surrounding Arkansas?

A. Yes.

Q. And I believe you stated while your rates were higher than some of the eastern states, they were lower than some of the surrounding states?

A. Yes, sir, I think they would have averaged lower than some, and higher than some; I can't say that we put in the lowest rate; I don't think we did, nor can I say; I can say this though, that our rate was a better rate, in my opinion, and in the opinion of the commission, than any of these states, although they might average higher than any of these states, but at the same time, I think the surrounding states would average higher than ours.

2241 Q. In what respect did you think the rate prescribed by your commission was superior to rates in surrounding states?

A. Its simplicity was one thing; any unlettered man, any man that could read, could tell the rate and then it moved everything strictly on the mileage basis; in other states, there was some more or less confusion to a man who didn't understand rates, about how to figure out their rates.

Q. Was the old system observed by your successors?

A. Yes, sir, I think so.

Q. Have you followed that up so you know?

A. No, sir, I didn't; I started in, after I left the Commission to keep up with it, but somehow or other, I failed to receive the literature after a year or so, and I haven't kept in touch with it.

Q. Have you observed the joint rates that were put in by the commission after they were empowered by supplemental statute to put in joint rates, and its effect upon your mileage scale?

A. No, sir, we had no power ourselves to make joint rates. The legislature gave them the power subsequent, to make joint rates.

Q. You have already stated that the members of the committee were all inexperienced in transportation matters; it is true, isn't it, that you had great difficulty in your investigation of this subject of arriving at results that were satisfactory to yourselves, on
2242 account of your inexperience?

A. Most assuredly, yes, sir.

Q. You found, didn't you, that it was a vast subject, one that re-

quired a great deal of practice and experience to enable a man to understand it properly, did you not?

A. Yes, sir.

Q. Let me ask you if the tariffs you put into effect on the 10th of April, 1900 was entirely satisfactory to the Commission, and if you didn't feel some doubt about how it would operate, growing out of your inexperience in that kind of work?

A. Well, we didn't know how it would work; we thought it was a good rate, and from the fact that we parted with the railroads, with assurances that if it didn't make money for them, to come back, we were ready to hear their complaints, and they never returned, and from the fact that it seemed to stimulate all of the industries of the state, we concluded it was a good rate; by subsequent events, it seemed to demonstrate that it was a good rate.

Q. You stated you prescribed a fairer rate for the people than any of the surrounding states had, what do you mean by that statement?

A. I stated, in my opinion, we had the best rate.

Q. The point I want to call your attention to, is what do you mean by stating "a fairer rate to the people?"

A. I meant by that, that it was not very much lower than
2243 others or that its effect was such as to put the people of all parts of the state on one common equality; if it didn't operate to lower the rate, that it nearly equalized it, and put every man upon his merits with reference to every other shipper in the state, more than any other tariff that I know of.

Q. I understood from the testimony of Mr. Bragg who was on the stand a few days ago, and I understood that to be the drift of your statements, that the tariffs you found in existence at the time you organized the commission recognized jobbing centers, and a great many special rates were given from jobbing centers to outside territory; that is to say, territory that was tributary to different trade centers of the state, is that correct?

A. Not our tariff.

Q. You don't understand me; I say—I am speaking of the railroad tariffs that you found in existence——

A. Yes, sir, that was practiced very largely; my recollection is on the Cotton Belt principally; they all recognized the jobbing points more or less, but they also had in effect at some places, what was called jobbers' rates.

Q. What were those?

A. As I explained awhile ago, that was a much lower rate than the distance tariff from the jobbing point, to *to* the outlying posts.

Q. Now, to illustrate what I mean, take Little Rock as
2244 an instance; Little Rock was the center of a trading district which was tributary to it; when you speak of jobbing rates, you speak of favorable rates that were given to Little Rock, within the territory that traded there; do I understand you correctly, as meaning that?

A. State that question again.

Q. Assume that Little Rock was a jobbing center——

A. Yes, it was.

Q. I understand that these special jobbing rates you speak of, were such as included jobbers, merchants in Little Rock, and permitted them to ship their goods out within the territory that traded at Little Rock, at a lower rate than their mileage rate or that people in the country could get in shipping back to Little Rock?

A. Yes, it was a lower rate, a much lower rate than the distance tariff; in fact, it belonged to that species of rate called combination of rates; for instance to illustrate, the rate from St. Louis to Little Rock is so much, say 20 cents per hundred; then you want to ship out of Arkadelphia; they give the rate through then, they take the combination of the rate from St. Louis to Arkadelphia, and the rate from St. Louis here, and this jobbers' rate is made up more of the combination; of course, something is allowed I suppose, for loading and unloading.

Q. What jobbers' rate do you refer to?

A. I am speaking of the jobbers' rate and not the local

2245 rate.

Q. You are speaking of the jobbers' rate out of Little Rock to Arkadelphia?

A. Yes, sir, it wasn't a to and fro rate.

Q. Well, it was the same from Little Rock to Arkadelphia or Malvern or Benton, or any points within the territory?

A. Yes, sir.

Q. And the same from Pine Bluff to points tributary to that?

A. Yes, sir.

Q. Those rates were lower than the regular rates?

A. Yes, sir.

Q. Why were these jobbing centers favored in that way?

A. I didn't have a very serious objection to the jobbers' rate; I never thought there was; it was fairer than the local, because it consisted of a combination of the through rate, and if they had observed that all over the state, but they didn't do that, it was the most favored points where that was done.

Q. What were the jobbing centers of this state at the time commission was organized?

A. We called a jobbing point any place where they did a wholesale business.

Q. I wish you would designate what were the jobbing centers at that time; Mr. Bragg named them as Little Rock, Van Buren, Pine Bluff, Texarkana, and possibly Camden?

A. That is correct.

2246 Q. That is about five jobbing centers; did this system of jobbing rates prevail at these several points, under the railroad tariffs that were in existence when your commission was organized?

A. You mean did jobbers' rates prevail at all these points?

Q. Yes?

A. I don't think it did, although to some extent it did.

Q. I think your testimony in that respect is different from Mr. Bragg's. Mr. Bragg testified that there were jobbing rates going to these different trade points?

A. I only said if all jobbing points in the state had it, I don't think they did, I think the shippers, particularly jobbers, at each point had it, wherever they had a favored shipper, they would give him the best rate they had.

Q. These jobbing rates had a tendency to build up trade centers in the state,—jobbing centers?

A. Yes, it put them on an equality with interstate points; there was a slight difference, slightly more than if they had bought it in the first place from St. Louis.

Q. The reason I am leading up to, I understood you to state on your examination in chief, that through the operation of these general and special tariffs, that railroads had in force before the commission was organized, it paralyzed business and kept trade centers from being built up in cities of the state; I don't think that was your language, but that was the effect of what you said,
2247 as I understood it; am I correct in this?

A. Yes, sir, these jobbers' rates, the commission would not have complained of if they were general; some points were favored more than others.

Q. Weren't there jobbing rates to certain points and certain special rates given to favored individuals, which you denominated discrimination?

A. Yes, sir, they had a jobbers' rate locally, that was a to and fro rate, but the regular jobbers' rate is a rate out from the jobbing center; that is my understanding; it wasn't given to all the jobbers, and thereby worked a discrimination.

Q. Now, your commission had no jurisdiction to regulate rates into jobbing points from other states?

A. We could influence them, but not regulate them.

Q. In what way could you influence them?

A. We could influence them in this way,—that would be hard to explain, but interstate rates are influenced more or less by local rates; for instance, rates consist of a combination of the locals; in interstate commerce, the through rate cannot be higher than the combination of the locals; freight rates are lowered here and that cuts down the combination of the locals, and in that way it influences interstate rates, especially inbound rates.

Q. Why do you say that the through rate, the interstate rate, cannot be higher than the combination of the locals?

2248 A. That is a rule of rate making, and it is based on the long and short haul clause of the interstate commerce law.

Q. Would such a rule as that be impractical to operate under a different rule from that, I mean from a business standpoint, I want to understand——

A. I am inclined to think that if the through rate was higher than the combination of the locals, it would be a discrimination.

Q. At any rate, it is your understanding that the rates prescribed by your commission, did in fact influence interstate rates?

A. I think so.

Q. Did you ever give any attention to that matter?

A. No, sir, I never thought anything in that line?

Q. In observing the tariff put in by the commission, did you notice it had any such effect as that?

A. I don't know that I did.

Q. You said awhile ago, that your impression was that many special rates were lower than the rates prescribed by the commission; I want to call your attention to a provision contained in the standard freight distance tariff, promulgated by your commission at the date you mentioned, April 10th, 1900, on page 14, to the effect that when class rates, carloads and less than carloads and commodities carloads and less than carloads, now in effect from jobbing centers to local points, and between jobbing points and other points
2249 in the state are lower than the rates prescribed in this tariff, such lower rates shall govern; didn't that have the effect to give the shipper the benefit of the lowest rate?

A. Yes, sir, I think so.

Q. I believe railroad companies, each of them published their own tariff, based on a copy of the tariff promulgated by the commission, when the commission rates went into effect?

A. Yes, furnished their own rate sheets.

Q. Yes, they printed their rates for themselves?

A. Yes; I am not sure about that, but I am inclined to think they did.

Q. For the purpose of refreshing your memory, and calling the matter to your attention, I want to hand you copy of your tariff, which was printed and put into effect by the St. Louis Southwestern Railroad Co., which contains on it, stamped on it in red letters, in effect a protest; it is a statement that the rates are put in under protest, and with reservation of the right to contest them; I do that for the purpose of asking you——

A. That is a fact; it was understood they went in under protest; that was understood by all the roads; I say with all the roads; I know it was with the Iron Mountain and Cotton Belt, and we told them it was so understood with all; I don't think that the other roads especially reserved the right, but it was understood by the commission that they were going in under protest, but I
2250 think the Cotton Belt and Iron Mountain especially reserved in the face of the rate sheet here, their protest.

Q. In preparing your schedule of rates, did you make any investigation as to the cost of service and operating trains?

A. Yes, we considered that the best we could. We found out this, that nothing but actual tests will demonstrate a rate at last; that railroads themselves cannot sit down and figure by any rule, they can approximate but they cannot figure out what would be just the rate, but they simply put in a rate and apply it, and if they don't make money on it, they take it out and keep putting in higher rates until they get one by which they can make money; there is a great deal of speculation; of course, men sitting down here, it is all well enough to consider all these things and they do, but then at last, that is the test.

Q. Did the commission and did you, who were the members of it,

give any recognition to the principal that the cost of service should be considered and recognized in preparing rates?

A. Yes, sir, and we were going to do just like the railroads, if it didn't make the money, we were going to take it out and put in one that would make money, a reasonable profit—a reasonable return.

Q. Did you discuss the proposition of the cost with the railroad people?

A. Not so much with the railroad people; we had reports there, had them all complied, what other roads cost, and their
2251 traffic, the value of it, and all that sort of thing, and they entered materially into the consideration in establishing freight rates, but from that, we could not have taken it and figured out just what would have been six — interest on their investment or anything of that sort; we thought from all the information before us, that we were putting in a fair and reasonable rate, one that was just to the roads, and also one that was just to shippers; we considered those things.

Q. In considering the subject referred to in your last answer, that is the cost or expense of operating trains, and what would be a fair return, did you have in mind what is cost railroads to procure material and labor, and essentials of that kind, that entered into the operation of trains and the maintenance of the road?

A. Yes, sir, we investigated all that; we got first, the capacity of the cars, the minimum capacity, and what it would cost per mile to run a train; how much it cost to start up and how much it cost each mile; I did know just what it cost to operate a road per mile after it was started, after steam was raised; we had that up; I don't know whether it was preserved or not; estimating the cost and tonnage, number of cars in the train, and what the average tonnage was, that depends of course upon the character of freight itself; some freight is bulky in proportion to weight, while other freight is very weighty in proportion to bulk, but when we took charge, I believe the minimum weight of a car was 24,000 lbs., and we
2252 figured on that basis largely. We figured all those things out, and the cost of operating trains, and on the minimum basis of what they would haul, and also the differences between the cost of a through train, and what you call a train handling pound freight, set-out and set-in freight and local freight, but after we had figured on it all, of course, we couldn't, with mathematical certainty, fix a rate that we could say would be compensatory. We were influenced by many things, and at last, we had to trust largely to experience, to actual test, actual application of our rate, and just as I said awhile ago. I found out that was the way railroads made rates; they put in rates, they applied them, if they didn't make money, they took it down, and put in another, and so on until it did yield a revenue.

Q. What investigation, if any, did you make as to the value of the property, in determining what you thought would be a fair return in the way of compensation?

A. We didn't make any estimate further than that furnished by

the railroads themselves; we included all betterments down to that time, cost of their road; we had no experts, the state didn't furnish us any; we had no money, and it was not practical for us to enter into that inquiry very extensively.

Q. Did you establish any basis as to what would be a fair compensation with reference to the investment, and what the property represents?

A. Well now, there was the Cotton Belt for instance; my
2253 recollection is it had its road down to $86,000 a mile, and the Iron Mountain about 56.

Q. I am not speaking about that; upon what basis of profit or earning, did you assume a fair compensation or return could be made, in the way of percents, say two or three, or four or five or six per cent on the investment represented by the property; what do you consider would be a fair return in the way of profit in per cent?

A. We had to consider what their indebtedness was, of course, and the value of stocks and bonds, and we thought that our tariff would yield a reasonable return.

Q. What did you consider at that time would be a reasonable return on the value of the property?

A. I don't know that we had any discussion among ourselves about any particular figure that it ought to be, but we believed that the tariff was not only a fair compensation for the service, but also, it was a reasonably fair return on the investment; just as I have said, we had no way of arriving at a mathematical certainty in that regard.

Q. What, in the view of the members of the commission, would have been a reasonable return in the way of interest on their money?

A. I would have thought it ought to have been legal interest at least?

Q. That is 6%?

A. Yes, sir, although I believe the courts have held that it must be some return; I don't believe they have said how much it
2254 is; I wouldn't want to be put in the attitude of saying that was right, but my idea is that a man for a large investment, with a return at a low rate on a very large investment——

Q. What I want to get at was the idea of the commission at that time, the idea upon which they acted at that time; in estimating on the rates, whether it ought to be five or six per cent?

A. We didn't figure on that; we thought it would be a reasonable fair return.

Q. I reckon you were pretty careful so as not to make your rates so they would make more than a reasonably fair return?

A. We thought we were pretty liberal; we gave the benefit of the doubt to the railroads.

Q. Have you kept yourself informed as to the relative costs of operating railroads in 1900, with what it is now, that is, the changes that have taken place in the prices of those things that enter into the operation of a railroad; that is the material that enters into the maintenance and betterments, that enter into the operation of a railroad, and the labor?

A. It is very much greater, I know; I have not had any occasion

to think very much about it; I know that everything is very much more costly,—labor is almost double what it was.

Q. The cost of living is very much higher?

A. Yes, sir, the cost of everything is higher; everything
2255 that enters into a railroad, as well as labor; all material has increased in price.

Q. That is true of nearly all industries and manufacturing concerns in the country?

A. No question about that.

Q. Isn't it true, don't you know as a matter of general intelligence and public information, that all the manufacturing and industrial concerns in the country have been obliged to raise the prices of their product and their output, on account of the increase in the expense of manufacturing, growing out of the higher prices?

A. I know that as a matter of general information, yes, sir.

Q. If that is true with other industries, would it not be fair and proper that railroads should be allowed to increase their rates, if the cost of producing the service has increased in proportion to other industries?

A. Most assuredly; I don't think there is any doubt about that

Q. The rule would apply to all industries alike?

A. Yes, sir, but you have got to consider this; now, as the prosperity of the country increases, and the latent energies of the country are roused and resuscitated, that it very materially increases the amount of traffic.

Q. Isn't the effect of that though, if the rates are insufficient, to increase the loss that will grow out of operating at insufficient rates?

A. Yes.

2256 Q. And still on the other hand, it would increase the profit, if the rates were fair and reasonable?

A. Yes, sir.

Q. In that same connection, isn't it a fact, isn't it an axiom that the growth in volume of business isn't profitable unless there is an equivalent growth in the prices that are charged for the output of that business?

A. I think there ought to be some increase in the compensation; that would be my idea, although a part of that increase, as I have just stated, is made up by the increased volume of business, there ought to be some increase.

Q. It is a rule that works both ways, that an increase in production, without a fair and ratable increase in the compensation, would be a misfortune; that is an axiom that you recognize as true?

A. Yes, sir.

Q. And it applies to railroads as to anybody else?

A. Yes, sir, railroads are entitled to share in the prosperity of the country the same as individuals, and ought to share slightly in its diversities.

Q. I want to ask you this question, and I ask it because I want to get your views on that subject, in view of the condition of prices of everything that enters into the construction, operation and main-

tenance of railroads; now, do you believe a rate that would be fair in 1900 would be fair today on the railroads in Arkansas?

A. I am inclined to think that it is more than likely
2257 that the road would be entitled to some increase; however, as I stated awhile ago, they are compensated in the way of an increase in the volume of their business, but still—I will say yes, I think they are entitled to some increase, but I won't undertake to say how much.

Redirect examination.

By Mr. HILL:

Q. Hasn't the capacity of cars increased very largely since 1900?
A. I think so; you mean the carriage capacity?
Q. Yes, sir?
A. Yes, sir.
Q. Very largely?
A. Yes, sir.
Q. Hasn't the power of the locomotives increased very largely?
A. In proportion, I suppose.
Q. Haven't railroads spent a great deal of money in Arkansas in reducing grades and taking out curves?
A. Yes, sir, that is my observation; that is, up this road I live on; I haven't been on any other, in many other parts of the state
Q. Those facts all tend to less the cost of traffic, do they not?
A. Yes, sir, most assuredly; there is a large outlay, however, to make those improvements, but they certainly tend to decrease the cost of carriage.
2258 Q. And of course, you would have a return upon that outlay?
A. Yes, sir.
Q. When you put in this commission tariff in 1900, I suppose engines were very much smaller than they are now, and freight trains very much less in number of cars carried?
A. Yes, sir, I think so; in fact, I know so; that is according to the capacity of the car, very much increased.
Q. Now, when the density of traffic increases, to which you have referred awhile ago, doesn't that lessen the cost proportionately?
A. Well, it lessens the cost; I can't say that it would raise it up to a given increase; it is hard to figure on these things.
Q. Take for instance in 1900, that a freight train drawing 15 cars, that was all the load it had, and it served to carry all the traffic of that day upon its run, and today that engine would be carrying 30 or 35 cars, on account of the increased volume of the traffic, and those cars would be very much larger than they were then, wouldn't the cost of that transportation be lessened by reason of those facts?
A. Compared with the amount, it would be very much lessened.
Q. Per ton per mile, reduced to that basis.
A. Yes, per ton.
Q. When you consider whether the rate should be higher or lower

than it was in 1900, on account of the increase in *in* wages
2259 and material and various other matters, you have mentioned, you should also consider whether or not this increased traffic and increased minimum in hauling that traffic, hasn't counter-balanced that, should you not?

A. Yes, sir, but you have to take into consideration also in getting at a basis, the increase in price as well, material and labor and everything of that sort.

Q. On the other side, are these other things and probably many more than I have mentioned?

A. Yes, sir, there are many things to be taken into consideration; all we know today is it is increased, but it would take a very thorough expert to figure out what ought to be the increase, and what is the increase in the cost.

Q. And in adjusting rates, those two effects should be taken carefully into consideration?

A. Yes, sir.

Q. If a railroad was making all of its fixed charges, paying 6% interest on a very large bonded indebtedness much larger than its assessed valuation, and paying 10% annual dividends upon a very large capitalization, very much larger than its assessed valuation, would you think that road needed any increase of rates?

A. I would not think so, no, sir.

Recross-examination.

By Mr. MOORE:

2260 Q. Judge Hill called your attention to large expenditures which were made, which resulted in increased facilities, made by railroads in conducting their business; you would say, wouldn't you, that railroads were entitled to a fair return on the additional investment that is represented by those additional matters?

A. Yes, sir.

Q. It is evidence in this case, that there has been really millions of dollars spent on these railroads, and that no doubt those improvements have increased the efficiency of the properties, but it would be a very unjust rule not to allow them a fair return on the money invested?

A. Yes, sir, they ought to have a return on the betterments, of course.

Q. Another thing, there are two sides to every question; your attention was called to the enlarged capacity of locomotives; it is a fact that it does not require an expert to know, that as you increase the size and capacity of locomotives, that you increase the cost of operating them,—fuel and water, etc.

A. Yes, sir, it might not be in proportion, but it would increase it some.

Q. Your attention has been called to the fact of the enlarged capacity of cars; now it is in evidence in this case, that every car, large or small, is what is called dead weight; it is non-remunerative;

it is hauled frequently empty; every car is a certain weight,
2261 independent of its remunerative tonnage; all that is included in dead weight; now, as you increase the capacity and the size and the value of cars, the cost of dead weight and the cost of hauling them empty is increased to some extent?

A. Yes, sir.

Q. You consider it fair to take all those and many others that I shall not enumerate into consideration?

A. Yes, sir.

2262 W. E. FLOYD, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. State your name, residence and occupation?

A. W. E. Floyd, secretary of the railroad commission, Little Rock.

Q. Have you custody of the records of the Railroad Commission?

A. I have.

Q. I had Mr. Swaim to put in evidence in his testimony statements from the records of the Railroad Commission of various changes that had been made by the Railroad Commission between July, 1903 and September, 1908, which reduced or tended to reduce the freight rates,—revenue—I have asked you to prepare data from the records of the commission of various petitions that were presented to the railroad commission, within that time, which did not result in reducing the rates; I ask you if you have prepared that?

A. Yes, sir, I have.

The statement containing summary of the orders is hereto attached as a part of this deposition, and marked Exhibit "D", and the summary is herein accepted by the plaintiffs, the same as if the original records were copied, subject to all objections as to competency and relevancy?

For Exhibit "D", see Volume 9, page 5772.

2263 J. G. WALLACE, being recalled, deposed as follows:

Direct examination.

By Mr. HILL:

Q. You stated to me this morning that you wanted to correct a statement that you made yesterday, and I would be glad to give you an opportunity to do so? What was the matter?

A. Mr. Moore asked me the following question yesterday; in substance: Does the intrastate rate influence the interstate, or does the interstate or intrastate rate—does it influence the interstate rate, and if so, how? I did not understand, my hearing is not very acute, I did not fully comprehend the question; I got started off wrong and got confused, and got mixed up with the long haul, and I wanted an opportunity to answer that question, to correct my answer this

morning. My answer is yes, it may in some instances do so; to illustrate, prior to the promulgation of the commission's tariff, the Frisco Railroad had interstate rates effective at stations in Arkansas, north of Ft. Smith; that is on its line north of Fort Smith, with which the Ft. Smith jobbers could not compete; it gave the Missouri points practically a monopoly of that trade, or at least it was so represented to the commission. The effect was to give the
2264 trade to Missouri points, and stations on the line of the Frisco, north of Ft. Smith; as a consequence, the Commission's tariff had the effect—its local rate which was effective anywhere in Arkansas,—had the effect to just reverse the order of things, and transfer that trade at all stations north of the line practically to Ft. Smith, and then, of course, the Frisco would have had to lower its rate from St. Louis and other interstate points in Missouri, north of the Arkansas line, in order to have enabled those interstate merchants,—that is, interstate as to us, to compete with the Ft. Smith jobbers; now, the same condition of things was applicable in some instances, as to a portion of the traffic of all through long line roads. The effect of it would be, of course, not necessarily as I understand it, reducing their revenues or income, but lowering the rate so as to give Arkansas competitors, as to all that traffic an advantage, while between Fort Smith and north of the Arkansas Line——

Q. If I understand you correctly, it is about this, that in certain trade centers; the intrastate rate will influence the interstate rate, but it is not necessarily a reduction, but a readjustment of the revenue, whether it shall be intrastate or interstate; is that the idea that I gather from you?

A. It is not necessarily a reduction; it is a reduction of the rate, it is not necessarily any encroachment upon the revenues;
2265 they might make more money as a consequence, or they might lose.

Q. It amounts to this, that whatever influence an intrastate rate may have upon an interstate rate, it is an influence in the distribution or re-distribution of the revenue, rather than a change of the revenue itself?

A. Yes, sir, a legitimate distribution of the burdens of transportation, which we all have to bear more or less.

Q. There was one question I wanted to ask you yesterday, and forgot it, and that is, whether this clause in your tariff, requiring the lower rate to be taken where there was a lower rate prevailing, had the effect or was intended to have the effect of continuing the special rates and jobbers' rates of various kinds that had been in effect before the commission tariff was promulgated?

A. I have not looked at the tariff for a long time, in a good many years, have not refreshed my memory; I should have before coming here to testify, but have not, but I can state in most unqualified terms, that no road, neither did any road so understand it, that they could vary their rates from those rates, only where the circumstances were exceptional; now, if there was water competition, they were at liberty to adopt the water rate to compete with it, but if they adopted

it as to one shipper, they must adopt it as to all, and where there were competing lines, take Fort Smith, there is two roads leading
2266 from Fort Smith to this point; the long line road might adopt the short line mileage, and again, occasionally there was a man that wanted to move, change his place of residence forty or fifty miles, and he had a cow and a horse that he wanted to take, and he could load his chattels, and if he didn't have enough for a carload, didn't justify him to get a car, why that we considered to be, we found decisions in exceptional cases, and allowed the road to give its own rate, with the condition, however, always that they gave everybody under like circumstances, and similarly situated, the same rate.

Q. That was intended and was not construed by the railroads, as a continuation of any of the special rates or jobbers' rates, or local rates?

A. No, sir, not at all; I don't think a railroad man so understood it; I never heard of such a construction being put upon it.

Cross-examination.

By Mr. MOORE:

Q. After Mr. Hampton became a member of the commission the shippers and jobbers of Texarkana made an application to the railroad commission to reduce the rate on sugar by putting in a maximum rate for 300 miles, reducing it to 13 cents,—it had previously been 15 cents—the Texarkana merchants were com-
2267 plaining of the rate to New Orleans; that rate had been fixed by the Kansas City Southern Road, which was the most direct route shipping by Shreveport from New Orleans to Texarkana, in order to accom-odate those merchants the commission did make a reduction of the maximum rate on sugar in this state, of two cents a hundred, reducing it from 15 to 13 cents; Mr. Hampton made a statement that there was no traffic in this state on sugar, originating in Helena, but it came from other points outside of the state; the object of making that rate was to influence the interstate rate and bring it down, and it did have that effect, because the rate from New Orleans to Helena was 10 cents; under their order from Helena to Texarkana, it was 13 cents, the sum of the locals being 23 cents and did have the effect of reducing the rate from New Orleans to Texarkana on the Kansas City Southern from 25 to 23 cents; that illustrates, doesn't it, the manner in which the reduction of intrastate rates affects interstate rates?

A. Yes, that is true, but then a shipper may always take advantage by reconsignment, etc., and avail himself of the lowest rate.

Q. That is the reason the sum of the locals controls?

A. Yes, we had some trouble on that line, before I went off the commission; we never could get the Texarkana people—that happened after I went off the commission, Mr. Hampton you
2268 stated was on the commission after I went off—we tried to effect that arrangement before I went off the commission; we couldn't handle the Iron Mountain; they had been shipping heretofore, and reconsigning from Helena, but I believe there was no com-

petition with the Iron Mountain at Helena, and from some cause or other, if it had competition, we couldn't get it to compete with it on that line, so we considered that legitimate for the shipper to avail himself of the lowest rate, and he might, by taking the combination of the locals, get a lower rate than the through rate in some instances; ordinarily, such would not be the result.

Redirect examination.

By Mr. HILL:

Q. You say you tried to effect that sugar readjustment, did you think that the rate to Texarkana was too high? Was that the cause of it?

A. Yes, we tried to effect it to the Texarkana market also; we thought the sugar rate in here was too high, and naturally, we tried to effect the very arrangement that I suppose was afterwards effected by Mr. Hampton, after he came on the commission.

Q. Didn't you find the sugar rate operating very unequally in different parts of the state?

A. Yes, sir.

Q. And it was to correct that inequality, as well as to
2269 get a better rate, that you were anxious to effect that readjustment?

A. Yes, sir.

2270 J. D. WATSON, being recalled for the defendant, deposed as follows:

Direct examination.

By Mr. HILL:

Q. Have you, since I requested it, examined the various interstate tariffs that were promulgated by your road since the injunction became effective Nov. 2nd, 1908?

A. I have.

Q. Can you state generally what changes have been made in the interstate rates, since November 2nd, 1908?

A. The interstate rates to the State of Arkansas, as a whole, have been changed to the extent of eliminating the less than carload commodity rates, which were in effect within the state, prior to the date of the injunction.

Q. When was that made effective, the change that you are referring to?

A. From St. Louis to points in Arkansas, it was effective on our line February 1st, 1909.

Q. Was that the first change that was made in the interstate rates after Nov. 2nd, 1908?

A. It was the first change to local points, not the first change to common points.

Q. When did you make your first change to common points, after November 2nd?

A. Effective Nov. 29, 1908.

Q. That was the date of the changes to common points,
2271 was it?

A. Yes, sir. Now, that is not a general change; you asked for the first change.

Q. Was that a change of any considerable extent, I am speaking generally, of the volume of the traffic?

A. No.

Q. Was the change of February 1st of any general extent?

A. The first change of any general extent to common points was effective Dec. 30; the first change made to local points was effective on our line, Feby. 1st.

Q. Now, were there any other changes,—that is changes of moment—I do not want to go into any small details, up to June 1st, 1909?

A. To common points, yes; for local points, no.

Q. When was the change to common points after that, of any extent?

A. The changes were being made just as fast as the supplements could be issued, and there was a supplement issued every thirty days, starting in on Nov. 29th, 1908, and every thirty days up to that time, up to date, and they are still being made.

Q. That is the common practice at all times?

A. Yes, sir, the changes in this supplement are incident to changes in state adjustment, as they are found, and as they are checked; there are many thousands of these rates.

Q. Now, I wish you would approximate, if you can, the extent of the changes as affecting the volume of traffic, from Nov.
2272 2nd to June 1st, 1909? How much of the volume of the traffic was affected by these changes?

A. It would be impossible for me to give you a definite percentage of the volume, but I can say, in a general way, a large volume.

Q. You could not give any approximation?

A. No, it would be impossible; I might explain the reason why; I cannot give you that statement; the volume of traffic, less than carload, as compared with the carload tonnage, is a very hard factor to determine. The less than carloads are affected, and some carloads; the majority of the rates that were affected were less than carloads, to local points.

Q. Then, your changes of the rates from Nov. 2nd to June 1st, were principally of the L. C. L. rates?

A. Yes, sir.

Q. There was no material change, during that period, in the carload rates; that is, material as affecting the volume of your traffic?

A. I couldn't answer that without checking the record, to determine that definitely.

Q. After June 1st, for six months say, what was the extent of the changes in the interstate rates?

A. I believe that from June 1st, for the following six months, from June 1st, 1909, for the following six months, the changes were as much or more than for the preceding six months.

Q. Were the changes from June 1st, for the ensuing six
2273 months, reductions or increases, generally speaking?

A. The majority of them were increases.

Q. Were there any reductions of any moment, from June 1st, 1909 to January 1st, 1910?

A. I don't know what you mean by "any moment;" reductions were made where it was found that some error had been made in readjusting the rates to the new conditions.

Q. That would be of some detail; I mean anything that would materially affect the revenue of your road?

A. I don't believe so.

Q. Before the injunction became effective, was there an effort made to adjust the interstate rates to the proposed intrastate rates that were put out by the railroads?

A. The time was too short to accomplish the changes incident to the new adjustment, but an effort was made.

Q. Do you know Mr. E. K. Vorhees?

A. I do.

Q. What position does he occupy?

A. General Freight agent of the Frisco system.

Q. I want to read you a statement from an affidavit filed by him in this court, on motion to modify the injunction in this case:

"Affiant further states that he was directed and instructed to co-operate with the officials of other Arkansas railroads, and to discuss and consider with them in conference, a schedule of rates that should be operative within the State of Arkansas, in lieu
2274 of said Standard Freight Distance Tariff #3. Affiant states that early in September, 1908, he met representatives of every traffic department of other railroads operating in the state, in conference, and the said conference remained in session about fifteen days, and as a result, the representatives of each line recommended to his company the adoption of a schedule of changes to apply within the State of Arkansas, in place of said Standard Freight Distance Tariff #3. Affiant states that the chief traffic officials of the lines named, gave careful consideration to the schedule that was recommended, and that before any schedule was adopted and published by the several lines, conferences were held with a large number of Arkansas shippers who would be affected by the changes of rates, and also with the railroad commission of Arkansas; that all objections from all said shippers and receivers, or the railroad commission of Arkansas, were given due and proper consideration, and a number of modifications were made in the rates first recommended, before they were afterward made effective by the several railroads, on Nov. 2nd, 1908. Affiant states that the representatives of the several lines discuss- and considered the relations which should exist between the several class rates, and after much study and comparison with the rates in other states, and the class rates applying on inter-state traffic in various portions of the territory west of the
2275 Mississippi River, and other elements affecting the fixing of class rates; it was decided to recommend that the various

classes should bear the following relation to each other," and then it sets forth the tabulation, which I will omit:

"Affiant represents that this decision was reached only after full discussion by representatives of the several lines, and that such recommendation was adopted by the chief traffic officials of the several railroad companies only after careful consideration, and affiant says that the relation of class rates resulting from the application of this principle, is fair and reasonable and just, as applied to traffic within the State of Arkansas."

Were you present at this conference to which Mr. Vorhees is referring?

A. I was.

Q. Is this a correct statement of what took place in this conference?

A. Yes, without the detail.

Q. Did you, in this conference, consider the interstate rates as well as the intrastate rates, when you were fixing the tariff which became effective Nov. 2nd?

A. We did.

Q. Did you attempt to adjust the relation that should be obtained between the state and interstate rates, in this conference?

2276 A. We cerainly did.

Q. The interstate tariff which was issued by your company in November or December, attempted to reflect the interstate rates as readjusted to the state rates, which you made effective Nov. 2nd, wasn't it?

A. As far as was possible to do so, yes; it is impracticable to adjust rates with only one factor, that factor being the state rate; there are a great many other considerations that move the adjustment of interstate rates; the state rate is one of them.

Q. What are the other considerations?

A. Commercial conditions; the long and short haul, the competition; that is a few of them.

Q. Explain just what effect the long and short haul would have in this connection?

A. It would be rather difficult to establish a higher rate for a short haul than for a long haul; if you operate the short haul upon a lower rate than the long haul, or if the long haul point happens to be reached by the short haul road, making it a short haul by one line and a long haul by another line, that makes quite a difference.

Q. That brings the proposition back to short line competition?

A. No, it brings the proposition back to conditions which are governed by the situation or location of railroads, the point of origin and point of destination.

Q. There were no changes in the location of your railroads between Nov. 2nd and June 1st, were there?

2277 A. You have evidently misunderstood my answer.

Q. What do you mean by the "location?"

A. I can possibly best explain it to you by giving you the points of distinction; we are short haul probably from Memphis to Pine Bluff; the Iron Mountain is long haul; that is the two lines at Pine

Bluff. At Little Rock, we are the long haul; the Iron Mountain is next, and the Rock Island is shortest.

Q. And if there would be a still shorter line built——

A. The still shorter line would make the rate.

Q. If a still shorter line would be built, you would have to readjust your conditions to meet that shorter line?

A. Yes, sir.

Q. There was nothing of that kind requiring readjustment, from Nov. 1908 to June, 1909?

A. No, sir, there was nothing of that character.

Q. Did I understand your statement to be, that from Nov. 2nd to June 1st, the principal changes were in regard to the L. C. L. rates?

A. That, I believe, was my statement.

Q. You could not approximate the extent of the other changes, but think they were proportionately speaking, small, as I understand it?

A. As affecting rates, yes; of the volume of traffic, I could not say.

Q. Well, it is the revenue feature of it that I am inquiring about?

A. I understand.

2278 Q. Could you give me an estimate from your experience, as to the volume of traffic intrastate, which moves under the class rates,—that is, L. C. L. and carload both?

A. You mean under the Standard Freight Distance Tariff?

Q. Yes, take it under the Standard Freight Distance Tariff?

A. It was very small.

Q. The volume of traffic that moved under it was small?

A. Yes, under class rates.

Q. Under both carload and less?

A. Yes, for the reason that the object of the Standard Freight Distance Tariff appeared to be to establish commodity rates to cover all given commodities, carload and less.

Q. Could you approximate the proportion of the movement into the state, under the class rates, and under the commodity rates? Have you ever figured on it, or given it any thought?

A. No, sir; I have given it considerable thought and figured on it, but it was impossible to arrive at it, without getting figures from the accounting department, and it was too voluminous a task; I have never attempted to get the figures.

Q. It would be impossible then for you — make even an approximate estimate?

A. One that would be of any service to you, yes.

No cross-examination.

2279 R. E. KIMBALL, being first duly sworn and examined, deposed as follows, being recalled:

Redirect examination.

By Mr. HILL:

Q. I requested you, when you were last here, to make a calculation, assuming the 96.1% increase in state freight and 9.4 increase in interstate freight, had been effective during the last six months of 1907, per ton per mile, and to make a calculation upon the apportionment of the expense between state and interstate traffic, as shown in your exhibit, covering that period, so as to show the decreased amount apportioned to interstate traffic under the supposed increase, and the increased amount apportioned to state traffic, under the supposed increase. Have you made that calculation?

A. I have, yes, sir.

Q. Will you attach that as Exhibit "E" to your testimony?

A. Yes, sir.

For Exhibit "E," see Volume 9, page 5778.

Q. I see from examining Exhibit "E," that you have made your calculations upon the basis that you have made your exhibits in this case, and also as the increases are illustrated in Exhibit 23; that is correct, isn't it?

A. Yes, sir.

Q. I will now ask you to state the result of that calculation in dollars and cents, the increased expense apportioned to state traffic, as shown by Exhibit "E"?

2280 A. Under Exhibit "E," the assumed basis shows the state freight expense, arrived at on a straight revenue basis of $148,796.45, for the period, July to December, 1907, inclusive. The actual figures for that period, as shown by Exhibit 33 were $89227.28.

Q. Showing an increase of how many dollars?

A. $59,569.17.

Q. Now, showing in the same way the decreased amount apportioned to interstate?

A. Under Exhibit "E," which is the assumed basis, the expenses apportioned to interstate freight, is $766,310.87, and under Exhibit 33, the expense apportioned to interstate traffic, which is on an actual basis and straight revenue being used, $823,408.60; the difference being a decrease of $57,097.73.

Q. By the "actual," you mean the actual revenue shown by your Exhibit 33, that you earned without the increase assumed which I have put to you to work out this problem?

A. Yes, sir.

Q. It is in evidence, that after the two cent fare was enjoined, that there was an increase in the passenger rate to 3 cents in most instances, but averaging about 35% in the passenger rate, by the railroads; it has been shown that the rates applied by the Cotton Belt on freight traffic in January, 1909, show an increase over those

in effect during the last half of 1907, of 96.1% on the state and 9.4 on the interstate? Applying these increases to the traffic,
2281 both passenger and freight, for the six months ending December 31, 1907, and using the gross revenue so ascertained, to divide the actual operating expenses of that six months, and also dividing double the assessed valuation on the same basis of your property, I wish you would state what would be the return on your property on that assumed basis, on the state traffic, and to save you the trouble of making the calculation, I wil hand you a calculation and you can see if that is correctly made?

A. I would like to have a little time to figure it.

Q. In page 2 of Exhibit 3, filed by Mr. Johnson, it shows the return on double the assessed valuation of the Iron Mountain, resulting from the operations of that line the last six months of 1907, but your exhibit does not make a corresponding statement, and I want you to attach as an exhibit, a corresponding statement to that, and we have prepared that here; I will submit it to you for your examination; it is just bringing forward in this form, your own exhibit.

A. I will want a little time to figure that.

Further examination postponed.

2282 R. T. BROOK, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. What is your name, residence and occupation?

A. R. T. Brook, Miller, Little Rock, Ark.

Q. How long have you been engaged in the milling business?

A. I am a miller and grain man, and have been engaged in the grain business since 1898.

Q. Are you familiar with the grain elevators in this country, and their value, and grain elevators generally?

A. Yes, sir.

Q. It is a part of your business to be familiar with the values of them?

A. It is.

Q. Do you know the elevator situated in Little Rock, commonly known as the Bunch Elevator?

A. In Argenta?

Q. Yes.

A. I do, it is a mill and elevator.

Q. Do you know about its value?

A. The value today would be about $186,000, that is the mill, elevator and warehouse.

Q. Do you know about its value in 1907, say the last half
2283 of 1907?

A. It is about the same; I don't think there was very much difference in machinery at that time.

Q. Do you know whether that was a public elevator, during the last half of 1907?

A. It was a private elevator.

Q. I wish you would state your opinion of the rental value of that elevator property, taking the entire property?

A. The mill, elevator and warehouse rental value, reasonable rental value, would be about $20,000 a year.

Q. In 1907, what would it have been?

A. Same thing.

Cross-examination.

By Mr. MOORE:

Q. How long have you been engaged in business in Little Rock?

A. About four years and a half, since October 1st, 1905.

Q. And where did you do business before you came here?

A. Oklahoma.

Q. What was your business there?

A. Grain business, and interested in a mill; elevator business and mill business.

Q. Did you rent an elevator there?

A. No, I had one of my own.

Q. Did you ever rent one?

A. No, I didn't rent an elevator.

Q. Never rented one as lessor or lessee?

A. No, sir.

2284 Q. Have you any knowledge of the cost of the elevator in Argenta?

A. Only the cost which I acquired during a suit which I had against the Iron Mountain, the actual cost as shown in that suit; the cost of that elevator came out in that law suit.

Q. Was it as much as you have estimated the value here?

A. Pretty close to it; let's see; it was $106,821.76., and there were additions made since that time; a drier was put in, corn drier put in, amounting to about $50,000 odd dollars.

2285 C. W. LEWIS, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would state your name, occupation and residence?

A. C. W. Lewis, I am in the lumber business, living at Benton, Ark.

Q. How long have you been engaged in the lumber business, Mr. Lewis?

A. About ten years.

Q. Are you familiar with the rates on lumber that prevail over this section of the country?

A. Yes, reasonably so, I could name quite a few of them.

Q. I don't mean the detail so much as I do the general system of rates? Are you familiar with the general system?

A. Reasonably so.

Q. I hand you two maps, representing the zones in which lumber originates, and in which it is shipped; they are exhibits 39 and 40 in this case; I ask you to examine them—you have already looked at them, and I will ask you if you are familiar with the system that is shown in those maps?

A. I think so, yes, sir.

Q. Is there an additional zone on the east side of the river?

A. There is a blanket rate applies over here on the east side of the river.

2286 Q. On the gulf coast?

A. Yes, sir.

Q. Mississippi?

A. Yes, sir, and part of Louisiana, on the east side of the Mississippi River.

Q. And directly east of the zone that is shown on that map?

A. Yes, sir.

Q. Now, where is that zone rate to?

A. St. Louis.

Q. How does it compare with the zone rate which embraces Arkansas?

A. 2 cents lower than the west side.

Q. Then, they haul the lumber from that zone——

A. In Louisiana and Mississippi.

Q. To St. Louis, lower than they do from Arkansas?

A. 2 cents lower, yes, sir; 16 cents over there and 18 over here.

Q. Where is the market for the lumber that is produced in Arkansas, pine and cypress, I am speaking of?

A. Largely in the northwest territory.

Q. You mean the territory here indicated on this exhibit 39?

A. Yes, sir, largely.

Q. Are there heavy shipments into that zone from Arkansas?

A. Yes, sir, the shipments from Arkansas go into that territory very heavy.

Q. That is not a paper rate, it is a real rate?

A. Yes, sir, and it goes over here into Illinois, Indiana, and Iowa.

2287 Q. That proceeds under this zone rate, that is indicated on exhibit 40?

A. Yes, sir, that territory is practically all 8 cents beyond St. Louis.

Q. It is first predicated on 18 cents to St. Louis?

A. Yes, sir, it goes clear through to Chicago on 8 cents beyond, 26 cents; that territory up there is practically all covered by one rate.

Q. The question I want to direct your attention to particularly, is this; does the lumber really move from Arkansas under these zone rates indicated on these maps, or are they partly paper tariffs?

A. Well, it largely moves on those rates; of course, there are a great many of the mills have a tap line road that throws it lower.

Q. We will get at that as another proposition; I am speaking of the actual movement from Arkansas.

A. They largely move on the tariffs, as far as I know, on the published tariffs of the companies.

Q. Into these zones?

A. Yes, sir.

Q. Those zones then, largely represent the market that is found for the Arkansas pine and cypress?

A. They represent quite a good deal of the territory into which it goes.

Q. I don't mean all of it; a large movement is represented by it?

A. Yes, sir, quite a lot of it goes into that territory.

2288 Q. Are there other zones in the neighborhood of these exhibits on these maps, that take the same rate or practically the same rate?

A. Yes, sir; of course, the Oklahoma rate is not so much of a blanket rate as the other; Illinois, Iowa and Indiana take pretty nearly the same rate, little difference in it, doesn't amount to very much.

Q. Now, you referred to the tap lines; I wish you would explain how the lumber is handled over the tap lines, and what you mean by tap lines?

A. We don't own any tap lines; we don't own any railroad, but the tariffs show a differential for the smaller roads throughout Arkansas, that give them a part of their haul, running from 3 to 6 or 9 cents difference.

Q. That is, a small part of this 18 cent rate or 23 cent rate, is divided with this small line?

A. As I understand it, yes; I am not very familiar with that business; we don't own a railroad.

Q. Well, you may not be familiar with the detail; you know that is done?

A. Yes, sir.

Q. To illustrate that, suppose that a large sawmill had a road five or ten or fifteen miles long, and it shipped lumber, or logs first into its mill, and then the lumber on into St. Louis, how would that be divided?

A. It takes the same rate from the end of their road that it would from the main line, and then they are allowed a differential, whatever their arrangement is with the railroad; the differential

2289 runs, as I understand it, all the way from two to six cents.

Q. That is more a division of the rate than it is a differential, isn't it?

A. They have called it most anything.

Q. There is no increase in the rate, by reason of its being divided with the tap line?

A. No, it is the same rate; they have called it differentials, and rebates, and everything; I don't think anybody knows just what it is.

Q. Now, what we are particularly trying to find out in this case, is the cost of service and the revenue producing the rate; I want to know what would be the difference in cost, say that a shipment originated in the woods on some tap line, and was carried to St. Louis at 18 cents, and another shipment originated at your mill, and you say you have no tap line—that goes into St. Louis, and suppose the tap line joined the main line just where your mill is, what difference would there be to the Iron Mountain Railroad, if you were on that road, in hauling two cars of lumber, one from your mill and one from the other mill?

A. I don't think there would be any difference in the cost of transportation, so far as the Iron Mountain is concerned.

Q. What would be the difference in revenue?

A. For the Iron Mountain you mean?

Q. Yes, sir.

A. The difference in revenue would be whatever they would pay a tap line, whatever it might be; those tap line divisions
2290 don't all run the same; some fellows are able to squeeze more out of them than the others are.

Q. There is a variation on the revenue of the amount paid to the tap line?

A. Yes, sir.

Q. Does this division principle also apply to different railroads; suppose that lumber was shipped into Alexandria on the Iron Mountain from some other road——

A. They publish a through tariff and divide it up; yes, the same rate is applied, the same as in going over three or four railroads.

Q. And suppose that there would be two cars of lumber shipped via the Iron Mountain from Alexandria to St. Louis, and they would get the 18 cent rate, as I understand it; one of those cars originated at Alexandria, and was delivered to it there; the other originated at some other point on some other railroad, and was delivered to it at Alexandria, and those two cars were hauled to St. Louis together: as far as you can say, would there be any difference in the cost of service in hauling those two cars?

A. No, sir.

Q. Would there be any difference in revenue?

A. Of course, if the Iron Mountain started the shipment and carried it all the way, there wouldn't have to be any division, they wouldn't have to divide it with anybody else.

Q. That is the illustration I gave you of one car, and the other car they would divide that with the road that brought it in?

2291 A. Yes, sir, the one they hauled on their own line all the way, they wouldn't have to divide.

Q. Is there much lumber shipped that way on divisions?

A. Practically all the big mills, they get a division, as far as Arkansas is concerned; practically all the big mills have short lines of railroad, that is owned and operated by the same people, but of course, it is a separate corporation and the saw mill does not get any rebate, but the railroad gets the division.

Q. And the lumber that is furnished by the small mills and

not furnished by other railroads, produces a greater revenue to the Iron Mountain, or whatever the particular carrier is, to the final destination, than those shipments that originate on the tap lines and the other roads?

A. Yes, sir.

Q. Now, in shipping lumber from Louisiana territory into Little Rock, what would be the rate?

A. My recollection of that rate, I would not like to be absolutely sure about that, but my recollection of the rate is, it is 22 cents into Little Rock.

Q. Then a car of lumber originating down in Louisiana—say two cars originating in Louisiana, one destined to St. Louis and one destined to Little Rock, hauled in the same train, they would get 22 cents for the one to Little Rock, and the other car, they would carry it to Little Rock, and detach it from the other car and carry it to St. Louis for 18 cents; is that the situation?

2292 A. Yes, sir, that rate as I understand it, is in there for the purpose of protecting the territory near to Little Rock; Louisiana cannot very well sell any stuff in this territory, on account of her rates; she can go to St. Louis as well as the rest of us.

Q. How about protecting the revenue?

A. I don't know about that end of it.

Cross-examination.

By Mr. MOORE:

Q. What is the reason for the establishment of zone rates on lumber from Arkansas territory into these northwestern points?

A. Well, I really don't know that I know just what the reason is.

Q. It is in pursuance of some policy?

A. I suppose, I judge you would call it a policy of the railroad; I know no better name for it; it is a blanket rate covering certain territory.

Q. Do you know what causes railroads to give those blanket rates?

A. I could hardly say that I know just what causes it.

Q. What is your understanding about it?

A. My understanding of the matter is that those rates were put in—in fact, I think that is the way—that those rates were put in when railroads first built in here; it opened up new territory, and it was figured out on some sort of a basis, to get stuff to market, and they just simply figured about what the commodity would

2293 stand and took their wad, so that the other fellow could just about break even.

Q. What do you mean by that, "about what it would stand"?

A. For instance, four years ago, when the price of lumber was up, they raised the rate; the commodity and rate runs about together; the manufacturer gets about as much as the railroad does.

Q. Isn't one reason for that adjustment, that it enables the manufacturer to do business?

A. Yes, possibly, that evidently has something to do with it; if

the rates were all the same, and all things being equal, of course, it would put the manufacturer on an equal footing——

Q. Isn't that one of the objects of it?

A. I presume so.

Q. What would be the effect of putting rates on a mileage scale, and charging according to the distances on the lumber industry in this state?

A. Of Arkansas?

Q. Yes.

A. It would help Arkansas.

Q. What effect would it have on territory south of Arkansas?

A. Really, I don't know; it strikes me it would not hurt that seriously, because they could get it down to the gulf and export it.

Q. How are those zones to the northwest situated, with reference to other lumber producing territory; is there any other
2294 lumber producing territory that can serve those markets in these zones than the Arkansas, Texas and Louisiana territory?

A. No, not unless they went west.

Q. What territory is there west?

A. They would have to go west of the Rocky Mountains, and that is a long freight haul, too.

Q. If the railroad would apply mileage scale rates, what effect would it have on the carrying business of the different lines of road in this state, say the Iron Mountain road and Chicago, Rock Island & Pacific Railroad; which of those two lines has the shorter haul to St. Louis for lumber?

A. Without looking it up closely, I would say the Iron Mountain has.

Q. What effect would the mileage scale have upon the ability of the Rock Island road to deliver lumber in St. Louis, if that is the case.

A. It might make the rate a little bit higher from Rock Island points; if it was figured on an exact mileage basis.

Q. That would be prohibitory, wouldn't it, for business on the Rock Island, if the rates were higher?

A. I don't know; not necessarily; they don't maintain the same rate now; the Rock Island, in some instances, gives two cents, where the Iron Mountain gives four or five to the tap line.

Q. Give me some instances in which you say there is a
2295 larger amount given by the Iron Mountain than the Rock Island?

A. This Fourche River & Indian Territory Railroad up here, that taps the Rock Island at Bigelow, according to the testimony of one of their men in court a few days ago, runs from 2 cents to Memphis, to two to Cairo, I believe, 3 to St. Louis, four to Kansas City, and 4½ to Oklahoma points west.

Q. You mean that is the division given the tap line?

A. That is the way I remember it.

Q. What tap line is that?

A. That is the Fourche River & Indian Territory?

Q. What is the length of that tap line?
A. I suppose they have 20 miles.
Q. Now, give me an instance on the Iron Mountain on all fours with it?
A. I haven't the evidences strong on that, but I am informed that the Grayson-McLeod road, St. Louis Southwstern,—what is the name of their tap line road they had down there——

Mr. HILL:

Q. Arkansas Southwestern?
A. Yes, sir, it is a part of the Iron Mountain now, but a few years ago, Mr. Grayson told me they were getting four cents.

Mr. MOORE:

Q. I want to compare the two at the same time.
A. The fact about it is I haven't got those rates.
Q. If you haven't got the rates on both lines themselves, you can't really testify about that, can you?
2296 A. I am only testifying as I understand them, and have picked it up; I am not absolutely positive about it.
Q. Your understanding on the old Grayson road, it was owned by a different interest from the Iron Mountain several years ago?
A. Yes, sir.
Q. What was the length of that line?
A. At that time, about 12 or 15 miles, it is longer now.
Q. What is the most direct and shortest road from this territory to the Kansas City market?
A. I really don't know.
Q. Which is the more direct, the Iron Mountain or the Rock Island?
A. I really don't know; one reason we never paid much attention to the direct road in shipping the stuff, was because they had the same rate both ways, I really couldn't tell you just exactly about those rates because I have never thought about them very seriously. It was a flat rate, and it never made much difference, if they carried it clear around the world, just so they got it there.
Q. It is a fact, isn't it, among competing railroads, the one that has the shortest line, if the rate is based on a mileage scale, can oust its competitors?
A. That would depend somewhat on the supply of the commodity.
Q. Assuming there is a supply.
A. Assuming that each had the same chance at the commodity?
Q. Of course, I assume that.
2297 A. That would be true, yes.
Q. But for this blanket arrangement that would be true as to the roads that hauled lumber out of Arkansas to the northeastern markets?
A. That might be true.
Q. Have you ever made any complaint that these rates were too low?

A. No, sir, never have.
Q. Do you think they are too low?
A. Which rates do you mean?
Q. The lumber rates in these zones?
A. You mean to St. Louis?
Q. Yes?
A. No, sir, I never complained about them being too low; I grumbled about them being too high.
Q. Do you think they are too low?
A. I think they are too low for the other part of the territory at least.
Q. I mean with reference to the services rendered by the railroad in transporting them, do you think they have put them too low so they cannot make anything on them?
A. No, I don't think they would put them where they couldn't make any money.
Q. I want to ask you a little more about these tap lines, describe to me just what they are, what is the arrangement of the tap lines?
A. Since we never did own one, I don't know whether I could be very minute in my descriptions of those things or not. It is
2298 only in a general way I know anything about them.
Q. What is the length of those tap lines?
A. They are supposed to be roads originating the product; that is, they go out and those tap lines run out into the timber and bring in logs; sometimes, the mill is located on the road; sometimes at the junction; the tariff is made to cover everything that goes off of that road; it goes from the junction point; supposed to be just what goes off the road; in fact, it is everything that the sawmill can buy; it is only supposed to be everything that originates on the road; everything they ship is billed off the tap line; if they could get a differential, they would be very foolish not to take it.
Q. Tell me the length of those lines?
A. They vary anywhere from five to twenty-five of forty miles; the Fourche River Railroad is chartered for forty miles; they built about twenty-five.
Q. What is the length of the Arkansas Southwestern?
A. It is quite a road now; it goes away out into Montgomery County, must be fifty or sixty miles.
Q. What service do those tap lines render to the main lines?
A. They really originate the stuff; they get the timber, the lumber.
Q. And haul it to the junction points?
A. Yes, sir.
Q. Who owns the line?
A. Usually they have a corporation that owns them; they are owned by the railroad corporation.
2299 Q. They are owned by different individuals from the main line?
A. Yes, sir, usually the same people who own the saw mills.
Q. They are usually incorporated railroad companies?
A. Yes, sir.

Q. Operating in that line of business?

A. Yes, sir.

Q. And they originate this freight and carry it to the junction point on their own rate?

A. Yes, sir.

Q. What other service do they render besides simply transporting it; do they load it on the car?

A. The railroad does not load anything; the sawmill loads it, of course, but they all do that; the sawmill on the main line loads the same as the other.

Q. The same rule is practiced as is practiced generally, the owner of the product loads it on the cars?

A. Yes, sir.

Q. And these tap lines haul the cars out to the point where it originates?

A. Yes, sir, hauls the cars to the timber, and hauls the timber into the mills.

Q. Probably hauls the empty cars out there to get the lumber?

A. Yes, sir.

Q. They have a double haul, a haul going and a haul coming back?

A. Yes, sir, they usually run a bunch of log cars.

2300 Q. Now, if the railroad company sent their cars out to these points where the lumber originated, they would have to send them out empty to get the load and bring them out to the junction?

A. It is all the same whether the car goes ten miles further or stops at the junction.

Q. I want to get at the fact, whether the railroads, if they sent out their cars to the point where the material originates, would they have to send them out empty in order to get them returned loaded?

A. It would not be practical to send regular railroad cars out to the logs, if it was a proposition where they hauled logs.

Q. Take a proposition where they haul lumber?

A. Then it would be all the same, if it was on the main line.

Q. I mean a tap line which is 25 or 30 or 40 miles off the main line?

A. If a mill was located out on the tap line, why of course they would have to have some way to get the cars out to the junction.

Q. What I want to get at is this: there is a real service rendered by these tap line railroads, in transporting this product along the railroad from its origin to the destination of shipment?

A. There is supposed to be at least, and there is in the greater portion of them.

Q. It is just a matter of division of the rate, in consideration of the services they render?

2301 A. So far as the railroad is concerned, yes.

Q. Do you know really—I am not asking now if you have information or knowledge, upon which the basis of the division is made, for tap lines, what they get for their services?

A. No, sir, my understanding is they don't earn some.

Q. Is that simply an impression you have or do you know that from your own knowledge?

A. It is largely gathered from the testimony of railroad mill operators in different suits where they have been in court.

Q. It is second-hand information?

A. Yes, sir.

Q. Now, there might be a difference, based on the difference surrounding the service, might there not?

A. Sure.

Q. You don't know to what extent the differences in character of services rendered, and differences that affect the service or that can affect it, what effect that has on the basis of the division?

A. No, sir, those things, so far as I know, are arranged between the different freight agents of the railroads and the operators.

Q. You found in your experience, that they are disposed to give the shipper too large a proportion of the rate, in case they divide with him?

A. Well, take the mill located right at the junction, and every cent that he gets is that much over the fellow that doesn't
2302 own the railroad.

Q. If he is right at the junction, what services does he render?

A. Nothing in the world; he brings his logs in on the railroad and the rest of us bring them in on the dirt road.

Q. However, doing that the railroad makes him some allowance for that?

A. Yes, sir, they pay a differential.

Q. Do you know what the regulations of the Arkansas State Commission are, in regard to the transportation of logs to the milling points to be milled and put in condition to ship to the market, do you know what the regulation is in regard to rates prescribed by the state commission?

A. In moving logs?

Q. Rough material?

A. Yes, I know some of their rough material rates.

Q. What are they?

A. They are based largely on the mileage basis.

Q. What cases do they apply to, in connection with the shipment?

A. The only requirement is to make a point with the railroad company that they will ship it out again.

Q. What is the rate prescribed in cases like that?

A. It runs from two to six or eight cents; I don't remember just how high it does run.

Q. There is, under the regulations of the state railroad commission, a rule prescribed of compensation for hauling the rough material to the mill where it is shipped out by the line of
2303 some other carriers?

A. Yes, there is a rule that is used somewhat, but it does not amount to anything much, except to the factories, furniture factories.

Q. There is a regulation of that sort?

A. Yes, sir.

Q. Who do those rough material rates apply to; what class of shipment, or rather, what class of material do they apply to?

A. That is rough material, rough lumber.

Q. Does it apply to furniture, rough lumber that is manufactured into furniture?

A. The Rock Island, I believe does—the Iron Mountain——

Q. I am talking about the regulations prescribed by the state commission?

A. We had a wrangle awhile back about it, and they cut out a part of that, but I think it has gone back again; I know the screen door manufacturer gets it.

Q. Do you know whether it has been the subject of investigation by the Interstate Commerce Commission or not?

A. Yes.

Q. Do you know what ruling they made?

A. The papers are full of it all the time.

Q. Do you know what ruling the Interstate Commerce Commission made in regard to it?

A. I couldn't tell you just now.

Q. Wasn't there some complaint before the Interstate Commerce Commission, relative to rates east and west of the Mississippi River on lumber?

2304 A. Yes, sir, they raised it east of the river, and they forced it down again.

Q. Were you a party to that proceeding?

A. No, sir, we have always been west of the river; my understanding is there is no tap lines allowances on the east side of the river at all.

Q. Perhaps I didn't make my question clear; I understand that there were two cases growing out of the complaints made in one instance by shippers east of the river, and in one instance by shippers west of the river; were you a party to either of those proceedings?

A. No, sir.

Q. Do you know whether the Interstate Commerce Commission made a reduction in rates east of the Mississippi River?

A. Yes, the rate was reduced.

Q. Wasn't it done because the tap line arrangement did not exist there?

A. Yes, sir, and my idea about the one that started on the west side was that it never was pushed in a very clean cut manner; the trouble about it is, all the big fellows on this side of the river cannot afford to push it, and the little fellows haven't the money.

Q. The fact is, they made the reduction east of the river and didn't west?

A. Yes, sir.

Q. And this tap line service and the division of the rates, west of the river, figured in that controversy?

2305 A. Yes, sir; I understand there is no tap line east of the river; I think may be there is one; one road is allowed a division, and it is a pretty good railroad.

Q. Now, you testified about the rates that were allowed, the compensation allowed to tap lines, and I think you said they got from four to nine cents?

A. I don't know just what that difference is; it runs, as I have been informed, some people told me that they got as high as seven, eight or nine cents.

Q. Who did you get that information from, what tap line was it that got seven or eight or nine cents?

A. Really, I don't like to give the gentleman away; he may have been giving me hot air; I don't care to get him in the controversy.

Q. All you know is possibly some hot air handed out to you?

A. I know what Mr. Morrison swore over here in court a few days ago, and I know what the Manager of the Fourche River road swore; I mean practically what they swore.

Q. Really do you know of any instance in which tap lines received a division of nine cents?

A. No, sir, I don't know of any positive division of nine cents.

Q. Do you know of any case where they received 8 cents?

A. You mean do I know positively if they got it?

Q. Yes?

A. No, I don't know positively.

Q. Do you know of any instance where they got six or
2306 seven cents?

A. No, sir, I don't know positively; I don't own a tap line, and I don't know that they receive anything.

Q. Your testimony is all hearsay?

A. Yes, largely necessarily so, on the tap line proposition, because I don't own one.

Q. What lines haul the principal part of the lumber from Louisiana points to Little Rock?

A. Really I don't know, I am not very familiar with the shipments from Louisiana to Little Rock.

Q. You stated if I understood you correctly, that the rate from Louisiana points to Little Rock is 22 cents?

A. That is my understanding.

Q. Do you understand that is the rate on the Iron Mountain?

A. Yes, that is the way it was given out to me.

Q. How did you get that information?

A. I got that information over in a hearing before the state railroad commission, and Mr. Watson, I think it was, was on the stand, and we were having a little tilt about raising the rates in Arkansas, and the Commission was inquiring as to what effect it would have on lumber in Arkansas, and I suggested it might let Louisiana into Little Rock on as low a rate as anybody, and I think Mr. Watson or somebody from the Cotton Belt, said the rate into Little Rock was 22 cents.

Q. Is this the gentleman?

A. Yes, sir, I think so; that is my information; I never looked it up.

Q. You really don't know what the rate on the Iron Moun-
2307 tain is?

A. Except what I have given you.

Q. Did he tell you what the rate on the Cotton Belt was?

A. He just said the rate from Louisiana to Little Rock was 22 cents; he was just showing us very clearly we would not get hurt by raising the rates.

Q. Who wanted the rates into Little Rock or Arkansas from Louisiana to be raised?

A. Nobody cared about that; it came in incidentally.

Q. In what way would that affect the lumber business in Arkansas, the rate from Louisiana?

A. If it was low enough, and they could ship cheaper than we could, it would help out.

Q. In other words, you apprehended a rate might be made that would enable the people in that territory to compete with lumber in this territory?

A. Yes; the distance in lumber rates doesn't cut but very little figure, when they go to making them.

Q. Why doesn't it?

A. They go to Chicago for 26 cents.

Q. Doesn't that fact that I referred to a moment ago, the giving of a very low rate from Louisiana in to this territory, wouldn't that interefere with the business of the manufacturers in this territory, doesn't that show and illustrate the necessity for these zone or blanket rates, in order to protect the different producing and purchasing territories.

A. Of course, it is very clearly illustrated what effect it has;
in the first place, the land values in that Southern territory
2308 are higher than they are in this country; timber land in that country is worth easy twice what it is here.

Q. In what way does that affect this country?

A. It would be the same proposition over again; it would still raise their timber land higher if they had lower rates; the cheaper they could sell the stuff, the more the stuff is worth.

Q. In other words, the cost of material is what causes the value of the lands to increase; as that increases, they are able to pay higher rates; is that true?

A. In other words, as the rate goes down, the stumpage goes up.

Q. Is there any difference in the amount of timber to the acre there is in that section, compared to this?

A. Yes, their timber is generally speaking, better—more timber on the ground.

Q. Their land is more heavily timbered?

A. Yes, sir, it lays betters; it is easier to put a road in.

Q. That is not a very material question there, but the point I want to get at is whether this system that you have called attention to, in testifying from the map, is not necessary and grows out of the conditions of that traffic?

A. I don't feel like it is; it may be.

Q. You think it would be better for the territories that produce

and the territories that buy, and for the shipper, and the carrier that there should be a mileage scale?

2309 A. I think so, decidedly so.

Q. Let's see why you think so; how far are you from St. Louis?

A. 375 miles, something like that.

Q. How far are most of your competitors south and west of you from that market?

A. After you get way down south, as you get to the gulf——

Q. South Arkansas, I mean?

A. It would only be a short distance further.

Q. It is a little further?

A. Yes, sir.

Q. If you put it on a mileage scale, it would make a difference of increasing the rate?

A. Yes, sir.

Q. The man closest to the market would think the mileage scale best?

A. Yes, sir.

Q The man a little further away wouldn't think so much of it?

A. Yes, sir, but Arkansas points happen to be up on that side.

Q. Aren't you a little closer to St. Louis market than most of your competitors?

A. Yes, possibly, not many of them; a few, yes.

Q. Can you recall,—just give us the names of any that are closer than you, except those in your immediate vicinity?

2310 A. No, none closer to amount to anything, I don't know of any closer; there wouldn't be much difference though in several of them.

Redirect examination.

By Mr. HILL:

Q. Mr. Moore was asking you about the rough material rate, and at the same time asking you about this tap line division; is there any relation or connection between those two propositions?

A. No, sir, they wouldn't have any use for a rough material rate?

Q. They don't need that in their business?

A. No, sir.

2311 A. C. READ, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HARROD:

Q. What is your name?

A. A. C. Read.

Q. What is your business?

A. I am with the Southern Trust Co., in the Real Estate Department.

Q. I will ask you if your experience in the real estate business, qualifies you to pass upon the value of rentals in this City?

A. Yes, I think it does.

Q. Are you acquainted with the hotel, known as the Pratt Hotel and the property therewith connected, such as the lunch room and hotel?

A. That was the old hotel?

Q. Yes?

A. Yes, sir.

Q. In 1907?

A. Three years ago.

Q. I would like for you to state, what in your judgment, is the fair rental value by the month or year for that property, including the hotel, bar room, lunch counter, and news stand, therewith connected?

A. How many rooms were there in the hotel?

2312 Q. I don't know exactly.

A. Around down here, with hotels of that character, we average them along at about $5. a room.

Q. Per month?

A. Yes, sir.

Q. What would you think the bar room privilege would be worth?

A. Our idea has been that was one of the best paying bar rooms in the city of Little Rock; about the highest priced rental of any bar room in this city, would be about $250.

Q. What would you think that would be worth per month?

A. $250.

Q. And the hotel would be worth $5. a room, at least?

A. Yes, sir.

Q. What do you think that the lunch stand and newspaper stand would be worth?

A. I don't know; we generally rent those to the highest bidder, or one we can get for them, but I should think easily $50. a month, for the lunch stand and the news stand; now, there are some news stands paying $50. and $75. a month up town here.

Q. You would think the news stand and lunch counter would be worth $50.00, and the bar room $250., and the hotel $5. per room?

A. Yes, sir.

Q. What do you think about the number of rooms in the hotel?

A. I don't know; I have been in there and slept there several nights, but I don't know how many rooms there are.

2313 Cross-examination.

By Mr. MOORE:

Q. Did you do your drinking at that bar?

A. No, sir.

2314 A. R. BRAGG, being recalled, deposed as follows:

Recross-examination.

By Mr. MOORE:

Q. You told me you would look up the matter as to whether the rates at certain points in northern Texas, among them Marshall and Jefferson and Waskon and Atlanta come under the Texarkana combination in rates? Interstate rates.

A. I found by taking the Texarkana proper tariff and adding the Texas Commission tariff, adding them on some commodities, it was a combination of the two rates.

Q. The two rates referred to are rates to Texarkana plus the local from Texarkana?

A. Yes, sir, plus the Texas Commission rates.

Q. Those places you me-n were the basing points for similar rates to other points?

A. Yes, sir, there were smaller points taking the same rates,—intermediate points.

Redirect examination.

By Mr. HILL:

Q. How many points were there?

A. There were only about four immediate points; that was Atlanta, Marshall, Jefferson and Waskon; the nearest point to Texarkana was 24 miles, and the furtherest was about 70.

Q. The statement was made by you in answer to some question the other day, that some of the voluntary interstate rates of the railroad to Arkansas points, were lower than the Commission tariff,
2315 and lower than the court tariff; have you looked up any of those rates since that time?

A. I have.

Q. Where did you find those?

A. I had knowledge of those conditions before, but I made some figures, on the White River Branch of the St. Louis, Iron Mountain and Southern.

Q. Have you those?

A. Yes, sir.

Q. I wish you would attach that to your deposition as Exhibit "F."

A. Yes, sir.

For Exhibit "F," see Volume 9, page 5781.

Q. Those are prevailing rates are they?

A. They are rates in effect now.

Q. Do you know of any other point where that same condition prevails?

A. Yes, sir.

Q. What other points?

A. That condition prevails on southern lines in the vicinity of Dermott and Varner.

Q. Southern part of the state?
A. Yes, sir.

And further deponent saith not.

2316 W. E. FLOYD, recalled, deposed as follows:

Direct examination.

By Mr. HILL:

Q. You are secretary of the Railroad Commission?
A. Yes, sir.
Q. Pursuant to an agreement entered into between the Railroad Commission and several of the railroads of the State, have any of the railroads filed monthly reports of the business under the court tariff, showing an increase of revenue by the court tariff, over Standard Distance Tariff #3?
A. Yes, sir.
Q. Have you any reports of the Chicago, Rock Island & Pacific?
A. Yes, sir, I have reports of the Rock Island road for four months.
Q. When was that filed?
A. On April 26th, 1910.
Q. I will ask you to read into the record the increases that are shown by those reports?
A. For the month of June, 1909, the report showed an increase of 19.59% of revenue received under the court tariff over what would have been the similar revenue under Standard Freight Distance Tariff #3, had it been in force and applied to the traffic moving. The report for the month of July, 1909, showed an increase of 21%, applied as above stated. The report for August,
2317 1909, showed an increase of 22.06% as above stated. The report for September, 1909, showed an increase of 21.32 as above stated, making an aggregate increase for the four months' period of 21.09% of revenue received under the court tariff, above what would have been received had the rates prescribed in Standard Distance Tariff #3 been applied for the traffic moving during those four months.

2318 J. W. CROCKETT, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, residence and present official position?
A. Little Rock; John W. Crockett; I am at present, a member of the Arkansas Railroad Commission.
Q. When did you become a member of the Arkansas Railroad Commission?
A. In January, 1907; I don't remember the date; I was sworn in sometime in January, 1907.

Q. Since you have been a member of the Arkansas Railroad Commission, have any of the trunk lines operating in the State, asked of the commission an increase in revenue?

A. No, sir.

Q. Either in whole or in part?

A. No, sir.

Q. Have they asked the Commission to raise any of their freight rates?

A. No, sir, I don't recall any.

Q. Have any of the small lines asked relief of the Commission in rates?

A. Yes, sir, the Little Rock, Hot Springs and Western asked the commission to permit them to restore some of the old rates which they had, which was an increase.

Q. Was it done?

2319 A. Yes, sir.

Q. Any other short lines applied to the commission for an increase?

A. I don't recall now judge, possibly so.

Q. Didn't the Missouri & North Arkansas?

A. Yes, they did.

Q. And the L. & A., didn't they ask for an increase?

A. I don't remember now.

Q. Since you have been a member of the Commission, if the railroads had applied to the Commission and showed you that the intrastate rates in force were non-compensatory, would you, as a member of the commission, and in your judgment would your associates on the commission have been willing to grant an increase of rates?

Question objected to by the plaintiffs.

A. Yes, sir, had they come to me or come to the commission, I would, and I am sure the other members of the commission would have permitted them to put in higher rates, if they had convinced us that the rate was too low.

2320 J. D. WATSON, being recalled, deposed as follows:

Direct examination.

By Mr. HILL:

Q. Are you familiar with coal rates from Illinois fields to Arkansas and Louisiana?

A. Reasonably so.

Q. I will ask you if you can give the rates over the Missouri Pacific under the joint tariff, from the Illinois field to Little Rock?

A. My recollection is $2.25 per ton. Yes, it is $2.25.

Q. What would it be from the Illinois field to Grady, Ark.?

A. $2.25.

Q. How far is Grady from Little Rock?

A. It is on the Little Rock, Mississippi & Texas Division, south of Little Rock.

Q. Something like forty or fifty miles?
A. I should judge more than that.
Q. Take Monroe, La., what is the rate from Illinois field to there?
A. $2. per ton.
Q. As against $2.25 for Little Rock?
A. Yes.
Q. What is it to Tullaloola, La.?
A. Also $2.
Q. What is it to Vidalia, La.?
A. $1.60.
Q. What is it to Rayville?
A. $2.25.
2321 Q. Same as Little Rock?
A. Yes.
Q. All of those shipments for Louisiana would pass through Arkansas would they not?
A. Through Arkansas but not through Little Rock.
Q. They would take the river division down?
A. Yes.
Q. Could you give me about the distance from Illinois field to those fields furtherest south into Louisiana, that I have given you?
A. The tariff would not give it, and I would not be able to give it without an examination of some mileage table.
Q. Give an approximation of it.
A. I should say it was five hundred some odd miles.
Q. How much further from the Illinois field than Little Rock would be?
A. Probably 150 to 200 miles.
Q. Are you familiar with rates from the territory north and east of St. Louis to Arkansas common points?
A. Reasonably so.
Q. How are those rates made?
A. There is a differential over the rates from St. Louis to Arkansas points.
Q. In dividing the rates made by this differential as you call it, there is a proportion of the rate going to the line that brings it to St. Louis, greater than the differential added to the St. Louis rate, to make the through rate?
A. Equal to or greater.
Q. Usually greater, isn't it?
2322 A. Yes.
Q. That would make the revenue of the Iron Mountain or of your road less on shipments derived from those carriers, bringing it in, in that way, than if the commodity originated in St. Louis, wouldn't it?
A. Yes.
Q. Could you give me the through rate and the division of the rate on a shipment of St. Louis beer, I think you have beer in St. Louis, originate some there, and also, some in Milwaukee, and that beer is consumed in Arkansas, some of it, strange to say.
A. I couldn't give you the figures off-hand.
Q. Could you look that up and give me the division on that; I

want a shipment of a carload from St. Louis to Little Rock or some other Arkansas point, and a shipment of beer from Milwaukee say, giving the divisions, assuming that the beer passed through St. Louis, and was handled as the St. Louis beer was down here, and showing the revenue which the Iron Mountain or your road derived from the shipment?

A. The fact that it passes through St. Louis has no effect on the rate; the rate adjustment is governed by an entirely different factor.

Q. I just want to make the illustration, have you the division sheet here?

A. No, but I can get them.

Q. You may make the illustration from some point, on packing house products, say from Chicago, to Little Rock, and a simi-
2323 lar shipment of packing house products, from St. Louis to Little Rock, showing the revenue derived by the road handling from St. Louis to Little Rock, and take farm wagons from Moline, Illinois, and compare that with shipments of other agricultural implements from St. Louis to Little Rock; I mean, a like shipment of wagons; if you don't find wagons, any other commodities of that class.

A. You mean in carloads?

Q. Yes; do you know how the first class rate from Chicago to Little Rock is made, and how it is divided?

A. By what junction?

Q. St. Louis?

A. We would not handle Chicago business via St. Louis; via East St. Louis the rate from Chicago is $1, with a differential of 20 cents, and the division of that through East St. Louis, the line to East St. Louis receives 65% of 40 cents; that is my recollection of the figures.

Q. You are familiar with rates from St. Louis to Little Rock and Alexandria and New Orleans, are you not?

A. Yes, sir, reasonably so.

Q. What is the rate on shoes and dry goods from St. Louis to Little Rock?

A. $1 per hundred pounds.

Q. What would it be to Alexandria, La.?

A. $1.25.

Q. What is the rate from St. Louis to New Orleans, on the
2324 same thing?

A. My recollection is it is 60 cents, I am not sure.

Q. 90 I think.

A. 90 cents, is right.

Q. How much further is it from St. Louis to New Orleans than it is from St. Louis to Little Rock?

A. I should say twice as far.

Q. The cost of service seems to be a little less from St. Louis to New Orleans than it is to Little Rock?

A. There are entirely different conditions governing there.

Q. It is not the cost of service that governs?

A. Not altogether.
Q. It doesn't seem to be a very large part of it.

Mr. MOORE:

Q. The Mississippi River has something to do with it?
A. Considerable to do with it.

Mr. HILL:

Q. Here is packing house products, carload; what is that to Little Rock?
A. I think it is 23 or 26 cents; the rate today is 31 cents.
Q. What is it to Alexandria from St. Louis?
A. 44 cents.
Q. And to New Orleans from St. Louis?
A. 30 cents.
Q. Are you sure of that; Mr. Hamilton had it 23 cents.
A. He used Helena figures, which I came very near using.
Q. A shipment of Packing house products to Little Rock would be 31 cents; to Alexandria, it would be 44 cents; to New
2325 Orleans, it is 30 cents?
A. Yes.
Q. That shipment going through to New Orleans would pass through Alexandria, wouldn't it?
A. I don't think so, under present conditions.
Q. How would it go?
A. By Ferriday, I think.
Q. Be any difference in the haul?
A. No, sir, not much.
Q. Wouldn't amount to very much more, if it went one way or the other?
A. Well, considerable.
Q. Forty or fifty miles?
A. More than that I should say.
Q. Some of the traffic gentlemen have used the pianos as an illustration of many points; I wish you would give me the piano rate from St. Louis to Little Rock; Pianos from St. Louis to Little Rock.
A. Pianos from St. Louis to Little Rock, carload, 65 cents.
Q. Isn't that 85, Mr. Watson?
A. No, 65 is right.
Q. Which class would it take?
A. It would take 2nd class.
Q. It has a commodity rating?
A. Yes, sir, 65 cents to Little Rock.
Q. Give us the commodity rate to New Orleans?
A. 75 to New Orleans.
Q. 65 to Little Rock?
A. Yes, sir.
2326 Q. What is it to Alexandria?
A. I can't give you that positively; I haven't got the necessary data to give it to you.

Q. You know the rate on soap from St. Louis to New Orleans, give us that, L. C. L. and carload both.

A. Soap, carload, St. Louis to New Orleans, 22; less carload, 25 cents.

Q. Give me those corresponding rates to Little Rock?

A. St. Louis to Little Rock, carload 33.

Q. L. C. L.?

A. 49.

Q. Give me the rates on beer, carloads, St. Louis to New Orleans?

A. 21.

Q. That is to New Orleans?

A. Yes.

Q. Give me the beer rate to Little Rock, from St. Louis?

A. 27.

Q. Give me the first class rate from St. Louis to Paragould, Ark.?

A. 81.

Q. What is it to Memphis?

A. 65. The first class rate to Paragould is governed by Western classifications, and the rate to Memphis is governed by Southern Classifications.

Q. Give boots and shoes?

A. I would have to have the Southern Classification.

Q. Boots and shoes would be in a classification?

2327 A. Not necessarily.

Q. Give us some other rate; have you a carload rate?

A. The only thing you could successfully compare, without having the classifications, before you, would be some commodity; that is what I have been giving you.

Q. Take a shipment of boots and shoes from St. Louis to Paragould, and similar shipments from St. Louis to Memphis, and give us the rates, and take packing house products, L. C. L.

A. That is, St. Louis to Paragould, and St. Louis to Memphis.

Q. Yes, sir, I have used various illustrations, but I will ask you if it is not a fact, that there is a large list of special commodity rates from St. Louis to this territory, effective for many years, what you might call Mississippi River points, and such rates are considerably lower than rates to intermediate points in Arkansas from St. Louis?

A. The Mississippi River points territory carries a great many commodity rates and a great many class rates, governed by different classifications different from the classification west of the river, which would result in somewhat lower rates in that territory.

Q. Isn't it a fact that there is a large list of rates from St. Louis to New Orleans that are lower than the rates for the same articles into Arkansas?

A. That is true.

Further examination postponed.

2328 H. C. HALVERSON, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HARROD:

Q. What is your name?
A. H. C. Halverson.
Q. What is your age?
A. 24.
Q. What is your occupation?
A. I am chief clerk to the Assistant General Passenger Agent.
Q. Where?
A. Little Rock.
Q. How long have you been so engaged?
A. I have been here since the 21st of March.
Q. This year?
A. Yes, sir, 1910.
Q. Were you connected with the Iron Mountain passenger service in Arkansas, prior to that time?
A. I was with the Missouri Pacific-Iron Mountain system in St. Louis.
Q. Are you familiar with the prices for which transportation is sold by the Iron Mountain, and for which it has been sold for the last six months in this state?
A. Yes, sir.
Q. Tell us the forms of passenger transportation you sell and the prices?

2329 A. Do you mean local and coupon?
Q. Anything that you sell in the way of passenger transportation?
A. We have local tickets on sale between local stations on our line, and we have coupon tickets on sale to foreign lines, and we have various issues of mileage books.
Q. Tell us about tickets within Arkansas, and mileage books that are used within this state and the rate?
A. In regard to the mileage, the Southwestern Passenger Association, of which we are a member, sells a mileage credential book in Arkansas, that is sold for a dollar; but there must be 2000 miles used in Arkansas, and there is a refund made down to two cents a mile.
Q. It costs the user two cents a mile, plus one dollar?
A. Yes, sir.
Q. He pays 3 cents, and gets a refund of one?
A. Yes, sir, but on some lines, there is a two cent rate; but he does not get that originally on the Iron Mountain.
Q. I am talking about the Iron Mountain.
A. Where it figures two cents a mile, there is no refund; usually, the only case in which he gets a two cent rate is where it is a competitive rate.
Q. Do you sell 500 mile mileage books?

A. That is $10, good locally on our line in Arkansas.
Q. Good anywhere in Arkansas?
A. Yes, sir, on our line.
Q. It is selling now for $10?
A. Yes, sir, it formerly sold, up to about a month ago, if I am not mistaken, for $12.50.
2330 Q. They did sell for 2½, but now it sells for 2 cents?
A. We have two five hundred mile books on sale; I have that circular; it may be the Arkansas book that still sells for $12.50.
Q. Those books are sold at all stations in this state, are they?
A. Yes, sir, and our coupon offices are provided with books.
Q. And they are sold for 2 cents?
A. No, that is in Kansas; in Arkansas they are sold for 2½.
Q. Where are they selling at 2 cents?
A. In Kansas, interstate, between St. Joe, Missouri and some other points, and that is competitive business we have up there.
Q. You are selling those in Kansas for 2 cents, are you?
A. Yes, sir, that is straight 2 cents a mile, and there is no refund, and these mileage books are sold there.
Q. Now, at competitive points in this state, you meet the competition of the Rock Island and these other people who are selling for 2½, don't you?
A. Where we have competition we do, but between some points we don't meet their rate.
Q. At every place the Rock Island touches out of Little Rock, and that your road touches, wouldn't you meet their rate?
A. Not at all points; it depends upon our main line points.
Q. You advertise to meet competition, don't you?
A. No, sir, not between all points.
Q. Don't you advertise that you sell these mileage books
2331 for 2½ cents, in order to meet competition of all your competitors?
A. That is not my understanding of it, no, sir.
Q. You say at some points, competitive points, you make rates to meet the rates of competitors, and some you do not; where are those points you speak of?
A. Our rate to Memphis, Tenn. is the same from Little Rock as the Rock Island; they make that rate being the short line, and we meet that rate.
Q. Tell me some competitive point you don't meet the rate?
A. I couldn't say positively whether we hold up our Little Rock to Helena rate or not; we hold up our rate, but I don't know whether,—exactly what the Rock Island fare is, but I don't think we would meet that rate, on account of our main line; if I am not mistaken, our rate between those points is $3.70, and the Rock Island rate was formerly that, but whether they reduced that when they went back to 2½ cents, I couldn't say positively.
Q. What is the rate to Ft. Smith?
A. $4.70, I think.
Q. What is the Rock Island rate?

A. The same thing; we meet their rate; 2½ cents figured on their line, would make less than 3 cents on our line.

Q. How about from here to Hot Springs?

A. We meet their rate in that; they make that rate on 2½ cents; we are the short line in there from Benton to Hot Springs,

2332 but we meet their fare, which is $1.55.

Q. Do you know any place out of Little Rock that you sell a ticket higher than the Rock Island rate, that the Rock Island goes to?

A. Crossett, Ark., our rate is higher than theirs.

Q. Have you a through line to Crossett, Ark.?

A. No, sir, we come back in there from Montrose; and also to Warren, Ark., and there is the same condition exists there; that is back off on a branch line of ours.

Q. That is the round about way of getting there?

A. Yes, sir.

2333 THOS. MCCUTCHEON, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would state your name, age, residence and occupation?

A. Thos. McCutcheon, residence Argenta, 1020 Poplar St.

Q. What is your occupation?

A. Switchman.

Q. How long have you been working as switchman?

A. I have worked there off and on since 1880.

Q. How long have you worked at Argenta?

A. From 1903.

Q. Working there yet?

A. No, sir, not since the first of this year.

Q. And you are not employed as switchman now?

A. No, sir.

Q. What company have you been working for?

A. Iron Mountain.

Q. Working in the Iron Mountain yards at Argenta?

A. Yes, sir.

Q. The yards of the Little Rock Division of the Iron Mountain road?

A. Yes, sir.

Q. Are you familiar with the way freight trains are handled in these yards?

A. Yes, sir.

Q. I wish you would explain your duties as switchman?

2334 A. Our duties as switchman, when a train comes into the yard, after it is carded, we break it up, put each car where it belongs in different tracks for different points.

Q. How do you know where each car belongs?

A. By the number on each car.

Q. That is designated on the car for the information of the switchmen?

A. Yes, sir, the contents and number of the station.

Q. I wish you would explain what is done with a through freight train coming in from St. Louis say, and what would it largely be composed of; how would you handle it, explain it in your own way?

A. It is broken up, just as I told you; I never saw a through train that came in that didn't have to be broken up.

Q. What do you mean by being broken up?

A. Where were different cars that didn't go through with that same train, cars for different points in it; I never did see a through train for the south from the north go straight through.

Q. Some of these gentlemen high up in the operating department of the roads have compared their through trains to a bridge, have compared a bridge running through the state to their through trains. Is there anything like that?

A. No, sir.

Q. You did not discover the bridge?

A. No, sir.

Q. What difference is there between the bridge and the actual facts?

A. Now, I have seen a fruit train come, that there would
2335 not be anything done to it, but to change the caboose.

Q. That would be from the south?

A. Yes, sir.

Q. Have you seen many of those?

A. No, sir.

Q. Have you seen anything else but a fruit train now and then?

A. A vegetable train, onion train.

Q. Some onion train from southern Texas?

A. Yes, sir.

Q. You have found a few of those?

A. Yes, sir.

Q. They are the only bridges you discovered?

A. That is all.

Q. The bridge only worked occasionally in going from Texas through to the north; the bridge didn't from the north when it came down south?

A. No, sir.

Q. What do you do with the cars in the train as they come in, you speak of breaking them up; that is a technical term that you understand, but we don't just explain that operation?

A. There is different tracks designated for different cars for different points; all cars that would go to the Valley, there is a track they go on; also, we set north and south cars for different tracks.

Q. And with the exception of these few onion and fruit trains, that come in here, every train you handled was broken up in
2336 that way?

A. Yes, sir.

Q. And new trains made out of these trains that had been broken up in that way?

A. Yes, sir.

Q. Was there any difference in handling the carloads that would come in, say from St. Louis, than there would be handling carloads that were delivered to the railroad here, say from the brick plant or cotton seed plant, or any other industry in Little Rock, after it was delivered to the railroad, would there be any difference in the handling of that than there would be in this train from St. Louis?

A. No, sir, they would be all handled in the same way.

Q. Of course, before it was delivered to the road, a car would be set out to the industry's switch, and loaded there, and then delivered to the road?

A. Yes, sir.

Q. The same would be true in St. Louis or wherever the car originated, that same service would be performed elsewhere?

A. Yes, sir.

Q. After it is delivered to the road, the handling of the car originating locally would be the same as a car originating in St. Louis or Chicago?

A. Yes, sir.

Q. Suppose a car came down from the Ft. Smith branch, or came up from Pine Bluff, how would it be handled?

A. The same way as the other; if it came from Fort Smith, it is switched in the Fort Smith yard, and it is set out on the track;
if it was going north, it would be set on the north track,
2337 where they kept the north cars, and if south, it would be
on the south track, and then another engine comes up and gets it and switches it out again, down below the south end?

Q. To the main line track?

A. Yes, sir.

Q. As I understand you, all the trains, the freight cars are brought into Little Rock, they are broken up, and new trains made out, and they are sent out to their destination in that way.

A. Yes, sir.

Cross-examination.

By Mr. MOORE:

Q. I suppose from your statements, that trains sometimes come into Little Rock from St. Louis with cars that are destined to Texas and cars destined to points in Louisiana—that is true, is it?

A. Yes, sir.

Q. When a train of that character comes, what do you do in the yards at Argenta?

A. Break it up and switch out the cars that would go to Louisiana on a different track from what would go to Texas.

Q. You place the cars that go to Louisiana on the tracks from
which it would be taken to the Valley line, do you not?
2338 A. Yes, sir.

Q. What do you do with the cars that are going to Texarkana?

A. Put them on the south track.

Q. Suppose that train was going right on through, no occasion for it to stop here?

A. We would let the cars go back on the train.

Q. The cars destined to Texas on the main line, would go right on back on the main line?

A. That is after you switch them here.

Q. What switching do you do of cars going through on the main line to Texas?

A. If they are shipped in altogether, which they are very seldom, you would not probably be required to handle them at all.

Q. Unless it is necessary to handle them in your yards, they sometimes remain on the track and you switch off the Louisiana cars and put them on the Valley track?

A. Yes, sir.

Q. You call the line that goes down the Arkansas River into Louisiana the Valley line, do you not?

A. Yes, sir.

Q. Have you ever seen any through trains carrying grain from the northwest to points south or east of here?

A. Yes, sir.

Q. Is that handled, going from points northwest to territory south and southwest of here, in a solid train?

A. Yes, once in a while.

Q. Is it necessary to break those trains up?

A. Not unless there would be a bad order car.

2339 Q. They frequently come through in solid trains?

A. I don't think I have ever seen very many solid trains of grain.

Q. Those that are through trains, solid trains do go through?

A. Yes, sir, if there are no bad orders to switch out.

Q. There is no switching done at all in Little Rock?

A. No, sir.

Q. You compared the switching for the purpose of collecting the cars that were located at the local industries around Little Rock?

A. Yes, sir.

Q. What service is rendered in getting those cars ready for shipment out of the station?

A. They are taken from this side over to the other side of the river, just like other cars.

Q. Let's assume that there is to be a carload shipped from the Dickinson Brick Factory, tell me the entire service connected with the handling of that car?

A. If it would go south, it would be taken from here over to the other side of the river and put on the track where there were south cars, and possibly be there for a day or whatever time until the first train went out, and if they didn't have too much tonnage of perishable freight, that car would go.

Q. Where would you take it from?

A. We would take it from the brick yard.

Q. How would you get it to the yards?

A. Take it out empty out there.

Q. And you would have to do that switching?
2340 A. You would have to handle the empty and loaded car too.
Q. You would have to switch that car out to the industry whether it was a brick factory or some other sort of factory?
A. Yes, sir.
Q. There to be loaded?
A. Yes, sir.
Q. Then what would be done with it?
A. It would be switched out again and taken back over to the Argenta yards.
Q. What would you do with it when you got it to the Argenta yards?
A. If it went south, it would be put on the track that holds the south cars.
Q. Then what would you do next?
A. If we was making up a train for the south——
Q. You didn't make up a train for just one car, did you?
A. No.
Q. You would put it on the same holding track, wouldn't you?
A. Yes, sir.
Q. Until there were enough cars to make up a train going in the direction in which that particular car was going?
A. Yes, sir.
Q. When you had gotten enough cars together for that purpose, what would you do?
A. Make up a train.
Q. Composed of those cars?
2341 A. It all depends; if it was what we call a short load, for the first or second or fourth station down the line, those cars are kept by themselves, and they don't go in through trains, they go on locals.
Q. Tell me just how those are handled, tell me how you handle the cars containing shipments from local industries, that are carried out of Little Rock on the locals?
A. They are handled just the same as any other train.
Q. You see I don't know how any other train is handled, give me the details of that?
A. We would go over to any of these industries, switch those cars out, if they were loaded, and bring them back; possibly there would be empties and loads mixed up together, and some would be for the north and some for the south or west, wherever they were doing, and they would have to be all switched on different tracks and kept there until there was a train order; if there was enough cars to order a train, they generaly ran one.
Q. Then what was done?
A. That is all we have to do—put on a caboose and engine.
Q. That is the way you would handle a local?
A. Yes, sir.
Q. You would make up a train composed of those cars that would go to local points in the state?

A. If there was enough of them; if there wasn't, we would probably put on some through loads.

Q. Next, describe the process of handling cars that are destined to points outside of the state.

2342 A. Yes, they are handled about the same way.

Q. Is it usual in a train made up here at Little Rock, composed of cars going to points in Texas or Oklahoma or Louisiana, or are the cars that you wish to send to points outside of the state, usually hooked on to some passing through train that comes along from St. Louis or from some other shipping center?

A. Yes, sir.

Q. Which course is pursued?

A. They would possibly go with that train that came in if it was perishable freight, perishable goods; after they collect up enough here,—they are all kept separate here, perishable cars and other freight cars, and that train that came in from St. Louis, might only have one or two cars that would go locally on the next train.

Q. I am asking you what the common practice is, not with perishable cars alone; do you make up trains to go to points outside of the state here at Little Rock, or do you attach cars containing goods to be shipped into other states to passing through trains; do you understand that question?

A. I think I do.

Q. Which course do they pursue?

A. Both, at times.

Q. Which course is more commonly pursued?

A. The more common, I guess, would be on through trains.

Q. How do you handle a car loaded at one of the industries, which you want to attach to a through train, to take to a point in Texas?

2343 A. If it was a through car, it is just throwed on with the through cars.

Q. You would first send the car to the place where it is to be loaded?

A. Yes.

Q. And then you ship it back and put it on the proper track in the yard at Argenta, until a through train goes, say from St. Louis to a point in Texas, where that shipment is directed?

A. Yes, sir.

Q. When that train arrives, the switching engine takes it off the holding track and couples it on to the through train?

A. Yes, sir.

Q. That is the process in that respect?

A. Yes, sir.

Q. If you are making up local trains of cars loaded at industries, you handle them in the same way I indicated, as far as collecting them is concerned?

A. Yes, sir.

Q. You first get them from the industry?

A. Yes, sir.

Q. You put them on some holding track?

A. Yes, sir.

Q. When you get up enough to make a train, these cars are assembled on some holding track on which they can be carried to the various points out in the country; that is correct, isn't it?

A. Yes, sir.

2344 Q. Is there a class of trains passing through Little Rock from trade centers out of this state, called Red Ball trains?

A. Yes.

Q. Do you know what a Red Ball train is?

A. Yes, sir.

Q. What is that?

A. That is supposed to be first class freight.

Q. How are those trains handled here?

A. They are handled just like the rest; I never saw a through Red Ball train go through here.

Q. Did you ever see one of those trains to which cars were attached, handled at this point?

A. Yes, sir.

Q. How are they handled?

A. They are handled just like all the rest.

Q. Now, let's see; suppose there is a train of that character originating in St. Louis and going to Dallas, Texas, made up of cars made up at St. Louis of cars destined to Dallas, Texas; that train arrives at Little Rock, and may be you have one or two cars at this point which you desire to go to Dallas, Texas; now, would there be anything necessary in the way of switching, except to switch those cars on the track and couple them on that train?

A. Not unless there was some to come out.

Q. My question indicates the situation; I didn't say there were any to come out; that is what you would do in that case?

2345 A. Yes, sir.

Q. If another train was to come along containing cars for Alexandria, La., and some cars for Dallas, Texas, then you would separate them, and put cars that were going to Alexandria on the Valley track?

A. Yes, sir.

Q. And if the cars were in good condition that were going through to Dallas, they would go right on through on the main line?

A. Yes, sir.

Q. As I understand you, the services rendered here in connection with through trains, is simply in shifting the cars onto the proper tracks, to enable them to go to points beyond that they are destined to?

A. Yes, sir.

Q. You don't handle trains of through cars?

A. No, sir.

Q. Are you in the railroad service now?

A. No, sir.

Q. How long since you went out of it?

A. The 10th, I believe, of December.

Q. Did you sever your connection with the railroad voluntarily, or were you discharged?
A. No, sir, I was not discharged.

Redirect examination.

By Mr. HILL:

2346 Q. Mr. Moore has put a question to you about a supposed through train from St. Louis to Dallas, did you ever see one of those?
A. No, sir.
Q. That is one of those bridges, isn't it?
A. I never saw one; there is always cars to take on or put off.
Q. He supposed a through train from St. Louis to Alexandria, did you ever see that?
A. I believe I saw one of wheat once.
Q. In your five years' experience, you found one of those that was travelling on the bridge?
A. Yes; I don't remember seeing any more, but there might have been more; I wasn't there day and night.
Q. You worked your eight or ten hours each day?
A. Twelve hours a day.
Q. In your five years experience, working 12 hours a day, you say you saw one of those?
A. I don't remember but seeing one train of wheat.
Q. I mean of any other freight train—through train.
A. No, sir, except fruit.
Q. Any other train going south from the north; you have already explained there are a few trains of onions and fruit going north?
A. Yes, sir.
Q. Your answer to his questions on that, that you had some cars here you might hook on them, that would be the practice if there was such a train, but in fact, I understand there would be no
2347 such trains?
A. There would be some to put on and some to come off?
Q. Wouldn't there be more than that to do?
A. The caboose to change and engine.
Q. What about inspection?
A. All those trains have to be inspected.
Q. Those through trains going through on the bridge have to be inspected like the others?
A. Yes, sir.
Q. And if you found them in bad order——
A. They would have to be set out on the bad order track.
Q. All those through trains undergo an inspection just the same as local or any other trains?
A. Yes, sir.
Q. How long do these through cars, as a rule, stay here?
A. Sometimes they stay a good deal longer than others; sometimes if they are Red Balls they are switched out; they always stop the Red Balls and keep them for Red Ball trains

Q. They wait here in the yards until there is enough cars of that class to make up a train?
A. Yes, sir.
Q. Suppose it was not Red Ball, would they usually stay?
A. They often would go out before the Red Ball; that is, if there was enough of a train.
Q. It would just depend on the kind of traffic that was coming in, which would go out first, whether the Red Ball or what do
2348 you call the other?
A. Dead freight.
Q. It wasn't a question of just shooting them through?
A. No, sir.
Q. It was a question of making up trains?
A. Yes, sir.
Q. That is the way it is practically handled?
A. Yes, sir.
Q. Whatever may be the theories on the subject?
A. Yes, sir.
A. As a rule, how long are these through cars held in the Little Rock yards?
A. They don't usually stay very long.
Q. That would vary with the seasons of the year?
A. Yes, sir.
Q. Depend on how the traffic was moving and things of that kind?
A. Yes, sir.
Q. Mr. Moore is assuming that this through train that was running over here like over a bridge, was on the through track; would it stay on the through track?
A. No, sir.
Q. Main track?
A. No, sir.
Q. Even this one train of wheat that went through here on a bridge didn't stay on the main track while it was here?
A. No, sir.
Q. It was switched off too?
2349 A. Yes, sir, they have to go into the yard with the others.
Q. If there was a bad order car which had to be set out, the train was broken up?
A. Yes, sir.

Recross-examination.

By Mr. MOORE:

Q. Did you ever see a through train from St. Louis to some point south of here passing this place?
A. Never did.
Q. Did you ever see through cars from St. Louis going to points south?
A. Yes, sir.
Q. What is the largest number of those cars you ever saw collected in one train?

A. I couldn't tell that; I think about thirty-eight or forty loads south, and fifty north.

Q. You have seen trains come here then with thirty-eight or forty loads; that is, that many cars from St. Louis to points south of this?

A. Yes, sir.

Q. Didn't that constitute a train?

A. That is south from here.

Q. Didn't that constitute a train?

A. Yes, sir, south.

Q. Tell me again what a Red Ball train is?

A. It is first class freight, supposed to be first-class freight;

2350 I have seen lumber Red Balled, perishable I presume.

Redirect examination.

By Mr. HILL:

Q. In your answers to Mr. Moore's last questions, did you mean that you had seen 38 cars come from St. Louis in one train, and those 38 cars carried straight on south?

A. Yes, sir.

Q. That was the maximum that you did see?

A. Yes, sir.

Q. Was there any set out from that 38 cars?

A. Yes, sir.

Q. That is what you mean, that that was the most you had ever seen?

A. Those were empty stock cars.

Q. That was as many as you had ever seen that went on one train, that would come in on one train?

A. Yes, sir.

Q. Of empty cars; that would be very many more than you would see of any other kinds?

A. Yes, sir.

Q. I suppose empty stock cars would be about the principal cars you would see going through?

A. Yes, sir, and empty foreign cars.

Q. Stock traffic through Arkansas on the Iron Mountain is comparatively small?

A. Yes, sir.

2351 Recross-examination.

By Mr. MOORE:

Q. Did you mean to state in answer to questions just asked you by counsel, that you never saw a train of 38 or 40 cars going south from St Louis except empties?

A No, sir, I never did

Q. You never saw a train then of loaded cars, containing from thirty to forty loads, going south from St. Louis to points south of Little Rock?

A. Not in one train.

Q. Were you here in 1907?
A. Yes, sir.
Q. October, November and December two years ago last fall?
A. No, sir, I guess I was in St. Louis.
Q. I thought you said you have worked here five years?
A. Yes, sir, but I was in the hospital a week or two weeks or three weeks.
Q. Any longer?
A. No.
Q. Just think a little bit and see if you cannot recall that there were a great many heavily loaded trains of grain passed through in solid trains, going from points in the northwest to points south and east of here, say to New Orleans, in the fall and winter of 1907?
A. No, sir.
Q. You cannot recall that?
A. No, sir.

And further deponent saith not.

2352 It was agreed, that GORDON N. PEAY, if present, would testify as follows:

My name is Gordon N. Peay: I am of lawful age, and live in Little Rock, and have been engaged in the real estate and banking business in this City for many years, and am acquainted with rental values of property in said City: I am well acquainted with the Pratt Hotel, and was in 1907: I think the reasonable rental value of the hotel, including bar, dining room, news stand and lunch stand, would be $350.00 a month, in 1907.

2353 R. E. KIMBELL, a witness of lawful age, being duly produced, sworn and examined on behalf of the defendant, testified as follows:

Direct examination.

By Mr. HILL:

Q. When we were last in session I requested you to make a couple of exhibits, which you wanted to have time to prepare carefully, have you done so?
A. Yes, sir, I have.
Q. Will you please present each one of them and state what it is as you present it?
A. The first exhibit, which will be "Exhibit G" is a statement covering six months ending December 31, 1907, prepared in answer to the request of Judge Hill, showing assumed revenue on the following bases:

State freight 96.1% increase over actual: interstate freight 9.4% increase over actual; state passenger, 35% increase over actual; interstate passenger, no increase over actual; miscellaneous, no increase over actual; and also showing the actual operating expenses, taxes and rentals divided between the several classes of traffic on
2354 the basis of the assumed gross revenues, ascertained as above; also double the assessed valuation divided on the same gross

revenue basis and the percent of return on said valuation.

Those, as I understand it, are the features you desired covered in this exhibit.

Q. In your other exhibits you carried forward 100% on freight and 25% on passenger for the supposed added intrastate expenses: I do not remember whether I asked you to carry that forward on this exhibit or not.

A. You did not and I did not do it. I confined the statement to your request literally.

Q. Mr. Kimbell, I see from your exhibit G that the return upon your property, assuming an increase of 96.1% on intrastate traffic, 9.4% on your interstate traffic, and 35% on your intrastate passenger traffic, will give you a return of 18.58% upon your property.

A. That is correct, without considering any extra cost for handling state business.

Q. That is what you would call the straight revenue basis, is it not?

A. Yes sir.

Q. And if the extra cost of one hundred or more percent on the freight, and twenty five or more percent on the passenger, were added to that, it would produce a still higher return upon your property as shown in your previous exhibit—I mean, the
2355 intrastate property.

A. It would produce a higher rate than is shown on the previous exhibits, for the reason that the revenue has been increased on this arbitrary basis.

Q. Mr. Kimbell, will you answer as to the other exhibit which I requested you to make?

A. Yes, sir. I submit a statement which will be Exhibit "H" being a statement supplemental to Exhibit No. 33 and prepared in answer to the request of Judge Hill, showing operating expenses, taxes, rentals, etc. and double the assessed valuation of property, divided between the several classes of traffic on basis of actual gross revenues for the six months ending December 31, 1907.

Q. Mr. Kimbell, this would show a return upon your property for this period on a straight revenue basis of 12.84% of all business done in Arkansas, would it not?

A. Yes, sir.

Q. And for the intrastate business done in Arkansas, freight and passenger combined, for the given period, without any extra cost for either freight or passenger business done in the State, as over the interstate of 7.71% upon the property?

A. Correct, yes, sir.

The exhibits "G" and "H" are marked respectively and are in the words and figures following to-wit:

For Exhibit "G", see Volume 9, page 5783.

For Exhibit "H", see Volume 9, page 5785.

2356 Cross-examination.

By Mr. MOORE:

Q. You stated this exhibit was supplemental to Exhibit 33: is that correct?

A. That is correct.

Mr. HILL: I intended to ask Mr. Kimbell something else and I may as well ask him now Mr. Moore.

Q. Mr. Kimbell, I wish you would give us the original or a copy of the contract between your road and the Iron Mountain for that leased road and trackage of the Paragould line.

A. Do you intend to put that in evidence? It is a very voluminous document.

Mr. HILL: I presume we can agree on that. I want to put part of it in evidence. You had better let us have the contract and we can agree on what we want.

Mr. MOORE:

Q. Mr. Kimbell, how was the 96.1% increase in interstate freight shown on Exhibit G, just filed by you, arrived at?

A. The 96.1% is the percentage of increase in the average revenue per ton per mile for the month of January 1909, over the average revenue per ton per mile for the six months ending December 31, 1907.

The 9.4% is the corresponding average increase on the interstate traffic.

Q. Would it be a fair assumption to compare the average revenue on business that moved in January, 1909, with the business that moved in the last six months in the year 1907?

A. I should say that it would be unfair.

2357 Q. I wish you would state your reasons for that opinion.

A. The assumption of an increase in the revenue for the six months ending December 31, 1907 as submitted by Judge Hill, which assumption is predicated on the average revenue per ton per mile for that period, being the same as the average revenue per ton per mile for the month of January, 1909, is, in my judgment, misleading, and in fact is highly improbable.

Such a difference in the average revenue per ton per mile on state freight as exist- between the six months ending December 31, 1907 and the month of January, 1909, might occur with exactly the same rates in effect for both periods. I say it might occur, for the reason that the character of freight handled during the two periods might vary sufficiently under exactly the same rates to materially change the average revenue per ton per mile.

Since this question was raised by Judge Hill a few weeks ago, I have investigated in a general way the character of the principal commodities handled during the two periods referred to and find these important changes in the commodity movement, which would

under any set of rates, have the effect of increasing the average revenue per ton per mile:

Coal, a low rate commodity, constitutes 5.5% of the total state movement for the six months ending December 31, 1907, and but 1.02% for January, 1909.

2358 Forest product material, another low rate commodity, constitutes 29.40 percent for the six months ending December 31, 1907, and but 13.96 percent for January 1909.

Now, on the other hand, the following important commodities which are rated higher than coal and forest product material show a proportionate increase in volume handled as follows:

Grain and grain products for the six months, 3.87 percent, and for January 1909 5.86 percent.

Hay, for the six months period 13.30 percent, and for January 1909, 18.56 percent.

Cotton seed products for the six months' period 5.58 percent, and for January 1909, 15.67 percent.

This market shifting in the character of tonnage handled would in itself make a radical change in the average revenue per ton per mile even though there was no change in the rates, and in my opinion, accounts in a large measure for the difference in the averages of state business during the two periods.

The length of haul of the differently rated classes and commodities is also an important factor to be considered in a comparison of this kind.

Exhibit 35, which covers the six months' period, shows an average haul of 43 miles for state freight and 232 miles for interstate freight.

2359 Exhibit A, which covers the month of January 1909, shows an average haul of 41 miles for state and 222 miles for interstate freight.

It is a recognized fact that as the haul increases the average revenue per ton per mile decreases. It is, therefore, to my mind, misleading to make a comparison of the average revenue per ton per mile for one period with another unless the character of tonnage carried and the haul for each kind of tonnage is identical.

I might say in this connection, that there is apt to be confusion in the use of the terms "average rate per ton per mile" and "average revenue per ton per mile". As heretofore explained, the average revenue per ton per mile may vary to a marked extent during any two periods, notwithstanding the fact that the identical rates prevailed during both periods.

The Interstate Commerce Commission uses the language "average receipts per ton per mile." It appears proper to use the term "average revenue per ton per mile" or "average receipts per ton per mile", which, as is well known, is determined by dividing the ton miles for all classes of freight handled into the revenue derived from all classes of freight handled. A change in the average revenue per ton per mile, or the average receipts per ton per mile, does not necessarily mean a change has occurred in the rates, as a variation of tonnage would of necessity produce a change in the revenue.

2360 As regards the assumption of 35 percent increase in state passenger revenues and no increase in interstate passenger

revenues, I wish to state that in my re-direct examination, in answer to a similar problem submitted by Judge Hill, I stated that the assumption of 33⅓ percent increase in state freight rates without any increase in interstate freight rates was in my judgment an incorrect one and for that reason principally the example submitted by Judge Hill was not one that could be practicably applied to any condition that might exist.

I wish to reiterate these remarks in connection with the problem submitted by Judge Hill, which assumes an increase of 35 percent in the state passenger revenue and no increase whatever in the interstate passenger revenue.

So far as my observation and study of adjustments, brought about by rate changes goes, I should say that it would be an impossible condition to assume that the state passenger rates would increase 35 percent without any increase whatever in the interstate passenger rates.

The passenger rate men, however, would be better able to explain that than I would.

Mr. HILL: Are you referring to Mr. Stone?

A. I say most any passenger rate man. Those are my reasons why it seems to me that the comparison proposed by Judge Hill is not a fair one.

Mr. MOORE: Mr. Kimbell, you were asked by Judge Hill,
2361 in reponse to which question you filed exhibit G, the following question:

"If the rates which produce the increase in average revenue per ton per mile as shown in your January 1909 statement of 96.1 percent on interstate freight had been in effect during the last six months of 1907, I want you to calculate the gross revenue of your freight traffic for that period, assuming now that the increase has been during that period."

I want to ask you, Mr. Kimbell, if it was a change or variation in the rates that produced the difference in the revenue per ton per mile, or was it the change in the character of the tonnage and commodities that were handled during the two periods, and was the result affected also by the differences growing out of the long and short haul, as between state and interstate business?

A. I would say in answer to that, that there are three elements which were affected, namely:

There was some change in rates; there was likewise a very marked shifting in the character of the tonnage handled, and there was a difference in the length of haul, all of which had its effect.

Q. I want you to state if the change in the revenue per ton per mile on your railroad would run uniform in any two months—is it likely that it would, or is there a variation from month to month of the revenue per ton per mile, both state and interstate, as compared with the last six months of 1907?

2362 A. There are some very wide fluctuations, I have noticed, in the average revenue per ton per mile.

Q. Is not that a necessary result of the variations in the character of the tonnage that is handled from time to time?

A. I think that fact is amply proven by periods when there are no changes in rates and there are still these changes in the average per ton per mile.

Q. I was going to ask you that question: if those variations did not occur when the rates were the same?

A. It is true they do, yes, sir.

Q. And that grows out of the shifting of the business as it occurs from time to time, the shifting in the character of the business handled?

A. If the majority of our tonnage handled for six months was low class tonnage, it is reasonable to suppose that our average revenue per ton per mile would be low. Now, if on the other hand, next month the majority of our tonnage handled was high class, it is likewise reasonable to suppose that the average revenue per ton per mile would be higher.

Q. I believe you have already stated that your Exhibit G provides for no extra cost in handling state freight?

A. It does not.

Q. Mr. Kimbell, Exhibit G shows an increase of 35 percent in passenger revenue, and no increase in interstate:

I want you to state what the facts are in regard to whether
2363 there was a corresponding change made in interstate passenger rates at the same time there was a change made in intrastate passenger rates.

A. As I understand it, there undoubtedly was. The passenger people adjusted their interstate rates as soon as possible after the change occurred in the state rates.

Q. So that increase in the revenue from one class of passenger traffic without any increase in the other, did not grow out of difference of rates, did it——

A. No sir.

Q. —because the rates were kept uniform?

A. That would be an absolutely impossible condition, I should say.

Q. Now, does this 35 percent represent any actual figures, as shown by the operations of your road, or is it merely an assumption?

A. It is an assumption, based on the conclusions, I think, that were reached at Little Rock last Spring when Judge Trieber considered the proposed advance in passenger and freight rates. The general average at that time, as I recall it, was about 35 percent in the passenger business.

Q. What I want to get at is this: you have assumed in here an increase of 35 percent in passenger revenue over the actual.

A. Yes, sir.

Q. Where does that assumption arise?

2364 A. That was Judge Hill's suggestion.

Q. But is it an actual fact, do your records show that?

A. No, sir, that absolutely is not according to the books.

Q. Your Exhibit H, which is an extension of a former exhibit filed by you as exhibit No. 33, by showing the return on the basis of exhibit 33—upon the value of the property, this return shown on

exhibit H is based on straight revenue, without any allowance for extra cost, is it not, Mr. Kimbell?

A. Yes, sir.

2365 R. E. KIMBELL, recalled, testified as follows:

Redirect examination.

By Mr. HILL:

Q. Mr. Kimbell, I did not quite follow you in your comparative figures that you gave in that six months' period and the January, 1909, period: let us see if I can get it: you give the percentage on coal, for the six months' period as 5.50 per cent, I believe?

A. Yes, sir.

Q. That is intrastate or interstate?

A. This is all intrastate business I am speaking of.

Q. Did you compare the coal movement of the interstate with that?

A. No, sir.

Q. Would that be of any value, to make a comparison of the intrastate coal of the six months' period with the one month period, when you do not compare it with the interstate coal movement for the same period?

A. For the purpose of determining the average revenue per ton mile on state business, I should say that interstate had nothing to do with it.

Q. Take this for illustration: I see that in January your coal, intrastate traffic, was only one per cent. Suppose that the coal, intrastate traffic, was only one per cent during that month?

A. That would not affect the average revenue per ton per mile on state business.

Q. No, but it would affect the relation of the revenue be-
2366 tween the state and the interstate business, would it not?

A. Yes, sir; these percentages I was giving there were to show the impracticability of comparing the average rate per ton per mile of state business for the month of January, with the six months' period.

Q. The comparison we were seeking to call your attention to was the relation between state and intrastate, 9.4 per cent increase of interstate and 96.1 per cent on the state:

Will these figures throw any light on that, when you do not compare the tonnage for the corresponding period for the interstate?

A. I should say it would. Your whole question is predicated on a 96.1 per cent increase on state freight.

Q. While there is only 9.4 per cent increase on the interstate?

A. Yes, and we seek to show you in these figures I have given you here, that that 96.1 per cent is not a normal condition. That is to say, that it could be entirely different from that.

Q. You seek to show that there is a great fluctuation in your revenue, is not that it?

A. I seek to show that while that difference occurs there it could

occur without any change in rates whatever; it could occur by reason of the shifting of traffic.

2367 Q. That shows that there is great fluctuation in your revenue?

A. Yes, sir.

Q. It is rather an unreliable yardstick to measure your expenses by if it fluctuates that badly, is it not?

A. Yes, sir. It is very good, I will say, for operating comparisons. That is about the only use we ever make of it. It is all right to compare January 1909——

Q. You are talking about ton miles and I am talking about ton revenue: this shows a great fluctuation in your revenue, does it not?

A. It does.

Q. Does not that show that your revenue is a very unreliable yardstick to measure your expenses by?

A. No, sir. I should say that the revenue reflects the returns on the different classes of traffic that may be handled.

Q. It is the return from the traffic?

A. Yes, and if the revenue is large, I think it is logical to conclude that we have handled some high-class freight and are therefore entitled to high revenue.

Q. That is merely a question of revenue, but you are seeking now to measure your cost by your revenue and you are showing very great fluctuations in your revenue?

A. Yes; fluctuations, it seems to me, are quite proper; if the revenue is high, it is reasonable to suppose the expense would be high for handling that high class traffic.

2368 Q. And if the revenue is low, the expense is lower, is that your theory?

A. That would be the logical conclusion, on a revenue basis. It reflects the service.

Q. Mr. Kimbell, could you give us your figures showing the percentage of coal tonnage in January 1909, interstate, and your coal tonnage for the six months' period, and the lumber, grain, hay and cotton seed products, just like you have on this?

A. It can be done, but I would dislike to have to do it.

Q. It seems to me that that is a necessity growing out of your exhibit here.

Mr. MOORE:

Q. Would that involve a large amount of labor and expense?

A. Yes, sir.

Mr. MOORE: Then I want to advise Mr. Kimbell not to do it, unless he wants to do it voluntarily. You have accountants, and our books are open to you.

Mr. HILL: He has put one side in evidence and it looks to me as if it is up to him to put in the other side.

The MASTER: Mr. Kimbell, tomorrow morning you can show us what labor is necessary in relation to furnishing that, and about how much it will cost, and then we will decide that.

The WITNESS: As I understand you, Judge, I am to let you know approximately the amount of labor involved in fur-
2369 nishing this information?

The MASTER: The amount of labor involved and the cost.

Mr. HILL:

Q. I want to get a little information about this: in making these percentages, are those tons or ton miles?

A. Ton miles?

Q. On both sides?

A. Yes, sir.

Recross-examination.

By Mr. MOORE:

Q. You were asked, Mr. Kimbell, if it would not be necessary to show the character of the tonnage that was moved in interstate traffic in January 1909, in order to balance or explain the statement contained in your testimony as to showing what the intrastate tonnage consisted of:

I want to ask you if there is any connection whatever, in so far as an explanation of the fluctuations are concerned, between the two?

A. Absolutely none.

Q. The revenue shows a certain increase of revenue derived from each kind of traffic?

A. Yes, sir.

Q. And the effect of the increase, or the cause of the increase in each one is independent of the other, is it not?

A. Yes, sir. Those are the two factors on which Judge
2370 Hill based his problem, one an increase of 96.1 per cent on state, and the other an increase of 9.4 per cent in the interstate. Those factors are absolutely determined independent of one another. The wide disparity led me to make an explanation of why the 96.1 per cent was so large, and it developed the fact that that could be large without any change in rates whatever.

Q. I believe you testified that coal was a low rate commodity, did you not, Mr. Kimbell?

A. Yes, it would be.

Q. When is a large volume of coal moved in Arkansas?

A. I am not very familiar with that Judge. I suppose——

Q. Don't you know whether in the summer or winter months?

A. It is used in the winter months and I assume it is probably shipped in summer and stored.

Q. At what season of the year is most of the cotton crop of Arkansas moved?

A. That is moved in the latter months of the year and the early months; from October to February.

Q. Now, without multiplying illustrations, I want to ask you if there is not necessarily large fluctuation in the monthly revenue derived from the operation of the railroad growing out of the character

of tonnage that is moved at different seasons of the year and different months?

A. Yes, sir; I think there is.

Q. That might be the case when the average revenues per
2371 annum, round the period of a year, would not fluctuate a great deal?

A. Yes, sir.

Q. And that is a fact, is it not?

A. That is quite true.

Q. The variations in receipts for short periods like monthly periods, does not indicate large fluctuations in the annual earnings of railroads, does it?

A. Not unless the receipts are light during the entire year.

Q. I am not speaking of that. I mean the various months that constitute the fiscal year. The fact that that varies and fluctuates and the earnings in some months are higher than in others, is not inconsistent with a large degree of uniformity in the annual earnings of railroads?

A. No, sir. The monthly returns are apt to vary considerably and still the annual returns may be normal.

Redirect examination.

By Mr. HILL:

Q. That is true both of state and interstate?

A. Yes, sir, I think so.

Q. Is there about the same fluctuation in interstate and in state?

A. I think so; they travel fairly uniformly.

Q. They go hand in hand, do they?

2372 A. That may not be literally true, but I think they go very well together.

Q. Figuratively speaking, a kind of "Siamese twins"?

A. That, however, is not true of expenses, Judge.

Q. Mr. Kimbell, you stated there was no relation, as I understood it, between these movements in the intrastate business and the movements in the interstate business: is that the way you——

A. Not so far as determining the two independent averages which you used as factors in your problem are concerned. There is no connection.

Q. Is there not supposed to be really a relation between the rates, state and interstate?

A. There is, yes, sir.

Q. Do you know what it is?

A. Know what the relation is?

Q. Yes.

A. It would be very difficult to say. It varies considerably, I guess.

Q. Do you know any body that does know?

A. In a general way I think our traffic men have told you that the relation exists.

Q. Mr. Watson is authority on that proposition?

A. As far as the rate feature goes, yes, sir.

Q. Do you stand by what he says on that subject?
A. I think his testimony should stand on its own bottom. I think it is all right.
2373 Q. I want to know if you have any independent knowledge of that relation, other than what Mr. Watson has given?
A. Yes, I have a general knowledge, to which I think I have testified before, to the effect that there is a relation.
Q. I understand that, but what is it?
A. That is a very difficult thing to say.
Q. I know it is.
A. It has been explained to you by Mr. Laing, who was just on the stand, that his passenger interstate rates were increased gradually, not all at once.
Q. But I am trying to get at how much?
A. All I can say on that, Judge, is that when you find it, I would like to see it.
Q. I have been trying ever since this case began to find it. I want you to refer me to somebody that can give it to me, if you cannot do it yourself. You cannot undertake to do it?
A. No, sir.

2374 J. D. WATSON, a witness of lawful age, being duly produced, sworn and examined, testified on behalf of the defendant as follows:

Direct examination.

By Mr. HILL:

Q. Have you the data ready which I called for heretofore?
A. It was the rate on beer from St. Louis to Little Rock and from Milwaukee to Little Rock, and the divisions of the rate from Milwaukee to Little Rock, via St. Louis. I presume you intended to say East St. Louis. The movement is not via St. Louis.
Q. You mean it would be handled through the Illinois line of the Iron Mountain?
A. It would be handled through East St. Louis. The movement from Milwaukee would not be via St. Louis. It would not cross the river here.
Q. It would run down the Illinois Division of the Iron Mountain, cross the bridge, and then over to Dexter, Missouri, would that be the way?
A. Yes, sir.
Q. And strike the main line of the Iron Mountain at Dexter, Missouri?
A. No, it would strike the Cotton Belt at East St. Louis; from East St. Louis via the Cotton Belt.
Q. Your illustration is on the Cotton Belt?
2375 A. Yes. The rate from St. Louis to Little Rock, carloads, minimum weight 20,000 pounds in wood, and 24,000 pounds in glass, is 27 cents per hundred pounds.
The rate from Milwaukee to Little Rock, subject to the same minimum weight, is 34 cents per hundred pounds. The rate from

Milwaukee to Little Rock would divide to East St. Louis 10.3 cents; south, 23.7 cents.

The next illustration is packing house products:

The rate from St. Louis to Little Rock, carloads, 31 cents per hundred pounds.

The rate from Chicago to Little Rock, 38 cents per hundred pounds. This rate divides to East St. Louis 7.8 cents; south, 30.2 cents.

Q. Is not the local rate from East St. Louis the same as from St. Louis?

**A. It is.**

Q. Then if you took St. Louis instead of East St. Louis, it would be the same figures?

A. The same figures identically; that makes no difference. I am simply trying to clear you up as to the movement of the beer, which does not move through St. Louis.

Q. I had in mind the Iron Mountain.

A. The next illustration is farm wagons, from Moline, Illinois, to Little Rock: 38 cents per hundred pounds. From St. Louis or East St. Louis to Little Rock, 33 cents per hundred pounds.

The rate from Moline to Little Rock divides to East St.
2376 St. Louis 10 cents, and south 28 cents.

The next illustration was the rate on boots and shoes, from St. Louis to Paragould, Arkansas, which is 81 cents per hundred pounds; that is less than carload. And boots and shoes from St. Louis to Memphis, Tenn., which is 65 cents per hundred pounds.

Q. Would that not apply to carloads where there is L. C. L.?

A. That is an any quantity rate. Packing house products, less than carload, St. Louis to Paragould, fourth class, 43 cents per hundred pounds. I specify the class there for the reason that there are different classes of packing house products in less than carloads, and the fourth class covers the large majority——

Q. That is the principal movement of packing house products?

A. Yes, sir. To Memphis, less than carload would be 26 cents per cwt.

Q. What is it to Paragould?

A. 43 cents.

Q. Is that the same proportion as to carload?

A. The carload to Paragould is 26 cents, and the carload to Memphis is 21 cents.

Q. That Memphis business would go right through Paragould on its way, would it not?

A. With us, yes.

Q. Are those all the illustrations I asked you for?

2377 A. Yes, but I believe the conditions in connection with that should be explained, so you will fully understand.

The rates from St. Louis to Memphis and to all Mississippi River points are governed by conditions that do not control the Arkansas rates. The rates to Memphis in no way control the rates to Arkansas, except it be a combination through Memphis may in some case make a lower rate than the established rate from St. Louis to

points in Arkansas. The rates to Memphis are very low on account of conditions over which the railroads west of the River have no control.

Q. You mean that the rate to Memphis plus the local rate back?

A. No, the rate to Memphis, plus the rate from——

Q. Take Paragould: that would be a back-haul.

A. Yes, but take a station in southern Arkansas, say Hope, for example, would make a lower through rate than the established basis operated by the lines west of the River, under the Western Classification; the rates to Memphis being governed by the steamboats and——

Q. How about an illustration of a shipment between Memphis and Fair Oaks?

A. That would hardly make a lower rate on the Memphis combination, than the straight rate; the distance being so short from Memphis is the reason of that.

2378 Q. That is a junction point, is it not?

A. Yes, but it amounts to very little.

Q. The business at Fair Oaks, I suppose is nothing, but would not that be a base for other rates out of there?

A. No, it happens not.

Q. Usually that is the case?

A. That is the case in some common points, but Fair Oaks is not one of them. Another feature in connection with that is the fact that the rates to Memphis, being a shorter distance, are lower than the rates to New Orleans. In other words, the governing factor is distance, both to meet the water competition——

Q. The governing factor was not distance between Paragould and Memphis?

A. The rates to Memphis have no effect whatever on the rates to Arkansas.

Q. The length of haul had nothing to do with the Memphis-Paragould rate on shoes, as illustrated?

A. It does not affect the rates to Arkansas as compared to rates to Memphis, for the reason that the Memphis rates do not base the rates to Arkansas.

Q. Do I understand that that resolves itself into this: that the element of distance enters into the water rates, but does not enter into railroad rates?

A. The element of distance enters into all rates.

2379 Q. Both water and rail?

A. Yes, sir.

Q. It did not in the Paragould shipment?

A. It does enter into the Paragould rate.

Q. How do you figure that?

A. The rate to Paragould is less than the rate to Brinkley——

Q. It is more than the Memphis rate and Memphis is a longer distance?

A. The rate to Memphis is not in any way governed by the rate to Paragould and vice versa.

Q. But in those two instances which are an illustration, the length of haul cuts very little figure in those rates?

A. The length of the haul cuts no figure as far as the Memphis rate is concerned, with us. We don't make the Memphis rate. We simply meet the competition fixed for us by water and rail.

Q. Then you move traffic on that Memphis rate without regard to the distance?

A. Some of the Memphis rates. There is some of the traffic we cannot participate in.

Q. But all that you do participate in, you move regardless of that, to meet your competitors?

A. To meet competition, yes, sir.

2380 Cross-examination.

By Mr. MOORE:

Q. I wish you would explain what you mean by stating that your road does not participate in some of this Mississippi River business.

A. Well, the best example of it is a concrete case I had yesterday. We were offered a shipment of cement, a number of cars to Memphis. We found that the rate was nine cents. By the time we paid the arbitrary up to and beyond our line there would be nothing left for our services.

That is only one example. There are many, any number of them.

Q. What is the principle upon which traffic men ace in deter? mining when they will not solicit or take business, under conditions such as you had in mind when you made the statement that you did not participate in some business?

A. When the business is unremunerative or will not yield a fair rate for the services we are required to perform after deducting the arbitrary we must pay.

Q. Is that a rule that obtains generally in railroad traffic, in cases where the normal conditions are affected or modified by competitive conditions or commercial conditions, which would render it necessary to modify the normal rates?

A. I think it is a universal rule. It is with our road
2381 and I presume with all other lines.

Q. Do you know from your intercourse with traffic men generally, what the rule is?

A. I should judge, from the various tariffs and the exceptions provided in the tariffs, that that is the case.

Q. Now, state what that competition at Memphis, to which you referred in your testimony in chief, is.

A. The water competition, the short line from St. Louis to Memphis, the Illinois Central.

Q. In what way does that modify conditions from what they would be otherwise?

A. The water lines would make a lower rate than the rail lines there, their cost being less, and necessarily they would establish a

lower rate to secure the business as against the railroad, and the rail lines would meet those rates. If the rail line had terminals of its own in Memphis and had no expensive charges or arbitraries to pay to get the traffic, they could probably afford to meet the River competition; whereas a line situated as the Cotton Belt could not afford to do so.

Q. Is the mileage scale abandoned in fixing rates under such abnormal conditions as you have just been describing, or is it still observed?

A. It is still a controlling factor.

Q. What are the conditions as between St. Louis and New Orleans, we will say? I take it Memphis is one of the important basing points between St. Louis and New Orleans, and New
2382 Orleans, perhaps is the next: to what extent, if any, is the mileage scale observed in fixing rates from St. Louis to Memphis and New Orleans?

A. The water carrier, if he went to New Orleans, for example, would have about twice the mileage than to Memphis, or possibly more, and their rate to New Orleans would be higher than the rate to Memphis, and the railroad lines competing for the traffic would be in the same position. The rates to New Orleans would therefore be higher and to that extent the mileage would indicate conclusively that the length of haul had a great deal to do with the rate applied.

Q. Where the conditions are normal and not modified by unusual commercial or competitive conditions, to what extent is distance a factor in determining the rate of transportation?

A. To a large extent.

Q. Please explain it.

A. Take any tariff that provides rates from a given point to a line of railroad, the longer the distance the greater the rate would be. Now, where a common point happens to intervene and that common point is governed by other conditions aside from the mileage feature, or has conditions aside from the mileage feature, which control the rate, that particular common point may carry a lower rate than the stations on either side of it; but those stations, not being controlled by the commercial or competitive condi-
2383 tions, would still be governed by the mileage feature. In other words, it would be controlled by the mileage.

Q. You mean to say, then, that aside from some special point that was affected by the unusual condition, the rates to intermediate points would still be governed by the mileage scale?

A. To a very large extent, yes. I can give you any number of examples of that.

Q. Give us some, please. I will be glad if you will give us some examples by citing cases that occur in practical operation on the main line of the Iron Mountain and the main line of the Cotton Belt roads, to points in Arkansas.

A. Well, bagging and ties, is a fair example. The rate to Moark (which is the first Arkansas station) from St. Louis, is 17 cents.

The rate to Little Rock—the first station south of Little Rock.

would be 20 cents. The rate to Little Rock would be somewhat lower. I haven't the figures with me, though.

To stations south of Benton the rate would be 24 cents, and as the distance increases the rate increases.

Q. What are the conditions that produce a lower rate to Little Rock than to Benton or Malvern, stations beyond?

A. At Little Rock the distance is shorter, and while at Benton and Malvern you have practically the same competitive conditions you have at Little Rock, that competition is governed also by the mileage basis. They have to haul the business further and
2384 therefore they cannot afford to make as low a rate for the longer as for the shorter distance, and they adjust their rates accordingly.

Q. Do the same factors prevail at Memphis, New Orleans and other points that are governed by water competition?

A. The factor as to distance, yes.

Q. As to the graduation of rates, now?

A. As to that also, the rates being higher for the shorter than for the longer distance—I mean, lower for the shorter than the longer distance.

Q. To what extent does that rule apply to different classes of commodities, high and low classes of commodities?

A. Well, in some cases the low class commodities are grouped in zones. Is that what you mean?

Q. Yes. Go ahead and explain it.

A. Where the zone basis is applied, the rate may be a little high to the first point in the zone and probably low for the last point in the zone, but as a general average the rate for the entire zone would be considered fair.

Q. I will call your attention to an instance that is in evidence here:

It is shown that here is a large territory embraced in the lumber zone extending from some point south of the Arkansas River, perhaps to the Gulf of Mexico:

I wish you would state how those rates compare relatively, in point of reasonableness, at the northern and southern points
2385 in that zone, and the intermediate points, on shipments to commercial centers north, such as St. Louis and Kansas City.

A. Well, from the lumber zone, which starts at Little Rock or the Arkansas River, and goes to the Gulf, the rate from the first stations in the zone—Little Rock, Pine Bluff, etc., may be considered fair rates.

The rates from the lower end of the zone are considered very low.

The rates from the central portion, or the average distance which we haul lumber, are considered reasonably low under the present conditions.

Now, it does not follow that all of the lines that operate from that entire zone, each have those rates. Some of the lines will operate from one point on their own rails, or all points on their

own rails, but I don't believe any one line would operate the rates from all points in the zone, or could afford to do so.

Q. Why?

A. On account of the arbitrary they would have to pay to get the traffic to their rails.

Q. Because it would be unremunerative?

A. Yes, sir.

Q. Do any of the railroads ever indicate on their tariffs, or the sheets that they issue in connection with their tariffs, that they will not handle certain territory, or handle certain parts of that territory?

2386 A. Any common tariff covering several railroads carries an exception to the application of the rates, which shows conclusively that each of the parties to that tariff do not participate in all the rates shown therein, and are not in a position to handle all the traffic covered thereby.

Q. Do you know about the case that came before the Interstate Commerce Commission, in which Oklahoma parties made complaint that the rates to the southern parts of the lumber zone in Oklahoma, extending north, were too high?

Mr. HILL: I am perfectly willing that Mr. Watson be examined on things I bring out, but I do not care to make him your witness in the trial of new matters.

Mr. MOORE: Well, I will withdraw that if you object to it.

Q. Now, Mr. Watson, on your direct examination you were asked to give the rates over the Missouri Pacific Railway, under the joint tariff, from the Illinois coal fields to Little Rock, and I think you showed instances in which higher rates were applied for shorter distances, than the rates for some other points further away from the point of shipment: Will you state, first, whether those conditions are exceptional or not?

A. They are exceptional.

Q. What cause brings that about?

2387 A. I happen to be very familiar with the rate to Little Rock, that is adjusted upon the Memphis combination, the rate to Memphis from the Illinois fields being governed by the condition of water competition, resulting in a rate of $1.00 per ton from the Illinois mines to Memphis.

The rate from Memphis to Little Rock, established by the Rock Island, the short line, based upon the Arkansas rate was $1.25 per ton, making the rate to Little Rock $2.25, which is the actual Memphis combination; and it was necessary for the lines operating direct to use the same basis in order to secure any of that traffic.

The rate to Monroe, Louisiana, which is $2.00 per ton, is a rate established by the one line operating from the Illinois coal fields to Monroe, to meet the rate in effect and operated by the lines from the Alabama district to Monroe, which also has its direct rails from the Alabama district to Monroe. To meet the Alabama competition it was necessary to put the Illinois coal into Monroe on the same basis.

That condition is also true at Tallulah, Louisiana, and points in that immediate vicinity which are in competition with the V. S. & P.

Q. What is the rule among traffic men when conditions of that sort arise, and the rates, due to those competitive conditions, are such that the business could not be carried without loss, or at least on a remunerative basis?

2388 A. The best explanation is this: that the Cotton Belt does not operate a rate from the Illinois mines to Monroe for that very reason—we can't afford to do so, the arbitrary up to and beyond our line being so much that the balance would not justify the services we would perform.

Q. Your attention was called to a number of points in Arkansas and Louisiana, further from the coal fields than Little Rock—Monroe, Louisiana, is one; Tallulah is another, where the rate is the same as Little Rock. It was shown that those shipments pass through the state of Arkansas, but not through Little Rock, but they are a longer distance: does that come within the explanations you have made as to the reasons for this abnormal adjustment of Little Rock rates, as compared with other points?

A. It does. The Iron Mountain reaches the coal fields and the destination points, and it is a one line haul from the coal fields to the destination; they don't divide the revenue with any other line.

Q. And the Little Rock rate is fixed by the conditions you spoke of a little while ago?

A. Yes, and it is considered a very low rate.

Q. You were speaking a while ago about the rate on beer from Milwaukee to St. Louis and East St. Louis.

Is there any terminal service or empty car service at St. Louis which enters into the rate?

2389 A. Yes, there is a terminal service in St. Louis on all beer. There is no beer shipped in East St. Louis that amounts to anything, and in St. Louis there is a terminal charge as well as a river transfer charge, to get it to our tracks.

Q. Empty car service?

A. Yes, sir.

Q. You also testified in your direct examination—your examination in chief, that the rate on shoes and dry goods from St. Louis to Little Rock, was $1.00 per hundred pounds; from St. Louis to Alexandria, $1.25, St. Louis to New Orleans, 90 cents: What brings about that condition?

A. The rate to New Orleans is fixed by water competition and by the direct lines to New Orleans.

The rate to Little Rock is standard first-class, and the rate to Alexandria the same. The rates to Alexandria are governed by conditions which do not govern at Little Rock or New Orleans.

Q. What are they?

A. A combination of locals through some Louisiana point or are fixed by differentials as is Shreveport.

Q. You have already stated, I believe, that the relative rates to which your attention was called in the examination in chief, when your attention was called to certain instances of shipments to Arkan-

sas and points in Louisiana—you have already stated those conditions: I wish you would state the relative volume of railroad
2390 traffic that is affected by those conditions, as to the whole traffic of the Cotton Belt road, so far as you know it, and to the Iron Mountain and other roads which operate in that territory.

A. Upon the Cotton Belt tonnage that is affected by those conditions as to the Memphis and other Mississippi Valley points, it amounts to a very small proportion—less than one per cent.

The Iron Mountain tonnage that would be affected thereby would be relatively the same as to their volume.

In other words, the lines west of the river cannot afford to meet the larger number of the rates that are operated to New Orleans, on the heavy moving commodities.

Q. And therefore they do not attempt to do it?

A. No, they don't.

Q. What lines do carry the most of that business and why?

A. The low grade lines and the short lines, the Illinois Central and the Mobile & Ohio.

Q. Why are they in a condition to handle it?

A. On account of their short mileage and the fact of the volume of tonnage that would be northbound to them. They have to have something to operate southbound and they can afford to handle this business cheaper on account of the direction of their traffic.

Q. What would be the result if they did not handle it?

A. It would go to the water lines. In other words, if they
2391 were to advance their rates——

Q. Is their reciprocal tonnage affected in any way by it?

A. It is affected very materially by it.

Q. Mr. Watson, you have just described the exceptional conditions that affect traffic growing out of the low rates on the Mississippi River and the short lines:

Now, referring more particularly to that class of traffic where that exceptional condition exists and you are forced to modify your basis of rates growing out of the exceptional conditions, what to any extent is the rule as to the classification and the application of rates according to the classification of the commodity, applied on river transportation?

A. I don't believe the river lines have any classification. They usually have a commodity rate.

Q. I mean this: you have in railroad operation, your first, second, third and fourth classes?

A. Yes, sir.

Q. And you charge higher rates for the first and have a descending scale down to the fourth class: what I want to know is if that system of graduation of rates is what is placed by these exceptional conditions as between the different classes of freight transported.

A. To some extent, yes, sir.

Q. To what extent, and how far?

2392 A. In a commodity rate the article is taken out of the classification and a specified rate provided therefor——

Q. Is there any difference made in the application of rates to the

different commodities? You say many of them are taken out of the class rates and put into commodity rates. Is there any difference in application of rates to different kinds of commodities? I mean, in that class of traffic which you charge a rate for—we will say dense articles, do you charge a different rate for heavy, dense articles than you do for lighter and more valuable articles?

A. That particular feature of it has to be taken into consideration by the steamboats and water carriers as well as by the rail carriers. It costs them more to handle that particular class of business. The heavier article is the less cost per ton. For instance, the steamboats charging for wooden ware or other light articles make their charges accordingly, but if they were going to handle grain or something that is heavier they are willing to apply a lower rate to it.

Q. Is that not the same distinction which you drew on a former examination, as to the rates being graduated according to the character of the article, the bulk, weight, density and value?

A. Steamboat lines use approximately the same method for graduating their rates as the railroads do.

Q. Does that system prevail in graduating rates as to traffic
2393 which is affected by the river conditions on the railroads?

A. Yes, it does.

Q. That practice is not eliminated, then, by these exceptional conditions you speak of?

A. It is not.

Redirect examination.

By Mr. HILL:

Q. Is there river classification permitted?

A. Not that I ever heard of.

Q. They make a package rate, don't they?

A. They make a package rate, a rate in cents per hundred pounds, for instance, so many cents per thousand for brick.

Q. They make a whiskey rate, do they not?

A. A rate per barrel.

Q. Then you adjust your rate in the western classification according to the river——

A. I don't understand what you mean.

Q. I understood your answer to Mr. Moore amounted to the fact that you took into consideration the classification the steamboats were making when you took your rates out of the class list and put them in the commodity list. Do you mean river classification?

A. River rates, not classification.

Q. It amounts to the same thing, does it not?

A. Yes, sir.

2394 Q. You do not like the term of "river classification?"

A. I do not want to talk about something I don't know anything about.

Q. Do the steamboat men get together like they do in the railroad lines and have a classification committee?

A. I have never heard of a steamboat classification. I have seen steamboat tariffs, but not classifications. They usually adopt the

southern or western or whatever classification happens to be operated.

Q. The river traffic runs on a package basis?

A. They have a great many commodities that are based upon package rates.

Q. Does not that river rate on all class rates and many of the commodities applied from St. Louis which you have given, also apply to Vicksburg, Greenville, Helena, and other points?

A. That is true.

Q. Where the distance is very different and much less than to New Orleans?

A. The distance is much less than New Orleans but the distance has a good deal to——

Q. Do these points I have referred to Helena, Greensville and Vicksburg, take the New Orleans rate?

A. No, there are quite a number of differences and exceptions in the tariff.

Q. As a general proposition that is the rule, is it not?

A. I cannot say generally.

2395 Q. Class rates all do, don't they?

A. Class rates do.

Q. And most, if not all, the commodities do, do they not?

A. I could not say that without examining the tariff carefully. My recollection is there are quite a number of exceptions.

Q. It is the rule to change them or to make exceptions, is that about the way to put it?

A. As far as Helena, Vicksburg and New Orleans are concerned, yes.

Q. You refered to this terminal charge on beer that you were going to ship from St. Louis to Little Rock there would be the same terminal charge on that beer that you shipped to New Orleans, at a less rate, would there not?

A. Yes, sir.

Q. I did not understand about that one per cent that you referred to in your examination a while ago. Do you mean that the traffic from St. Louis to New Orleans would be one per cent?

A. No, I mean that the traffic that the St. Louis Southwestern would move from St. Louis to Mississippi Valley points, including New Orleans and Memphis, would be less than one per cent of our traffic. In other words, we handle very little of it.

Q. They are dominated by the New Orleans rate?

A. Very little.

2396 Q. How much of your traffic is dominated by the Memphis rate?

A. Very little; Memphis, practically, alone.

Q. I thought from your testimony a little while ago that there were a great many combinations made on the Memphis rate?

A. No, I said the only combinations possibly would be the combinations in southern Arkansas and then it would be only in cases where the classification to Memphis was different than the classification to Arkansas on account of the class being different.

Q. What is the volume of traffic of the Iron Mountain that is dominated by the Memphis rate?

A. I don't know positively, but my understanding from the tariffs themselves would be that it amounted to very little.

Q. Is not all the traffic from St. Louis to Arkansas common points based on a differential——

A. The rates are differentially adjusted as to Memphis but they are not based on Memphis.

Q. What are they based on?

A. They are not based on Memphis and they are differertially adjusted over Memphis; there is a difference between a differential adjustment and a combination of locals.

Q. If there is a differential adjustment between St. Louis and Memphis that would control the movement from St. Louis
2397 to the Arkansas common points, would it not?

A. Not necessarily control it, but establish a parity as between the rates from Memphis to Arkansas points and from St. Louis to Arkansas points.

Q. That parity would be a fixed quantity?

A. It is a fixed quantity.

Q. It would not be a parity then, it would be a combination of those rates?

A. The fixing of those rates establishes the parity.

Q. It is a question of a different use of terms but you get the same proposition?

—. ——.

Recross-examination.

By Mr. MOORE:

Q. In order to clear up something that there may be some confusion about, I want to ask you in regard to the basis of rates:

I want to ask you if the rates from St. Louis to Arkansas points are not made on differentials over the rate from Memphis to Arkansas and not on the rates to Memphis, that is, from St. Louis to Memphis?

A. The rates from St. Louis to Memphis do not enter into the adjustment to points in Arkansas. The rates from Memphis to Arkansas points plus certain differentials established the rate from St. Louis to Arkansas points.

2398 JAMES C. LINCOLN, a witness of lawful age, being duly produced, sworn and examined on the part of the defendant, testified as follows:

Direct examination.

By Mr. HILL:

Q. Mr. Lincoln, will you please state your name, residence and occupation?

A. James C. Lincoln; St. Louis, Missouri; Commissioner of the Merchants Exchange Traffic Bureau.

Q. Before you were commissioner of the Merchants Traffic Bureau, Mr. Lincoln, in what occupation were you engaged?

A. Just before accepting my present position, I was with the Missouri Pacific Railway System, as Assistant Freight Traffic Manager.

Q. How long experience did you have as Assistant Freight Traffic Manager, or in the traffic department of the Railroad?

A. My entire life almost has been spent in the railway service. I entered the service in 1876 and left it in 1906.

Q. In what department of the service has your work been, Mr. Lincoln?

A. My original work was that of a general utility boy around headquarters. I was then in the office of the Superintendent
2399 of car service and from that in the office of the Master of Transportation; then in the General Freight and Passenger office as chief clerk. That, however, was in my association with the St. Joseph & Denver City Railway, now the St. Joseph & Grand Island Railroad, which company I left in September, 1888, to accept service with the Missouri Pacific Company.

I served the Missouri Pacific Company at Atchison, Kansas, for one year, in charge of their Central Branch and their Nebraska Division, in the Traffic Department. I then came to headquarters and served through the various offices from Assistant Freight Agent to Assistant General Traffic Manager.

Q. Was the St. Louis Iron Mountain & Southern a part of the system that you served?

A. Yes, sir.

Q. Are your duties in your present position such as keep you in touch and familiar with the rates prevailing in the southwestern country?

A. Quite generally, yes, sir. I have to keep in touch with the general rate adjustment to this entire section. I have to watch the adjustment from other markets in competition with St. Louis.

Q. In what year did you leave the railroad service?

A. In May, 1906.

Q. Mr. Lincoln, I wish you would state from your familiarity with the making of interstate rates, the controlling factors in the making of such rates?

2400 A. The controlling factors in the making of rates, state or interstate, or the foundation upon which a rate is made, is the maximum rate allowed by law, either state or interstate, or on through business the combination of state rates. They are departed from as commercial conditions require.

Q. What consideration in the making of interstate rates is usually given to the cost of actual service performed in transporting the traffic under the given rates?

A. Very little consideration is given to the actual cost of the service in making rates. Rates are made generally based upon competition or commercial conditions. The traffic man necessarily should be informed to a greater or lesser extent, as to what it costs, but in the making of any individual rate he is unable to determine what is the cost of handling that individual traffic.

Q. What information or statistics do the railroad companies have before the traffic men when they make rates, that is, as to costs?

A. Well, there are all kinds of statistics that reach a traffic man, or the traffic man can avail himself of them if he wishes to—as to the movement of the tonnage, the various commodities making up the tonnage, car movement and the averages. The ordinary traffic man is not well versed upon the expense of conducting the transportation as to any commodity on any division, but deals with totals.

Q. In fact, there are no statistics made by the railroad com-
2401 panies operating in this immediate section of the southwest that have the cost of transportation of any given commodities, are there?

A. Not that I know of. I never saw them.

Q. In your experience you did not meet such?

A. Not such statistics.

Q. In fixing rates from large distributing points, say St. Louis to Arkansas, and through Arkansas to points beyond, say New Orleans and the Texas common points on the other side, how largely, if at all, does the cost of the length of the haul from Arkansas points to New Orleans and to Texas common points, determine the rates that are fixed for these various movements?

A. In the fixing of rates from St. Louis to New Orleans or from St. Louis to Texas points, or from St. Louis to Little Rock, to what extent do the Arkansas rates enter as a factor?

Q. No, I say, to what extent does the length of the haul to these respective points, and the cost of the service, enter into making those rates, from St. Louis to New Orleans, from St. Louis to Texas points, or St. Louis to Little Rock; what consideration is given the cost of the service and length of the haul in fixing those rates?

A. Length of haul in the state or entire haul?

Q. Well, I will state it broadly: the length of the haul at all. What consideration is given to that in fixing such rates as I have
2402 mentioned.

A. Except in a very remote way, consideration is not given to the expense of conducting the transportation in making the rates from St. Louis to New Orleans; from St. Louis to Little Rock, or from St. Louis to Texas points.

Q. Mr. Lincoln, if you are called upon to divide the expense of traffic, state and interstate, under proper conditions, what formula would you use, or on what method would you proceed in dividing it?

A. That is a very, very broad question,—The question of the division of the expenses as between state and interstate. I have never been able to devise, or in my judgment, seen devised any method by which the expenses of the service could be separated.

I have had my views, but have never worked them out.

Q. Are there any controlling factors in the difference of the service, state or interstate, or the difference in long hauls and short hauls?

A. That is in connection with expenses?

Q. Yes.

A. In connection with the expenses of conducting transportation

there are controlling factors in the way of terminal expenses. There are controlling factors in the way of these short hauls being more expensive than the long hauls.

Q. How is that taken care of in practical railroading?

2403 A. In the adjustment of rates.

Q. The evidence in this case shows this—I will just speak in round figures—that the revenue per ton per mile on the state traffic is 12 mills and the revenue per ton per mile on the interstate traffic is 6 mills:

Do those statistics indicate to your mind that this extra cost for short hauls had been taken care of in the rates?

A. This would indicate to my mind that in a measure the short haul has been taken care of in the rate by the fact that the average rate per ton per mile is higher than for the longer haul.

Q. And that is the way, as I understand you, in which this extra cost of the short haul, terminals, etc., is taken care of?

A. It is contemplated in the rate adjustment, taken care of by the higher rates for the shorter hauls than for the longer hauls.

Cross-examination.

By Mr. MOORE:

Q. Mr. Lincoln, you think the length of haul affects the expense of conducting traffic, do you not?

A. Unquestionably the longer the haul the less the cost should be per ton per mile.

Q. What are the reasons that enter into and cause that result?

A. What are the reasons?

2404 Q. The causes of that.

A. The causes are the continuous transportation over divisions and that after freight is in movement it would be hauled greater distances without a progressive rate of expense for each mile hauled.

Q. There are two classes of interstate traffic; from one state into another, say adjoining states, and that which crosses states; the latter branch has been termed "trans-state" traffic in this case. A movement may originate in St. Louis and terminate in Galveston and it is a trans-state shipment in Arkansas because it has no origin or destination there.

To what extent does that enter into and affect the relative cost of transportation as between interstate, including that in interstate on one hand and intrastate on the other, in the state of Arkansas?

A. Well, I would say this: that business can be conducted with less expense which is the average shown by the result in the rate per ton per mile for the longer haul from St. Louis to Galveston than for a short haul within that distance, passing over the same line and in the same direction.

Q. Is there any other element, that in your opinion, would enter into the relative difference in expense than the short and long haul?

A. All things being equal, no.

Q. What is the service rendered with relation to trans-state traffic and interstate traffic, in the more limited sense that I ex-
2405 plained a while ago, in the State of Arkansas?

A. What is the relative service as between the trans-state and the interstate?

Q. Yes, in the state of Arkansas?

A. Well, within the state, on state traffic, terminal expenses are embraced in the rates.

Q. On what traffic?

A. On the intrastate or short haul traffic. The same terminal expenses are embraced in a rate on an average of a long haul. The continuous movement of freight for a long haul enables—when there is a volume of business to move—the conduct of that business cheaper than the short hauls, because the short haul is usually handled in local trains.

Q. Will you charge any terminal service on a trans-state shipment to the expense of conducting traffic in Arkansas?

A. No, there should be no expense charged in Arkansas for the terminal service.

Q. When you say there is a terminal service you mean the traffic itself requires a terminal service?

A. Yes, originally; there would be no terminal service on through business.

Q. How would it be in interstate traffic as distinguished from trans-state, from St. Louis to Little Rock?

A. There would be one service there in the state and one out of the state.

Q. How is it usually in state business?

2406 A. There are two terminal services in the state.

Q. Is there any material difference in the expense of conducting intrastate and interstate traffic, referring now to the state of Arkansas, without having to repeat that each time?

A. No.

Q. You think there is no very material difference in expense?

A. In handling state and interstate business?

Q. Yes.

A. No, sir.

Q. On what do you base that view, Mr. Lincoln, that there is no material difference?

A. I base that view upon the fact that an imaginary line does not increase expense. I support the proposition that there is a greater expense attached to the handling of short haul business, state or interstate, than on long haul business, state or interstate.

Q. Do you know the manner of handling state business that prevails usually on through lines of railroad, and particularly on the Iron Mountain in Arkansas?

A. That handles state business?

Q. Yes.

A. Why we have at Knoebel, Arkansas, we will say, a carload of lumber that is going to Little Rock, Arkansas. Now, the expense

attached to the movement of that car is the switching serv-
2407 ice at Knoebel in placing the car for loading by the shipper and in the placing of the car at Little Rock to the industry or team tracks for the unloading; two terminal expenses.

The expense of the movement of that car is no greater from Knoebel to Little Rock than it would be through Knoebel and Little Rock from a point north of Knoebel in Arkansas to a point south of Little Rock, Arkansas.

Q. Is the local business, intrastate business, conducted on local or through trains usually?

A. Ordinarily, all short haul business is conducted on local trains and the long haul business on through trains, irrespective of whether state or interstate.

Q. What proportion of state business is handled on through trains, would you say?

A. In Arkansas?

Q. Yes.

A. I doubt if there is a very great amount of Arkansas local traffic, that is, state business, handled on through trains. I imagine most of it is short haul and therefore would go on local trains.

Q. The statistics in this case show that the average haul, intrastate haul in Arkansas, is about 71 miles, and the interstate haul about 224 miles:

Now, what proportion of the interstate business would you say is handled on local trains?

A. What proportion of the interstate business in Arkansas
2408 is handled on local trains? From my general knowledge of the situation I would not say that there was a very large volume of interstate business handled on local trains. Of course, there is business out of Memphis, Tennessee, going into Arkansas, and considerable would be handled on local trains.

There is business out of St. Louis to Arkansas points that would be handled on local trains. And there is business out of Fort Smith to Arkansas points, that would be handled on local trains. There is business out of Texarkana that would be handled on local trains.

Q. You say business from St. Louis to Arkansas would be handled on local trains?

A. Yes, sir.

Q. Not on through trains?

A. On through trains to Poplar Bluff and local beyond, or through trains to the division points and local beyond.

Q. Suppose there is a car or train made up to go south from St. Louis to Little Rock; another to Texarkana and another to some point in Texas, perhaps: how is that freight handled?

A. Carload freight?

Q. Yes.

A. It should be and probably is handled on through trains.

Q. Which is the greater volume, the carload or less than
2409 carload, of interstate freight?

A. Interstate freight?

Q. Yes.

A. I imagine the carload business would be the greater volume of interstate business.

Q. It would be very much greater, would it not?

A. I think it would be materially greater. I have not the statistics on that.

Q. The statistics in this case show that 51% of the total traffic of the Iron Mountain Railroad Company consists of trans-state traffic and that 49 and a fraction percent is made up of interstate, and of the latter—according to my recollection—about 16% is state and the difference between that and 51% is interstate. I think I have stated it about correctly. I am not giving fractions.

Now, with those facts before you, what in your judgment would be the proportion of the entire interstate including in that term trans-state business that would be conducted on through trains rather than local trains?

A. Well, the percentages would indicate, and I think it is without question, that the trans-state traffic is all handled on through trains.

Q. You take that out at once?

A. The interstate traffic is very largely handled on through trains. State traffic is handled on local trains, very largely.

2410 Q. That is about as nearly as you can approximate it, I suppose?

A. About. I am speaking of Arkansas.

Q. This is all confined to Arkansas whether I so state or not.

Has your experience in railroad work been such as to qualify you to speak as to the difference in the expense of operating the local as distinguished from the through trains, in Arkansas?

A. No, I would not say that I could qualify myself to testify on the question of operating expenses. I have a general knowledge of it which I have ascertained by analyzing operating sheets.

Q. Then I will not ask you to go into it in great detail. But you know in a general way that there is a very large increased expense involved in the operation of local as distinguished from through trains?

A. There is a larger expense in handling local as compared with through trains.

Q. I would like you to state, in a general way, what produces that increased expense in the operation of local trains?

A. The increased expense in connection with the operation of local trains is the constant service that is required at the local points as they go along, in stopping trains and starting trains, as

2411 well as the switching service. There is also some additional expense attached to the conduct of the trains in the way of expense of employés' overtime, usually.

Q. Is there any other element of additional expense in connection with the labor feature, or are you familiar with that?

A. I am not.

Q. I mean, are the wages paid operatives on the local trains higher than wages paid on through trains?

A. I thought I covered that in increased cost of the labor on trains?

Q. You confined it in your answer to overtime but I mean now in the wage scale, the rate of wages paid?

A. I am not familiar enough with the wage scale to speak on that point. Some of those are based on the runs, allowing a man to make a certain amount for a certain run, on a mileage.

Q. You would say then, that there is very considerable increase of expense in the operation of local freight trains over through trains, would you not, Mr. Lincoln?

A. No, I would not say it was so considerable. When I say that, Judge, I do not want to be misunderstood in it.

Q. And I do not want to frame my question so as to mislead you.

A. I do not want to be misunderstood in connection with the operation of the local trains. The local train is handling
2412 interstate and state business at the same time; the expense goes to both.

Q. I am not speaking now of expense as applied to state and interstate. I am speaking of operating local——

A. The expense of operating the local trains is greater than the expense of operating the through trains.

Q. Is it not very considerably greater?

A. I don't think it is, but I am not competent to testify on the measure of it.

Q. You would not want to base an opinion on it?

A. I prefer not, if it be a final opinion.

Q. Let me ask you another branch of it: are you familiar with the manner of handling less than carload freights as distinguished from carload freights?

A. Oh, yes, sir.

Q. Is there any difference of expense growing out of the manner of handling those two classes of freight?

A. There is an additional expense upon the carrier in handling less than carload freight.

Q. What does that consist of?

A. They receive it at the station; they load it into the cars and there is a trucking and handling and loading expense at the station, in addition to that of the carload shipments; the carload shipments being handled by the shipper or receiver, and the less than carload being handled by the railroad.

Q. That is one very important element, too, is it not?

2413 A. Yes, sir, it is a very important element.

Q. Is there not another important element of added clerical expenses growing out of the fact that less than carload lots involve a larger number of way-bills?

A. There is an increased expense and a material expense in connection with handling less than carload business, in the way of way bills. It has to be way-billed and the way bills have to carry the description of the article shipped. The bills of lading, you understand, they do not have anything to do with them; the shipper make- out the bills of lading.

Q. I understand about the bills of lading, but the waybilling is done by the railroad, is it not?

A. Yes, sir.

Q. It is in evidence in this case that there are some carload shipments sometimes which involve 20, 30 or 40 different packages, maybe more; each one has to be billed separately to its destination, does it not?

A. No, one waybill is made for the entire consignment, from one consignor to one consignee.

Q. Yes, but suppose it goes to twenty different consignees?

A. Then there would be twenty different waybills; possibly there may not be. I have seen billings made on one waybill—from St. Louis, we will say, to Little Rock—of various consignments
2414 on one way-bills. However, there will be a separate expense bill issued.

Q. You have now in mind less than carload, interstate?

A. I have in mind all less than carload business.

Q. Let us take a local down in Arkansas: the train starts out at Little Rock on the main branch, we will say: say it has two carloads of less than carload freight—to illustrate my point better I will take one car—there is a car ladened with goods for Benton, for Traskwood, for Bryan and Malvern, Benton and Malvern being the most northern and southern and being about twenty or twenty-five miles apart. There we have four destinations. In that case, Mr. Lincoln, to distinguish it from the usual practice in interstate, that probably would consist of a great many shipments to different persons?

A. Yes, sir.

Q. It would be likely there would be a greater variety of shippers and consignees than there would in an interstate less than carload, would it not?

A. I don't know whether it would be a greater variety, but there is quite a variety.

Q. Now, all of that involves a further and considerable expense?

A. It involves an expense.

Q. Is there any expense growing out of that separate package movement in less than carload lots at the terminal
2415 station?

A. There is an additional expense in the handling of less than carload lots at the terminal station in the way of handling.

Q. As well as the originating station?

A. Yes, in the way-billing and the expense-billing of it.

Q. There is another feature of the operation of local trains. That is what is known as the "peddling trains": do you know what I mean, when I say peddling trains—a train that has to stop at all the stations for the purpose of delivering package freight carried in less than carload? That is very largely local freight, is it not?

A. Yes, that is local freight.

Q. Is not a very large part of the expense incident to running local trains resultant from that peddling business which necessitates the stopping of trains and perhaps the side tracking and the switching——

A. That, I stated, covered the extra expense of handling local trains.

Q. There is another feature I want to call your attention to while we are on this subject:

I told you a while ago that the statistics of the Iron Mountain in evidence in this case, show the average length of haul on interstate business to be 224 miles—I include all interstate——

2416 A. I understand.

Q. Now, is it not a fact that the trans-state movement if you were to segregate it from the other movements, would be very much longer than the state movement—I mean the interstate movement, in the state of Arkansas?

A. The average movement of the trans-state shipment would be greater than the average interstate shipment.

Q. The statistics to which I refer take no account of any part of the haul of trans-state traffic outside of the state of Arkansas. It may originate in St. Louis and go 150 or 200 miles before reaching Arkansas, and go 500 miles after leaving Arkansas, but that is not taken into account in these statistics. If you add the total length of haul of trans-state business and bring that into comparison, it would make the average haul very much more than the amount I told you, would it not?

A. I am not familiar with the statistics. I would say, of course, that the average length of a haul on trans-state business would be materially greater than the average length of the haul on an interstate shipment, as the average length of haul on interstate shipment may be greater than the average length for state shipment.

Q. But the point I want is this:

If you eliminate that part of the movement of the trans-state business which is outside of the state of Arkansas and con-

2417 fine it to the haul in that state, then you reduce very materially the average of what the total length of haul would be on that business, that part of the movement outside of Arkansas.

A. Certainly, it would.

Q. Is it not a fact in all railroad practice that the rates diminish as the length of haul increases?

A. That is the common theory and the common practice.

Q. Now, when Judge Hill tells you that the average revenue per ton per mile on state freight is 12 mills and on interstate freight 6 mills, is not a very large part of that difference accounted for by the fact that you have just stated—that is, that the rate diminishes as the length of haul increases in view of the fact that the length of haul is as 71 is to 224, and if you were to give the trans-state movement its full effect, would be very much larger; does not the increase in the length of haul——

A. The increased length of haul tends to reduce the average rate per ton per mile. That is the accepted theory and is the general result.

Q. Then if we were to take the revenue as representing rates the difference would be accounted for in that way, would it not, Mr. Lincoln?

A. The difference in the revenue?

Q. If you take the revenue which you heard represented to you, that would be largely accounted for in that way?

A. The increase in the revenue per ton per mile for
2418 short hauls as compared with the long haul is, of course, created by the difference in the rates.

Q. If you take it by the difference in the rates it would be accounted for very largely by the difference in the length of the haul?

A. Yes, sir.

Q. It would be diminished and the——

A. The rates are higher per ton per mile for the shorter than the longer haul.

Q. Is it a fact that the revenue per ton per mile represents the rates and affects the rates in view of the fact that when you take the receipts per ton per mile you make no distinction as to the commodities or length of haul, but the whole thing is just massed on one common average and put on a common level, disregarding all distinction of class of freight, and all distinction of rates and all distinctions of those elements that enter into the fixing of the rates? Is it not a fact that it reflects more the character of the traffic that is handled than it does the rate?

A. Well, the average revenue per ton per mile, of course, is the average of your total earnings all massed together, striking a general average, and it varies somewhat according as the commodity movement may vary or the character of the traffic may change. The test has been used but I do not know how correct it is.

Q. But it has not been used for the purpose of de-
2419 termining rates except in the aggregate, the total body of rates?

A. The total body of rates. One of the things that must be brought before a man in making rates is, what are the average earnings and what is the average cost.

Q. Let me ask you, Mr. Lincoln, is it not a fact that it might occur and does occur frequently, that you take two different periods of the year—take a month representing the movement of freight which characterizes the movement of that particular period, might it not be that a shifting of the tonnage of traffic—or whatever term you use—you understand what I mean——

A. Yes, sir.

Q. Might account for the very large difference in the earnings per ton per mile without there being any difference at all in the rates.

A. It would be—one commodity may predominate in one season and the next season there would be none, and another commodity takes——

Q. That is a rule that is generally recognized in all railroad circles I believe.

A. Yes, sir.

Q. You spoke about the rates, state and interstate; is it not a fact, Mr. Lincoln, when you come to compare state and interstate rates on the mileage scale for similar distances, that the state rate is as low or lower than the interstate rate?

A. Not generally.

2420 Q. I want to call your attention to——

A. That is not generally the case.

Q. Now, Mr. Lincoln, I will ask you to look at exhibit 37 filed by the plaintiff in this case and state what that shows to be the relation between state and interstate rates for the same distances; that is, the state rate in Arkansas and the interstate rate.

Mr. HILL: I believe I will object to that question. It is not cross-examination, and it is taking Mr. Lincoln into something that would not be fair unless he had Mr. Perkins' testimony. If Mr. Lincoln has the time to read that over——

Mr. MOORE: It is distinctly and directly cross-examination because you asked Mr. Lincoln the question if state rates were not enough higher to make up the difference in the expense, and that is in response to that and it is directly cross-examination.

Mr. HILL: This is a comparative table that Mr. Perkins admitted very little traffic moved under.

The MASTER: Go on.

A. It shows generally that the rates on these commodities between points in Arkansas are lower than on the same commodities between points in other states than on the comparisons used for interstate.

Q. Mr. Lincoln, don't the commodities that are listed on that exhibit constitute a large volume of business?

2421 A. Well, brick is a large movement and usually goes under commodity tariffs and not distance tariffs.

Coal is a large movement and interstate moves under commodity tariffs and not distance tariffs.

There is a very large movement of cement, nearly all of which moves on commodity rates.

Cord wood I have no information on.

Grain, ordinarily does not move on distance tariff, but on commodity or transit rates.

Hay moves more nearly on the distance tariff, state business usually on distance tariff.

Lumber ordinarily moves on commodity rates.

Salt moves on commodity rates.

Sand moves on commodity rates.

Stone ordinarily moves on commodity rates.

The comparisons are not those upon which you can very well base a conclusion, as to the interstate or even as to the state rates in other points, except as a paper proposition.

Q. That does show the rates on those commodities in the state for short distance and about the average of state haul and also for the interstate movement on short corresponding hauls.

A. No, Judge—I have no doubt that the statement is correct, absolutely none.

That these are based upon the distance tariffs of the re-

2422 spective states I have no doubt that such is the fact as to many of these commodities, in fact all of them, the rates generally in Arkansas are lower than the other states. As to the

computation upon which the interstate rates are made I do not know anything about that.

Q. Assuming it is true and correct on the face of it, it shows that for the same distance the state rate is lower than on the interstate on those commodities that are set out here?

A. If the statement is correct and the business moves under those rates, yes, sir.

Q. Taking that generally and in the aggregate, does that not represent a large movement?

A. The commodities represented by the statement represent a large movement of the traffic.

Q. Mr. Lincoln, are you familiar with the ruling of the interstate commerce commission under which they take the sum of the locals of the different states as prima facie evidence of the interstate rate?

A. I am very familiar with the ruling. They hold a through rate should not exceed the combination of locals and where a through rate does exceed those they will hold prima facie that the through rate is unreasonable.

Q. That shows that they recognize the relation between the state and interstate rates, does it not? Is not the effect of that to
2423 establish kind of a parity between that part of the interstate rate as applies in each state with the state rate?

A. From my knowledge and information, the way that question arose was as to through rates in cases of combinations on terminal points and relate- to interstate business rating. I never construed it or considered it as setting up any connection with state rates.

Q. Is it not obvious on the face of it a recognition that there ought to be equitably and in justice, a relation between the interstate rate and the state rate? That is to say, the return of an interstate rate which exceeds the sum of the state rates is unreasonable within itself?

A. Where the combination of two rates are lower than the through rate they point out that that seems to be an unreasonable rate.

Q. That is in itself a recognition to some extent of the relation, that there should be a relation in the adjustment of the two classes of rates.

A. No, I do not think so. I only had it in mind as the measure for——

Q. Does not that take as a prime facie the state rates as a measure for the reasonableness of the interstate rate?

A. If the state rate happens to be on two movements to make up the through movement——

Q. That is what I mean.

A. —they do that as to state and interstate. It is a com-
2424 bination of two interstate rates, or a combination of interstate and state rate, as compared with the through rate.

Q. Is it not a fact, Mr. Lincoln, that state freights are as a rule loaded lighter in the cars than interstate freights?

A. As to commodities?

Q. As to whatever the contents of the car may be. I will call

your attention to the fact that the evidence in this case is that the average loading of the local car engaged in local service is from three to five tons, I think, and in interstate it is——

A. You are speaking of less than car-load?

Q. Yes.

A. That is the reason I asked whether you referred to commodities or not. The average loading of merchandise in less than car loads is less for the shorter haul than it is for the longer haul.

Q. That in effect results in the impairment of the efficiency of the cars that engage in local traffic, does it not, and therefore a corresponding increase in the——

A. Yes, all the traffic derived from that is not as great.

Q. Well, railroad operators seek, as a matter of economy, to adjust their business so as to load the cars as nearly as possible to their full capacity?

2425 A. That is the object and a very proper object.

Q. To get the full efficiency of the car service?

A. Yes sir.

Q. Is not that also true of commodities in car loads?

A. As to car load commodities?

Q. Yes. I mean this: taking the entire tonnage hauled by local and through trains, the relative proportion—the percent of the local tonnage moved on local trains, that is, car load—or rather the ratio of the car load tonnage moved on local trains, to the entire car load movement, state and interstate, would not the comparison to which I call your attention——

A. Would not the average loading of a car on an interstate haul be greater than on a state haul?

Q. Yes.

A. I think it would be some greater, the average loading on interstate than the state haul, because the interstate haul very largely represents business moving from manufacturers to jobbers—that is, as to merchandise; but as to commodities, such as lumber, grain and articles of that kind, I really see very little difference in the loading. I will say that as to grain my experience is that loading grain is just as heavy on the short as on the long haul movement—from St. Louis.

Q. Do you know how it is done in Arkansas?

2426 A. I will apprehend that the average car loading outbound in Arkansas will be probably lower than the inbound movement, state or interstate.

Q. It is a fact that all railroad men recognize that in these heavy grain trains from the Northwest down into that territory the cars are loaded to the full capacity?

A. That is the accepted basis now.

Q. You are aware that for instance if a local man at Little Rock in loading his car out to his customers he will perhaps load one car to a dozen consignees that represents the same grain that is brought in on the car from Kansas City.

A. No, I hardly think that. I think that he loads out a lighter car than he receives, but not to—the car will come in first, probably

from the country—into Little Rock with 60,000 pounds of grain in it, and it may contain only 40,000 going out.

Q. Now there is another case of where the efficiency of the car is lost to a large extent, say one-third.

A. Yes, but that is an interstate movement.

Q. Whatever you term it.

A. Yes, but it is an interstate movement; it is not a local movement.

Q. What is the proportion of empty car movement on local and through trains?

A. I could not answer that now. I have not been in the
2427 railway service for four years and I am not informed on that.

Q. Mr. Lincoln, you stated in your examination in chief that one of the principal factors in rate making was the maximum rate allowed by law:

That grows to some extent, does it not, out of the low rates prescribed by state commissions?

A. Well, answering the last part of your question first, I will not say whether the state rates were too high, or too low, but the maximum rates fixed in the state become the measure from which rates would be made and under *to* ordinary conditions will not be made lower unless there are commercial or competitive conditions requiring them to be made lower.

Q. You are speaking of interstate rates in relation as to state rates?

A. As to state rates. Now, as to an interstate shipment, you take the combination of the two state rates and you add them together. I am speaking of your system in the West more generally of state rates and interstate rates.

Q. In that sense if you say the law fixes the maximum for interstate as well as state——

A. In that sense because we cannot very well charge more for the through shipment than the two combined locals. Of course, the Commission fixes the maximum rates in its orders; the measure of the rate as to how high but not as to how low.

2428 Q. But the Interstate Commerce Commission in particular instances of complaint——

A. That is all on complaint.

Q. Upon what do you then base your assumption that the maximum interstate rates are fixed by the law?

A. I explained that the maximum interstate rates were fixed by law—that is, the maximum of the interstate rates are fixed by the law, because we cannot exceed those two component parts. Of course, Judge Moore, our present system of interstate rates has been one of evolution. It was not established today or yesterday, or twenty years ago. It was established a great many years ago.

Now, they have been controlled either by a maximum scale rate, or by competitive conditions, or by commercial conditions.

For example, the rates from St. Louis to what is known as trans-Missouri territory—Kansas and Nebraska is the trans-Missouri territory—when the Nebraska Legislature reduced its rates in the

State of Nebraska it reduced the rates from Omaha and immediately that reduced the interstate rates from Chicago and St. Louis so as not to exceed the combination, the rates having been made upon the old combination, generally speaking.

The same was true as to Kansas. When the rates in Kansas were reduced it then reduced the interstate rates by reason of the
2429 combination through Kansas City—although some of the rates were made lower than the combination—but by reason of the reduction in Kansas there was another readjustment.

The rates into Arkansas from interstate points were really affected by your Arkansas tariff. Rates from Bridge Junction to Little Rock that fixed the rates you might say from Memphis to Little Rock.

Then there were commercial conditions that required certain other adjustments from New Orleans—the rate from St. Louis to Little Rock and I think Ft. Smith. I have been out of the service four years and I am not entirely familiar with that, but I think the Ft. Smith and Van Buren rates are made with respect to the Little Rock rate, so if the Little Rock rate was disturbed by that factor it disturbed the interstate rate.

That is why I say you aim to get all you can. Every traffic man does that. I do not mean by saying that, that he will stifle business at all. He must have in mind the movement of business and the commercial necessities of the community he goes through. If he put the rates too high he might as well not have a railroad at all but the measure of our rates necessarily has some local obligation as a maximum.

Q. Now then as I understand you, the rule is what you have stated, that is to say as to the maximum rates, and that rule is determined how in those exceptional cases brought about
2430 by competitive and commercial conditions?

A. They have been brought about by competitive and commercial conditions——

Q. And they are treated as exceptions to the rule?

A. They are all exceptions to the rule and I would say that generally, as to interstate traffic, you do make an exception to the rule because of the force of competition as between communities.

Q. That is forced upon the railroad operators, is it not?

A. The competition forces the adjustment.

Q. Those exceptions are forced upon them by conditions the railroads cannot control, are they not?

A. Generally speaking, they cannot control them.

Q. For instance, you take the common points where the shorter line controls the rate: that is something that cannot be obviated, can it?

A. No, I do not see how we can obviate the short line controlling rate, although it don't always——

Q. It does in the absence of some other exceptional condition?

A. No, where it is based upon the statute rate of course the short line controls the rate, but there are so many other conditions going into rate making that the short line does not always control.

Q. Give me an instance where the short line common
2431 point does not control.

A. There are so many of them that it is very hard to determine. I will give you one. It is based on a contract.

The Chicago Great Western Rialroad is notoriously a long line from Kansas City to Chicago and yet it made the packing house product rate for the short line because it established a lower rate.

Q. By reason of contract?

A. They made a contract to get the business, by which they would enjoy a certain share of the business; not the entire business, but a certain percentage of the business.

There are innumerable instances of that kind where a long line may originate the lower rate between two competitive points.

Q. Is there any such case in Arkansas?

A. There are. Just as the shippers' traffic men may convince him (the railroad man) he can get some business.

Q. Can you give me any instances you have in mind now, in Arkansas?

A. No, I couldn't give any instances. I presume it would be very easy to determine from the records of the rates from St. Louis to Ft. Smith and Van Buren. If the Iron Mountain originated a rate, they created a condition. They are a long line and the Frisco is a short line.

Q. That is hypothetical, you do not know of such a case?

A. No, but I say that we know those things are done
2432 and contsantly done.

Q. Mr. Lincoln, I want to be informed on another matter and that is as to the extent to which distance, the mileage scale, is displaced by these exceptional conditions where they arise:

For instance, take a movement from St. Louis to Memphis or New Orleans: those points are both dominated, as I understood, as the exceptional condition—the rates from St. Louis to Memphis and St. Louis to New Orleans.

Is the distance scale of adjustment of rates abandoned there, or is it still kept in force as far as it can be operated?

A. The distance rate is entirely abandoned in the making of rates from St. Louis to Memphis and New Orleans.

Q. What is the rate to Memphis, Mr. Lincoln, from here to Memphis?

A. I cannot state positively. I think it is 7 cents, but I would not say; first class. It is 90 cents to New Orleans.

Q. It seems to me that that establishes just the contrary to what you say, begging your pardon.

A. St. Louis rates are not made on distance tariff, but on water competition.

Q. I asked you if the mileage scale is lost sight of or if it obtains in making rates between nearer-by and more distant points.

2433 A. The mileage scale is absolutely lost sight of in making rates.

Q. Perhaps in using the word "scale" I have run upon some

technicality. I will leave that out and put it in a more homely way:

How are the rates adjusted from St. Louis and Little Rock, as compared with the adjustment to Benton, Malvern and Arkadelphia, three points on the main line below Little Rock—how are they graduated?

A. I have not studied those rates lately, but I was of the impression that the rates were made to points South of Little Rock by adding the rates out of Little Rock to the Little Rock rate.

Q. In that case length of haul controls?

A. The length of haul South of Little Rock and the measure of rates control that.

Q. Take a shipment from St. Louis to Memphis, which you said on first class was at the rate of 70 cents and to New Orleans a rate of 90 cents——

A. I think those are the figures.

Q. Why is the rate 20 cents higher to New Orleans than it is to Memphis?

A. The rates made from St. Louis to New Orleans and to Memphis are made as against water competition. I presume they could get more money to New Orleans than they could to Memphis. They had boats running in the old days—they do not have them
2434 now—from St. Louis to Memphis. We also had boats which operated through St. Louis to New Orleans.

Q. Is it not a fact that the distance from St. Louis to those two places is a factor in fixing those two rates?

A. I do not think so at all because intermediate rates this side of New Orleans are higher than they are to New Orleans.

Q. What is the intermediate rate to Jackson and Meridian, as compared with Memphis?

A. I do not recall, but it is higher than from St. Louis to New Orleans, the rate from St. Louis to Jackson and Meridian, although the traffic moves through Jackson and Meridian to get to New Orleans.

Q. That establishes the proposition that this disturbance produced by these exceptional conditions is confined to the point where the exceptional condition exists, and does not affect the intermediate rates.

A. I say there was a commercial or competitive condition that required a departure from the mileage scale.

Q. As to New Orleans?

A. Yes, sir.

Q. But does not affect the intermediate points like Jackson and Meridian?

A. Not to the same extent; to some extent, but not to the same extent.

Q. But still the fact remains, Mr. Lincoln, that the rate
2435 to Memphis, the shorter distance, is less than the rate to New Orleans from St. Louis?

A. I may be wrong. It may be that the 90 cent rate may apply to Memphis and New Orleans.

Q. It is in testimony here that you are right about that—I won't say the exact cents, but the rate is higher to New Orleans.

How is it with reference to river points? To illustrate: a shipment by boat to New Orleans—Memphis is an intermediate point with reference to distance between St. Louis and New Orleans—how are the boat rates adjusted as between those two points, from St. Louis to New Orleans, and St. Louis to Memphis? Is it in regard to the distance?

A. I stated that I imagined that the making of the scale rates from St. Louis to Memphis lower by water than the scale from St. Louis to New Orleans, is probably due to the fact that there are certain boat lines operating from St. Louis to Memphis, that being their destination; whereas there are certain other boat lines which operated through from St. Louis to New Orleans; they, of course, could get more money into the lower river by not having the Memphis boat competition, but whether the boat from St. Louis to Memphis stopped there and made the measure of the rate or not, I don't know.

Of course you understand we have no boats from St. Louis to New Orleans and no rates.

Q. But the potentiality of the river is what affects rail-
2436 road rates, is it not?

A. When the competition exists it affects the railroad rates.

Q. The fact remains though, does it not, Mr. Lincoln, that the river rates are lower from St. Louis to Memphis than from St. Louis to New Orleans?

A. That is my impression. I would not want to make a positive statement upon that point at this time without consulting the tariffs as far as that is concerned. That is railroad rate you are speaking of?

Q. River rate.

A. There are no rates by river to New Orleans now. We have no river rates.

Q. I was just going to ask the question if that did not apply to rail rates.

A. The rail rates are the measure of the old river rates. At the present time we have no river rates to New Orleans.

Q. That is what influences and renders them the exception to the general rule you spoke of awhile ago?

A. The water competition made those exceptions to the general rule.

Q. Now, Mr. Lincoln, pursuing the matter a little further—and I am speaking now with my impression of what the testimony in this case is—is it not a fact that it must be a very exceptional condition that would bring about a lower rate for the long haul than would be fixed upon an intermediate shorter haul?

2437 A. It requires an exceptional condition. Some force of competition that fixes the lower rate for the longer haul to the terminal point, but as to the rates to the intermediate points that is something which we could debate at great length.

Q. Mr. Loncoln, I believe the rates from St. Louis to Eastern Arkansas are affected by the Memphis rates, are they not?

A. From St. Louis to points in Eastern Arkansas?

Q. Say Brinkley and Paragould.

A. I believe they were by rates from Memphis over to those points.

Q. Do you know how the rates from St. Louis to Paragould, which is perhaps forty, fifty, or one hundred miles closer to St. Louis, and Brinkley compare.

A. I do not. I don't recall. I should judge that so far as merchandise is concerned, you are speaking of class rates—I haven't had occasion to examine the tariffs for some time and I have had no opportunity to prepare myself with any figures in this case. I can ordinarily tell as to the grain adjustment, but not as to general merchandise rates, and in speaking as to an Arkansas adjustment I can only speak as to what has been the usual controlling factor in making the rate, not as to the exact measure.

Q. Mr. Lincoln, when you say in regard to the cost of service being the large factor in determining the rates, you mean
2438 in determining the details, don't you? You do not mean that a railroad could operate unless it could fix its rates with some reference to the cost of the service?

A. I say that the cost of the service is not the factor that controls the making of the rates. The results of operation necessarily, as to the revenue, you would have to have some regard to cost or you would go into the hands of a receiver.

Q. That is what I want to know.

Could a railroad be operated successfully if its rates were fixed without any reference to the cost of the service it rendered to the public?

A. If it absolutely disregarded it and handled its business without regard to cost of the service, it would either have to get a receiver or raise the rates.

Q. When you speak of the disregard of the cost you mean in fixing particular rates?

A. Yes, the particular rates, though, do not take into consideration to any great extent the cost——

Q. But you would not say that railroads are not governed by the same rules that all other industrial institutions are governed by, would you?

A. I say if they do not govern themselves by the same rule, they ought to.

Q. Are they not governed by the general and universal
2439 law which is necessary in manufacturing or industrial concerns, to so fix their prices that they would not be under the cost of production.

A. It should.

Q. Would not a railroad that disregarded it, be in the hands of a receiver?

A. Well, it has not done it.

Q. Are you familiar with the ratings of the Western Classification Committee?

A. Yes sir.

Q. Do you know the classification they make for the various commodities moved?

A. They divided them into ten classes.

Q. Do they have any regard or pay an attention to the character of the articles transported with reference to the cost and the risk that enters into the service in reference to the particular classes that are defined by them?

A. They consider a great many things in the development of the proper rating to be applied. The cost, the risk, the density and the volume of the traffic.

Q. They take all of those things into consideration, do they?

A. They do; by intuition, if not directly.

Q. Why is it that they would classify an article of small value and little density, weight, etc. lower than they would an article of greater value, that did not have so much density and was
2440 lighter.

A. To distribute the proportion so as to make the commodity as nearly as possible contribute its share toward the total revenue of the road.

Q. And they have in mind the cost of handling those different classes of commodities?

A. Those are all factors that should be taken into consideration.

Q. Does not this Committee do that?

A. Very largely.

Q. Does not the classification on its face show that?

A. As a whole it shows very good judgment.

Q. Take an article that is very valuable and fragile, easily broken, that would involve a heavy loss and damage claim: they are likely to put a higher classification on that than on one that is less likely to be broken?

A. The classification is the best prepared document of the relations that should exist between the different commodities. The classification shows the relations that should exist, not the rates.

Q. Mr. Lincoln, you stated that statistics of all kinds are kept by the railroads, and I remember you enumerated among those various commodities handled, the total of the tonnage, and that sort of thing: what are those statistics kept for?

2441 A. Well, they are kept for an index as to the business handled by your railroad—the operating sheets, cost of service, cost of handling business over certain divisions. The empty car movement is supposed to influence a man as to where he ought to get the tonnage instead of hauling back empty cars; for the guidance of the traffic man in the conduct of the traffic department.

Q. All those elements which you enumerate now enter into and influence the keeping of those statistics?

A. They should be used for that purpose.

Q. They also keep statistics in the same connection——

A. Of course, the commodity description is now kept in making reports to the Government.

A. In connection with those fiscal statistics they keep revenue statistics showing what the earnings are?

A. Oh yes, there is such a statement as shows the earnings of each station. I suppose about one traffic man in one hundred sees it. There are all kinds of statistics and they are very valuable, very valuable.

Q. One other important reason, I imagine, for all that is to enable the railroads to know how successful their operations are financially, is not that one of the reasons?

A. I think that is the necessity for statistical work; otherwise it would be impossible to know what your operation shows.

Q. That is the reason, or one of the causes, for keeping
2442 those statistics, to ascertain the cost relatively of handling certain commodities?

A. Yes, that is what it is for.

Redirect examination.

By Mr. HILL:

Q. Mr. Moore has inquired of you about the extra cost of handling less than car load movement: there is a higher rate for that, is there not, on the less than car load than the car load?

A. Oh yes; the rates are higher on less than car load business generally, with very few exceptions.

Q. That is for the purpose of taking care of this extra cost that you have spoken of?

A. Yes, sir.

Q. That would enter into these statistics I have given you, in round figures, twelve mills on interstate and six mills on state?

A. If you take the earnings into account it has got to show results.

Q. You told Mr. Moore that there are fluctuations in the movements of commodities that would change the revenue as well as the change of rate would change the revenue.

A. The average rate.

Q. Is not that equally true of commodities, state and interstate?

2443 A. Of all business, state or interstate.

Q. Is it not a fact that they move practically hand in hand, the same class of commodities on the same trains, as a general proposition?

A. State and interstate?

Q. Yes.

A. Yes, grain moves at the same time, local and interstate; lumber——

Q. These fluctuations that he refers to occur in one line of the traffic as well as in other lines of the traffic?

A. It will make its appearance in both state and interstate business.

Q. Speaking of the Western Classification of commodities as the basis of fixing rates: do not the railroads in the interstate tariff make many exceptions to that?

A. A great many, state and interstate.

Q. Both state and interstate? The State Commissions make exceptions and the railroads make exceptions?

A. Yes, sir.

Q. Mr. Moore has asked about a great many rates which he has called "exceptional" rates, like these New Orleans competitive rates; zone rates and things of that kind that are excepted from the distance scale:

I will ask you, as a general proposition, whether the traffic most largely moves under these competitive rates or does it move under the distance rates?

2444 A. It moves under the competitive rates.

Q. They constitute the larger volume, these rates Mr. Moore has been discussing with you, as based on competition conditions, river conditions and things of that kind?

A. A larger volume moves under competitive rates.

Q. Now, in referring to the rule of the interstate Commerce Commission that a through rate in excess of the sum of the locals is prima facie unreasonable, is not that founded upon the principle that you announced in your direct examination, that the rate making bodies, whether the state or the railroads themselves, make proportionately lower rates for the long haul than they do for the short, and if you have two short hauls they are supposed to be more expensive and must have more remuneration; it necessarily would follow that a rate for a long haul including that would be less; is not that about the principle of it?

A. The theory of rate making is that the long haul should be not as great a rate as the short hauls combined, and the commission in making their ruling—and I presume I had as much to do with that issue before the Commission as any one else—held that prima facie any combination of two local rates which are used by the railroads are lower than the through rate then the through rate is excessive. They did not, however, make any order that the through rate should be lower than the combination.

Q. You are referring to extra expense of the short haul business: would there be any expense other than on train and station

2445 cost?

A. The greater expense attached to the short hauls as compared to longer hauls are on local trains as compared with through trains?

Q. Yes.

A. The train expenses and the station expenses, the wear and tear.

Q. Now take the traffic expenses: there is no extra cost of traffic expense in regard to the length of the haul, is there, in the difference in the haul, state or interstate; long or short, or local and through?

A. The only feature that was brought out in station expense was that in the short hauls there were more broken shipments requiring more billing. That is station expense.

Q. That is station expense. Take traffic expense: would there be any extra charge on that?

A. I don't know how you use the term.

Q. I think that includes these outside agencies and industrial agents; I don't know how many other things. They are classified in that way—soliciting agents, traffic managers and freight agents, things of that kind: would there be any additional expense due to that?

A. In handling local business they don't need the expense of solicitation, outside agencies, that they do in connection with the competition business.

Q. That would be borne more largely by the competition
2446 business than it would by the local business?

A. Oh, if you get down to the exact science of cost, why yes, but that has not been found, any way to get to the science of the cost.

Q. Take your terminal expense on the through business: Mr. Moore asked you about terminal expense on trans-state shipments: are they not handled about every one hundred miles in division points?

A. One hundred to one hundred twenty five miles, approximately that.

Q. The train is usually broken up in places like Little Rock and a new train made up?

A. Oh yes at division points, especially important division points, or a junction point.

Q. Speaking of less than car load shipments which you have explained at some length, being more expensive to handle for way billing and other matters, I call your attention to the cotton movement in Arkansas: that is a very considerable volume of traffic, is it not?

A. Yes, the Arkansas traffic is very large.

Q. Do you remember how that is handled; do you know the detail of it?

A. It is local into the compress point, compressed and subsequently reshipped.

Q. All interstate, is it not?

A. All treated as interstate movement, through inter-
2447 state.

Q. The movement into the compress is usually less than car load, is it not?

A. Largely less than car load movement, yes.

Q. They usually pick up the cotton as they get to the stations, and take it to the nearest compress point as a less than car load, and then it becomes a carload when it leaves the compress?

A. In any quantity.

Q. That would have three terminal expenses, would it not?

A. That particular traffic would, yes, sir.

Q. Well grain would have three, too, would it not?

A. Most of the grain has three; the majority of it.

Q. I believe you have already explained those. Practically all of the grain is in the interstate movement?

A. Practically all handled on transit, would therefore be interstate movement.

Q. Summing up all these various items of extra cost which you

have gone into, are they the items of extra cost you had in mind when you made your original statement that you thought the revenue being double on the state traffic over the interstate traffic, took care of these extra expenses that you have been referring to?

A. I had in mind that the extra expenses of handling the short haul were taken care of by the rates which reflected the revenue.

2448 Recross-examination.

By Mr. MOORE:

Q. What do you mean by less than carload shipments of cotton for the purpose of taking it to the concentrating points?

A. Most of the cotton handled in Arkansas—I don't think the condition has changed, if it has I may be wrong in my statement—is handled on through rates from points of production to destination. Cotton is handled on local movements into the compress point on local rates in any quantity.

Q. You stated that a good deal of that was less than carload?

A. Yes, in less than carload lots.

Q. I would like you to explain what you mean by that.

A. Not solid carloads from point of shipment into the compress.

Q. Is it not the practice down there in that respect, that a car would be side tracked, loaded with cotton at the commercial centers where the cotton is collected from the farmer and then hauled in in carloads to the point of concentration; is that not the common practice?

A. It is taken into the local points along the line, placed on the platform and shipped into the compress point.

Q. Take the history of a loaded car: is that stopped and loaded until the capacity of the car is exhausted, from station to
2449 station, or does it usually start from the point of shipment with a full car?

A. I think not as a solid car. I don't think the movement into the compress point is full carload movements.

Q. What is your means of knowledge in regard to that?

A. Matters that came to my knowledge and information of eight or nine years ago, when I had charge of that business. We could not load our cars into the compress points full. We could not hold the cotton indefinitely at the local stations until it accumulated a carload.

Q. My information is that these cars are set out at the stations at which they are loaded, and as a rule—of course, there may be exceptions to it, but as a rule the car goes out of the station where it originates, loaded to its capacity: that is what I am talking about.

A. That was not the situation eight or nine years ago. It was the effort all the time to get them loaded full.

Q. You spoke a moment ago of terminal expenses in connection with trans-state cars: is not that rather a yard expense instead of the terminal?

A. That is a yard expense.

Q. There is a difference between terminal and yard expense? Is there not?

A. I don't think there is a great deal of difference between that in the handling of interstate or trans-state carload business, because it is simply a switching service. Now, that expense is smaller
2450 at some division points than at other division points. Take a division point like Little Rock: trains have to be broken up more there than at Poplar Bluff, or Hoxie—I think that is the division point now. There is more breaking of trains at Kansas City than at Sedalia.

Q. What would be done at Hoxie, for instance, I mean in the trans-state?

A. With a through train going to Hoxie?

Q. Yes, going to Texas?

A. Well, a through train starting from St. Louis to Texas pulls out of here as a solid train, we will say, to Hoxie. There the crew taking it releases that train. There is a new engine and a new crew to take it out. That train is broken up to some extent at Hoxie in order to take care of the through freight which may accumulate and go in that train and set out some that is not time freight.

Q. Please explain that.

A. There are three classes of freight in the train, red ball, green ball, and the third class on which the time does not cut a figure. When they break up at Hoxie they will put in red ball there and take out some unclassified freight.

I stated that at a point like Hoxie the service of breaking up the train and switching will not be as great as a point like Little Rock. There they will probably have to break the train up very
2451 largely because the contents of that train out of St. Louis to Little Rock is distributed over other divisions. It is not all going to Texas, but some may go to Fort Smith or Monroe or Shreveport, or Pine Bluff; so it requires the breaking up of that train and the making up of a new train at Little Rock.

Q. Let me see if I understand you: at Hoxie there was a car that was not to go on: with that the work would be to set that car off?

A. I would say that if you start the train out of St. Louis to Hoxie, and Hoxie will have cars coming in there from Cairo and from Thebes. Trains break at Hoxie.

Now, if there was some red ball freight, the time freight, in the trains out of Thebes and Cairo, it would be put in the train going south from Hoxie.

Q. Assume that that is trans-state tonnage.

A. Yes, trans-state, all of that is, or interstate tonnage, not necessarily trans-state,—Poplar Bluff or Texarkana or El Dorado.

Now they take out of that train the slow freight and put in the red ball so as to have that train take care of the red ball south of Hoxie. There would not be very much changing of the contents of that train at Hoxie, but there would be at Little Rock and there would be at Kansas City.

Q. If there were five cars on that train going to Texas, when it reached Hoxie,—I mean in its original condition as it left
2452 St. Louis—there are two cars that come in from Cairo which you want to put into that train to take to Texas, you simply hook those two cars on to the through train to Texas?

A. That is hardly the situation. I will try and explain a little better than I have.

We will assume—I don't know what the tonnage is of the engine that takes that train out of St. Louis to Hoxie—that is one division, there is a division in between—that the engine is rated to carry 1500 tons:

It has in the train 700 tons of red ball. It has in the train five hundred tons of green ball, that is 1200 tons.

Q. What is green ball?

A. That is next to the preferred freight. Green ball comes next to red ball.

Then it has in the train 300 tons unclassified freight on which time is not an object. Now, it arrives at Hoxie. These trains that came in from Cairo and Thebes have red ball freight in them. They will take out at Hoxie—by the way, Hoxie is on the main line, no branches there—in the train that carries 1500 tons there at Hoxie, they take out at Hoxie green ball freight—or they first take out the non-classified, the slow freight, and if necessary take out of it some of the green ball freight and put in the red ball, the time freight, to expedite the movement of that freight through.

2453 Q. They take out the unclassified freight?

A. Yes, first.

Q. And put in the higher grade for the purpose of giving the latter the benefit of the quicker movement?

A. That is predicated on the power in and out being the same.

Q. I understand. What do they do with the train when they have hooked on that additional green ball?

A. When they make up their tonnage for the train south of Hoxie that has to go on and what is left——

Q. The train goes right along?

A. Another train.

Q. What do they do with the unclassified traffic that is on there?

A. Leave it there to fill out the next train or carry it forward on a local train; or they may accumulate sufficient freight by reason of three divisions to take care of that and run an extra train; or, they may be able to handle on the train south of Hoxie if there are a greater number of tons to the engine than into Hoxie.

Q. That is yard service?

A. Switching and yard.

Q. For the purpose of expediting the more important freight with reference to the movement?

A. Yes, sir.

Q. And it consists in taking out of a train certain freight

2454 and putting in certain freight which cannot be delayed?

A. It requires a switching service, yes.

Q. Now, we will go to Little Rock: what do they do at Little Rock, tell me in detail.

A. The train going into there would be broken. It would be broken to a greater extent than at Hoxie because of the various branches—suppose there is a carload each going to Camden, Hope, Texarkana, Fort Smith or Galveston, or maybe to Pine Bluff: now there are three lines branching out there. If the red ball freight

is going in different directions that requires another breaking up of that train.

Q. That is, provided it contains cars that go on these different routes?

A. Solid cars of the same kind of freight moving direct from St. Louis to final destination——

Q. If you have two cars on that train going to Monroe, Louisiana, would you take that off and put them so they would go on the valley lines?

A. Yes, sir.

Q. That left you ten cars going to Dallas and there are five more cars there going to same destination or some point beyond there, but on the same road, they would be hooked on to the train?

A. The train is all broken up. It is not just a question of taking the engine off.

Q. What service is performed in doing that work?

2455 A. Switching, throwing it on the different tracks; they have there classified yards, I presume. They have splendid yards at Little Rock, I think it is the ladder style, throwing the cars on to different tracks to be made up in trains.

Q. That illustrates the service that is rendered in connection with the handling of cars?

A. Yes, sir.

Q. Now, let us assume that there are five cars on that train at Little Rock, tonnage for Little Rock:

One has to be delivered, we will say, to a plant in Little Rock; another to an industry south of Little Rock—the Davison brick yard, and another one to another point in Little Rock: what is the service rendered in reference to that tonnage on that train?

A. I would not undertake to state in detail the final operation at Little Rock. I know in a general way what it is because *because* I have been over similar yards in Kansas City a great deal.

They take those five cars there, they are set out on a track designed for switching cars from and to the local industries and the engine would take those cars and switch them to the different industries.

Q. When they are unloaded they are brought back empty to some other point?

A. Probably.

2456 Q. There is a terminal service in addition to the switching service that is applied to the trans-state cars, is there not? There has to be an additional terminal service in connection with those cars which are to be——

A. There is a greater measure, of course, in the switching. The cars have to be switched from the tracks to the train and some have to be switched from the tracks to the different deliveries. Those deliveries are a greater distance apart.

2457 Mr. MOORE: Mr. Lincoln, does this transstate traffic that you have been speaking of require the use of the station organization at points where the re-adjustment you spoke of is made?

A. Generally speaking, no.

Q. Or the station buildings?

A. No.

Q. Does it require the use of the house tracks for cars, loading or unloading?

A. It should not; I presume it does not.

Q. Or public tracks?

A. It should not.

Q. It does not require, does it, the use of tracks to elevators? It does not require the use of the tracks to elevators and industries? You have already spoken of industries I think?

A. It does not require the use of the elevators.

Q. Of tracks to elevators?

A. It does not.

Q. The office of this adjustment that you described this morning is to enable the train to go on with full tonnage, or a full train; isn't that the purpose of it?

A. Yes.

2458 Q. Now the transstate freight itself, which is passing through the State, does not require that, does it? Just these other trains that are brought in or let out at these places that require switching, isn't it?

A. Well, the train is composed of all kinds of freight.

Q. I understand, but you may have a train of cars, and ten of them would be transstate cars, and ten of them would be interstate cars, or you may want to add some interstate cars, make some changes, such as you describe, at a point on your line, passing through Arkansas. Now you said that that is done for the purpose of keeping up the tonnage of the trains, making a full train?

A. Done for the purpose of getting the most economical result.

Q. That would not be necessary to the movement of this transstate traffic itself, would it, for you to economize on account of these incidents brought into it—by the accumulation of other cars?

A. The necessity of taking in the other class of traffic, of course, is to reduce the cost of operation by using the engine to its full capacity.

Q. To utilize the full efficiency of the engine?

A. The crews and everything to its full efficiency.

Q. And to keep the transstate cars moving as rapidly as they can, is that it?

A. Of all through freight——

2459 Q. Yes, that is what I mean.

A. To keep it moving as rapidly as possible.

Q. Is every through train, transstate freight train, that goes across the state subject to that adjustment that you spoke of?

A. Of changing the contents of the train?

Q. Yes.

A. I think practically all of them the contents of the train is changed.

Q. Are you acquainted with the conditions that exist in Arkansas now on the Iron Mountain Railroad as to the route of through shipments from south to north and north to south?

A. I believe I am quite generally familiar with it, not in its absolute detail.

Q. Now do you know the location of the Memphis, Helena & Louisiana branch?

A. Yes, sir.

Q. Does not a great deal of the heavy through lumber business, which originates in territories south of Arkansas, and in Eastern Arkansas also, take that line, which is a low line—it is a low grade line, isn't it?

A. That line from Marianna, or in that vicinity of the M. H. & L. is a low grade line.

2460 Q. Does not the greater part of the transstate movement from Texas points, Eastern Arkansas points and Louisiana points move over that new line, that is, the Memphis, Arkansas & Louisiana by way of McGhee, Lexa and Paragould, crossing the Mississippi River at Thebes?

A. It is my understanding that with the completion of the connecting link between the Helena branch and the M. H. & L., running from a point in the vicinity of Marianna to McGhee, on account of it being a low grade line, the traffic originating or terminating on the M. H. & L., which is the line running from the vicinity of Arkansas City down to Farraday, where it connects with the Texas and Pacific Railroad, and the H. C. A. & N. division from McGhee to Alexandria, where it connects with the Texas and Pacific Railroad is moved by this new line, being the low grade line and the short line; and that business moving between the Mississippi River crossing St. Louis and south, and Louisiana points, including New Orleans, would move over that line, where it would be delivered or received by the Texas and Pacific at Farraday or Alexandria. It is not, however, my understanding that any of the Texas traffic moves by that line, with the possible exception of some traffic in the vicinity of—in extreme southeast Texas. Louisiana and Arkansas traffic having origination and destination north of St. Louis—east of St. Louis, east of the Mississippi River, would move over those rails.

2461 Q. Would not a great deal of that traffic move in unbroken trains, solid trains?

A. I couldn't say as to that.

Q. There is a considerable lumber business originates on the H. C. A. & N. line. To what extent would it move in unbroken trains north?

A. I couldn't say.

Q. How long is it since you severed your connection with this road?

A. Four years ago this month.

Q. Do you know whether or not here have been changes made in the manner of handling transstate traffic since you have severed your connection with that line, growing out of these new lines being established, and also the establishment of the classification yard at Dupo?

A. I can't say as to that definitely. As I have stated, it is my understanding, and it is logical, that the business should move that way; that this business passing between those territories pass over those new lines.

Q. And you are not familiar with those changes growing out of that?

A. Not in the detail of them, no, sir.

Q. Now do you know that the Iron Mountain Railroad has a large classification yard at Dupo?

A. Yes, sir, I know that.

2462 Q. What is the purpose of that, the establishment and maintenance of that yard?

A. Well, I presume the purpose—as it was started when I was with the company—is to take care of their interchange business with the eastern lines through East St. Louis, and also have the yards in which they could make up the trains and handle over Illinois Division, which is a low grade line.

Q. And isn't it a fact, Mr. Lincoln, transstate trains are made up there and classified with a view and for the purpose of giving them the longest possible movement without shifting cars so that traffic can be handled with the greatest economy?

A. That is the purpose.

Q. Any competent railroad operator in handling that class of traffic would do everything that could practically be done to economize by minimizing as much as possible the changing and shifting of cars in those trains, wouldn't they?

A. There and elsewhere. I would state that so far as that line is concerned. I believe it has been open for operation within about the last year, for continuous operation.

Q. Now do you know that in making up that class of trains and classifying the cars the practice now is to put all cars that may require moving, transferring and shifting together at the head of the train so that they can be moved or shifted in few movements?

2463 A. As far as is practicable. That is the instruction, and it is done I presume.

Q. That is done to facilitate the rapid and economical handling of this transstate traffic, is it not?

A. It is to avoid the unnecessary switching.

Q. Now, I believe, if I understood your statement as to the field of your labors, you have been largely with the traffic department, haven't you?

A. Very largely with the traffic department.

Q. Have you had any experience in the operating department?

A. Not directly, excepting for a limited period when I was in the operating department.

Q. When was that?

A. Well, that was about 1879 to 1888 when I was in the operating department.

Q. What line were you with then?

A. St. Joseph and Denver City at that time. It is now the St. Joseph and Grand Island Railway.

Q. What is the length of that line and character of its business?

A. Two hundred and fifty two miles; ran from St. Joseph, Missouri, to Grand Island, Nebraska, where it connected with the Union Pacific Railroad, and was a part of the Union Pacific from 1879.

Q. You have had no experience in handling trains and directing their movements, and in the operating department along
2464 the line of the Iron Mountain since you have been with it, have you?

A. I have had no experience in the matter of handling trains or

directing them. I have only had my experience in consultation with officials.

Q. For instance, now, when you describe the manner in which it is handled at Hoxie, you base it upon general impression and not upon actual experience?

A. So far as Hoxie is concerned upon general impression and upon my knowledge of the instructions that are given. So far as other points are concerned upon actual knowledge.

Q. Well, now, the instructions, I would take it, that are given are always to the end and for the purpose of directing the movement and shifting of cars and traffic with the least possible expense and with the greatest amount of economy possible in the conduct of the traffic, that is true, isn't it?

A. The purpose of the instructions in regard to making up trains, they are classified and all with the end in view of economizing in the operation, and the methods employed unquestionably brought about that result.

Q. You refer now to general instructions from general offices in St. Louis?

A. I am referring to instructions given by the chief of the
2465 operating end through superintendents and yard masters.

Q. Those instructions do not attempt to deal with the details of the operations, do they?

A. Well, the instructions go pretty thoroughly into details, because you have to in giving instructions to minor officers go into details.

Q. I believe you just stated you are not acquainted with the changes made in operating methods since you left the Iron Mountain—on that line I mean?

A. Yes, sir, I am somewhat familiar with them, because my relations are kept up with the railroads, as to their operations, my duties being all railroad duties.

Q. And your duties have been confined to matters pertaining to the traffic in the City of St. Louis, have they not—I mean the city interests of St. Louis?

A. My duties are to look after the traffic interests of St. Louis, and in looking after that interest I have to be generally informed upon the situation caused by competition for other companies.

Q. Your duties do not take you out over the lines of the railroad, do they?

A. Sometimes.

Q. Have you had opportunity, and have you taken occasion, to investigate the handling of this trans-state moving in the last four years?

2466 A. Not in the way you have mentioned, but have been giving a great deal of attention to the handling of trans-state traffic.

Q. That is from a traffic standpoint; have you from an operating standpoint?

A. From an operating standpoint as to cost. It was made necessary in my investigation in the Texas rate case and in the Southwest case.

Q. Now then your investigations have been of the character that

would cause you to go personally on the ground and make a personal investigation?

A. Not in those cases; has been acquired very largely from the reports of the railroads themselves as to results.

Q. Those are reports that contain such general statements, I suppose, as might be expected in official reports?

A. Well, they are very largely reports made for the Interstate Commerce Commission, and the State, and their annual reports.

Q. Speaking of that, what expenses are charged to traffic?

A. What expenses?

Q. What expenses are charged to traffic? You were asked by Judge Hill in your direct examination in regard to traffic expenses; I say what expenses are chargeable to traffic?

2467 A. Oh, I would not undertake to go into that in detail, that is, as to the methods employed by the railroads, in the items of them. It would require a considerable investigation on my part. I have not made it a study, and I do not recall all of the expenses. Charge off certain things not chargeable to traffic; passenger business and express business, various items.

Q. Has the Interstate Commerce Commission promulgated any regulation in regard to it?

A. They have.

Q. You don't recall what they are?

A. I do not recall the detail of their instructions.

Q. I think I understood you to state on your re-examination that a large volume of traffic is under competitive rates?

A. Yes, sir.

Q. Now, Mr. Lincoln, when you made that statement, you had in mind, didn't you, the traffic throughout the country at large?

A. Throughout the country at large.

Q. You were not speaking with reference to the Iron Mountain and the St. Louis Southwestern railroads, were you?

A. Well, I think the general adjustment of rates upon those lines is largely the force of competition.

Q. Now isn't it a fact, Mr. Lincoln, the rates applicable to the heavy movement of traffic on the Iron Mountain and the St. Louis Southwestern lines in the State of Arkansas are graded

2468 according to distance?

A. I am not informed as to the volume of the movements between points in Arkansas; but to my best knowledge and ability, the business which moves between points in Arkansas is moved on distance tariff rates, which is a mileage scale.

Q. Now Mr. Watson testified to that effect in this case. You know who I mean by Mr. Watson?

A. Yes, sir.

Q. Assistant General Freight Agent of the Cotton Belt?

A. Yes, sir.

Q. And that the larger volume of traffic of both of those lines—interstate traffic into Arkansas—was under the rate of distance. You would not undertake to say that statement by him is not correct?

A. Is that the interstate business?

Q. The business into Arkansas, business from St. Louis into Arkansas?

A. That the business from St. Louis to Arkansas moves on Arkansas distance rating?

Q. No, I didn't say that—the Arkansas distance rate is based on the mileage; the rate is adjusted in reference to the distance, and not regardless of the distance of the haul?

A. No, I would not say that the rates from interstate
2469 points into and out of Arkansas—the interstate traffic—was adjusted on a mileage basis, because I do not think it is.

Q. Now we will take the rates on the St. Louis Southwestern, stations on the line of that road, for instance Paragould; will you say that those rates are not based on the length of the haul, I mean now from St. Louis as the initial point?

A. I was going to state that so far as the interstate rates from St. Louis—or the rates from St. Louis, which are interstate rates, to stations on the Cotton Belt Railroad in Arkansas are concerned, they, as I recall it without going into detail, are based: Points south of Pine Bluff upon rates to Pine Bluff plus the Arkansas Distance Tariff. Of course, the rates into Pine Bluff are controlled by the Arkansas State rate, which would be a mileage scale from Memphis; and the rates from other territories are made with relation to that adjustment to a greater or less extent, not to an absolute degree. But so far as the Cotton Belt is concerned, its rates from St. Louis are more nearly upon a mileage basis than any of the other lines in Arkansas.

Q. How is it north of Pine Bluff?

A. North of Pine Bluff I do not recall the adjustment, but the rates do increase to a certain extent as the mileage increases. From the Missouri State line going down to Pine Bluff the rates increase as the mileage increases.

2470 Q. Now what is the condition on the Iron Mountain on its main line south from St. Louis to points in North Arkansas, Central Arkansas and points south of there?

A. As to the Iron Mountain main line?

Q. Yes.

A. Which runs from Little Rock to Texarkana?

Q. Yes, from St. Louis—basing on St. Louis?

A. Its rates are made with reference to the rate into Little Rock, which is controlled by the Arkansas rates from Memphis, indirectly, not absolutely. But to points south, it is made on the Arkansas tariff added to the Little Rock rate. I am not clear in my mind as to the present adjustment. I think the exception to that basis—speaking of the main line—obtains at Hope, Arkansas, and at Texarkana, Arkansas; that I am not positive. Hope may be on the full combination on Little Rock, that I am not sure—not in all rates. Texarkana is not on the full combination in all cases.

Q. You do not undertake to testify then in regard to those?

A. Not as to the detail.

Q. Now, how is it on points on the Camden branch?

A. At points on the Camden branch——

Q. I don't mean at Camden, but take it north and south of Camden?

Q. Points on the Camden branch, it is my understanding
2471 that the present class rates are on the Arkansas Distance Tariff added to the Little Rock rate. As to the details of those figures I would not state. I have not had an opportunity to go into them, and I would not state definitely as to merchandise adjustment.

Mr. MOORE: That is all.

Redirect examination.

By Mr. HILL:

Q. Mr. Lincoln, Mr. Watson testified yesterday to some particular rates to which I want to call your attention. Merchandise rates from St. Louis to Paragould eighty-one cents a hundred, L. C. L.; boots, and the same from St. Louis to Memphis, sixty-five cents a hundred; boots and shoes, St. Louis to Paragould eighty-one cents, and to Memphis sixty-five cents; that would apply to merchandise as well as L. C. L.; packing house products, L. C. L., St. Louis to Paragould fourth class, forty-three cents, to Memphis twenty-six cents per hundred; less than car load lots would be twenty-six cents a hundred to Memphis, and forty-three to Paragould; same proportion as to merchandise; merchandise twenty-six cents to Paragould, twenty-one cents to Memphis. I call your attention to these higher rates to Paragould, and the statement that the traffic passes right through Paragould to Memphis, the rate being higher to Paragould than to Memphis; I will ask you to state what adjustment, if you know, that that is made from?

2472 A. I could not say as to just how the rates obtain at Paragould, as to the measure of the rates, and could only state that—based upon previous knowledge of the situation—that the rates from Paragould are adjusted with reference to the Arkansas General Rate Adjustment; probably based upon rates from the nearest Mississippi River crossings; whereas the rates from St. Louis to Memphis are competitive rates, which probably originated with water competition, to some extent, and to some extent with the competition met with at Memphis from other sources of supply—that is, in their competitive markets. For example, a rate from St. Louis to Memphis might not have been compelled by water competition, but would have been compelled by a rate adjustment from Louisville, a competing market.

Q. Does not that look like it took the rate to Memphis and then charged the Arkansas adjustment from Memphis back to Paragould to the back haul, although they carried the stuff right through—they stopped the Paragould shipment at Paragould and carried the Memphis part of it on through Paragould?

A. I hardly think that Paragould was based on the rate to Memphis and the rate back. I think it is more likely that the rate from Cairo to Paragould was the controlling rate.

Q. Wasn't much mileage consideration in those two rates was there?

A. No, they are not made on mileage consideration com-
2473 pared with Memphis.

Q. We had in evidence here many illustrations, that I will

not go over with you, showing the rate from Little Rock was considerably higher than the rate to New Orleans, with the same commodity from St. Louis; that would not be on a mileage scale by any means, I suppose?

A. The rate is not made upon a mileage to Little Rock as compared with the rate to New Orleans.

Q. Mr. Moore referred to through trains that would have ten cars of transstate, and probably ten other cars would be set out at Little Rock, and asked you, if I understood him correctly, whether this switching or breaking up of a train was not necessary so far as regards the ten cars that were going on through. I will ask you if this switching was not done and other cars hitched onto those ten cars, if that would not make the transstate freight a very expensive proposition?

A. I think I catch the idea is this; if the ten cars of transstate traffic were allowed to go on through as a continuous movement, without putting other cars into that train to bring it up to its tonnage that the engine can haul and the crew can handle, that it increases the expense of handling the transstate freight—undoubtedly.

Q. Well, that would be true if it started from St. Louis that way?

A. Anywhere.

2474 Q. It is economy of the transstate business, as well as general economy, if you break up these trains at these division points or distributing points, as you have indicated has been done?

A. It is economy to all of the traffic handled to make each engine haul full tonnage and not having light trains, whether it is one class of freight or another.

Q. Then it is good economy to set out these through trains at Hoxie or Little Rock, whatever the point, and wait for a train to be made up to carry them?

A. It is economy to wait at a division point and fill out your trains.

Q. In reference to various services performed at the division points, you generally have an inspection? Isn't that a service performed at these division points?

A. Inspection of what?

Q. Inspection of the cars?

A. I assume the cars are inspected at the division points. I hadn't thought of that.

Q. The wheels, boxings, and everything of that kind?

A. That is what is usually done at division points, is to attend to equipment.

Q. That is a cost of service, of course, that would apply——

A. To all.

Q. Apply to all alike?

A. Yes, sir.

2475 Mr. HILL: That is all, Mr. Lincoln.

Mr. MOORE: Nothing further.

[End of Volume I.]

# (22,889.)

# SUPREME COURT OF THE UNITED STATES.

**OCTOBER TERM, 1911.**

# No. 813.

---

ROBERT P. ALLEN, GEORGE W. BELLAMY, AND WILLIAM F. McKNIGHT, RAILROAD COMMISSIONERS OF THE STATE OF ARKANSAS, APPELLANTS,

*vs.*

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

---

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE EASTERN DISTRICT OF ARKANSAS.

---

VOLUME II.

---

INDEX.


| | Original | Print |
|---|---|---|
| Evidence for defendants—Continued. | | |
| Testimony of R. E. Kimbell (recalled) | 2476 | 997 |
| T. F. Wharton | 2484 | 1000 |
| Herbert C. Whitehead | 2650 | 1075 |
| W. E. Fitz Gerald | 2660 | 1080 |
| Henry Willmering (recalled) | 2725 | 1111 |
| R. D. Parker | 2829 | 1161 |
| C. B. Bee | 2861 | 1176 |
| Charles S. Ludlam | 3145 | 1309 |
| Maurice Wright | 3310 | 1383 |
| T. F. Wharton (recalled) | 3345 | 1400 |
| T. A. Hamilton | 3352 | 1402 |
| Conway C. Hillman | 3524 | 1479 |
| T. A. Hamilton (recalled) | 3621 | 1524 |
| T. F. Wharton (recalled) | 3784 | 1599 |
| J. M. Johnson | 3793 | 1603 |
| Fred P. Johnson (recalled) | 3808 | 1611 |

| | Original | Print |
|---|---|---|
| Stipulation of counsel as to monthly statements of Chicago, Rock Island & Pacific Railway Company | 3810 | 1611 |
| Testimony for complainant in rebuttal | 3811 | 1612 |
| Testimony of R. H. Laing | 3811 | 1612 |
| C. E. Perkins | 3827 | 1619 |
| J. D. Watson | 3938 | 1672 |
| M. L. Byers | 3987 | 1695 |
| W. H. V. Rosing | 4054 | 1726 |
| H. B. Aumocek | 4137 | 1769 |
| B. W. Moore | 4147 | 1773 |
| John Cannon | 4195 | 1795 |
| H. V. Brown | 4211 | 1803 |
| W. L. Seelig | 4224 | 1809 |
| Frank Nay | 4230 | 1812 |
| F. E. Ware | 4321 | 1853 |
| Carl R. Gray | 4406 | 1893 |
| Hubert Roth | 4567 | 1973 |
| Fred P. Johnson (recalled) | 4583 | 1981 |
| Frank Nay (recalled) | 4650 | 2012 |
| Hubert Roth (recalled) | 4778 | 2076 |
| R. E. Kimbell | 4780 | 2076 |

# VOLUME II.

No. 813.

ROBERT P. ALLEN et al.
vs.
THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

2476 R. E. KIMBELL, being recalled by the defendant, further testified as follows:

Redirect examination.

By Mr. HILL:

Q. Mr. Kimbell, are you ready to make your report to the Master that he called for yesterday?

A. I stated yesterday in answer to your request, Judge Hill, that the information could be worked up, but that I disliked to do it on account of the labor involved. I find upon making an estimate of the labor, that it will require something like a month's time for a competent clerk to work the information up. I think it is pertinent to say here now that we have been always willing and ready to work up everything you wanted. In fact, this Exhibit A you put up was worked up at your request, at very heavy expense to us——

The MASTER: Well, never mind about that part of it, Mr. Kimbell. This is contained in the record of the railroad company—the Southwestern?

A. Yes, sir.

The MASTER: Those records are open for all the purposes of this examination, under the order of the Court. I do not think it would be doing justice to the railroad company, or to the witness here, to require him to produce that record. I think, Judge Hill, if you want that information you asked for that you should take the laboring oar and get it.

2477 Mr. HILL: I felt like the laboring oar was on them. They put in half of the proposition; they ought to be required to put in the other half of it.

The MASTER: They really were not required to put in that.

Mr. HILL: They did that voluntarily. I did not ask them to put in that. Mr. Kimbell has been very courteous about furnishing information we have asked. But this exhibit I am calling for now is his own testimony, put in to show certain facts, which he thinks is important, which he admits is one side of it, and when that is done, it seems to me it is his duty to put in the other side of it to get it in full.

The MASTER: I will not require Mr. Kimbell to go into that work.

Mr. HILL: Mr. Moore, I called for this contract yesterday, and I am willing for Mr. Kimbell just to state what it is instead of putting in the paragraphs.

Mr. MOORE: Are you sufficiently familiar to do that, Mr. Kembell?

Mr. KIMBELL: Yes, sir.

Mr. HILL: Now, Mr. Kimbell, without going into the details, I want none of the details, but I want generally speaking the arrangement between the St. Louis-Southwestern and the Iron Mountain as to the leased tracks from Paragould to the Missouri State line?

A. Prior to January——

The MASTER: The record will show that that is done by
2478 contract.

A. Prior to July 1st, 1909, under the terms of this contract, the St. Louis, Iron Mountain and Southern Railway was accorded trackage rights over the rails of the St. Louis-Southwestern Railway between Dexter, Missouri, and Paragould, Arkansas, the compensation being forty cents per train mile. As I have stated, prior to July 1st, 1909, that, in substance, was the entire agreement.

Subsequent to July 1st, 1909, the track was placed on, what is known in railroad parlance, as a joint track basis, which provides for the St. Louis, Iron Mountain & Southern Railway paying the St. Louis-Southwestern a rental on an arbitrary basis and paying its proportion of the expenses of maintenance and operation on the car mile basis.

Mr. HILL: How were the expenses of maintenance and operation apportioned prior to this change?

A. The St. L. S. W. Ry. received compensation at the rate of forty cents per train mile. Under the rules of the Interstate Commerce Commission carriers are required to sub-divide amounts received for trackage of that character between rentals, maintenance, operation and general administration. No fixed basis is prescribed by the Commission, and the railroads are at liberty, under their rules, to divide that amount on such basis as they may consider equitable. The St. Louis-Southwestern Railway credited fifty per cent of this amount to rentals and the balance to maintenance and operation.

2479 Did it make any further apportionment of that fifty per cent from maintenance or construction, or just credit it generally to that?

A. It is credited in proportion a part to maintenance of the way and structures, a part to conducting transportation, a part to general administration.

Q. On what basis is that maintenance of way and maintenance of equipment proportioned?

A. It is a purely arbitrary basis, determined by our company in a way which we think is as fair distribution of it between those accounts as possible. I do not recall just exactly what the percentage is now. I believe it was credited fifteen per cent to maintenance of

way and structures, probably fifteen to conducting transportation and the balance to administration. There is a sub-division there which I do not recall off-hand.

Q. Well, I just want to get at it generally. You sub-divided it into these various amounts according to what you thought would be proper to each?

A. Yes, sir.

Q. Now since you have made this change you have changed that basis also?

A. Yes, sir.

Q. Now how do you apportion it since the change?

A. The amount paid by the Iron Mountain as rentals is
2480 credited to income as a rental receipt. The amount paid by the Iron Mountain for its proportion of maintenance and operation is credited to the several operating accounts in about the same ratio we formerly used it.

Q. I believe you said you ascertained that on a car mile basis?

A. We ascertained the division upon the Iron Mountain and the Cotton Belt, but not the sub-division upon the operating account.

Q. Now the sub-divisions between the operating account you apportioned on what you considered a fair basis?

A. Purely arbitrary.

Q. Between the two railroads it is apportioned on the car mile basis?

A. Yes, sir.

Q. Now, Mr. Kimbell, what traffic is covered by the Iron Mountain Railroad by that leased line in Arkansas?

A. That I could not say, Judge. We have no detail of that traffic whatever. Our record reports——

Q. I am referring to under that contract what traffic may they carry?

A. They are entitled under the contract to carry through traffic only. If, however, in the performance of their duties as a common carrier they are required to handle any local traffic on receiving seventy per cent of the local tariff.

Q. Has that occurred?

2481 A. No, sir, not that I know of, I don't know any single case.

Q. They have handled only through traffic?

A. Yes, sir.

Q. Only through freight traffic?

A. That is all.

Q. No passenger trains?

A. None whatever.

Q. You pay the taxes I believe?

A. We pay the taxes and charge them one-half.

Q. I presume there were taxes taken care of on that just like other taxes?

A. Yes, sir.

Q. No difference in handling the taxes on this leased road to the Iron Mountain than——

A. We pay the taxes. It is our property absolutely; charge them one-half.

Q. When you pay their taxes what do you do with them?

A. That is treated under the itemization as a rental property, just the same as a rental income I assume, not credited to taxes.

Q. And you pay the whole taxes, and as far as the tax account shows you get no credit, but you carry that into another account?

A. Into an income account.

Q. What is the mileage in Arkansas of that line?

2482 A. Thirty-six miles.

Recross examination.

By Mr. MOORE:

Q. When was the change made in the terms of the contract?

A. July 1st, 1909.

Q. Prior to that time were the taxes divided?

A. No, sir.

Q. All paid by the——

A. All paid by the St. Louis-Southwestern. Its compensation was the amount of forty cents a train mile, covered all that was paid by the Iron Mountain.

Q. Expressly excluded any additional charge by the way of taxes or otherwise?

A. Yes, sir.

Q. And that was the condition prior to July 1st, 1909?

A. Yes, sir.

Q. I believe you said only freight cars are moved over this line?

A. By the Iron Mountain.

Q. I mean by the Iron Mountain.

A. That is correct so far.

Q. And this basis of charge applies simply to the freight cars?

A. Yes, sir.

2483 Q. Not to passenger and mail and express?

A. They have the right——

Q. I am speaking about what is actually transported over it?

A. We have not been handling any passenger trains as I know of.

Q. Do not and never have for them?

A. No, sir.

2484 T. F. WHARTON, a witness of lawful age, being duly produced, sworn and examined on the part of the defendant, testified as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, age, residence and occupation?

A. T. F. Wharton; 40 years of age; residence, St. Louis; occupation, Public Accountant.

Q. What is your business?

A. At the present time I am Manager of the St. Louis office of Haskins & Sells, Certified Public Accountants.

Q. What is the business of Haskins & Sells?

A. It is the business of public accounting, which includes auditing, the preparation and installation of systems of accounts, and all work related to those two classes of business.

Q. Does that firm do railroad accounting?

A. Yes, sir, a great deal of railroad accounting.

Q. Is that a firm that has an extensive business? Explain without going too much into detail, the general nature of the business of Haskins & Sells and where they have offices?

2485 A. The firm of Haskins & Sells have their main office in New York City and have other offices in Chicago, St. Louis, Cleveland, Pittsburg and in London.

Q. How long have you been connected with the firm of Haskins & Sells?

A. Since January 1, 1902.

Q. How long have you been an accountant?

A. Well, I have only practiced the profession of public accounting since that date. Prior to that time I had done more or less municipal work, but no work aside from municipal work to speak of.

Q. What do you mean by municipal work?

A. Municipal accounting matters relating to the municipality and all kinds of municipal work.

Q. Have you been continuously engaged in the business of accounting since 1902?

A. Yes, sir, with the firm of Haskins & Sells.

Q. Have you had any railroad experience as a practical railroad man in any way?

A. No, sir, my only railroad experience has been that secured in the Missouri and Arkansas Rate Cases, aside from just some work that would not amount to anything.

Q. Work has been that of an accountant entirely, so far as it touches these questions?

A. Yes, sir.

Q. You referred to the Missouri Rate Case: what connec-

2486 tion did you have with that?

A. Well, the work undertaken in Missouri was undertaken by the St. Louis office of Haskins & Sells of which I had charge at that time, and I was connected with that case all the way through, although I did not testify in that case or take the close interest that I have in this case.

Q. I wish you would state just generally what the issues were in that Missouri Rate case?

A. The issues in the Missouri Rate case were very similar to those in this case, with this exception:

In Missouri, the Legislature in 1905 and again in 1907 passed a maxmum freight rate law which fixed maximum freight rates on special commodities named in the law.

The railroad companies enjoined the enforcement of that law and it was on their application for permanent injunction that the issue

was raised. The same thing applied to passenger fares also in that case. It was a legislative act fixing the rate at 2 cents a mile. It was also attacked by the railroads and the fight in that particular was the same as in Arkansas.

Q. Were there issues in that case as to the separation of property and business between state and interstate, traffic?

A. Yes, sir, just the same as in the Arkansas case. The question of the state and interstate business and the division of property and expenses between those two classes of business, both freight and passenger.

2487 Q. Did you give that question study, thought and investigation?

A. Yes, sir.

Q. How long were you engaged on the Missouri Rate case, Mr. Wharton?

A. I believe we started our work on that in June, 1906, and we were engaged on that, I believe, for almost three years. I am not sure as to the exact time, but it was something like that.

Q. During that time were you closely in touch with the issues in the case?

A. Yes, sir, all the time.

Q. And you are familiar with the methods of operation and expenses adopted by the railroads and adopted by the state in that case?

A. Yes, sir.

Q. Was your firm employed by the State of Arkansas in this case?

A. Yes, sir.

Q. State the purpose of your employment by the state of Arkansas in this case?

A. The purpose of our employment was to assist the state in getting at the facts in the case as near as possible, in determining the cost of state and interstate business as near as it could be determined.

Q. When did your firm begin to work for the state in

2488 this case?

A. In August, 1908, we were employed by the Traffic Bureau at Little Rock to assist the state in its efforts to resist the granting of the preliminary injunction.

Later we were employed by the state itself to do the work.

Q. By the Railroad Commission acting for the state?

A. Yes, sir.

Q. Do you recall about what time you were employed by the Railroad Commission to undertake this work that you have been continuously engaged in since?

A. I think about last June, May or June, was the time.

Q. Now, Mr. Wharton, begin at that point when you were employed by the state to begin this investigation and state the history and methods pursued by you, giving the reasons for the methods that you did pursue?

A. In our first consultations with the railroad commission and with the counsel for the state we discussed at considerable length the

plans that had been followed in the Missouri Rate Case, and the plans that we thought might be worked out in this case.

The Railroad Commission and its counsel both desired to get at the actual facts, if possible, without the use of any theories of any kind and we went to work with that in view, from the reading of the testimony in the Missouri Case and from——

2489 Mr. MOORE: It does not seem to me that this is competent testimony—the statement of the methods pursued, in the discussions and conferences among the members of this firm Haskins & Sells and the representatives of the state as to the course to be pursued by them in this case.

The MASTER: I suppose the object of that statement is to show the opportunities that the witness has had for acquiring facts and information in this case.

Mr. HILL: Yes, sir.

The MASTER: I will let him go on and state that but not state anything hearsay from the Missouri case in this connection.

Mr. MOORE: I want it to be understood that I am objecting to it.

The MASTER: Certainly, the record will so show.

The WITNESS: From the reading of the testimony in the Missouri case and my understanding of the purport of that testimony, it appeared all the time that the differences in the cost of state and interstate business were mainly the differences in the cost of local and through trains.

The witnesses all seemed to testify that way and we determined that if it was possible we would work up statements showing the cost of local and through business and after getting that cost, we would ascertain in the best manner possible the cost of state and interstate business carried in the two classes of service; in that way getting away from any question of theory, but getting down to an
2490 application of the facts and of the testimony given in that case, and subsequenly given in this case.

Mr. HILL:

Q. How did you proceed to carry out those plans?

A. The first thing that was necessary was to ascertain the movement of freight on local and through trains; also the car miles, engine miles, the train miles, and all such statistics in reference to the movement of freight on local and through trains, in order that the expense could be properly apportioned between the local and the through service and in order that the cost of that service might be apportioned between the state and interstate business moved in the two classes of service.

The Cotton Belt road had prepared statistics of that kind in a test they made in the month of October, 1908.

On the Iron Mountain it was necessary for us to prepare most of our own figures in that particular. The railroad company had prepared a statement showing in full detail the movement of freight during the month of October, 1907, and we——

Mr. HILL: I want to identify that now, Mr. Wharton. It is marked Exhibit 26.

A. We did not work up the entire movement of all freight on all trains during that month but we worked up the movement of all freight on all of the local trains on the Iron Mountain
2491 during that month and having that and the total movement of freight, the difference between the two was the movement on the through trains during that month.

Q. As I understand you, then, you accepted the Iron Mountain figures as to the total movement of the freight during the month of October, 1907, as shown in their Exhibit No. 26?

A. Yes sir.

Q. And started with that as your beginning point and then segregated the two classes of traffic by ascertaining the actual movement on all the local trains in the State of Arkansas during that month, was that it?

A. Yes, sir; that is correct.

Q. Do you mean the Iron Mountain in Arkansas and not the entire system?

A. Yes, sir, the Iron Mountain in Arkansas.

Q. Mr. Wharton, explain the method of working up that, without going into detail. I understand Mr. Hamilton knows that better than you do, but explain the plan and how it was carried out.

A. The detail I am not familiar with.

The plan of the work was to take the wheel reports, list of the car numbers, and get the way-bills, I believe, showing the freight moving in those cars.

Q. You mean from the records of the Iron Mountain Company?

2492 A. Yes, sir, it was all worked up from the records of the Iron Mountain Company.

Q. Just explain what records and where you found that?

A. I would rather have Mr. Hamilton do that. I made up the plan.

Q. That plan was carried out by others, under your general direction and co-operation?

A. Yes, sir.

Q. Now, Mr. Wharton, have you that statement as worked up?

A. Yes, sir.

Q. I wish you would present it and file it as Exhibit "I."

Whereupon the exhibit just referred to is marked "Defendant's Exhibit I" and is in the words and figures as follows to wit:

For Exhibit "I," see Volume 9, page 5787.

2493 Q. Mr. Wharton, please take that Exhibit I and explain it?

A. The first column in Exhibit I, the one marked "local trains" contains the statistics worked up by us under Mr. Hamilton's personal direction. The last column marked "total" contains the total statistics shown in Exhibit 26 and in some of the other exhibits

filed in this case,—I will take the last part of that out—some of these are not shown in the exhibits in the case.

All of the figures in the "total" column were obtained from the books and records of the St. Louis, Iron Mountain and Southern Railway Company, except the percentages and averages worked out.

Q. The totals there of ton miles were taken from Exhibit 26?

A. Yes, sir, from Exhibit 26, the mileage statistics as to car miles, caboose, engine and train miles, were taken from the records of the railway company for that month.

Q. Now proceed with your explanation of it.

A. The second column marked "through trains" is the difference between the column marked "local trains" and the one marked "total," with the exception, of course, of the percentages and averages, which were worked out from the figures in those columns.

The first section of the statement shows the ton miles of freight carried during the month of October, 1907, divided between
2494 local trains and through trains.

Following that we have the ton mileage of each class of freight expressed in percentages.

Following that are mileage statistics and other statistics as to train movement and car movement.

Q. Mr. Wharton, I wish you would state what you found in that test of the loading of the local trains as between state and interstate, expressed in percentages?

A. We found from that that the loading of the local trains was 71.49 per cent interstate, and 28.51 per cent state, based on the ton miles carried.

Q. What was the loading of the through trains?

A. The through trains were loaded 94.41% interstate and 5.59% state.

Q. What did you do with the company freight in that case?

A. We originally worked up some statistics on the company freight but finally excluded them from this statement.

Q. This is the revenue freight?

A. This is simply revenue freight. My recollection of the company freight is that a larger proportion, in proportion to the total freight handled, is handled on local trains than on through trains.

Q. I see you have here "Number of cars handled in and out of terminals where yard engines are maintained:" I wish you would explain those figures?

2495 A. The instructions in relation to working up the cars handled in and out of terminals by local and through trains were that the wheel reports were to be taken and the total cars shown by that wheel report as going into the terminal were to be accounted as going in and the total going out of that terminal was to be accounted as going out. The figures are made up in that way classifying the wheel reports as between local and through.

Q. Now, Mr. Wharton, having obtained statistics as shown on Exhibit I, what was your next step in trying to get at the actual expenses between state and interstate?

A. After having obtained these statistics we worked up the operat-

ing expenses with more or less detail, for the six months ending December 31, 1907, and made a division of those expenses as between local and through train service so far as they are train expenses, and as between intrastate and interstate as far as they——

Q. Where did you get the expenses you were working up?

A. From the books of the railroad company.

Q. Are those expenses shown in your exhibits here?

A. They are shown in detail, I guess, the freight and passenger together,—the detail is shown in one of Mr. Johnson's exhibits.

Q. You started with the details which are represented in these exhibits?

A. Yes, sir.

2496 Q. You had better give me the number of that exhibit.

A. It is statement 4 of Exhibit 3 and shows the total operating expenses in Arkansas, both freight and passenger.

We worked up the freight or passenger side of those expenses, I have forgotten which—the passenger side of those expenses, all the way through and agreed them in total with the total passenger expenses shown on the second page of Exhibit No. 3, where the expenses are divided between freight and passenger business under the heads of "Maintenance of way and Structures;" "Maintenance of Equipment;" "Traffic Expenses;" "Transportation Expenses;" "General Expenses;" "Hire of Equipment;" "Dining Car service;" "Taxes;" and "Rentals."

Our object in working up the details was to make such a separation of that as we thought necessary in dividing the expenses as between local and through service.

Q. That was on the passenger side you have been telling of?

A. We worked the total of the passenger side and subtracted it from the total shown by this statement in order to get the freight side.

Q. What do you mean by "this statement?"

A. Statement 4 of Exhibit 3.

Q. Then how did you proceed with your working up of the freight?

A. You mean the division of freight expenses?

2497 Q. Yes.

A. In answer to that I will file this exhibit as "Exhibit J," which shows the division of operating expenses between local and through train service.

The paper just referred to is marked "Defendant's Exhibit J" and is in the words and figures following to-wit:

For Exhibit "J", see Volume 9, page 5790.

2498 Q. You are referring to the freight?

A. Yes, sir, freight operating expenses divided between local and through train service and state and interstate business.

The methods followed in arriving at the figures shown in that exhibit are explained on these sheets attached to Exhibit J, and which I will file as "Exhibit K." This exhibit consists of eight pages.

The paper last referred to is marked "Defendant's Exhibit K" and is in the words and figures as follows to-wit:

For Exhibit "K," see Volume 9, page 5792.

2499 Q. Mr. Wharton, I do not suppose I can have you explain that any better than you have already explained it in that exhibit?

A. I don't think so.

Q. If there is any detail that is not in that exhibit, that you think of, I would be glad for you to explain it. I think it is as good an explanation as you can make without adding any other statement.

A. It was intended to cover a full explanation of everything going into Exhibit J, freight division of expenses.

Q. I will now take up that exhibit K, Mr. Wharton, and ask you regarding some of the matters you have used there.

I see that under "Maintenance of Way and Structures" you say, "The proportion of these expenses applicable to the freight business, as shown by the statement in this case submitted by the Company, has been divided between local and through train service on the basis of the total engine and car miles of each class, during the month of October, 1907, that month being considered representative of the business for the six months ended Dec. 31, 1907."

Why did you divide that between local and through on the basis of the total engine and car miles?

A. Because it seemed to us to be the most equitable method, and, I believe, is a method followed considerably by the railroads themselves in apportioning that class of expenses where they have

2500 to make a division between different classes of freight service.

Q. Is that regarded in railroad accounting as an accepted approximation of the actual conditions between different classes of service?

A. I am not familiar enough with railroad accounting to say that, but my understanding is that contracts, such as Mr. Kimbell testified about yesterday are on the car mile basis——

Q. Taking it as an accounting proposition, what do you think of it?

A. As an accounting proposition I think it is the best method we could follow with the information we had at hand.

Personally, I think the expenses should be divided on a gross ton mile basis which includes the weight of equipment and the weight of the product hauled, but this is the best information we had at hand to make a division.

Q. You think if you had the information the other way you would get a little closer to the facts, is that it?

A. I believe so.

Q. This is the best method that would most nearly represent the actual facts that were available?

A. Yes, sir.

Q. I see you state that:

"In arriving at the number of engine and car miles we have added 50% to the engine mileage of local trains for station switch-

2501 ing, and have assumed that each engine mile was equivalent to 2½ car miles."

What was your reason for doing that, Mr. Wharton?

A. Well, it appears in this case that the local engines do a great deal of switching and while we had no basis on which to make our 50% estimate, we figured in our own minds that ought to be a liberal estimate as to the mileage made by local engines in station switching. Multiplying by 2½ to get an equivalent in car miles is, I believe, what the railroad men call working it on a wheelage basis, a locomotive, I believe, being usually considered to be about the equivalent of 2½ cars.

I discussed that with a railroad man and that was his idea, about two and one-half cars to an engine.

Q. You got information from experienced men that led you to believe that this was correct, is that it?

A. Yes, sir.

Q. In the next division of expenses "Maintenance of Equipment" I see you state that:

"The expenses under this head are divided between yard, and local and through road locomotives on the basis of locomotive mileage of each class during the month of October, 1907," and that you have:

"Added 50% to the mileage made by yard locomotives to provide for the possible extra maintenance due to yard service; have added 50% to the mileage of road locomotives in local service to provide for the possible extra switching mileage, and again have added 50% to the switching mileage of the local train engines thus ascertained to provide for the possible extra maintenance due to switching service":

What were your reasons for making those additions to the
2502 apportionment of the cost of the local trains?

A. I have always understood that switching engines owing to the nature of the work they do, require a great deal more maintenance expense in proportion to the mileage they make than road engines require, and the 50% was added to make provision for that, although we had no definite percentage that we could apply, and used that arbitrarily.

Q. That is an effort to take care of what you understand to be an extra service performed in that line of traffic?

A. As to the local engine it is. The yard engine is just to take care of the extra repairs due to the work done by the yard engine.

The local locomotives, as we explained under the head of "Maintenance of Way and Structures" make a switching mileage in addition to their regular road mileage and we applied the same percentage of increased repair expenses as in the case of the yard locomotive.

Q. The next division is "(B)—freight cars";

I see you state: "This amount is apportioned to Arkansas by the Company on a car mileage basis. In dividing this expense between local and through service, however, we have taken into consideration the elements of repairs due to the stopping and starting of trains at way stations and repairs due to extra terminal handling of cars in local service."

2503 What figures and what authority did you have for adopting the percentages that you allowed for this extra expense for that service?

Mr. MOORE: I want the record to show that I object to that, if your Honor please.

A. The figures, of course, were obtained from the records of the railway company as to the maintenance of the cars.

The authority for the division as we had it as between starting and stopping and terminal handling, was the book by Mr. Wellington, as explained in the exhibit.

Q. Give the title of the book?

A. "The Economic Theory of Railway Location." The author is Mr. A. M. Wellington.

Mr. MOORE:

Q. Give us the date of that.

A. The date of this particular publication was in 1908, but the work was written a good many years ago and has been revised at various times.

Mr. MOORE:

Q. I want to get the date of that particular part of it which you refer to here, page 203.

A. You are referring to the statistics on which it is based, I suppose.

Mr. MOORE:

Q. Yes.

A. The date is not clear here, but it is back about in 1890 or prior to that time. I don't believe the statistics come up much later than 1890.

2504 Mr. MOORE:

Q. And that is found on Page 203 of the edition that you hold in your hand, what edition is it?

A. It is an edition published in 1908.

Mr. HILL:

Q. You say that you have assumed that each local train makes a stop every five miles and each through train a stop every twenty miles:

Have you information or did you gather information as to that fact in order to make a proper apportionment between the two?

A. I gathered information; that is the only way I could get it on that particular.

Q. As I understand it, Mr. Wharton, you have, as explained here, endeavored to take care of all these elements of extra cost in these matters that have been stated by railroad operating men to be extra cost: is that it?

A. That has been the idea in working it up in this way.

Q. Mr. Wharton, the next sub-division I see is "Supervision and General Expenses" headed "C" in your exhibit:

I wish you would explain your method of dividing that between the local and through service?

A. That is divided between local and through service in proportion to the total maintenance of equipment charged and assigned to the local and through service as explained, before taking up supervision and general.

Q. Explain that method of dividing charges of that class?

2505 A. Well, that is a method that is very commonly followed in the business world. In the apportionment of general and supervisory expenses they generally follow the direct expenses and they are generally so apportioned.

Q. That is recognized among accountants, is it, and the business world, as a correct method of apportionment of general expenses?

A. Yes, sir.

Q. Is it constantly used by your firm and other accounting firms?

A. Yes, sir, wherever we have occasion for the apportionment of that class of expense we invariably apportion them in that method.

Q. The next division is "3—Traffic Expenses": How have you apportioned those?

A. We simply followed the railroad method of apportionment of those expenses there and apportioned them on the basis of the total freight revenue, intrastate and interstate.

Q. Do you think that is correct?

A. No, sir, I don't believe that is a correct method of apportionment of expenses.

Q. Have you been able to work out anything to your own satisfaction that you think is a correct method?

A. No, I have not been able to work out anything that could be applied here. I think it might be possible to get a closer approximation of those expenses if proper statistics were kept as to the

2506 freight that is influenced by the solicitors and other traffic men, but in the absence of any statistics on that, I don't know of any method that could be followed in apportioning those expenses.

Q. Do you think this is fair to the state?

A. No, sir, I think this unduly burdens the state traffic, that being largely non-competitive traffic and not requiring the services of traffic men particularly.

Q. Are there other methods than a revenue division of that to get at an apportionment?

A. Well, I suppose some method could be worked up. I don't know of any class of expense that could not be divided on some method. A person would have to go in, though, and study the work of traffic men and the results they obtain and work up a method from that study.

Q. Could that be worked up like you work up cost and expense systems for business concerns?

A. Undoubtedly something could be worked up along that line

that would be a pretty fair approximtaion of that expense between state and interstate business.

Q. The railroads have no statistics on that line?

A. No, sir, none that we could use in working up this division here.

Q. Then, in the absence of statistics for a proper basis you merely accepted the railroad basis for this?

A. The revenue basis. I don't know that they followed
2507 exactly the division that we did, but we followed the revenue basis which is the one used by them in general.

Q. I believe this is a comparatively small item. It would not make much difference in the general result which way it was divided?

A. No, it would not make a great deal of difference which way it would be divided.

Q. The next item is "Transportation Expenses":

I believe you have explained that pretty fully, Mr. Wharton, in this statement, but you might repeat into the record just your method of dividing the station expenses which is the first item there under "Transportation Expenses"?

A. The station expenses are divided between state and interstate business and not between local and through train service. They are divided on the basis of total tons of freight handled in Arkansas during the six months period, assuming, however, that each state ton received two handlings and each interstate ton one handling.

Q. That has been the allowance that you have made in this for two terminals of the intrastate traffic on this particular item?

A. Yes, for two handlings at stations on state traffic as to one handling for interstate traffic.

Q. The next sub-division is "Yard and Terminal Expenses":

I believe that follows the others as explained in that sub-
2508 division.

The next sub-division is "Fuel and Locomotive Expenses":

I wish you would explain your method of apportioning expenses there—that is, under sub-division "C."

A. Well, the sub-division explains it pretty well. We took as a basis for it the test made by the St. Louis Southwestern Railroad Company during October, 1908, of the actual fuel consumption of local and through trains.

Q. Could you get the actual fuel consumption of the Iron Mountain?

A. We could not. We were unable to get that.

Q. Did you make an effort?

A. Back in October, 1907, Mr. Hamilton was instructed to get the actual consumption if possible.

Q. Now, you say you have adopted the proportion that was found in the St. Louis Southwestern Railroad test: did you have any information that that would be a true comparison for the Iron Mountain?

A. I think Mr. Doddridge testified along that line.

Q. We had better refer right in this connection to that St. Louis Southwestern test, it shows there: can you get the Exhibit number.

A. Exhibit- No. 19 and 20.

Q. The next item to which I call your attention is "Engine House Expenses":

2509 I see that you have allowed that the local engines require 12% more service per engine mile than the through: how did you get at that?

A. By taking the average local engine run as compared with the average through engine run, as shown in our statistics Exhibit "I."

Q. So as to make proper allowance for the extra care of the engine?

A. For the extra use of the engine house by the local engine compared with the mileage they make.

Q. The next item, under sub-division (E) is "Road enginemen and trainmen": what did you do in that case?

A. We worked up an actual division of that expense on the Iron Mountain during the month of October, 1907, and used that actual division as a basis for the division for the six months' period.

Q. And applied what you found for the one month as applicable to the six months' period?

A. Yes, in the same proportion.

Q. That was from actual figures from the books of the Company, was it?

A. Yes, sir.

Q. The next item, under sub-division (F) is "Other train expenses": how did you handle those?

A. Well, they are divided on the train mile basis as explained there.

2510 Q. The next item is "Loss and Damage" under sub-division (G): how did you follow that?

A. We worked up the actual claims paid during the month of October, 1907, and charged to that account and apportioned the item for six months on the basis of that one month's figures.

Q. Those are actual?

A. Those are actual for the one month.

Q. Now we have, under sub-division (H) "Supervision in General": I suppose you followed the principle you have heretofore explained on that?

A. Yes, sir.

Q. The fifth heading is "General Expenses":

You handled that on the basis of the direct charges on this accounting proposition that you have referred to?

A. Yes, sir.

Q. Under the eighth heading you have "Total cost of intrastate and interstate business": how did you ascertain that?

A. The method of ascertaining that is shown under the head of No. 7, the method of dividing train cost. It is explained in detail.

Q. The next heading is "Miscellaneous revenue, taxes, rentals, hire of equipment and value of property":

That was divided on a straight revenue basis you have stated?

A. We just followed the railroad division with the exception of "Miscellaneous revenue." They made no division between state and interstate, but set aside the portion of the expenses.

2511

Q. What did you do with it?

A. We divided it on a straight revenue basis, classified as to intra and interstate.

Q. Then, I see you take the assessed value of the property and double that, following the railroad plan on the revenue basis?

A. Yes, sir.

Q. Do you regard that as right?

A. No, I do not regard that as being correct.

Q. Why is it not correct?

A. Well, I can't see that the revenue has anything to do with the division of the value of the property or can be used in that way. I do not see the relation between the two.

Q. In your experience as accountant do you know whether that method is adopted in business affairs, accounting affairs, to ascertain the division of property or cost of service?

A. I do not know of any case that it would be used in ascertaining the expenses of any given service. Of course, this is the only case I have ever seen where any division of property was necessary between different classes of business.

2512

Q. Have you given thought and investigation to that subject, Mr. Wharton?

A. I have given considerable thought to the subject of the proper division of property, yes, sir.

Q. Have you any opinion of what is more nearly a correct basis than the revenue basis for that?

A. My opinion is that the cost basis is the more correct basis for the division of property. Owing to the fact that the cost, taking into consideration the elements of extra use of property and the extra property required—if any extra property is required in the service performed—that it would be the best measure of the property required.

Q. That would take into consideration, then, all of the use, whether extra use or not?

A. It would take into consideration all of the use, the cost basis.

Q. Would it be subject to the fluctuation the revenue would be?

A. No, sir, it would be subject to no fluctuation except the fluctuation in expense.

Q. What do you think of the revenue division of the expenses? You were speaking of the revenue division of property.

A. My opinion of that is the same as it is on property, that it is no basis of division at all.

Q. In this table of statistics that you have prepared, I understand you have accepted the railroad division on that in the absence of anything else, and worked up the calculations accordingly?

2513

A. Yes, sir.

Q. The next statement I find here seems to be the passenger side of the question.

A. Yes, sir, and I will file that as my exhibit "L."

I have an explanation of Exhibit "L," and I will file that as "Exhibit M."

The papers last referred to are marked "Defendant's Exhibit L" and "Defendant's Exhibit M."

The said exhibits are in the words and figures following to-wit:

For Exhibit "L," see Volume 9, page 5801.

For Exhibit "M," see Volume 9, page 5803.

2514 Q. This Exhibit M, as I understand you, explains your method used in Exhibit L?

A. Yes, sir, it explains it in detail.

Q. Now, Mr. Wharton, turn to the next statement that you have prepared there, which will be Exhibit "N" and state what that is.

The paper last referred to is marked "Defendant's Exhibit N" and is in the words and figures following to-wit:

For Exhibit "N," see Volume 9, page 5809.

2515 A. Exhibit "N" is a statement of the revenue, expenses and net earnings in Arkansas, both freight and passenger, as divided between state and interstate, mail and express business.

Q. For what period?

A. For the six months ending December 31, 1907. The statements of train cost that we have just discussed are carried into this statement on line 2-*a*, in the columns running across the page, under the head of "Operating Expenses."

The miscellaneous revenue, taxes, rentals, hire of equipment, dining car deficit, assessed value of the property, were carried into this statement from the exhibits showing the freight and the passenger division of expenses.

The revenue from freight, passenger, mail and express business (line 1-*a*) is the revenue shown by the railroad company in its statements filed in this case.

Q. The total percentage shown of earnings and the value of the property, for the whole intrastate business, was 7.50%?

A. That is the total business in Arkansas that 7.50%.

Q. Now turn to the next page where we get the total intrastate (which statement will be marked "Defendant's Exhibit O"), and state what is the total intrastate return on the property as shown there?

A. The total intrastate return on the property would be 7.69%.

2516 The paper just referred to is marked "Defendant's Exhibit O" and is in the words and figures following to-wit:

For Exhibit "O," see Volume 9, page 5811.

2517 Q. That is excluding mail and express?

A. Yes, sir.

Q. Now, Mr. Wharton, have you calculations made on the Cotton Belt on the same line?

A. Yes, sir.

Q. There is one question I want to ask you about your passenger business in the statement you have just testified about: did you make a division between the local and through passenger trains?

A. No, sir.

Q. Why did you not do that, Mr. Wharton?

A. The reason was that we did not have any available passenger mile statistics showing the movement of the state and interstate business on local and through trains during this period.

Q. I wish you would attach the figures you have made in the Cotton Belt Case as exhibits.

A. I will attach Exhibits "P to V" inclusive.

The papers just referred to are marked "Defendant's Exhibits P to V" inclusive, and are in the words and figures as follows to-wit:

For Exhibit "P," see Volume 9, page 5813.
For Exhibit "Q," see Volume 9, page 5815.
For Exhibit "R," see Volume 9, page 5817.
For Exhibit "S," see Volume 9, page 5826.
For Exhibit "T," see Volume 9, page 5827.
For Exhibit "U," see Volume 9, page 5832.
For Exhibit "V," see Volume 9, page 5834.

2518 Q. Look at Exhibit V, excluding the mail and express, state the percentage of return on the valuation of the property of the Cotton Belt for this six months period?

A. Intrastate it is 9.16%.

Mr. HILL: Mr. Moore, I will turn Mr. Wharton over to you now. I want to examine him on some other propositions later, but you may examine him now if you wish.

2519 *T. F. Wharton.*

Cross-examination.

By Mr. MOORE:

Q. Mr. Wharton, how long have you been engaged in the occupation of an accountant?

A. Since the first of January, 1902; a little over eight years.

Q. Prior to that time what was your occupation?

A. Prior to that time, for about six years, I was City Clerk in a small city in Wisconsin. Prior to that time I was in a newspaper office as Printer and Business Manager and all-around man. That is practically all.

Q. Where did you begin to practice as an accountant in 1902?

A. In Chicago, for Haskins & Sells.

Q. What character of work did you do?

A. The first work I did for Haskins & Sells was some city
2520 work that the firm was doing at that time in Chicago.

Q. What was the character of that work?

A. The character of the first work I did was work connected with the Special Assessment records of the City of Chicago. It was regu-

lar accounting work in connection with that. The next I did was——

Q. What was the character of that work?

A. The firm had a contract to bring down to date from the time of the Chicago fire, the Special Assessment records of the City of Chicago and it was in that class of work that I spent about a month, I think it was, when I first went to work.

Q. That consisted of collecting and compiling such records as could be found on that subject? Well, what was the next?

A. The next was in connection with the installation of the system of accounts for the City of Chicago. I spent about two months on that.

Q. What character of accounts were you dealing with in that work?

A. The particular work I had to do with was in the Collector's office, the City Clerk's office and City Treasurer's office; looking after the accounting in those offices.

Q. How long were you engaged in that work?

A. I think I spent just about two months on that.

2521 Q. Your work there, I suppose, was in developing some system of keeping the records of those offices?

A. Yes, sir; the system had already been outlined and it was my duty to see that the outline was carried into effect.

Q. What did you next take up in accounting?

A. The next engagements we were on were private engagements, both manufacturing—well, manufacturing was the next work I was on, principally.

Q. Tell me what character of work that was.

A. The particular character of work I did on the next engagement, for about three months, was in connection with the taking of inventories of work in progress, finished stock and raw material, and of foundry product. That was for about three months.

Q. And what followed that?

A. The work that followed that was more city work.

Q. What was the character of that work?

A. There were small engagements in between, but the next particular engagement I was on was city work in the City of Houston, and auditing for a period of three years of all the city's books and accounts, and the preparation and installation of a system of accounts for the city.

Q. By whom was that system outlined?

A. I assisted in that.

Q. How long were you engaged on that work?

2522 A. I was engaged on that work for about ten months.

Q. In that work you dealt with the city accounts?

A. Yes, sir.

Q. That brought you down to about what date?

A. That brought me down to about the first of June, 1903.

Q. What did you do next in connection with accounting work?

A. I cannot remember all the engagements I have been on; some of them were small and some of them were large.

The next recollection of any I had was with a large manufacturing concern, in connection with an analysis of the appraisals of the properties of the concern. I do not remember just how long I was on that but I think perhaps up until August. That was in Chicago.

Q. Some two or three months?

A. Yes, sir.

Q. What manufacturing concern was that?

A. I would not care to give the name.

Q. I do not want the name, I want the character of the manufacturing.

A. Well, they manufactured farm machinery.

Q. Machinery?

A. Yes, sir, manufacturers of machinery of all kinds.

Q. Now, you say that was in connection with the appraisal?

2523 A. Yes, sir, analysis of the appraisals of the plants of several large concerns.

Q. What did that work consist of, Mr. Wharton?

A. Well, it would be pretty difficult to explain that.

Q. I mean in a general way?

A. In a general way it was taking appraisals that had been made by two different concerns, setting them side by side in detail, and working out the difference between the two, what it meant in dollars and cents, in machines, also, and in property.

Q. Did it also involve the valuation of the property?

A. No, sir; I had nothing to do with the valuation.

Q. I do not mean did it involve valuation by you, but the valuations placed by others on the property?

A. Yes, sir.

Q. What work followed that in your accounting work?

A. The next engagement was the audit of a retail lumber company. I cannot remember just how long it took me on that, but I think I was at work on it two or three weeks. That was not a very large engagement.

Q. In that work you went over their accounts, did you?

A. Yes, sir.

Q. Following that what was your accounting work?

A. The character of the next engagement was the investigation of the accounts of a county in Oklahoma, extending over a period of a good many years.

2524 Q. How long were you engaged at that?

A. I suppose some five or six weeks; I can't just remember exactly.

Q. In a general way what followed that?

A. The engagement that followed that was the preparation of a system for Oklahoma City.

Then following that was some small miscellaneous work here in St. Louis.

Q. Commercial work?

A. Yes, sir; it was just small work, the work I did at that time, just auditing, and work of that nature.

Then, following that, I went to New York and spent a little over

a year there, auditing for various concerns and preparing systems of accounts for a few of them.

Q. Were those industrial and commercial concerns?

A. Yes, sir, and manufacturing; preparing systems of accounts and work of a general accounting nature; different kinds of work, hard to classify.

Q. To about what time did that bring you?

A. About Nov. 1, 1904. I left New York and came west and prepared and installed a system of cost accounts for a large manufacturing company, which took me about until the next June or July, that is, 1905.

Then I came to St. Louis to take temporary charge of our St. Louis office and I have been here practically all of the time since that.

2525 Q. What work did you engage on when you came to St. Louis?

A. I just came down to take charge of the work of the office. I have forgotten what the office was doing. They had several different engagements they were working on.

Q. That was commercial work, though?

A. Yes, and manufacturing.

Q. About how long were you in charge of that character of work?

A. I have been in charge of it ever since.

Q. Mr. Wharton, in your experience in connection with the accounts of industrial and manufacturing concerns, what do you find to be their practice in charging off items such as depreciation and accounts of that kind?

A. Depreciation, particularly?

Q. Yes.

A. Well, very few concerns have any fixed rule as to charging off depreciation. It would be difficult for me to state what we found as a general practice among corporations. There is no general practice.

Q. From your experience in commercial accounts and the accounts of manufacturing and industrial concerns, what is the proper rule in that respect?

A. I could not give it. I can only take each individual case and work it out. I cannot give any rule.

Q. There is a system, is there not, of charging off a cer-
2526 tain amount for depreciation in plants, and that which is used in manufacturing and industrial concerns?

A. There is no particular system. Each plant and each corporation governs the question of depreciation itself. There is no system that I know of that is followed by plants; that is, generally.

Q. Each one adopts a method of its own, you might say?

A. Yes, sir, each generally adopts a method of its own.

Q. Do you find, as a rule, that establishments of that sort do have some system?

A. Do you mean as to the depreciation accounts?

Q. Yes.

A. No, I can say that, as a rule, the concerns that I have had to

do with have no such system; a few of them have. Where we have installed systems of cost accounts we always try to provide for depreciation.

Q. Why do you do that?

A. Because of the wearing out of the plant; the invisible wearing out that cannot be represented by repairs and renewals.

Q. What account do you charge that to?

A. To depreciation.

Q. Do you carry it as an expense?

A. Well, in a manufacturing concern it nearly always goes into factory expenses. The depreciation of buildings, used in manufacturing and the equipment used in manufacturing is usually taken up as a manufacturing expense; one of the indirect
2527 expenses of the manufacturing, as a general rule.

Q. What allowance do you usually make in your charge for depreciation?

A. It is generally an arbitrary figure arrived at by the management as to what they think they should charge off. I never worked on any rule of that kind myself.

Q. When you adopt a method of that sort it is for the future as well——

A. Yes, sir, for all time; supposed to be.

Q. Then the rule, whether arbitrary or otherwise, is one that you expect to be regularly applied in practice?

A. Yes, sir.

Q. And whatever it is will be applied with the same uniformity after such system has been adopted?

A. That is the idea of the thing.

Q. You say it is done in order to cover invisible—you might say an undefined loss or expense incident to business of that kind?

A. Yes, sir.

Q. Is it necessary in order to enable an industry, or a person or corporation conducting a manufacturing industry or anything that employs the use of plants and perishable things, to do that in order that the books may properly reflect the financial condition of the concern?

A. Yes, I think it is necessary that that be done.

Q. You say you usually adopt an arbitrary rule: do you not have some uniform method by which you measure that rule? Although it might be arbitrary, was there not some
2528 consideration upon which you acted in establishing that rule?

A. Well, usually the amount of depreciation to be charged off is determined after a consultation with the superintendent and with the other officials of the Company, and those most competent to know.

Q. I suppose really, the underlying principle is that it should be such a charge as would represent in money value the depreciation.

A. That is the underlying principle.

Q. The annual depreciation?

A. Yes, sir.

Q. When did you first undertake any work in connection with railroad accounting?

A. The only work that I have undertaken has been in connection with the Missouri and Arkansas rate cases. That was started, I believe, about June, 1906.

Q. Was that your first experience in connection with railroad accounts?

A. Yes, sir.

Q. Have you ever had any experience in railroad operation?

A. No, sir.

Q. The only experience or means of obtaining information in connection with railroad system accounting is what you have gathered in these two cases that you mentioned?

2529 A. Well, I have had occasion to go into the Interstate Commerce Commission reports, more or less, and into their system of keeping the accounts.

Q. Was that in connection with these cases?

A. Yes, it has been, and perhaps outside of that; just simply as a matter of accounting information.

Q. You say you began that work in 1906: what was your first work in that line?

A. My recollection is that our first work was to take reports that had been filed by the Wabash Railroad in the Missouri rate cases and to start in on an examination of the data back of those reports in the railway offices.

Q. Where was that data found that you examined?

A. I only had charge of that work and did not get into the offices myself, in particular, to look after where it was found.

Q. In other words, you did not give it personal attention?

A. Not close personal attention, no, sir.

Q. What was the next phase of your connection with railroad accounting?

A. Principally it was in the discussion of all these matters with the accountants we had on the work and the preparation of statistics and information in relation to the results of their work.

Q. Your connection was more in the nature of consultation rather than of actual work in the offices, then?

2530 A. Yes, sir.

Q. Was that the fact throughout the Missouri rate case?

A. Yes, sir.

Q. You did not devote any personal effort or work to the examination of the accounts yourself?

A. Not in the offices of the Railroad Co., no, sir.

Q. How long did that engagement in connection with the Missouri rate case continue?

A. Until about January or February last year, I believe it was, 1909.

Q. I believe you were not a witness in that case, were you, Mr. Wharton?

A. No, sir.

Q. When did your connection with these cases begin?

A. Well, the first real work we did in connection with these cases I think must have been along in May or June of last year.

Q. 1909?

A. Yes, 1909.

Q. That work, and the work you have done since then, and the work you describe as having been done by you in the Missouri rate cases represents your experience in railroad accounting?

A. Yes, sir.

Q. What has been the character of your work in connection with these cases?

2531 A. It has been supervisory; planning the work to be done with Mr. Hamilton and the other accountants on the work.

Q. Have you gone personally into the accounts and into the books of the plaintiffs in these cases?

A. No, sir.

Q. Your work on these cases has been something like it was in the Missouri cases?

A. Except that I had a more direct connection with this case than I had in that case.

Q. What was the next work you were connected with in these cases?

A. I think the first work that we started to do in this case was to get at the movement of freight on local trains over the Iron Mountain, during the month of October 1907.

Q. When did you begin that work?

A. We must have started that shortly after we began this work. I am not just sure as to when we did start that.

Q. How long were you engaged in that work, Mr. Wharton?

A. I think we spent about four months on that work, getting up those statistics; four or five months; something like that.

Q. That was in May or June of last year?

A. Yes, or the first of July. It may have been close to the first of July when we started.

Q. When did you complete that work?

2532 A. The work was mostly completed within the next four months. We started into these hearings and there was still left a good deal to do in the shape of getting our final figures on that work. I guess it dragged along quite a while before we got it completed.

Q. You did not get those figures and the formulas which resulted from that work, ready to present to the plaintiffs in these cases until February of this year, did you?

A. Just about then, I think; whenever we sent a copy of the statistics to you; we were practically through with them at that time.

Q. At that time you were able only to furnish just a mere outline of the results?

A. Yes, sir.

Q. You had not been able to get your work into condition so you could furnish detailed statements until you filed these exhibits in this case—from "I" to "O" I believe they are.

A. We have been working on these exhibits from the time we fur-

nished you with a copy of the statistics until the hearing began in this case.

Q. You were not able to work the problem out so as to prepare exhibits, until about the time you presented the exhibits, were you?

A. No, sir, not finally.

Q. Have you attended and been connected with the taking of testimony and proceed-ngs had before the Master since we began taking testimony last Fall in this case?

2533 A. I have attended very few times.

Q. Have you been in St. Louis?

A. I have been in St. Louis most of the time. I have been away a few days at a time.

Q. But you did not take an active part in the hearing before the Master?

A. No, sir.

Q. I believe you stated that you made no investigations of the railroad accounts or records in the Missouri cases.

A. Not personally, no, sir.

Q. Nor in fact in this case?

A. Nor in fact in this case.

Q. Did you prepare or draft the statement or formulas that were used in the Missouri case?

A. I worked with Mr. Taliaferro, Mr. Ludlem and others of our organization, on those statements, but I cannot say I prepared them; no, sir.

Q. Who outlined the work and suggested the character of work that was done on the statements in that case?

A. Those were worked up jointly. Mr. Taliaferro I think, had more direct connection with that work than any other one in our organization, but all of those statements were worked up altogether in our office.

Q. Who was in charge of that work?

A. Mr. Taliaferro was more directly in charge of it. He

2534 worked at it all the time he was here.

Q. Who assisted him in that work, Mr. Wharton?

A. Oh, several accountants. I do not remember now just who they were; Mr. Hamilton, principally.

Q. I believe the same is true in this case is it not, that you did not work up these formulas that have been introduced in this case?

A. They were worked up in our office after a consultation, talking back and forth.

Q. Did I not understand you to say on your examination in chief, that Mr. Hamilton had prepared these formulas and that you personally——

A. Not the formulas. I did not understand your question.

Q. To what extent did you participate in the preparation of these formulas contained in exhibits "I" to "O"?

A. I participated actively in the preparation, of the formulas and in the working out of the results, but it was worked out, as I say, through consultation in our office.

Q. But you did not go into the details in working out the result?

A. Not in working out the statistics in the railway office, no, sir.

Q. Did I understand you to say on your examination in chief, that while you did not do the detail work, that was done by others;

2535 that you suggested the line on which the work *that* was to be done.

A. I had charge of the work and to that extent did suggest it, but it was all worked out by Mr. Hamilton and others in our organization, after consultation.

Q. By whom was the method originated of dividing these accounts and the expenses of railroad operation as between local and through trains, and state and interstate traffic?

A. Well, the most of the ideas I think came from the testimony in these cases. The ideas originated, with Mr. Hamilton and myself after my reading of this testimony, and the testimony in the Missouri case, and with Mr. Hamilton's understanding of the testimony in those cases.

Q. What did you base it upon, upon the reading of that testimony?

A. The main idea, I think, came from the reading of the testimony in those cases.

Q. You considered that a basis on which to make those divisions?

A. The testimony of the witnesses of the railroads seemed to be based on the difference in cost between local and through service, and that suggested to us the idea of working up statements of the cost of local and through service.

Q. I was going to ask you upon what features of the testimony you acted in making that line of investigation and division.

2536 A. Just the general run of the testimony all the way through; the operating men, principally. I could not specify any particular witnesses.

Q. I do not mean any particular witnesses: I just mean in a general way: in what respect, Mr. Wharton, do you think that the plan upon which the division is made in the exhibits filed by you in this case, is superior to the plan that was suggested by the plaintiffs' witnesses?

A. You mean the revenue theory?

Q. Yes.

A. Well, it seemed to me that this plan carries into effect all the reasons given by the railroad witnesses as a basis for their ideas of the extra cost of doing state business; while their ideas seem to be based more on opinion as referring to the revenue.

Q. Are your divisions not based upon opinion as well as the method of apportionment that was indicated by the testimony of the plaintiffs.

A. No, not so much so.

Q. To what extent is there a difference?

A. The revenue theory is all opinion, and the plans worked on here have considerable basis of fact behind them all the way through.

Q. Do you mean that the plan outlined in these exhibits was not based on assumptions?

A. They are based upon assumptions, yes sir; but the
2537 assumptions treated with each separately and not as a whole.

Q. Are the divisions you have made here based on any knowledge or information you have as to what occurs in actual operation of railroads?

A. No, I have no knowledge as to the actual operations of railroads.

Q. It is based on information you have obtained by reading the testimony in this case?

A. Quite largely, yes sir.

Q. And you have taken that as a foundation for the programme that is outlined, or the method of division that is outlined in your exhibits?

A. Quite generally, yes, sir.

Q. Now, I believe you say you began work last year, for the purpose of ascertaining the movements of freight during the month of October, 1907—you did not say that month, but that was what you meant, was it not?

A. Yes, I think I stated October 1907; on the Iron Mountain.

Q. What was that work based on? What record in this case was that work based on?

A. The railroad record.

Q. I believe you stated it is based largely on exhibit No. 26.

A. Well, we used that exhibit in connection with the work that we did for that month.

Q. If I understand your plan, you have attempted to di-
2538 vide train expenses, as between local and through trains, first?

A. Yes, all expenses as between local and through trains with the exception of station and traffic expense, and a portion of general expenses?

Q. Your entire fabric, you might say, is built up on that theory?

A. Yes, sir.

Q. Dividing expenses between local and through trains?

A. Yes, sir.

Q. Where did the data come from, from which you made that division between those two classes of trains?

A. From the records of the Railroad Company.

Q. I want you to particularize and tell me what particular records.

A. Mr. Hamilton worked up most of that and I cannot do so. I turned that over to him to be worked up.

Q. You are not prepared, then, to be examined on the details of that?

A. No, sir.

Q. Mr. Wharton, you stated—I quote it here from the testimony; turn to it in case you wish to see it—in your testimony in chief, that you were "familiar with the methods of operation and expenses adopted by the railroads and adopted by the State in that case."

—. What did you refer to in that statement?

2539 A. The quotation is on page 504. The answer to my question there meant that I was familiar with the issues in the

Missouri cases and with the main points made by the railroad companies and by the state.

The testimony does not seem to be very clear there on that point.

Q. You did not mean to say that you were familiar with the methods of operation?

A. No, sir, I am not familiar with the methods of operation.

Q. Mr. Wharton, do you then feel that you are qualified to say as to how the expenses in operating a railroad should be divided?

A. Excepting from the point of view of an accountant, I am not.

Q. But from the point of view of the practical operation of a railroad you do not pretend that you are.

A. No, sir.

Q. Do you think it is possible to arrive at the comparative cost of operation as between the different classes of railroad traffic?

A. I think that one can get a very close approximation, but not an exact statement of cost of operation of any particular class of traffic.

Q. What do you base that view on?

2540 A. Just on my accounting experience; the fact that it is done every day in other branches of business than the railroad business; the cost worked out from——

Q. Do you believe that you are as well qualified to judge of the practicability of making a division on the actual basis of cost as men who have devoted their lives to railroad operation?

A. As to the accounting features, it has been my experience that an accountant who would study those matters can work out a plan that will be better than the plan of an ordinary operating man who is not familiar with the accounting features.

Q. That is simply a plan from a book-keeping or a clerical standpoint?

A. From an accountant's standpoint.

Q. That is what I mean. When you get down to the actual thing in practical use for the purpose of enabling an operating man to exercise his judgment as to the method of operation—to ascertain what the different branches of traffic cost, relatively, would you not think his experience would serve that purpose better and be more useful in obtaining practical results, than an accountant's?

A. His general knowledge, I think, would be better than that of an accountant, but I think that an accountant would go in and study the situation and lay out a set of accounts that would give results that an operating man would not know from his general knowledge of the business.

2541 Q. Is not the experience of an operating man in his connection with the operation calculated to give him more specific knowledge than that of an accountant who looks at it only from a distance?

A. The operating man just looks at the matter in general and not at a specific item.

Q. Suppose an operating man says he has made a study to try to ascertain the relative cost; he has been engaged in actual operation; it is part of his duty and constant work; the point I want to call your attention to is this:

Does not the fact that he is closely in touch and associated with the actual operations and workings, give him a better opportunity of judging of the practicability of making a division and the basis on which it should be made, than a man who has no familiarity whatever with the operation of a railroad?

A. It should.

Q. Now, how can you or any accountant, form any definite idea as to what is a fair basis of division of the expense of operation as between a local train and a through train, without some knowledge of the practical workings of those two classes of trains?

A. Well, a person can gain some knowledge of that by reading the testimony in this case. That is where such knowledge as I used in this case came from; in reading the testimony of the operating men; going through their testimony and getting their

2542 ideas.

Q. That second hand knowledge is derived from statements of operating men?

A. In this case.

Q. That is what you relied on?

A. Pretty generally, but not altogether.

Q. How long were you and your associates engaged in connection with the Missouri case?

A. We must have been engaged on that two and one half years.

Q. Who were associated with you in that case?

A. M. Taliaferro, principally. Mr. Hamilton was at work there and Mr. Ludlam.

Q. I believe you said you began your investigations in that case in 1906, did you not?

A. About June 1906, if I remember rightly.

Q. When was the testimony in that case taken?

A. I think they began to take testimony along in September or October, the same year, and it continued until about the first of January last year, at varying intervals.

Q. Did the representatives of Haskins & Sells prepare and file in that case a basis of dividing expenses?

A. We prepared numerous exhibits there. I do not recollect, I would have to see them.

Q. Do you know at what stage of the case those exhibits were introduced?

2543 A. No, sir.

Q. It was in 1909, was it not?

A. I could not say as to that. I did not attend the hearings, so I would not say.

Q. I want to ask you if as a result of the study and investigation of yourself and Mr. Taliferro, and those who were associated with him in that case, caused you to use this basis in that case:

"Miscellaneous earnings, both freight and passenger, were divided between state and interstate on a basis of the actual state and interstate freight and passenger earnings. That means they were, in the case of the C. R. I. & P. R. R., that intrastate passenger earnings amounted to 50.29% of the total passenger earnings, the state divided the miscellaneous passenger earnings, which includes both

mail and express, between state and interstate traffic, assigning to the state traffic 50.29% of the total miscellaneous earnings.

The operating expenses were divided between state and interstate traffic on the basis of the ton miles and passenger miles of each class of traffic.

Taxes and rentals were divided on the same basis used in dividing operating expenses.

The valuation of the property was determined by multiplying the assessed value by three and dividing the amount thus ascertained between each class of traffic in proportion to the gross revenue of each class."

2544 Is not that the basis that is contained in the statement prepared by Haskins & Sells' representatives in that case?

A. I would have to examine the schedules to determine the correctness of all the statements you have made there.

Q. Have you copies of your exhibits in that case?

A. We have a copy of the testimony in the case, a printed copy of the testimony.

Q. Now, I hand you copy of the Rock Island exhibit in the Missouri rate case: I wish you would examine it and state if what I read to you is not a correct statement with reference to that, Mr. Wharton.

A. I presume they are correct, but I do not know anything about them personally. I never examined the figures that were worked up.

Q. But what I have read to you is a formula that was used and presented to Judge McPherson?

A. Mr. Hamilton could testify better as to that. I am not familiar with it.

Q. What is your impression in regard to it?

A. My impression is that miscellaneous revenue was divided between state and interstate business on a basis of the gross revenue and that the expenses of operation were worked up on a ton mile and passenger mile basis, using different percentages in connection with them, of increased cost of state over interstate and that the basis of division of property was not changed from the basis

2545 used by the railroad company, although I am not sure of that. No comment was made on that, that I recollect.

Q. Was not the ton mile theory used with reference to the operating expenses without any other division, Mr. Wharton?

A. I do not just understand you.

Q. Was not the ton mile theory applied to operating expenses in gross without any sub-division of them by you in that case—without any destinction as between the expense of local and through trains?

A. They were made up, as I recall, without any allowance made for a distinction between local and through trains, but——

Q. That is the point to which I want to call your attention: the theory upon which the exhibits introduced in this case by you were filed was not suggested in that case, was it?

A. You mean that we filed in this case?

Q. Yes, "I" to "O" inclusive.

A. The general trend of the testimony of the railroads in that

case had a good deal to do with suggesting this method of dividing the expenses, yes, sir.

Q. This was the method suggested and adopted in that case by you, that you just outlined?

A. I would not say as to that. I would rather have the exhibits speak for themselves as to that.

Q. I do not want to put into this case the exhibits of that
2546 case, and if you participated to some extent in preparing them, you ought to be able to state what the result was.

A. While I participated in St. Louis in the consultations on that, my recollection is that the final exhibits were put in evidence in Kansas City and that they were worked over there considerably. I was not present at that time.

Q. Were you not sufficiently in touch and familiar with the work to enable you to state now.

A. Just on a general line.

Q. You were not in touch with the detail work?

A. No, sir.

Q. And working out the system of division?

A. Not the final result as put into the case. I was not familiar with that. I did not follow it closely.

Q. Your work in that case hardly educated you very thoroughly on that subject, did it?

A. We discussed it a great deal in that case.

Q. Is not the primary basis of all the statements that have been filed by you in this case the showing of tons, ton miles and revenue of all traffic, included in the October 1907 accounts, divided between trans-state, interstate and state, and between car-load and less-than-car-load? I refer to exhibit 26.

A. We used those statistics in connection with the preparation of this statement. I would not say that they were the primary
2547 division, though; the primary basis.

Q. I should have added so far as the Iron Mountain Railroad is concerned.

A. Well, my answer would be the same.

Q. Was not the statement filed by Mr. Kimbell, of operations of the St. Louis Southwestern Railway for the month of October 1908, as exhibits No. 19 and 20, I believe, the basis of the statement prepared by you with regard to that Company in connection with certain ratios which you have applied in some instances, from exhibit No. 26?

A. We used Mr. Kimbell's statistics as far as we had occasion to, in the preparation of our Cotton Belt statement, but I do not remember any particular connection between the Iron Mountain exhibit and the Cotton Belt.

Q. Do you know how exhibit No. 26 was compiled Mr. Wharton?

A. No sir, I am not familiar with the methods of its compilation. I think Mr. Hamilton is.

Q. What is your understanding of the effect of that exhibit as showing the tonnage moved by the St. Louis, Iron Mountain & Southern Railway in October 1907?

A. It shows the number of tons moved. I do not know just what that effect—I do not know just what you mean by your question.

2548 Q. I mean, what was your understanding as to the showing made there of the tonnage moved in that month.

I want to know whether in using that exhibit you did it with the understanding that it showed the tonnage moved in that month.

A. That was our understanding of it. To show the tonnage moved or handled during that month.

Q. Your statement is based on that assumption; that is, the statement prepared by you and filed in this case?

A. We used these ton miles in connection with our other ton miles, in connection with the local trains.

2549 Q. Now, Mr. Wharton, you have testified that you did not do the detail work in connection with the exhibits you have filed in this case:

I wish you would state who did handle the detail work in connection with those exhibits?

A. As to the statistics, the detail work was handled by Mr. Hamilton and under his direction.

Q. Who were the men connected with it? I want to know who were the men who did that work and I would like you to give me the names of all of them.

A. I will have to refer you to Mr. Hamilton on that, because he had charge of that work and disposed of the men as he saw proper, on the various classes of work they were doing.

Q. Are you unable to give me the names?

A. I would not care to state, because I don't know the individual work the men were doing up there. Mr. Hamilton does know that.

Q. Do you know what the cost of that work was?

A. No, sir.

Q. You could not undertake to state what the cost of that work was?

A. No, sir; I would not care to. I haven't worked it up at all to see.

Q. In Exhibit I, near the bottom of the page, is the heading, "Number of cars handled in and out of terminals":

2550 Will you state how that was arrived at?

A. Mr. Hamilton worked that up under instructions to take the wheel reports showing the total cars going into the terminals where yard engines were maintained, and the total cars shown by the wheel reports as going out of terminals where yard engines were maintained, and these figures were worked out on that basis. That is, during the month of October, 1907.

Q. I want to call your attention to Exhibit K: that exhibit, as I understand it, deals with the cost of "maintenance of way and structures" of all the business in Arkansas?

A. The part under that heading, "maintenance of way and structures" deals with the proportion charged to the freight business.

Q. What I mean is this: so far as the operation of the Iron

Mountain as a system is concerned, it is dealing with that part which is assignable to the state of Arkansas?

A. Yes, sir; that portion assigned to Arkansas, and assigned to the freight business by the railroad.

Q. Now, I am going to ask you where you got those divisions? In the first place, where did you get the basis upon which you acted here, as to that part of the business of the Iron Mountain system in Arkansas?

A. The total "maintenance of way and structures" the
2551 expense was taken from the exhibit filed by the railroad Company.

Q. I want you to show me that exhibit.

Statement 4, to Exhibit 3, filed in this case by the plaintiffs, shows a division of operating expenses on the Iron Mountain system which were charged to the state of Arkansas. Did you take that statement as a basis of the total expense of operation in this state?

A. I will explain this more fully: as to the "maintenance of way and structures" we took the total amount shown on Exhibit No. 3, page 2.

Q. That is taken from statement 4 of that exhibit, is it?

A. I don't know whether you call that statement 4, or not. It is——

Q. Just look at statement 4, and you will see what it is.

A. As I explained, the "maintenance of way and structure" expense was taken from item shown page 2, of Exhibit No. 3, where a division was made of that expense between the freight and passenger business. We took the total freight expense——

Q. I am not speaking about that. I am speaking of the expense in Arkansas, on the Iron Mountain system:

What I want to know is, where did you get the basis for your figures as to the expense of "maintenance of way and structures" in the state of Arkansas?

2552 A. We got that from this statement number 4, as to the total amount.

Q. You adopted that statement as reflecting the amount chargeable to this state? That is what I want to understand.

A. Yes, sir.

Q. Now, Mr. Wharton, as I remember, there was no similar statement filed by the Cotton Belt road: where did you get the expenses assignable to "maintenance of way and structures" in the state of Arkansas, on the Cotton Belt? When I say "Cotton Belt" I mean the St. Louis Southwestern Railway.

A. As to the "maintenance of way and structures" from Exhibit 32.

Q. What is the item there that you referred to?

A. "Maintenance of way and structures", I say, from Exhibit 32, which was a statement filed by the St. Louis Southwestern for the month ending December 31, 1907.

Q. Where did you get that portion of the expenses which you assigned to the freight traffic, and that portion which you assigned to the passenger traffic in your exhibits in this case?

A. From the books of the railway companies.

Q. From the books of the railway companies?

A. Yes, sir; books and records.

2553 Q. Statement number 2, to Exhibit 5, filed by the plaintiffs in this case, contains a statement of the basis upon which the division is made between freight and passenger traffic expenses: Is that the basis upon which you acted in dividing expenses as between freight and passenger traffic?

A. We made no division between freight and passenger of our own; simply taking the division made by the railway company itself.

Q. You simply adopted the division they had made?

A. We took their division.

Q. Why did you take that, Mr. Wharton?

A. We considered that it was good enough for the purpose we cared to use it for.

Q. Both as to state assignment and as to division between freight and passenger?

A. Yes, sir.

Q. And when you say that you apply it to both plaintiffs in this case?

A. Yes, sir.

Q. Either you or the representatives of Haskins & Sells doing this work, verified the figures and the bases presented by the railroad company, did you not?

A. In general, yes, sir.

2554 Q. On what basis is a division of expense as between freight and passenger traffic, on the Iron Mountain, made in the exhibits in this case?

A. On their exhibits?

Q. Yes.

A. It depends on the nature of the expense. They used various methods. It is all explained on this statement number 5, just referred to.

Q. It is largely on the revenue train mile basis, is it not?

A. Yes; largely on a revenue train mile basis.

Q. Did you think that was a proper basis to divide it upon?

A. As between freight and passenger, it was probably good enough for the purpose of this case. I would not care to pass a personal opinion on that, because I have not studied it sufficiently to form an opinion as between freight and passenger.

Q. Is not the division between freight and passenger the very basis and ground work of all the work you have done in this case?

A. Both freight and passenger. The rates and the expenses are the issue, and it seemed to me that a change in method would not materially affect the total result.

Q. Could you make an intelligent or satisfactory assignment of the expense of freight traffic or passenger traffic either, as between the several branches or departments of each of those kinds

2555 of traffic, without having before you a correct statement of the total of each?

A. Well, an approximately correct statement; as near as it can be made correct.

Q. Let me ask you: is not that the very foundation, the fundamental part of your work, that you must have a correct statement to work on, and must know the total cost before you can make any attempt to ascertain the cost in detail?

A. It is necessary to have the total cost of freight and passenger before you can go into detail.

Q. Did you ever in your experience in auditing the books of any industrial, manufacturing or commercial concern, act on the data before you, without first satisfying yourself that the total of whatever you were dealing with, was correct?

A. Either correct, or approximately as near so as it could be made.

Q. I want to ask you this in that connection: I believe you said you did not give that sufficient study to enable you to determine whether it was a correct division or not, as between freight and passenger?

Would it have required any greater examination to determine that question, than as to the proper division of the various elements, between state and interstate?

2556 A. Well, it would require considerable study, I think, to arrive at an exact correct basis, if one could be arrived at.

Q. Could you say that you were qualified to ascertain the cost in detail of freight traffic, and apportion it between state and interstate, without giving the matter sufficient study to enable you to arrive at an intelligent conclusion as to whether the total expense of operation had been properly divided between freight and passenger?

A. Having accepted the railway company's division between the freight and passenger, the only study that was necessary was as to a division of freight expenses between local and through, and the passenger expenses of the various classes. It was not necessary, particularly, to give any consideration to a division between freight and passenger business.

Q. You say you accepted the division between freight and passenger, made on the revenue train mileage:

Why did you depart from that basis in making your division of expenses of "maintenance of way and structures".

A. On a car mile basis?

Q. Yes.

A. It was our idea, after considering the matter, that a car mile, as between local and through, would more nearly represent the difference in cost.

2557 Q. What was the reason for that?

A. On account of the difference in the two classes of trains, local and through; and the difference in the cars they carry, and the number of cars in the train.

Q. I see you added 50% to the engine mileage of local trains, on account of station switching:

Where did you get that per cent?

A. That percentage was worked up after consultation with Mr.

Hamilton and with others, and was simply an arbitrary percentage added.

Q. That was simply an arbitrary assumption?

A. Yes, sir; an arbitrary assumption.

Q. You had no knowledge or information which qualified you to——

A. Except such as I just stated, discussing the matter with Mr. Hamilton and others.

Q. And you had to adopt some basis—an arbitrary one—just like it has been said in this case that the revenue basis was an arbitrary one? You had to have a basis and you had to take something for that basis?

A. We felt that something should be added to local engine mileage for that purpose.

Q. But you did not know whether fifty per cent or some other figure should be added?

A. No, sir.

2558 Q. Then you added 150% for each engine mile to make it equal a car mile: why did you do that?

A. We added 150% to engine mile, also after consultation with Mr. Hamilton and with others, as representing the difference in the weight of the engine and the cars.

Q. Did you weigh an engine and car for the purpose of ascertaining from actual weight what the difference was?

A. No, sir.

Q. Then what reasons were given in your consultations—if you had consultations you must have developed some reasons—for adopting that per cent? What was the reason, that is what I want to ascertain, because this is the foundation of your figures?

A. Well, if hearsay testimony is not competent, I would not be able to say.

Q. So you are unable to make an explanation?

A. Except upon information I gathered in consultation with men who were qualified to pass on that.

Q. What causes this extra amount of switching performed by the engines that haul local trains, Mr. Wharton?

A. Local service, according to the testimony of the witnesses in this case.

Q. What do you mean by "local service"?

A. Local service done by local tarins.

2559 Q. I understand that, of course: what necessitates that service?

A. Switching cars from the trains to the sidetracks——

Q. What makes it necessary?

A. The nature of the service itself. The witnesses in this case have testified as to that.

Q. The point I want to ask you is this: you have added fifty per cent to local over through trains to offset the extra switching: now, what character of freight causes that switching to be done—what class of freight?

A. The local freight that has to be distributed through the state, or to be picked up in the state.

Q. As between the interstate and intrastate freight carried on local trains, which causes it?

A. Both.

Q. In what proportion do they each contribute to the switching service? That is, produce the necessity of it?

A. Exhibit I of the Iron Mountain, will show the freight hauled on local and through trains.

Q. You mean your Exhibit I?

A. Yes, on the Iron Mountain; will show the freight hauled on local and through trains, both interstate and intrastate, and the relative volumes there would evidently indicate the necessity for the switching.

Q. I understand that, but the point I want to get at is this:

You say that you acted on the evidence in this case that
2560 there was a difference in the extra expense: Does not that evidence show, Mr. Wharton, that that extra switching expense results from and is caused by the handling of state freight?

A. Not according to my reading of the testimony; no, sir.

Q. Did you read Mr. McPherson's testimony?

A. I ran through it.

Q. Do you recall what he said about it?

A. No, sir.

Q. Did you have that in mind when you made this division?

A. No particular testimony.

Q. Whose testimony do you recall, of all the witnesses who testified in this case, that does not indicate that the extra switching cost on local trains grows out of state freight? If there is any one——

A. I recall no particular testimony on that point. The best evidence as to what the switching was for would be indicated by the freight carried on the trains, which is shown in our Exhibit I, on the Iron Mountain.

Q. Do you say, Mr. Wharton, that that exhibit contains any evidence whatever as to the character of service that has to be rendered for each of the two classes of freight, state and interstate?

2561 A. It indicates the volume of the traffic, both state and interstate.

Q. Yes, but does it indicate the different kind of service that is incident to the two kinds of traffic that is carried on local trains? Local trains carry state and interstate freight. You say the exhibit indicates the total volume of traffic carried on the local train: does it indicate the service that is necessary and incident to those two kinds of traffic?

A. Only as the volume of traffic itself indicates it.

Q. In what way does the volume of traffic indicate it, Mr. Wharton?

A. The volume of traffic indicates what the train carried.

Q. I understand that, but I am not talking about what the train carried. I am talking about the extra expense on account of switching of local trains. The extra expense on account of extra switching

that has to be done by local trains? Now what do you see
2562 on that exhibit that indicates to which class of traffic that should be charged?

A. There is nothing except the volume of the traffic itself.

Q. Now, Mr. Wharton, if that is the case, as you stated, how would you make known by what appears on the exhibit—and what appears there does not indicate any difference in the extent and character of switching anywhere between the two kinds of trains—why do you make an allowance of fifty per cent for switching on the local trains?

A. To get the local train expense.

Q. It seems to me you must have had in mind in making up that exhibit the sources from which that extra expense arose, didn't you?

A. No, sir; except the local train does the switching at local stations for all classes of traffic, whether state or interstate.

Q. You did not have that in mind?

A. We only had in mind the fact that it does the local switching in either case.

Q. Mr. Wharton, I wish you would give me a statement of trans-state freight that was handled on local, also on through trains, in October, 1907, on the St. Louis, Iron Mountain and Southern and the St. Louis and Southwestern Road each?

2563 A. For the Southwestern I don't believe the statistics have been worked up.

Q. Well, take first the Iron Mountain?

A. Well, I will have to go into our records and see if we have them.

Q. I think you can point that out from the exhibit here?

A. Not of the trans-state. I will of the local and through trains, is that your question?

Q. Yes.

A. No, we haven't it in any exhibits here.

Q. Will you let us have that then, Mr. Wharton?

A. If we have the figures, I will, yes, sir.

Mr. HILL: I believe it does appear in the exhibit as interstate, without carrying the distinction in it throughout, doesn't it?

A. That is correct.

Mr. MOORE: Mr. Wharton, in order that you may understand specifically what it is I want I will call your attention to it. The interstate freight carried on local trains and on through trains on the first line of that exhibit. Now I want to know what the ton miles of trans-state freight are in each one is, and what the per cent is?

A. Now that can be furnished as to the Iron Mountain but not as to the Cotton Belt.

Q. You say it cannot be furnished as to the Cotton Belt?

A. No, sir.

2564 Q. Don't your total figures show on your work sheet each kind of freight carried on those trains?

A. On the Iron Mountain, yes; not on the Cotton Belt.

Q. Then you can obtain that information from your work sheets, can't you?

A. Yes, as to the Iron Mountain.

Q. In adding fifty per cent to the engine mileage on local trains on account of station switching did you make any distinction between that part of the traffic that was trans-state and the other part?

A. No, sir.

Q. Well, do you think there is any difference between the amount of switching done for trans-state and interstate freight?

A. I couldn't say as to that on local trains.

Q. Well, what is your opinion about that?

A. I wouldn't express any, I have none as to that.

Q. You have no opinion as to that?

A. No, sir.

Q. Well, wasn't that a very important feature to know that?

A. Not as I understand between local and through train service, no, sir.

Q. Now let us see, I don't mean make a difference on the division right now between local and through trains. I mean when you go to divide expenses, like the difference on state freight and interstate freight, wouldn't it cut a figure then?

2565 A. It would in a final division between state and interstate.

Q. Did you make any allowance or give any attention to that in making your final division between state and interstate, after you had divided the expense to local and through trains?

A. No, sir.

Q. So if there was any distinction there it was not taken into your statement?

A. If there is any distinction it is not taken into consideration.

Q. Mr. Wharton, how does the volume of traffic in the month of October compare with the volume of traffic in other months separately during the period of twelve months?

A. The total amount of traffic during the month of October was heavier than it would average for the six months ended December 31, 1907.

Q. What is the difference?

Mr. HILL: Which road is that?

A. That is Iron Mountain.

Mr. MOORE: What is the difference?

A. The total volume of traffic during the month of October was in round numbers a hundred and twenty million ton miles. The six months ending December 31 amount to five hundred and eighty-eight million, or an average of a little less than one hundred

2566 million ton miles per month.

Q. What was the total ton miles for October?

A. A hundred and twenty million.

Q. That was about twenty per cent above the average? October was about twenty per cent above the average?

A. Yes, sir.

Q. How were the months of July, August and September compared with the months of October, November and December?

A. I have the statistics for the period by months.

Q. You can't separate the six months period into parts then?

A. No, not with the information I have before me.

Q. Have you any information in the details you worked up in this case that would enable you to say that?

A. I couldn't say. I don't believe we have any by month though

Q. What is the volume of the tonnage as between local and through trains in October?

A. As between local and through trains?

Q. Yes, sir.

A. You want it in figures or percentage?

Q. Perhaps both ways?

A. During the month of October, 1907, the local trains carried 11.18 per cent of the total freight, and the through trains 88.82.

Q. Read that again please?

2567 A. During the month of October, 1907, the local train carried 11.18 per cent of the total freight, and the through trains 88.82.

Q. I want that stated in train miles if you have it?

A. No, I can't state it in train miles.

Mr. HILL: Was that in ton miles?

A. It is the percentage of ton miles carried, local and through.

Mr. MOORE: Your record there shows the relation in October, doesn't it?

A. Yes.

Q. That is what I am asking about now; in ton miles.

A. Well, in ton miles——

Q. Train miles.

A. Well, I would have to work it out to give it to you in train miles.

Q. Here is it, Mr. Wharton, right there (indicating on exhibit). It isn't worth while. What is the train mile?

A. Well, the per cent of train mile, local train miles are 26.42 per cent of the total, and the through train mile 73.58 per cent of the total.

Q. How will that compare with the six months ending December 31, 1907?

A. I haven't the statistics for the six months.

Q. Have you ever looked that up?

A. I had Mr. Hamilton look it up roughly at one time.

2568 It was just worked out roughly, though.

Q. You haven't that?

A. No. My impression is that the percentage remained very close to this percentage for the whole six months, but I am not sure that is correct.

Q. You cannot state how it is?

A. No, sir.

Q. Well, now were those figures—was that basis of division worked up without that knowledge?

A. This basis of division?

Q. Yes.

A. It was worked up with a knowledge we had for October, 1907.

Q. But was it without a knowledge as to what the relation was for the six months ending December 31, 1907?

A. Yes, sir, just on general average.

Q. You didn't work it out?

A. No, sir, not closely.

Q. Wasn't that a very essential matter to know about in determining whether you could take October as a representative month?

A. Well, if there had been a large variation of the train miles I think it would have been important, but the rough figures we made up show there was a very little variation in the relative train miles.

2569 Q. Mr. Wharton, do you know whether the number of local trains is uniform throughout the year operated on these two roads?

A. No, sir, I don't know whether it is or not.

Q. You don't know whether they run one or more than one train in the month of October?

A. No, except just from general knowledge that the local trains usually run on the days they are scheduled.

Q. The point I am calling your attention to is whether there is more than one local train run at any time during the year on either of these line- of road?

A. I haven't any knowledge as to that.

Q. Well, now, you do know as a matter of common knowledge, don't you, that in the autumn down in Arkansas, that there is a very large increase in the volume of business, you know that, don't you?

A. I could tell that if I saw the statistics.

Q. I mean don't you know that as a matter of common knowledge?

A. I would not want to say that I know that as a matter of common knowledge, no.

Q. Don't you know that the movement of the cotton crop necessitates a very much larger increase of equipment and that there is great complaint down in that country in the autumn about want of railroad equipment?

2570 A. I don't know about the complaint, but I assume a great deal of the cotton crop would be moved along through the fall and winter.

Q. Now what I want to ask you is this: If you know that the increase in volume is more largely in the movements of interstate traffic than it is in the movements of state traffic?

A. No, I don't know whether it is.

Q. You don't know that?

A. Except as statistics would indicate.

Q. You haven't investigated that?

A. Not closely.

Q. Why did you divide maintenance of way and structure between local and through trains? Why did you do that?

A. Why did we divide it?

Q. Yes.

A. In order to find out the amount.

Q. I mean is that a train expense?

A. It is an expense caused by running trains; necessary for the running of trains, but not strictly an expense of the operation of the train itself. The road is kept in condition that the trains may run over it.

Q. Isn't it based on the theory that the depreciation of wear and tear to the track is caused by the operation of trains?

A. Not entirely, no, sir.

Q. Then why do you use it as a train expense then?

A. Because it is an expense necessary that trains may be
2571 operated over the road—necessary that they may be operated over the road.

Q. Now there may be—and there are—some items of maintenance of way that are not and cannot in the nature of things be attributable to the operation of trains, and yet you include them in this division, don't you?

A. What are you referring to now?

Q. What is included in maintenance of way and structure? Just tell me what you include in that?

A. Mr. Johnson's statement No. 4 shows the classification of accounts included in maintenance of way and structure.

Q. And the classes that are included in that exhibit are covered by your exhibit there, are they not?

A. All of this was covered by our exhibit, all lumped together.

Q. Well, I see there an item of flood damages, an item of general cleaning of right-of-way, an item of buildings and grounds, fences, telegraph and telephone, personal injuries, stationery and printing. Now are any of those items effected by the operation of trains?

A. They are incident to the expense of maintenance of way. The maintenance of way is affected by the operation of trains and cars, and they naturally follow the direct expense of them.

Q. But the depreciation caused by those things is not
2572 brought about by the operation of trains is it?

A. They are necessary to keep the track and roadway in proper condition, and to that extent they are.

Q. Mr. Wharton, isn't it a fact that a very large per cent of the depreciation and damage to tracks—this maintenance of the way cost attributable to the elements rather than to the operation of the trains on the track?

A. That is correct; yes, sir, I think so.

Q. Now if that is true why do you charge that as train expense? Why don't you divide that on some other basis?

A. Because the primary object is to keep the tracks and roadway in condition for the operation of trains. We have to keep up the tracks and roadway for the trains to run over, and naturally whether the expense is caused by the train itself or is necessary so the trains may run over the tracks, it seems to me it would naturally follow the use made of the track.

Q. In other words, that is on the theory of the trains have to

use the track and whatever depreciates the track must be charged to the train expense?

A. It must be charged to the account that naturally follow- those that are naturally caused by the operation of the trains.

Q. Now, you have got to have a railroad in order to do business and you have got to have traffic too?

A. Yes.

2573 Q. How did you follow the division?

A. Didn't have any particular division?

Q. Is it more essential to railroads to have tracks than business?

A. It is absolutely essential to have the track.

Q. Why did you divide a portion of the traffic expenses on the revenue?

A. There was no other basis to go by and just simply stated them in that way. There was no basis of division suggested by anybody that seemed more reasonable and that could be worked out and we simply followed that method.

Q. Now isn't it a true theory if you were going to make a division of the expenses of operation on the basis of local and through trains, that the proper way to do it is to confine it to that character of expense which grows out of the operation of the train?

A. All of the indirect expense that grows out of the direct expense follows the direct expense, whatever it may be. If the indirect expense is apportioned on one basis the direct expense is apportioned on one basis. It naturally suggests itself to follow that basis.

Q. In the exhibits you have prepared it is a direct expense?

A. In the exhibits we have prepared and in the general accountings.

2574 Q. What proportion of the expense of maintenance of way and structure is the result of wear and tear from the operation of trains over the track?

A. Well, I couldn't say as to that.

Q. Is there any charge in these accounts on account of depreciation of structures and tracks and so on?

A. I have no details of the account, but I don't remember there is as to the maintenance of way and structure any depreciation charged. Mr. Johnson may know more about that himself. I don't see any depreciation down here.

Q. Well, there is a very large depreciation there from natural causes, isn't there?

A. Yes, sir.

Q. Now you stated this morning—I mean since you have been on the stand—that your observation in regard to the charge on depreciation. Should there not be a charge made there according to the proper method of conducting business of this kind, necessary to the business?

A. Well, as to track and roadway, the railway company that keeps its property in good condition. I would hardly know just what to say as to a proper charge for depreciation. I presume there should be some charge there for that purpose.

Q. Every reason that would exist in an industrial plant would apply to a railroad, wouldn't it?

A. Well, in an industrial plant the machines wear out.

2575 Q. The machinery of railroads wear out?

A. Well, the railroad usually keep their property up in good condition, the track and the roadway; while in an industrial plant the machines will wear out, and that wearing isn't noticeable until it is necessary to replace a machine entirely by a new one, you can't repair it.

Q. At the same time it is true that there is an analogous depreciation going on not only in the track and the structure but in the machinery that is used on the railroads, that is true, isn't it?

A. I say there should be some depreciation charge.

Q. What would you estimate would be proper?

A. Well, I have not anything in mind on that subject. I would have to go into an investigation before I could make up my mind and then probably could not.

Q. I believe you said you have given this subject some study and thought, Mr. Wharton. If that is true, I suppose you know that there has been a very thorough investigation on the subject of division of expenses by the Wisconsin Railroad Commission, don't you?

A. Yes, sir; as between, I think, just freight and passenger business, however.

Q. Now, you looked up some authorities, among others Mr. Wellington. Isn't it true that the Wisconsin Railroad Commission divided that part of the maintenance of way and structure ex-

2576 penses which resulted from depreciation on the gross earnings basis?

A. I couldn't say; I would have to go and look over their ruling on that matter first to know just what their final finding was in that matter.

Q. Does your car mile basis make any allowance for the difference of weight in cars?

A. No, sir.

Q. Well, do you think that is fair, Mr. Wharton, to charge the same amount of wear and tear to every car without regard to its weight?

A. Not absolutely, no sir. I expressed the opinion that I thought the gross ton mile basis would be the best basis to use.

Q. The gross what?

A. The gross ton mile, which would include the weight of the car.

Q. Why didn't you use that basis?

A. I didn't have the information on which we could work it out, and this was the next closest to it.

Q. Then you have not adopted what you think would be the best basis?

A. Not the best basis, no, sir.

Q. Now the Cotton Belt exhibit contains that very information, don't it, Mr. Wharton?

A. It may be. I didn't look into it very carefully.

2577 Q. Look at it and see, please, Exhibit 19?

A. Yes, it gives the weight of the trains; the dead weight as well as the ton mile weight.

Q. You could then have made a division on that basis as far as that road is concerned?

A. Yes, sir, we could have done so.

Q. Well, why wasn't that rule adopted if you think that was the proper method?

A. We preferred to work both statements on the same basis.

Q. Now, there is a difference in weight growing out of another cause, cars may be empty at the initial point, and then refilling cars, or cars on local trains are lightened from station to station by unloading at those stations, are they not?

A. I presume so, although I am not familiar with that.

Q. Isn't that true with that kind of state traffic which is peddled out at local stations?

A. I wouldn't say as to that. I am not sufficiently familiar with that to pass on it. I could state that in Exhibit P, which is our Cotton Belt freight exhibit, we show the average loading of revenue on freight, both carloads and less than carloads in the local and through trains.

2578 Q. And the statement you speak having there shows a forty per cent heavier loading on through than local trains?

A. Taking a carload and less than carload together, yes, just about that.

Q. Now doesn't the report also show the gross ton miles on each train?

A. It does not, and I don't believe we had it on carload and less than carload. We didn't have the statistics on which we could do that.

Q. Well, it was not necessary to show that as far as the division between local and through trains, was it?

A. No, sir, it was not necessary to have this in either case.

Q. Then you could have made that division on the gross—did you say tonnage basis a mile?

A. Yes, sir.

Q. Which you say would have been the better plan—did you use the term gross tonnage?

A. Gross ton miles.

Q. You could then in both cases have made your division on gross ton miles?

A. No, sir.

Q. Why not?

A. We didn't have the weight of the equipment of the Iron Mountain.

2579 Q. Didn't the Wheeler report show that?

A. I don't know, I didn't see the Wheeler report.

Q. I will show you now.

A. I think the Wheeler report provided for that, but I don't know whether it is on there or not.

Q. Well, this statement of yours was made up on the basis of the Wheeler report?

A. As to the ton mile of freight and car miles, engine miles and train miles.

Q. And this division between local and through trains and the cost of maintenance of way and structure was made on the basis of car miles, wasn't it, which you obtained from his report?

A. Yes, sir.

Q. Now doesn't Exhibit 20 show that the dead weight for the local train was 120 per cent greater than the through on the Cotton Belt road?

A. I didn't see it worked out here. Mr. Kimbell's exhibit shows that the average ton miles of dead weight to each ton mile of commercial freight of through trains is 1.84 ton and on the local trains 4.9 tons.

Q. Now did you make any allowance for the difference between empty and loaded cars?

A. No, sir.

Q. And its *a*ffect upon the track, or wear and tear?

A. No, sir.

2580 Q. Your figures include empty as well as loaded cars, do they not?

A. Yes, sir.

Q. Mr. Wharton, don't you think that to get a correct division of the cost of maintenance of way on a basis of car miles, and engine miles we would have to take into account these differences in weight between empty and loaded cars, and between that class of cars which are loaded heavily and those loaded lightly, and that class of cars which begin to unload immediately from the time they start out from the station until they get to the end of the journey, which is the case with local trains?

A. If the expense were divided on a gross ton mile basis that would all be taken care of. Of course it is not all taken care of exactly on the division on a car mile and engine mile basis.

Q. Well, the reason I wanted particularly to call your attention to that, because you stated in your examination in chief that you wanted to get away from theory and get this down on a basis of actual costs. Now in view of these facts have you succeeded in doing that?

A. I think we have got it down to a very close basis of actual cost, not to an actual division.

Q. Now isn't the assumption that you make in this division by adding fifty per cent to engine miles for station switching

2581 and that every engine mile is equivalent to two and one-half car miles, a matter altogether of conjecture or guess?

A. Not altogether of guess, no, sir.

Q. Well, now, tell me the elements of certainty and knowledge that there is in it? How do you know that?

A. That was arrived at after a consultation with Mr. Hamilton and others as to about the length of time it takes a local train to make its run and the length of time that

it ought to take if the train ran through, making some allowances for each station, and the evident time—the difference between the two that would be spent in switching. We add for this about six miles an hour, which was he basis I think fixed by the Interstate Commerce Commission, amounted to about the percentage we have used here. It was just worked out roughly and we did not go into any detail on the matter. But that was the ideas we had back of the figures we used here.

Q. You were asked by counsel why you divided expenses of maintenance of way between local and through on the basis of total engine and car miles, and you stated in your answer, among other things, you believed that it was a method followed considerably by the railroads themselves in apportioning that class of expense
2582 where they have to make a division between classes of freight service.

Now, Mr. Wharton, does the railroad in any case adopt that basis for arriving at the difference between different classes of freight service?

A. I think the St. Louis and Southwestern Railroad divide maintenance of way expense on that basis on the Paragould division. I believe Mr. Kimbell testified to that, with the exception that they make no extra charge for the engine mileage; or multiply by two and a half simply dividing it on a straight car mileage basis.

Q. What part of his testimony are you referring to; that in regard to the contract between the two railroads?

A. Yes, sir.

Q. I am asking you about a division of the amount, not a matter between two railroads, one owning the property and the other leasing it from the owner, and contractural elements entered into by them. I might estimate my property as worth so much and at the same time in renting it to someone charge them on a different basis. I might charge them more or less. That is no criterion. What I am asking you, and what you undertook to give, as I understand it, was the method in which railroads divide their own accounts. Now can you point out any instance in which such a division is made on the basis of car miles?

A. No, sir, not as to division of its own accounts.

2583 Q. Did you take into consideration in making this division the extent to which the different kinds of traffic used these facilities of station buildings and house tracks and facilities of that character?

A. No, sir; we just simply took into consideration car miles and the engine miles in making this division between local and through service.

Q. I want to call your attention to the former testimony of Mr. McPherson in this case where he says trans-state freight, which is fifty-one per cent of the total freight, makes no use of station buildings, except that portion assigned for telegraph purposes, nor of house tracks where cars are loaded and unloaded, of team and public tracks where car load freight is received and delivered, nor of tracks to elevators and industries, such as mills, warehouses, coal and lum-

ber buildings, and other facilities which are provided to care for traffic either originating in and destined to points within the state.

Now was any consideration given to that in making this division by you, to the facts set out there in Mr. McPherson's testimony in regard to using the facilities by trans-state traffic?

A. No separate consideration was given to it, no, sir.

Q. Could you properly divide the expense of maintenance of way and structure in the traffic which you include, trans-state traffic, as well as ordinary interstate and local, without taking
2584 into consideration those elements, if that statement is true?

A. Well, it seems to me that they would affect the result so little as to a division of maintenance of way and structures expenses that a division on either a car mile or a gross ton mile basis would be approximately correct.

Q. And he further testified—the same witness—that the main tracks of the St. Louis, Iron Mountain & Southern in Arkansas, including second track, is 1331.5 and side-track mileage is 509.41; of this side-track mileage 114 miles consists of passing track, which are maintained on the same basis or standard as the main track mileage; the other part of the tracks represent 395.41 miles, requires 2560 ties to the mile, and renewal of these ties represented by this mileage every five years, and so on. Now that is not used by trans-state trains, he further testified. Now could a division be made on the basis you have attempted, at the cost of maintenance of way and structures, without also taking that fact into consideration?

A. It don't seem to me as if that would affect the cost in any particular, owing to the classes of freight hauled, and the two classes of service being so inter-mixed, both classes of trains using the facilities you have mentioned.

Q. Then you have a traffic in your interstate business that does not use that amount of tracks mentioned by Mr. McPherson?
2585 A. According to Mr. McPherson's statement.

Q. I am assuming that is correct.

A. There are some tracks there that the trans-state business don't use.

Q. There are 395 miles, isn't that a fact—practically four hundred miles?

A. The cost of the maintenance of those tracks I do not believe is kept separately.

Q. The point I want to call your attention to is if it was not requisite to ascertain that, make some allowance, average, in order to make a correct division that your exhibit is founded on?

A. No, I don't believe it would be necessary to make any allowance for that. It would be impossible to determine just what proportion of the cost should be allowed for that purpose, if any.

Q. Well, isn't the trans-state freight charged, under your method, the same relative proportion of the cost of maintaining station buildings, house tracks, team and public tracks, tracks to industries, miscellaneous buildings, and this part of the side-track which is not used by trans-state trains at all, as is charged to the cost of handling interstate freight traffic?

A. Yes, sir; on each class of service charged the trans-state has its share of the expenses.

Q. There is a character of traffic there that you are charg-
2586 ing on facilities that it doesn't use, isn't that true—I mean the cost of maintenance facilities it doesn't use?

A. If Mr. McPherson's statement is correct, there is a small expense there that is being charged to the trans-state that that service does not use.

Q. Now tell us what the size of that item of expense is?

A. I don't know.

Q. You have no means of knowing either, have you?

A. No, sir.

Q. And you really don't know whether it is large or small do you?

A. No, sir; I just assume from the nature of the expense that it isn't very large in comparison with the whole expense, but that is just an assumption on my part.

Q. Mr. Wharton, I believe you made an affidavit that was filed in this case at the hearing before Judge Vandeventer in St. Paul on the application for an injunction, didn't you?

A. Yes, sir.

Q. And in that affidavit you stated, did you not, that the ton mile basis was a proper method of division, and had no reference to the division between local and through trains?

A. Yes, that is correct.

Q. Didn't you also file in connection with that affidavit a letter from Haskins and Sells to the Attorney General of Missouri
2587 which contains the following statement:

"For the reasons given above, we consider that the ton mile basis is the most correct basis for the division of the expenses of maintaining ways and structures, and these reasons are also considered sufficient for the statement that there is practically no difference in the cost per ton mile of such maintenance, whether it be for through, inter-state, second class interstate or state"?

A. Yes, sir, I presume that is in the letter to Mr. Hadley. I have no particular recollection of it now.

Q. Your recollection then was that the ton mile was the proper manner of dividing this expense?

A. Yes, sir.

2588 T. F. WHARTON—cross examination resumed.

By Mr. MOORE:

Q. Mr. Wharton, in your division of the cost of maintenance of locomotives, you have added 50% to the mileage made by yard locomotives to provide for cost of extra maintenance due to the yard service:

How did you arrive at 50% as a proper allowance to make?

A. That was just approximated at that. We had no definite basis to use for that purpose, but in consultation we decided we would add that amount as representing the possible extra expense of that.

Q. That was an assumption?

A. That was an assumption, yes, sir.

Q. Then you have added 50% to the mileage of road locomotives in local service, to provide for possible extra switching mileage: how did you determine the percent to be added on that account?

A. Well, that is the same percentage that was used under the head of "Maintenance of way and structures", as I explained
2589 yesterday in talking about local switching.

Q. It was on the same assumption as it was in the case of "Maintenance of way and structures?"

A. Yes, sir.

Q. And the additional 50% you have added to the switching mileage of the local train engines to provide for the possible extra maintenance due to switching service, was reached in the same way, I suppose?

A. Yes, sir, as just explained about the switching engines.

Q. Now, Mr. Wharton, you have stated that those were mere assumptions; that you did not have any data from which you could make any percent based upon facts known to you?

A. No, sir, no known facts or figures to work it on.

Q. The extra mileage that you have allowed in the way you speak of in the matter pointed out, amounts to about 118,000 miles, I believe—at the top of page 2—and that is nearly 50%, is it not, of the total mileage, between 40 and 50%?

A. You mean the total mileage exclusive of——

Q. I mean about 25% instead of 50%.

A. Almost.

Q. I have it worked out here. It is 23%.

A. I expect that is about right.

Q. So, you have added to that mileage in making your division practically 25% upon assumptions which were based
2590 upon unknown facts: is not that the case?

A. Unknown figures and data, but I don't know that the absolute facts would be unknown.

Q. What did you have? You said a while ago you had no facts.

A. When I said that I meant visible facts. What we had was simply the result of conferences among ourselves and with some railroad men.

Q. And they were simply assumptions?

A. They were assumptions based on those conferences and the knowledge that those people had about the matter.

Q. How is this expense divided between freight and passenger service? It is on the revenue train mile, is it not?

A. I don't believe it is (referring to paper). Yes, the common maintenance and equipment expenses are divided on train mile basis, between freight and passenger business.

Q. Mr. Wharton, is it not a fact that all engines are used interchangeably between freight and passenger service; that an engine may be today in yard service and tomorrow in road service; today pulling a freight train and tomorrow pulling a passenger train: is not that true?

A. I couldn't say as to that.

Q. You do not know about that?

A. No, sir.

Q. Well, assuming that it is true, should not this extra allowance of 75% that you have made, have been made before the di-

2591 vision between freight and passenger?

A. No, I cannot say that it should have been. The railroad company did not see fit to do so.

Q. The railroad company did not make this extra allowance either, did it?

A. No, sir. They testified to various matters of that kind in the testimony.

Q. The railroad simply divided the total cost of locomotive engines between freight and passenger, on the revenue train miles, did it not?

A. Yes, sir, which practically means the engine miles also.

Q. Does that mean engine mileage?

A. Practically, as I understand it. It may not mean absolute engine miles, but as I understand train miles and engine miles, there is very little difference.

Q. Have you acted on that assumption in making up these figures?

A. No, sir, I have not acted on any assumption in regard to that at all.

Q. Was it not necessary for you to know the difference and distinctions between these bases upon which estimates of that kind were made?

A. It was necessary for us to know the train miles and to know the engine miles, which are shown in our statement.

Q. You say you followed the railroad company's method: that was to divide on a basis of revenue train miles the total expense?

2592 A. Not the total expense, no, sir.

Q. I am speaking of locomotive maintenance: if you did not do it, tell me where you deviated from that, because it is my understanding that you did.

A. All expenses of a common nature are divided upon a train mile basis, but whether that included all the maintenance of engines, I don't know.

Mr. HILL:

Q. Are you speaking of maintenance of way or maintenance of equipment?

A. Maintenance of equipment.

Mr. MOORE: I am speaking of this branch of maintenance of equipment. It is divided into several branches. Locomotive maintenance is the one I am speaking of, now.

Q. You stated a moment ago that you followed the division made by the railroad:

The question I have just asked you was if the railroad company did not divide the cost of maintenance of locomotives upon the basis of the revenue train miles, total cost?

A. I stated that all common expenses of maintenance of equipment are divided that way, and I did not know——

Q. If you intended to follow the railroad company's division of operation, the total cost, should you not have made your extra allowance before you made the division between freight and passenger?

A. No, I did not consider that necessary.

2593 Q. If you were trying to act consistently with the action taken by the railroad company, you would have endeavored to do that, would you not?

A. That is a matter that I will have to give considerable thought before I can say definitely just what I would have done.

Q. Now, to go back: If it is true, as I suggested in a question a while ago, that these engines are used indiscriminately in hauling freight and passenger trains, should not this allowance have been added before you made the division between freight and passenger?

A. No, I hardly think so.

Q. Can you give me any reason for your view about it?

A. Well, the only reason I have on the subject is that if the engines are used indiscriminately, they are also used in the passenger business between local and through service, and, perhaps, switching; and that the average on both sides, freight and passenger, would probably be about correct as divided by the railroad company.

Q. Is not that the very best reason for adding your arbitrary before you make the divison?

A. No, I could not say so.

Q. That is the reason I have in my mind for thinking so, and I might say, it seems to me that that is a conclusive reason why you should have added your arbitrary before you made the division.

2594 A. It does not seem to me so. It seems to me that the reasons I gave would be sufficient not to disturb the division they had made.

Q. You made no allowance for difference in size and weight of engines, did you?

A. No, sir.

Q. Or the difference in the kind of trains they pull?

A. No, sir.

Q. You put them all on a level?

A. All on a level.

Q. Now to go back to the question I asked you a while ago: the expense of maintenance of yard locomotives is divided between local and through service on the basis of the number of cars of each class of service handled by yard engines during the month of October, 1907, on the exhibit relating to the Irion Mountain, and the month of October, 1908, in the exhibit relating to the St. Louis Southwestern Railway:

How did you arrive at the total number of cars handled at terminals?

A. As I explained in my testimony yesterday, we took the total

number of cars shown by the wheel reports as going into the terminals, and the total number of cars shown by the wheel reports as going out of the terminals, for all the terminals where yard engines were maintained during that month, on both roads.

2595 Q. In dealing with that proposition, you counted every car that went in and every car that went out of a terminal?

A. That was the idea. I think that is correct.

Mr. HILL: As I understand it, that answer was correct so far as it went, but it is not complete. I want to call on Mr. Hamilton on that. I do not want to get it mixed up.

Mr. MOORE: Do you want Mr. Hamilton to make a statement of that now?

Mr. HILL: Mr. Wharton's answer is correct so far as it goes, but it is not a full explanation.

Q. (To Mr. Hamilton:) Will you please explain that, Mr. Hamilton?

A. It is just this: In working up that data we found that in a great many cases a switch engine was maintained at an intermediate yard, that is, a yard between the ends of the through freight train's or local freight train's run. We did not count the entire consist of the train into the intermediate yard and out again if it went through that yard, but only the cars set out or picked up there at the intermediate yard.

Mr. MOORE:

Q. Did you do that on all trains, both local and through, on the basis of all the wheel reports?

A. Yes, sir, all trains for the entire month; both local and through.

Q. Referring, now, to the month of October, 1907?

2596 A. Yes, that work was done by myself and assistants on the Iron Mountain, and by my assistant, jointly with an employé of the Cotton Belt, on the Cotton Belt road.

Q. How many terminals did you have?

A. I have not the data here, but the points we called terminals were taken from the list furnished us by Mr. McPherson. I have the list.

Q. When did Mr. McPherson furnish you that?

A. I have not the exact date.

Q. Do you mean his testimony on the stand or off the stand?

A. No, a list given us at his office at our request.

Mr. MOORE:

Q. (To Mr. Wharton:) Mr. Wharton, what is the local and through car mileage shown on your exhibit "I," in the month of October, 1907, on the Iron Mountain road?

A. The local car miles, freight car miles, are 1,112,865.

Q. That is your number of local car miles?

A. Yes, sir.

Q. What was it including cabooses?

A. Including cabooses it was 1,173,350, on the local trains.

Q. What was the average number of local cars moved in that month as shown by this exhibit?

A. Do you mean per train?

Q. No, the average number of local cars?

A. Well, it gives the average number of cars per train. The number of cars moved was 1,173,350.

2597 Q. That is car miles?

A. Yes, sir.

Q. I am asking you the number of cars moved during that month, as shown on this exhibit I, in the local service.

I will call your attention now to the statistics shown on that exhibit: "Average number of cars per train" is given there, and the "Number of trains run": Now, it seems to me you can ascertain that very easily by multiplying the average number of cars per train by the number of trains run—16.6 cars per train and 1,116 number of trains run.

A. Based on the average number of cars per train and the number of trains shown here, the number of cars would be 18,525.

Q. In the through service, your statistics show the average number of cars per train to be 33.2; and the number of trains run to be 2,758:

Give me the number of cars on through trains?

A. The number of cars run on that basis would be 91,565.

Q. Now, Mr. Wharton, if you divide this number of cars into the number of car miles that will give you the average haul?

A. Yes, sir, I think it would.

Q. What would that work out on local trains?

A. I did not work it out finally, but it would be about 60 miles on local and 70 miles on the through.

2598 Q. Now, Mr. Wharton, is it not a fact that all the cars on the local trains run the full distance of the trains? Do you assume that to be a fact?

A. No, I do not assume that all the cars that they haul are hauled the full length.

Q. If your average length of car haul is 60 miles for local service—that must be the case if your statistics are correct, because I call your attention to Exhibit "I," where you say the average length of run of trains in miles is 63.2 miles—if your car mile run is 60 miles and your train run is 63.2 miles, your cars—each car in the local train—must run about the same distance that the train does.

A. On the basis of the figures you are using that must be so.

Q. Do you think that is possible, Mr. Wharton?

A. No, sir, it is not possible.

Q. The same result would obtain in regard to the relation of car runs and train runs in through service; you say it is about seventy miles, the average length of run in miles on through trains: as stated in your statistics, it is 78.8 miles.

A. Yes, the point of that is this: in getting this average number of cars we do not get the actual number of cars handled by the

train for the reason that the local train, while it distributes cars as it goes along, also picks up cars, and goes into a terminal with practically the same number of cars it would leave with. So it would handle more cars than would be indicated by this figure.

2599

Q. If that explanation is correct, your statistics here, where you undertook to give the average number of cars per train, do not in fact give it, do they?

A. Yes, they give the average number of cars per train.

Mr. HILL:

Q. Per train, or per train mile.

A. Train mile.

Mr. MOORE:

Q. I say the average number of cars per train. You cannot switch it over to train miles.

A. That would be the average number of cars per train, just the same.

Q. If the average number of cars per train are shown to make an average run of sixty miles, it seems to me that that means that the cars average that: it cannot mean anything else but that each car averages that.

A. Not that each car averages that; not each car, but as a whole.

Q. The number of cars you have is 16.6, local service, multiplied by 1116 trains.

A. Yes, sir.

Q. That gives you your number of cars: now, you have the car mileage that you worked out there and it seems to me that that, if it means anything, means that the average run of a car is 63.2 miles.

2600

A. No, sir.

Q. That is what you said a moment ago when I asked you what that would be.

A. The average run of the cars that are in the train would be that much, but, as I say, they drop out cars and they pick up cars; the average car does not run through from the beginning to the end of the run. The number of cars——

Q. Mr. Wharton, on that basis, then, in order to get an average of 63.2 miles, would you not have to assume that many of your cars on a train run, run a very much less and many of them a very much greater distance than the average run of your train? The average run of your train is 63 miles: can you make that assumption that you run cars a much greater distance than the average run of your trains?

A. No, sir.

Q. Then you cannot work out that theory, it seems to me.

A. We cannot work out the theory that the train handled only 18525 cars. We can work out the theory as expressed here. This statement made here is correct, but when we say the train handles only 18525 cars that is not an exactly correct statement.

Mr. HILL:

Q. Why is that not correct?
A. (No answer.)

Mr. MOORE:

Q. How did you get the average number of cars per train?
2601 A. By dividing the train miles into the car miles.
Q. Do you not think, Mr. Wharton, from the testimony in this case and the investigations you have made, that the average number of cars in the local train exceeds 16.6?
A. I have nothing to go on except the figures we worked out on that.
Q. But what do you think about it?
A. I do not imagine that they exceed much more than one half the cars on a through train.
Q. Mr. Wharton, do you know if the expense of repairs to locomotives is included in the common accounts under "Maintenance of Equipment" or not?
A. I expect that on some roads they are. I think some roads make an effort to keep them separately.
Q. But I am speaking about this case. I do not want to know about any other roads just now than these two, the Iron Mountain and the Cotton Belt.
A. Yes, sir, I think they are included.
Q. Do you know, Mr. Wharton?
A. The accounts would indicate that in the statement filed by the Railway Company.
Q. Can you not answer the question more definitely than that, Mr. Wharton?
A. No, I would not care to without looking into further data on the matter, Mr. Moore.
Q. In the division of expenses of maintenance of freight
2602 cars you have set apart 21.5 per cent on account of the expenses of stopping and starting at way stations, and 13.5 per cent on account of terminal handling, on the authority of one, Mr. A. M. Wellington, who wrote a book on "Railway Location:" do you know when that book was written?
A. It was probably first written about 1887.
Q. It has been revised since, has it not?
A. I believe so.
Q. Has there been any revision made of those figures?
A. I cannot say. I did not see the original publication.
Q. Well, there has not in point of fact, Mr. Wharton, and I want to ask you if there have not been great changes in the methods of railroad operation, as well as accounting since 1887.
A. Yes, sir, there undoubtedly have been.
Q. Have not the views of railroad men upon that line of subjects undergone modifications and changes in the last few years?
A. I could not say as to that.
Q. You do not know about that?
A. No, sir.

Q. Have you any information bearing on Mr. Wellington's means of knowledge and competency to deal with subjects of that sort?

2603 A. My undersanding is that this is a standard work among engineers; that is the only means I have of knowing.

Q. You do not know anything about the author's experience?

A. No, sir.

Q. In using those figures, Mr. Wharton, set up some twenty three or twenty five years ago, you do not make any allowance for changes in the methods of operation, do you?

A. Not since then, no sir.

Q. Now, after deducting about 35 percent (under Mr. Wellington's authority) you go on and assume that each car in local service receives two terminal handlings: therefore, you say "To each terminal handling of a car in through service, the local service should be charged with two times as much as the through service":

You were asked yesterday if trans-state freights were not carried on local trains to some extent and you said you could not answer. I asked you to look it up and tell me this morning: are you prepared to answer that question now?

A. Yes, sir.

Q. What did you find?

A. I found that 2,224,437 ton miles of trans-state freight were handled on local trains during the month of October, 1907.

Q. Did you charge that tonnage with terminal expenses

2604 in this exhibit?

A. Yes, sir.

Q. Do you think that is fair, in view of the testimony in this case as to the manner of handling trans-state traffic?

A. Well, I am not familiar with just the method of handling the trans-state traffic that was on the local trains, so I cannot answer.

Q. Then you do not know whether your basis is fair or not?

A. As to trans-state I would not know without going——

Q. Yet you have brought it here as the fairest and nearest approximation to an actual division, have you not?

A. Yes, sir, and so consider it now.

Q. I observe that you made an allowance for two terminal handlings in the local service on the St. Louis, Iron Mountain & Southern Railway and for four terminal handlings on the Cotton Belt Railway, and you have charged the local service on the Iron Mountain exhibit with two times as much as through service and on the Cotton Belt you have charged four times as much. Why did you do that?

A. On account of the difference in the average run of local trains on the two roads.

Q. Explain what that difference is, please.

A. On the Iron Mountain the average run of the local train is practically the same as the average run on a through train

2605 On the Cotton Belt the average run of the local train is just a little over one half the average run of the through train.

Q. As I understand it, you are now dealing with freight cars?

A. Yes, sir.

Q. And you are endeavoring to ascertain the cost of maintenance of freight cars and you make this allowance of a difference of terminal handling in and out of stations because of the character of the traffic?

One class of cars, the cars in local service, would be likely to be handled more frequently than the cars in through service: that is the basis, is it?

A. That is the basis.

Q. On each of these roads do you not deal with that problem on the basis of the service of the car? Is not that the foundation of your figures here, the service—I mean, the expense imposed upon the corporation in maintaining its cars, growing out of the use of the cars in this terminal service?

A. Naturally, the cars are maintained so they can be used in both local and through service.

Q. Now, to put it a little differently: if each car is handled in the terminals to which it is assigned—if it is local—at the beginning and the end of its journey?

A. Yes, sir.

2606 Q. Does it make any difference whether the journey is long or short, a long haul or a short haul?

A. Not as to one single run. It would if it ran over a division point.

Q. If the average run of a local train is ten miles and of a through train twenty miles, each one of those cars receive the handling that will attach to it at the beginning and end of its run?

A. Yes, sir.

Q. Without regard to whether it is a short or a long run?

A. Yes, sir.

Q. How can you by any possibility make a distinction? Explain that distinction that you have made.

A. On the basis of a car mile the element of distance, of course, comes in, and the assumption that a car mile is the same as one car a thousand miles, or one thousand cars one mile——

Q. You are not basing this——

Mr. HILL: Let him finish.

A. All cars, as I understand it, in the local service—and this was the basis of the figures we worked out on the Iron Mountain—start out with the terminal handling at the beginning of their run and a good many of them will be dropped out along the run.

Other cars will be picked up during that run and carried
2607 through the terminal to the end of the run.

So, taking the train as a whole, the cars in that train have been handled two times, or rather, four times, where the cars in a through train going through there would be handled only two times; taking the trains as a whole, or the mileage as a whole.

Mr. MOORE:

Q. We are not dealing now with car miles, but with the number of cars handled.

A. We were dealing with car miles in this case. We are applying our division to car miles.

Q. Let me read what you say: "Assuming also that each car in local service receives two terminal handlings (that is, on the Iron Mountain, and four on the Cotton Belt) including handling at local stations, to each terminal handling of a car in through service, the local service should be charged" and so on:

You are dealing with the individual cars there. I know you divided the expense later on, on train miles, but you are dealing there with the individual cars.

A. With individual cars as relate to the cars hauled by a train. A train starts from one point and goes to another. The cars we deal with are the cars in that train. The cars in that train, as a whole, are handled in the ordinary method of operation (as I understand it) on a local train twice, while the cars in the through train would be handled in those propositions.

2608 Q. You stated it twice, but I will ask you again: how you arrive at the number of cars handled into and out of terminals.

A. By counting them from the wheel reports.

Q. So it is not a matter of train miles. It is a matter of actual count?

A. In and out of terminals.

Q. And then you assume that, in order to equalize the expense growing out of the service, you doubled the number of cars that you Counted.

A. Not the number of cars we counted.

Q. You assumed that each car in local service received two terminal handlings: the local service, therefore, would be charged with two times as much as the through service. That means that you doubled the number of local cars. You cannot charge it without doubling that.

A. Doubling the local car mileage?

Q. No, you get the miles later on, Mr. Wharton.

A. No, I do not see it that way. We double the local car mileage only in proportion to the mileage those local cars travel. As I understand it, they do receive nearly twice the handling the through cars receive in making the same mileage.

Q. Maybe I am mistaken. It impresses me differently, but I am glad to have your explanation of it.

2609 In ascertaining the number of cars in and out of terminals, did you distinguish between empties and local cars?

A. Not in the figures we have used here, no, sir. We took all cars in and out of terminals.

Q. It is a fact, is it not, that there is a much larger percentage of empty cars in the intrastate movement and local trains, than there is in through trains?

A. I think that it is a fact in local trains there are more empty cars in proportion to the cars handled than in the through trains.

Q. Didn't the method you adopted disregard that fact, Mr. Wharton.

A. No, sir, not that I can see.

Q. Now, let us see with a view of ultimately ascertaining the expense of conducting intrastate as against interstate traffic: you take up this item of expense of keeping cars in repair: in order to arrive at it you count cars that go into and come out of terminals. You count empties as well as loaded cars.

For illustration, there were five hundred empties in local service and two hundred and fifty in through service, in the month of October 1907, and you charge that—I am not speaking about which way it will work out—but you charge that without any discrimination as between the loaded and the empty, to the class it would be assigned to in your division.

A. In the maintenance of freight cars?

2610 Q. Does it not derange the application of your formula, that is this part of your formula as to the ultimate result?

A. Not that I can see. I cannot see how it would.

Q. Now, going next to the traffic expenses: you divide them I believe, on a straight revenue basis?

A. Yes, sir.

Q. Why did you do that, Mr. Wharton?

A. We had no other basis that we could work up that would give us a result on that.

Q. Do you term that a "direct" or an "indirect" expense?

A. Well, I suppose a good portion of the traffic expense is a direct expense of securing traffic.

A portion of it is an indirect expense of the total traffic expense.

Q. You state in your testimony in chief, that it might be possible to get a closer approximation of the traffic expenses if proper statistics were kept as to the freight that is influenced by the solicitors and other traffic men. In the interest of railroad accountants, I will be glad if you would tell how we can compile those statistics.

A. I would have to go into the office and study the situation more. I will tell you what I had in mind then: the claims made by the traffic men themselves, over the country, as to the traffic they influenced; the filing of reports by those men—that is what I had

2611 in mind. Those statistics would not be exact, but they would represent the claims of the traffic men at least as to what they thought they had influenced.

Q. What items enter into "Traffic Expense"?

A. Aside from the supervision there are the foreign agencies, advertising, stationery, and printing.

Q. Do those heads include salaries and expenses of freight traffic managers and freight office force, do you know?

A. The classification of accounts of the Missouri Pacific-Iron Mountain Railway provide this as to the superintendence: The amount includes pay of freight traffic manager; assistant freight traffic managers; general freight agent; assistant general freight agents, and other officers in the freight traffic department.

Q. That includes their office force, too?

A. The pay of clerks, chief clerks, and porters.

Q. Also industrial agents and division freight agents?

A. I would have to depend on their word for that. I do not know, but I presume it does.

Q. Do not the labors of those officials have a great deal to do with the conducting of intrastate traffic in the State of Arkansas?

A. Well, I am not sufficiently able to pass on that, Mr. Moore.

Q. If it does, it is chargeable to State business, is it not?

2612 A. Yes, sir; any portion that would be applied that way, of their time and their effort and their expense.

Q. Just as an illustration: you know from your connection with this case, probably, that a great many of the forces that have been enumerated as coming under that head, have been at work for a long time in connection with the development of the testimony in these cases:

Do you not think it is fair that that should be charged to the intra-state business of Arkansas?

A. Not all of it.

Q. Do you think any part of it should?

A. I imagine a small part of it should be charged up to the state business, but how much I do not know.

Q. Why do you say a "small part"?

A. Because I do not imagine that even in the building up of the industries there it would result in a very great increase.

Q. The matter involved in this litigation is the intra-state rates in Arkansas.

A. Yes, sir.

Q. That is the whole matter that is involved, is it not?

A. Yes, sir.

Q. And yet you say that a small part of the expense incurred in this litigation should be charged to that intra-state traffic?

2613 A. I did not understand you were talking about the expense in this litigation. I understood you were talking about the expense of these men in developing the state of Arkansas. I was mistaken about——

(Question read.)

Q. You understand the question now: what do you say?

A. I should say if any of this expense was included in the items here, it would be chargeable to the State of Arkansas, but just how much to the state business I cannot say.

Q. You said "charged to the State of Arkansas": my question was whether it would not be chargeable to the intra-state traffic in the State of Arkansas.

Mr. Wharton, my question is not with reference to how the expense of this litigation shall actually be charged. It will, perhaps, have nothing to do with the issues involved in this case:

I am asking you these questions for the purpose of getting the views on which you, as representatives of the state accountants in this case, acted in your division of expenses.

What I want to know is, is an expense of that character (I merely mention this case to illustrate, not as affecting any issue involved in the view on which you acted, properly chargeable to intra-state traffic in Arkansas?

2614 A. If I understood you, you are simply referring to the work of traffic men, or any other official, in connection with litigation of this kind.

Q. Yes, anybody——

A. Well, in view of the fact that it is an action of the roads themselves attacking existing rates, I do not know whether it is properly chargeable to intrastate rates or not.

Q. Under the head of transportation expenses you have "station expense": I wish you would state first what you include in "station expense."

A. We have included station service, station supplies, telegraph and telephone operation, and station policemen.

Q. You have divided the expense between intrastate and interstate business on the basis of the number of tons of each class of traffic, assuming that each intrastate ton was handled twice and each interstate ton once: is there service of that character rendered to trans-state freights?

A. I am not familiar enough with the handling of trans-state freight to say, Mr. Moore.

Q. If there is not, or if there is a less amount of service based under this head, which is not attributable to trans-state freight, would it be proper to charge that with the same amount of station expense as the other interstate freight which is distinguished from the trans-state?

A. There is so much interstate freight that is handled two and three and four times that it seems to me that in taking the
2615 whole interstate freight and considering that it was handled once, including the trans-state, you are doing no injustice at all to the interstate.

Q. You have acted on that principle, then?

A. Somewhat, and we were guided somewhat too, by Mr. Doddridge's testimony in the case as to the handling of freight.

Q. Didn't Mr. Doddridge state in his testimony in this case that doubling the state passenger and adding that to the total interstate passenger, was charging too much to the interstate traffic and that the same thing applied to the freight traffic?

A. I think he said that, but rather qualified it; he thought it might be a fair method.

Q. After his attention was called to it he stated that?

A. I think he said it might do a little injustice to the interstate basis, but after all he thought it was a fair basis. That is my recollection. The testimony will speak for itself on that point.

Q. I do not think you will find that Mr. Doddridge supports you in that.

Now, this station service includes the labors and service of the agent at the station, does it not, and the cashier, stenographer, clerks, collectors, bill clerks, platform foreman, truckmen, scale men, sealers, car men, receiving men, delivery men, weigh-masters,
2616 warehouse men, and so on: the services of all of those man are represented in this item, are they not?

A. It does include those.

Q. The point I want to get at is: you do not think any of that character of service is applicable to trans-state traffic, do you?

A. I stated that I do not know just what station service the trans-state business did receive, so I could not say, Mr. Moore.

Q. What does "yard and terminal expenses" include?

A. It includes yard supervision, yard men, yard engine men and firemen; fuel for yard locomotives, yard enginehouse men; operation of fuel stations for the yard service; water supply for yard locomotives; stores for yard locomotives; other supplies for yard locomotives; yard signal men; yard policemen and yard signal supplies.

Q. These expenses are divided between local and through business on the basis of the number of cars handled at terminals, are they not?

A. Yes, sir.

Q. Have you made the same allowance for terminal handling of cars there that you did under the head of freight cars, to which I called your attention a while ago, where you made an allowance of two terminal handlings in local service to one terminal handling in the through service on the Iron Mountain and four on the Cotton Belt? Does that apply to this? I am asking for information; I do not know.

2617 A. No, sir, it does not.

Q. Mr. Wharton, is it not a fact that there is more terminal service rendered to the cars in local trains, in the manner in which those trains are handled, than there is in through trains?

A. I am hardly qualified to pass on that point.

Q. Was that discussed by you and your associates in adopting this basis of division?

A. That was discussed, yes, sir.

Q. Did you give no consideration to that feature of it?

A. Yes, that was given a great deal of consideration.

Q. Did you come to the conclusion that there was no difference in the cost of the amount of service rendered as between local and through trains?

A. As to the cars handled at terminals where yard engines were maintained.

Q. In making up this statement, you disregarded any claim that might be made for extra expense in handling cars in local trains?

A. Yes, at these terminals.

Q. Tell me just what you mean by saying "these terminals."

A. As distinguished from the cars handled by the local train itself between terminals. That is taken care of in local train expense.

Q. Assume that a train hauling fifteen cars comes into a

2618 station—we will say Hoxie—and it is handled in the ordinary way that a train of that kind is handled—it pulls in and then goes out: how many handlings do you charge to the cars in that train?

A. We charge the handling in and the handling out as figured here.

Q. In other words, you charge two handlings to the cars in that train?

A. Yes, sir.

Q. In making your division of the cost of fuel under the head of "Fuel and locomotive expenses" you were governed by the test made on the St. Louis Southwestern Railway to October, 1908, were you not?

A. Yes, sir, we followed that test.

Q. In that you covered all locomotive supplies did you not?

A. We cover locomotive supplies in our figures.

Q. Fuel, water, and so on?

A. Yes, they were not included in the test on the Cotton Belt, they only included——

Q. To have that clear, I will ask you that question: what do you include in this head of "Fuel and Locomotive expenses"?

A. We include fuel; operation of fuel stations; water supply for road locomotives; stores for road locomotives, and other supplies for road locomotives.

2619 Q. All of that expense is divided in your formulas used in each one of these cases, on the basis of the test that you say was made on the St. Louis Southwestern Railway in October, 1908?

A. It is applied here on an engine mile basis, using that test as a basis for making it; yes, sir.

Q. Did you have any information in regard to the similarity or dissimilarity in the conditions that existed on the St. Louis Southwestern Railroad in October, 1908, and October, 1907?

A. I think Mr. Doddridge gave some testimony as to that.

Q. I wish you would turn to that if it has any bearing on this.

A. (Witness producing volume:) It is in volume 2, pages 106 and 107 of the printed record.

Q. Just read that part of his testimony that you refer to in the record, please.

A. Do you want me to read the whole of it?

Q. What you relied on.

A. I relied on all of it that is set out here.

Q. You stated that you thought Mr. Doddridge's testimony justified the assumption that the conditions which existed on the St. Louis Southwestern Railway in October, 1908, bore such similarity to the conditions which existed in the preceding year, 1907, as to justify the application of that test to the earlier period:

2620 In the testimony you have referred to, at pages 106 and 107 of volume 2 of the printed record, was Mr. Doddridge not referring to the correctness of applying a test made on one road to another road? For instance, the test made on the Cotton Belt to the Iron Mountain? Was not that the matter to which he was referring to instead of the application of the test made at one period to a period of another year?

A. I cannot say as to that. I gathered the impression from his testimony that he considered the relative fuel consumption on the Iron Mountain, local and through, practically the same as on the Cotton Belt, local and through, as shown by this test.

Q. Upon what data do you base the assumption in dividing these "engine house expenses" that the local engines require twelve per cent more engine house service per engine mile than a through engine?

A. On the basis of the average length of run of the local and through train.

Q. Please turn to those per cents and tell me what they are.

A. The average length of local is sixty three and of through it is seventy one.

Q. As appears on Exhibit "I"?

A. Yes, sir.

Q. And you base it on that?

2621 A. We base it on that.

Q. What is included in "engine house expenses"?

A. Just engine house expenses. Just the one item of engine house expenses. This is the road engine house expense and not any yard engine house expense.

Q. I see in dividing expense of "road engine men and train men" you have taken actual figures: how did you get that; that is, how did you get the local and how did you get the through?

A. Mr. Hamilton worked that and I am not familiar with the detail.

Q. You do not know?

A. No, I would rather that you ask him about that.

Q. You adopted the percents that you found on application of the statistics for October of 1907, on the Iron Mountain?

A. To the six months we did.

Q. How did you get it in regard to the St. Louis Southwestern Railway? Did you use the actual test made by that road?

A. In October, 1908; yes, sir.

Q. Mr. Wharton, what is included under this head of "other train expenses"?

A. Freight car lubrication; train supplies; road signal men; highway crossing watchmen; signal supplies, road; clearing wrecks; injuries to persons; stock killed and damage to property; operation of joint tracks; flood damages; operation of stock yards and

2622 elevators; highway crossing supplies.

Q. Do not the items of "injuries to persons," "stock killed" and "damage to property" constitute a large proportion of the total of that class of expense?

A. Yes, sir.

Q. It is about 73 percent, is it not?

A. No, it would not be quite that much, Mr. Moore. You just said injuries to persons, damage to property and stock killed?

Q. Yes.

A. It is about 57 percent.

Q. You say it amounts to 57 percent?

A. Yes, sir.

Q. Could not that have been worked up—referring now to that part of the expense which consists of injuries to persons; stock killed and damage to property—and charged to local and through trains

just as conveniently as you did in the next item of "loss and damage"?

A. Well, I am not familiar with their method of handling those accounts, so I cannot answer.

Q. You cannot answer as to that?

A. No, I cannot.

Q. Can you assume, reasonably, that the amount and value of stock killed during the month of October; persons injured;
2623 or damage to property, would be any criterion as to what the amount would be in another month?

A. This is the amount for six months. I should say that it would not be any criterion as to what would happen the next month, but I presume the claims average up pretty well about the same amounts.

Q. Is not that a character of expense that is divided on the actual fixed and located charge; is it not a charge easy of allocation?

A. I should think a great many of the charges would be, but, as I say, I am not familiar enough with their handling of accounts to answer that.

Q. In "loss and damage to freight" the very next item, you based your division on the actual claims paid during the month of October, did you not?

A. Yes, sir.

Q. And yet the same items, practically, under the head of "other train expenses" you divided between local and through in proportion to the train miles for each class of service?

A. Yes, sir.

Q. Why did you not treat them alike?

A. We had no particular difficulty in getting at the loss and damage claims, but we assumed we would have considerable difficulty in making any segregation of the other expenses.

Q. You did not have the courage to tackle that problem?
2624 A. We did not have the courage to tackle that.

Mr. HILL:

Q. Just to save re-direct, I wish to ask Mr. Wharton what percentage this particular claim would amount to.

A. It is about two and one half percent of the total operating expenses.

Mr. MOORE:

Q. What do you include under the head of "supervision and general"?

A. Superintendence; stationery and printing; rents of buildings; and incidentals.

Q. Explain to me why you have applied those expenses under that head on the basis of direct charges, local trains, through trains, intrastate traffic and interstate traffic.

A. Well, the theory is that the supervisory expense, the general expense which goes with the supervisory expense, more nearly follows the direct expense, any particular direct expense, than it follows anything else. It is the measure of supervision that is neces-

sary for the expense that precedes it. That is an accounting principle that is frequently applied on expenses of that nature.

Q. How did you distinguish between that part of expense which you have applied to train costs and that part which you have applied to other costs?

A. Just as given in the methods explained before: under the head of each one of those sub-items.

2625 Q. That is to say, you assume that some are a direct charge applicable to train cost and others a direct charge applicable to traffic: is that what you meant?

A. Yes, sir.

Q. Tell me what you mean by that term "direct expense" and "indirect expense": I would like you to explain that.

A. The term "direct expense" as it is used in here, means the expense applied on one basis or another, the one that seemed most just to us, or the one that has been suggested by the testimony. That is what the term "direct expense" means in this exhibit.

Q. Let us take it in its application—because it is used in all these divisions—its application to "maintenance of equipment":

Under your sub-headings you speak frequently of direct expenses and indirect expenses, and you adopt a different basis of division, too, in regard to that as applicable to, say, "maintenance of equipment": give me the distinction between the direct and the indirect expense.

A. In the application of what have been called the "general and supervisory expenses" right through here we followed exactly the same plan in the division on the basis of whatever had been applied above it as direct, or as near direct as we could make the application. There is no difference between the application of the general and supervisory expense in each case. It all applies on a basis of

2526 the expense apportioned above it.

Q. You say station expenses cannot be applied to transportation expenses because they are not train expenses: of course we all understand that, but they are an expense, are they not? They cost you an expense that is essential to the transportation of freight because that involves a handling of freight that is carried on the cars.

A. That is true.

Q. You could not transport freight without providing for handling it?

A. That is true, but you handle it before you transport it and after you transport it, so we set up the handling separate.

Q. Is not damage to the track, "by the elements" as it is called, or the cost of repairing telegraph poles or some structure that may be on the track and which is not actually used by the trains in passing, an indirect expense just about in the same sense in reference to the "maintenance of way and structure" charge, that "station expense" is in relation to transportation charge?

A. No, I would not consider that they were of the same nature at all.

Q. Do you not think they are analogous?

A. No, I would not say so.

Q. Mr. Wharton, will you furnish me with a statement showing the amounts charged under each of the sub-heads that
2627 follow "maintenance of equipment" in your exhibit "J"? That is, under the heading of, (*a*) "locomotives; yard; road"; and under (*b*) "freight cars"; (*c*) "supervision and general"?

Then, under the heading of "transportation expenses" the items opposite the letters from (A) to (H) inclusive? That is to say, each of the sub-divisions of transportation expense on the St. Louis Southwestern Railway and also on the St. Louis, Iron Mountain & Southern Railway?

A. You mean just the several accounts that go under each of the——

Q. Yes, both freight and passenger. Exhibit "I" and exhibit "M"; both.

A. Do you want those as formal statements or just for your own information?

Q. As formal statements.

2628 Q. Mr. Wharton, did you get those statements for me?

A. It will take me some little time to prepare those. I will have them for you in the morning.

Q. What is your personal view as to the percent of freight car expense that would be attributed to terminal handling for the purpose of making repairs growing out of switching?

A. Is this on the maintenance of freight cars?

Q. Yes.

A. I cannot say that I have any personal view on this subject.

Q. What is your view as to the total expense of repairs of freight cars, attributed to repairs from stopping and starting at way stations?

A. I have no personal views on that subject. All I studied up has been what I looked up in Mr. Wellington's book.

Q. On terminal handling you have no personal view?

A. No, sir.

Q. Mr. Wharton, the result of this formula, or exhibit K, insofar as "maintenance of way and structures" are concerned, is "that the total charge to freight service is divided between local and through trains on the basis of the total engine and car miles in each
2629 class of trains, allowing fifty percent additional mileage to the local trains for station switching and adding 150 percent to all engine miles to get the equivalent in car miles, charging the trans-state freight, which is 51 percent of the total traffic, with an equal proportion of the total expense of each class of trains based on the amount of tonnage in the trains; and disregarding the fact that maintenance of station buildings and side tracks other than passing tracks are not chargeable to the trans-state freight;" is not that the result of your formula of division?

A. Practically, I think; as near as I can understand the question.

Q. Is it not true that the total charge for repairs to locomotives and freight cars is made practically upon the mileage of the equipment, with added percentage to cover switching service and terminal

handling, some of these percentages being based upon conditions in 1887? I am referring to Mr. Wellington's statement as to the percents. This includes both?

A. Yes, sir.

Q. But making no allowance for lighter loading of state freight, for the greater use of cars in state traffic, nor for the greater empty movement required in short haul state business: is that correct?

A. No, it is not.

2630 Q. In what respect is that incorrect?

A. The charge of the local business is for all the cars moved in trains, whether empty or loaded; whether half loaded, quarter loaded, or of company material. The expense is all there and it is taken care of. The same applies to the through train. Those elements are taken into consideration in that regard.

Q. Do you mean to say that the statement that no allowance is made for the lighter loading of state freight is not correct?

A. I do not think that is a correct statement, no. The entire cost of the local train is there, whatever the loaded train may be loaded with, state or interstate freight; or maybe it is loaded lighter or heavier. The entire cost is there. That is the reason I cannot see the point of your——

Q. Do you make any allowance for the larger movement of empty cars in local service?

A. The cost of the hauling of those empty cars is all there. It is part of the maintenance and is all there.

Q. In this division you make, you make no allowance? You charge the expense of hauling empty cars the same as if they were loaded cars and divide the expense on that basis?

A. The total expense of the train; not on the basis of empty cars, but of the freight it carries, whether loaded or empty.

2631 Q. You do not distinguish between a car that is empty and a car that carries 40,000 pounds?

A. Not as to maintenance expense, no, sir.

Q. Either as to the maintenance of the car or as to the effect that the weight of the car may have upon maintenance of way?

A. As to both maintenance expenses; maintenance of way and structures and maintenance of equipment I mean.

Q. Is that statement correct, except as you indicated a moment ago?

A. Your statement that you made originally?

Q. Yes.

A. I would not care to say so. I would rather hear it again.

(Question read.)

Q. After hearing it re-read what do you say?

A. The whole statement is based on the fact that I objected to in my answer, so I would not say that your statement was correct at all.

Q. You referred in your answer to the cars carrying company material: I thought your statistics upon which you based your formulas were based exclusively on revenue freight.

A. Yes, they are——

Q. Do you include Company material?

A. What I meant was cars loaded with company material.

2632 The maintenance of those was——

Q. All other items than those that have been enumerated, of equipment, are divided on the basis of the percentages ascertained in the division of locomotives and car expenses, are they not?

A. Are you referring to "supervision and general"?

Q. I am referring to all items under the head of "maintenance of equipment."

A. There are three items under that head: "maintenance of locomotives"; "maintenance of freight cars" and the other is "supervision and general."

That "supervision and general" is based on the charges that are arrived at under the head of locomotive and freight car maintenance.

Q. That is on the same basis as the other?

A. Practically.

Q. It is correct?

A. They are all on a locomotive and car mile basis, with proper allowances.

Q. You divided "traffic expenses" on a basis adopted by the Railroad Company?

A. On a gross revenue basis: what they call a "straight revenue basis."

Q. In your formula "station expenses" are divided on the assumption that every ton of state freight has the use of two agents

2633 and two station forces; that every ton of interstate freight has the use of one agent and station force, and every ton of trans-state freight has the use of an agent and a station in Arkansas, even though it is billed and loaded at Kansas City, Mo. and delivered and collected for at Alexandria, La.?

A. They are divided in a comparative sense on a basis of all state business having two terminals within the State, as compared with one terminal for all interstate business, including trans-state.

Q. But the result in its practical application is what I stated in that question, is it not?

A. No, I would not care to take that unqualifiedly.

Q. In what respect is it not?

A. As I stated in my testimony before, I think, lots of the interstate business has two, three and four terminals handlings in a state; lots of state business has three and four handlings and I doubt not that a good deal of trans-state business is handled at times in the state. So that the figures we have used here are a good deal in the comparative sense as to the relative handling of the two classes of traffic.

Q. I am not speaking of terminal, I am speaking of "station expense."

A. I am speaking of "station expenses." I should not have said terminal.

Q. What do you mean when you say that some interstate
2634 freight has three and four handlings in connection with station expense? I understand what you mean in connection with terminal expense, but not "station expense."

A. Cotton, for instance, must have more or less, two or three handlings in the state. I think the testimony indicates that. I believe it indicates that grain does.

Q. In what sense are you using the word "handling"?

A. The station handling and the work that has to be done around a station to take care of the freight—the billing, checking, etc. I am not familiar with the details and am testifying a good deal from hearsay in that particular, and what I have read.

Q. If you leave cotton out——

A. I should say that a good deal of freight comes in from junction points; is unloaded and loaded again; goes on to its final destination, and would have two handlings. Interstate freight I was thinking of then. For instance, freight in or out of Memphis; or freight in and out of Fort Smith. Those are items that I had in mind when I spoke of interstate having more than one, and state more than two handlings.

Q. Have you excluded the theory that some parts of intrastate freight may have more than two handlings? Is not your formula based on that basis?

A. It is on the assumption strictly that the state business is handled twice to each handling of intrastate, including transstate.

2635 Q. With the application of these station services, such as the use of an agent, loading, unloading and so forth to transstate freight, although it may not be handled in Arkansas?

A. It is included in the interstate and has its share of expense.

Q. "Yard expense" is divided in your formula on the basis of the number of cars handled at terminals without regard to the class of traffic or length of haul, or any other factor, except the number of cars, is it not?

A. That is the only factor, the number of cars handled at terminals.

Q. "Fuel and locomotive expense" on the Iron Mountain has been divided on the basis of the cost on another railroad, at a period of one year later than the period under investigation.

A. The comparative engine mile cost on the other road; the cost per engine mile for the use of fuel.

Q. Wrecks; personal injuries and damage to property, not on the train, is divided on the mileage of trains; and other items of a miscellaneous nature are divided in proportion to the expense ascertained in various ways and by various percentages in other accounts?

A. Yes, sir.

Q. And it is true that the only item divided upon an *an*
2636 actual basis and without the element of speculation or assumption, was "loss and damage to freight in transit," is it not?

A. That was actually worked out for one month.

Q. I asked you if the only item divided on the actual basis, without the element of speculation, is not "loss and damage to freight."

A. It was worked out actually for one month, as was also the road engine and train men pay-roll. All the other items are divided as indicated on the various bases stated.

Q. Mr. Wharton, in your reference to road engine men and train men, which you say are on the division of expenses, was that an actual division of actual expenses for the month of October, 1907?

A. It was intended as such. The instructions were to get the actual expenses for that month, for that purpose.

Q. For both local and through?

A. That is my recollection of the instructions. I am not really positive as to that——

Q. Do you know how each one was associated?

A. I do not know. Mr. Hamilton is entirely familiar with the details as to that. It is possible on that, Mr. Moore, we have worked up only the local train.

Q. You cannot state, then?

A. No, I cannot be positive about that. I would have to consult Mr. Hamilton about that and find out.

2637 Q. Referring to your division of "loss and damage to freight" and "engine men" which you think was worked out on actual cost: you applied that though to the six months' business for the last half of 1907, on an assumption that the same ratio would apply to the six months as would apply to the month of October?

A. Yes, sir.

Q. Mr. Wharton, after you had worked out all these various formulas, you divided the total expense of operation for the six months, excepting traffic expense, station expense, loss and damage to freight, and a small part of supervision and general expenses, between state and interstate traffic on the ton mile basis, did you not?

A. Yes, sir.

Q. And the amount divided on the ton mile basis was 83.3 per cent of the total operating expenses for the six months, was it not?

A. That would be about the right percentage, yes, sir.

Q. Is that what you call "whipping the Devil around the stump"?

A. No, sir.

Q. Is the result of the division of expense between state and interstate traffic, on the formulas filed by you, not the same that would result from the application of the straight revenue basis, without any allowance for extra expense in conducting state traffic?

2638 A. It is almost the same as the straight revenue basis, but not quite.

Q. It is practically the same?

A. On a straight revenue basis the percentage of intrastate business to the total is 13.41 percent and the expense 12.81 percent.

Q. What result do you get by multiplying the total expense by 13.41 percent; what are the figures?

A. You mean taking the total expense?

Q. $3,073,843.40 multiplied by 13.41 percent.

A. $412,000.00 in round figures, as the operating expense; about $18,000.00 more than the figures worked out on this (indicating

exhibit). This just includes the straight operating expenses on the Iron Mountain road.

Q. Now, does the result work out practically the same way on the Cotton Belt Line?

A. On the Cotton Belt 9.78 percent of the freight revenue is state and 10.83 percent of the freight operating expenses are state; somewhat above on the straight revenue basis.

Q. What is the difference in figures between the result of the application of your formulas of division between state and interstate on that basis and a straight revenue basis; the figures presented by Mr. Kimbell?

A. On a straight revenue basis the state business would cost
2639 $90,500 as compared with $100,000 that we show—just in round figures.

Q. Now, going to the formula prepared by you and submitted here in connection with passenger traffic, I want to ask you if you made division there as between local and through service?

A. No, sir.

Q. Why did you not?

A. We had no basis for the division of the expenses ascertained in that way. We did not have the passenger miles by local and through trains.

Q. On Exhibit "M" I find this statement: "As nearly all passenger trains on the St. Louis, Iron Mountain & Southern Railway Co. do a local business, we have not considered it necessary to make any division of expenses as between local and through service."

That is what you say on that exhibit: is that your reason?

A. That was one of the reasons and the other was also a reason.

Q. Would not that reason apply just as well to a different division of local and through freight expenses?

A. No, sir.

Q. Is not freight business divided between each class of service?

A. Yes, local and through, and the passenger business is divided
2640 between local and through—Mr. McPherson in his classification——

Q. Is not the freight business——

A. —of passenger trains assigned only a very few trains as through trains, all the rest as local trains—most of the trains——

Q. You acted then upon the basis of Mr. McPherson's testimony in that respect, did you?

A. Yes, as to local and through trains in the passenger business.

Q. Assuming that that was a correct statement?

A. As to the local and through trains.

Q. You divide the expense between coach, Pullman, mail and express service, on a car mile basis?

A. Pretty generally.

Q. Under the head of "Maintenance of way and structures"?

A. Yes, sir.

Q. How did you get at the mileage of coaches, Pullman cars, mail cars and express cars, respectively?

A. That was worked up under Mr. Hamilton's direction and I would have to ask you to get that information in detail from him.

Q. You do not know how it was worked up?

A. Not in detail, no, sir.

Q. You would not be able to explain, then, these divisions that were made?

A. I can explain the divisions of expenses, but not the method of getting at the coach and Pullman car mileage in detail.

2641 Q. You have divided all the expenses of "Maintenance and equipment" in the passenger service, except "Supervision and General Expenses" on a car mile basis, I believe: have you not?

A. Yes, excluding in the case of passenger train cars the maintenance of Pullman cars.

Q. Under the head of "Station expenses" you have made an allowance of ten cents a day for the handling of mail at certain stations: what stations were those?

A. Stations where there are agents, in that case.

Q. How did you arrive at that ten cents a day?

A. In the testimony of Mr. O. L. Teachout, given before the Commission which investigated the postal service in 1900, Mr. Teachout based his station handling of mail on that rate and we simply followed the basis.

Mr. Teachout at that time was the general agent of the mail department of the Missouri Pacific, Iron Mountain, Cotton Belt, International & Great Northern and Kansas City Northwestern Railways.

Q. Will you indicate the volume and the page from which you obtained that authority?

A. Part 1, page 302. In the little expression used he said:

"I am charging for the handling of mail between stations ten cents a day."

That is the only place we found that and we simply followed that in this case, as a small part of station expenses undoubt-

2642 edly does attach to the handling of mail.

Q. What do you include in "Supervision and General Expenses" under sub-division (*c*) of Maintenance of Equipment?

A. I include the repairs, renewals and depreciation of work equipment superintendence; personal injuries; repairs of tools and machinery; shops; heating and lighting; watchmen; stationery and printing; incidentals, and a credit for repairs of equipment used in joint yards, etc.

Q. That is in connection with repair shops, is it?

A. It is in connection with the "Maintenance of Equipment."

Q. I want to know if those different items you mention are the expenses that arise in the operation of the shops, the repair shops?

A. I don't suppose all of them are, but a good many of them are.

Q. You speak of personal injuries in connection with repair shops: just look and see.

A. (After referring to exhibit:) This amount of personal injury——

Q. I am referring now to "Supervision and General" under the head of "Maintenance of equipment."

A. I thought you asked me specifically about personal injuries. You mean the whole "Supervision and General Expense"?

Q. I am referring to the sub-head of "Supervision and
2643 General Expense" under the head of "Maintenance of Equipment."

A. They all relate to the "Maintenance of Equipment" the shop expenses and other items connected with "Maintenance of Equipment."

Q. You enumerated what entered into that particular sub-head a while ago, and you mentioned repairs and personal injuries: Is that personal injuries in connection with shops that are maintained for the purpose of keeping up and making repairs to equiment? That is the point I want to know. It is all a branch of expense, connected with the keeping up of equipment of the company?

A. Yes, it is all connected with that "Maintenance of Equipment"; not necessarily in the shops, but in connection with the "Maintenance of Equipment" wherever it may be.

Q. What part of the expense have you charged to the Pullman cars?

A. Just the proportion of the locomotives——

Q. It is 13.88%, is it not?

A. 13.88% to Pullman cars.

Q. Are Pullman cars at all handled in the shops of the railway companies?

A. The engines are.

Q. Are the Pullmans, the cars themselves?

A. I think they are to some extent. I am not familiar with that, but I have an impression that whenever repairs are required.

Q. You think it proper to charge a part of the repairs to
2644 Pullman cars?

A. Yes, I think so.

Q. Suppose you are mistaken about that?

A. I don't think I am.

Q. If you are mistaken, then, it would not be proper to charge any of the expense of repairs to the Pullman.

A. Of the engines, it would be.

Q. I am speaking of repairs to the cars.

A. We are speaking of it here where we spoke of "Supervision and General"; all repairs, whether locomotives or cars.

Q. I understand, but a portion of that is repairs to the cars themselves?

A. Yes, sir.

Q. If Pullman cars are not handled and repaired by the railroads would it be proper to charge any portion of that expense to the——

A. Yes, it would be. The "Supervision and General" naturally takes in everything that is repaired there. The locomotives are repaired there and the locomotives pull the cars, and their expense passes back over the trains.

Q. Assuming now, to meet your view, that 1% of the expense incurred under this head was for repairing locomotives: Now, lay that

aside: say you attribute that to Pullman cars: should any part of what remained be charged to it?

A. We don't charge any part of other maintenance. Just the portion that is charged under the head of locomotives.

2645 Q. Under the head of the division of cost of coach and Pullman service, between intrastate and interstate, you have divided the cost of Pullman service between intrastate and interstate business on the basis of 25% intrastate and 75% interstate: where did you get those percentages?

A. Those were just arbitrary percentages based on just general knowledge about the use of Pullmans, but no detail figures back of them.

Q. What do you include under the head of "Traffic Expenses" in the division between passenger expenses?

A. It includes superintendence; foreign agencies; advertising, stationery and printing.

Q. It is the same thing you stated in connection with the freight traffic?

A. Practically, the same, yes, sir.

Q. What has that to do with the mail and express business of railroads?

A. On the revenue basis, I think it has just as much to do with that as the passenger traffic.

Q. On the theory that you are going on?

A. I have no theory on it.

Q. You have charged 11.63% of that to "mail" and 7.70% of it to "Express:" is there any part of it applicable to those branches of service?

A. The only theory on which it can be divided on a revenue basis is that each part of the revenue should stand its share

2646 of the expenses. That being the case, it applies against "Mail" and "Express."

Q. In other words, you agree with the revenue theory when it comes to——

A. No, I am not giving this as my basis. I am simply following out the revenue theory of making divisions.

Q. So, you followed the revenue theory there, Mr. Wharton?

A. We took that as we did because we had no other on which to divide it.

Q. You frightened me very badly at the outset, because I thought you were going to divide it on a basis of facts. I was afraid you were going to present here endless facts, but this is a deviation from that basis.

A. We qualified in each case by stating that the traffic expenses we have no basis of dividing.

Q. You make the traffic expenses an exception?

A. Yes, sir.

Q. Mr. Wharton, if you were really trying to get the actual expenses chargeable to traffic, would you apply any of it to mail? If you were trying to get at the actual facts?

A. I would have to go into the offices and see how they handle

the "Mail" and "Express" in their traffic department. I would not be able to give you an answer without such an examination?

Q. We have a contract here. Have you seen that con-
2647 tract? You say that you have read the evidence. We have a contract between the railroad company and the government.

A. I presume there must be some traffic expense in there chargeable to "Mail" and "Express."

Q. We have a contract under which the mail is carried and we have the contract between the Express Company and the Railroad Company: I suppose you know what they are?

A. I know in general what they provide.

Q. If you were making an actual division on a basis of actual expenses incurred, would you charge 19% to mail and express?

A. I could not answer that without going into the matter very thoroughly, and knowing the traffic expenses incurred in mail and express business handled.

Q. You have made this division without going into the matter?

A. I have, without going into that matter at all.

Q. There is a good deal of theory about that?

A. It is all theory, as far as traffic expenses are concerned.

Mr. HILL:

Q. Is it your theory or the railroad company's theory?

A. The railroad's theory.

Mr. MOORE:

Q. You take what is good and leave out what is bad?

A. I would not say we took what was good. We took what we had to.

2648 In that connection, I might add to that, Mr. Moore, (I just thought of it now): Referring to this testimony before the Postal Commission, the railway companies always included on a car mile basis a portion of traffic expenses in figuring the cost of mail service.

I believe there is a statement in one of these by Mr. Johnson, the Auditor of the Cotton Belt, on that very point.

And I might say further, also, it occurs to me now that in a case tried before the Interstate Commerce Commission (Case No. 1028, entitled Kindel vs. Adams Express Company) Mr. Peabody, of the Santa Fe, filed a statement showing the cost of express business and also included traffic expenses on a car mile basis, as a portion of the cost of doing express business.

Q. What do you think about the correctness of that?

A. I presume it is just as good as any other way. I would not pass on it. Those are the views of the railroad men themselves as to the proper division of these expenses along with other expenses.

Q. You have the car mile division and the revenue division: which do you think is the better basis of division?

A. Well, as to traffic expense I would not care to say because I

don't know. There is not a great deal of difference, I don't believe, between the two bases.

Q. Mr. Wharton, I observe on the last item which appears on Exhibit O, which is a summary of revenues, etc., you use
2649 the term "Percentage of net earnings to valuation" describing the per cents which are on the line opposite those words:

Do you make any distinction between that and the term used by the railroad company "Return upon the assessed value of the property"?

A. I presume they are the same. This is just the assessed value of the property doubled. I presume that is on the same basis.

Q. I want to ask you if by using the term "Percentage of net earnings to valuation" do you mean to imply any different meaning or significance to your figures than that which would be implied in the formula prepared by the railroad company?

A. No, sir, there is no difference.

2650 HERBERT C. WHITEHEAD, a witness of lawful age, being duly produced, sworn and examined on behalf of the defendant, testified as follows:

Direct examination.

By Mr. HILL:

Q. Will you please state your name, residence and occupation?

A. Herbert C. Whitehead; Public Accountant and Auditor; Chicago.

Q. What experience have you had in railroad work, Mr. Whitehead? Kindly give us a little outline of your experience.

A. I was thirty-five years in the railway service, commencing about the end of 1872 as office boy and junior clerk in the general freight office of the old Kansas Pacific Railway, now part of the Union Pacific Railroad.

I was promoted in due course to corresponding clerk—that was before the days of stenographers and typewriters—and from that I became local cashier and paymaster connected with the auditor's office.

From that I became traveling auditor on that same road and was for one and one-half years traveling auditor and tax agent.

Then for a short time I was accountant and paymaster of the Mackinaw extension of the Michigan Central Railway; that was for less than six months.

2651 From there I went to the Atchison, Topeka & Santa Fe as traveling auditor, for about one and one-half years and was appointed auditor for the southern Kansas portion of the Santa Fe, at Lawrence, Kansas, and stayed there for six years.

From there I went to Los Angeles, California, as auditor of the Southern California Railway and was there for eight years.

Then I was promoted to be general auditor of the Santa Fe system, with offices in Chicago, and filled that position for nine years.

Q. What years were they?

A. 1896 to 1905. For two years after that I was consulting auditor of the system.

Q. The Santa Fe?

A. Yes, at Chicago.

Q. That carried you down to 1907?

A. To the end of 1907.

Q. What have you been engaged in doing during the last two years?

A. Public accountant and auditor.

Q. With offices in Chicago?

A. Yes, sir.

Q. Since you retired from active railroad work, have you kept in touch with railroad affairs and with economic questions that have been presented in railroad accounting?

2652 A. So far as I could under the press of pretty hard work which at times would last months, but I tried to keep myself as well informed and as alert in that respect as it was possible for me to do.

Q. Have you been connected with the American Association of Railway Accounting Officers?

A. Oh, from the beginning. I was from the time it was organized, in the '80's.

Q. Have you kept in touch with its work?

A. Up to the time that I retired from the Atchison as the consulting auditor, yes; and to some extent since.

Q. Have you served that Association in any official capacity?

A. I was President for one year, while I was general auditor of the Sante Fe.

Q. What is the scope of the work of that Association, Mr. Whitehead?

A. It is an association to enable its members, who are accounting officers—and in some cases their immediate subordinates are also admitted—with the view of bringing about uniformity in methods and improvements in methods.

It is really an effort on their part to keep in touch with the development of accountancy, I should say, as done in their business and in outside businesses.

Q. I wish you would define what you mean by "accountancy."

2653 A. Some years ago the question was up with the dean of one of the schools of commerce, accounts and administration, at one of the universities in the west, and he was getting a great many definitions at the time from various people, railway people and accountants.

I happened to be down there at the time visiting my boy who was attending that university, and he asked me for a definition. I couldn't give it to him offhand, so I promised it to him. I made it in the rough, going up on the train that evening and furnished it afterwards. If you care to have it I can give it to you right now. It may require a little slight explanation and amplification.

"Accountancy is the accurate, truthful and scientific expression, in current and generally understood form of terminology, for the purposes of information, regulation and protection against loss; and the critical review and verification of such expression".

Q. Is that accountancy, as you have defined it, what you referred to in speaking of "railroad accounting"?

A. Yes, sir, but the railroad accounting is just one branch of accounting. The same principles which underlie all accountancy would underlie railway accounting. The practice might differ quite a good deal from the practice of merchandise concerns, manufacturing and others, due to what you might call the abstract character of the railway business. They don't have anything tangible.
2654 You can't buy anything and sell it again. There is that abstract feature that attaches to railway business, or any public service, that makes it quite different from a commercial concern.

Q. Different in detail, rather than in practice, is it not?

A. Different in arrangement and detail, both.

Q. Have you in your work given thought and investigation to questions of dividing railroad expenses between various accounts and departments of railroad work, between state and interstate transactions?

A. Through the whole course of my career as an accounting officer, I had a great deal to do with the preparation of statistics of division of earnings and expenses between main and branch lines, as you might say, of the properties, but not between state and interstate. The thing was not required in my day at all. I don't remember ever to have had a demand or request of that sort when I was in the accounting offices of railways.

Q. That seems to have come up as a litigious question, rather than a practical one?

A. What sort?

Q. Litigious, a question of litigation?

A. Oh, yes. I should say that the division of revenue and expenses between state and interstate, was a matter that was political and external, as compared with the division of earnings and
2655 expenses between the main and branch lines of a system. The latter would be economic and internal, whereas the former would be political and external.

Q. How would you classify a division between freight and passenger?

A. That is internal; economic and internal.

Q. In this case the plaintiff railroad companies have sought a separation of state and interstate business, and have separated the revenue derived from those two classes of traffic, and then seek to separate the expense of the two classes of traffic, and apportion the revenue that one class bears to the other:

I will ask you your opinion of that method of ascertaining the relative cost of state and interstate business.

A. In my judgment, to determine cost on the basis of gross earnings is not a very sound determination. That basis is not sound,

whether you attempt to divide the expenses as a whole or a portion of them on that basis.

My principal reasons for my view are, that in the case of a trader in merchandise, he would—if he followed that line of argument or reasoning—determine his cost on the basis of his sales of his product; and it further implies the assumption that the end and aim of the railroad enterprise is gross earnings and not net earnings, as I look at it.

Q. Suppose the facts are as developed here: that the gross
2656 earnings that are used to determine the expenses are derived from two separate and distinct systems of making the rates which produce those revenues—one a Commission tariff, arranged by state authority, based on distances the freight is carried, and the passenger based on the distance the passenger is carried; and the other the Interstate rates, based on many conditions, commercial, competitive and otherwise:

What further effect would such system as that have upon the revenue as factors in determining the cost of doing the business?

A. Why, it seems to me that that would be a matter of very minute inquiry, before anybody could give an opinion. Any competent accounting officer before he gave an opinion as to what the effect would be—it would be a matter for minute inquiry as to what the effect would be.

Do you really mean to ask what the effect would be or whether the method would be changed?

Q. Really my question goes to both propositions: what effect would it have upon this method of dividing this dual system of making rates as based upon different considerations?

A. Speaking from the point of view of having in mind the principles and practice of accountancy, I should not say that it would make
2657 any change whatever in the method that would be chosen to arrive at the cost; if there were sound bases for arriving at those costs, that the fact that a certain tariff was in effect or another tariff was in effect, different from it, would not make any difference at all in the method of division, or the method of the determination of the cost.

Q. It would not be the tariff: it would go back to the measure, whether that was a proper measure of costs?

A. No, sir; I should say not. That is determined by other things than what particular tariff might be in effect, either freight or passenger.

Q. And either state or interstate?

A. Either state or interstate.

Q. Mr. Whitehead, have you examined the exhibits that have been filed in this case by the State, that have been put in evidence by Mr. Wharton?

A. Yes, sir, I examined them and went over them with him.

Q. Take for instance the exhibits that deal with freight traffic.

A. Which road?

Q. You might take the Iron Mountain. The principles are the same.

You will see from those exhibits, as you doubtless know, that there is an attempt made there to ascertain the cost of state and interstate business, by ascertaining the cost of local and through trains,
2658 and then ascertaining the volume of state and interstate traffic that is carried upon those trains, and in that way ascertaining the cost of the state and the interstate:

I will ask you to give your opinion of that method of apportioning those expenses.

A. You are asking me for an opinion in detail or in a general way?

Q. In a general way.

A. Why, it seems to me to be very fairly worked out and quite approximately correct.

Q. Are the bases that are used there for the various divisions, such bases as are used by railroads in their own apportioning, and are well known and recognized factors for determining these divisions?

A. To my certain knowledge, they are the ones that have been worked out experimentally by the railroads, in the last forty or fifty years, which they have come to as the business increased and as the density of traffic became greater.

Cross-examination.

By Mr. MOORE:

Q. I believe you said, Mr. Whitehead, that you have never undertaken or had any experience in dividing between state and interstate business, as between the main line and branch lines: that your work has been done in the matter of dividing revenue expenses: have I understood you correctly?

A. That was quite correct, yes, sir. Your understanding
2659 was correct.

Q. Have you had occasion to make a division of revenue and expenses between local and through trains?

A. At times, as auditor I would be called upon to make statements of train earnings and expenses for the Manager of the road of which I was auditor. I can't recall those things just now. They are constantly coming up; they are asking for statements of station business; for the earnings and expenses of particular trains. In all railroads I think the auditor is called upon for that sort of work, to a greater or less extent, according to the volume and character of the business.

Q. Let me see if I understand: what would be the extent of a case like that, if you have any case in mind? What would be the nature of the inquiry you would make?

A. The inquiry would come from the general manager or general superintendent, to the auditor. He would be asked to prepare statements showing the earnings and expenses of certain trains, or give the business of certain stations and what their expenses were.

Q. What would be the purpose of that, Mr. Whitehead?

A. To inform the operating official so that he might learn whether those trains were paying or not, and predicate his judgment as to

continuing them; increasing the service or changing it in some respect; purely a matter of internal workings.

2660 W. E. FITZ GERALD, of lawful age, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would please state your name, age, residence and occupation?

A. W. E. Fitz Gerald; 39; Residence, Austin, Texas; Auditor and expert Accountant, Railroad Commission of the State of Texas.

Q. How long have you occupied your present position?

A. Since June 1st, 1909.

Q. Prior to this work that you are now engaged upon, in what were you engaged?

A. I was in the railroad service, with the H. & T. C. R. R.

Q. How long have you been engaged in railroad service?

A. 24 years.

Q. I wish you would give a brief history of your railroad service, mentioning the earliest, and follow it through to your present position?

A. In June, 1885, I entered the railroad service in the accounting department of the G. H. & S. A. R. R., at Houston, Texas, as an office boy, and my service has been in that department continually ever since, occupying positions, as voucher clerk, general bookkeeper, and chief clerk, in charge of general and disbursement accounts.

Q. With what railroads have you been connected?

2661 A. With the Southern Pacific interests, from June, 1885 to I think about 1890, and from 1890 to 1894, with the San Antonio & Aransas Pass Railroad at San Antonio, and from that date, I was with the H. & T. C. Railroad, and I then afterwards worked again with the Southern Pacific interests, and returned again to the H. & T. C. Co., my last service being with that Company.

Q. I believe you stated all your service has been with the Accounting Department, of these railroads in different capacities?

A. Yes, sir.

Q. Has your work in the railroad service, and with the Texas Railroad Commission made you familiar with railroad accounts, and have you made a study of that subject?

A. Yes, sir.

Q. What is the scope of your work with the Railroad Commission?

A. The principal work is in the nature of compiling statistics, and examining the records, verifying any data that the different railroads might be called upon to furnish for our use.

Q. Are you dealing with railroad accounts in this position?

A. Entirely.

Q. Have you made any study and investigation of the question

of dividing expense accounts in various departments of the railroad, work, between state and interstate traffic?

A. As between state and interstate traffic, not to any great extent. The question has never come up very much; in fact, I never knew it to come up before while I was connected with the railroad service, The only division being required as to traffic being between freight and passenger service.

2662 Q. Have you, since you have been with the Commission, had occasion to examine the questions of state and interstate relations and the separation of their work?

A. Not to any great extent.

Q. Are you familiar with the various bases of divisions of railroad expenses, ton mile, car mile, train mile, etc.?

A. Yes, sir.

Q. In this case, the plaintiff railroad companies have sought separation of their state and interstate business, and have obtained the revenue from each of those classes of business separate, and have the gross expenses of the State of Arkansas ascertained for a given period, and are seeking to divide those expenses between state and interstate traffic, in proportion that the revenue state and interstate, bears, what is known as the revenue theory of dividing expenses. Are you familiar with that theory of division of expenses?

A. I have given it some consideration.

Q. I wish you would state your opinion of that method of ascertaining the expenses of state and interstate traffic?

A. I would say the revenue theory appears to me to be exceedingly erroneous, in view of the fact that the operating expenses of a railroad bear little relation to its income or revenue derived from traffic. For these reasons, 1st, the preponderance of expenditures being apportioned as a whole, *giving* on a basis irrespective of revenue coming in, making the expenses largely independent of the amount of traffic, the constant expenses being considered as an average, we will say, about 60%. Second, it is a well known fact that the actual

2663 cost of service is more often disregarded in arriving at rates, the same being based frequently on other conditions, such as competition or commercial conditions, industrial developments, etc., without any consideration to the distance of the haul. In my opinion, the revenue theory would not be a fair basis under these conditions.

Q. In addition to the reasons that you have given, I will ask you what relation if any, exists between the rates or revenue, state and interstate, that would make the revenue derived from each of those sources a proper measure of the cost of the service?

A. I don't see where the revenue would make it a proper basis for the very reasons enumerated, that these considerations are not given in making the rates.

Q. Have you examined the exhibits in this case, that have been filed by the state with Mr. Wharton's deposition?

A. Yes, sir.

Q. I wish you would express your opinion as to those exhibits,

as to whether or not they show a proper division of the expenses between state and interstate business?

A. The basis prescribed, as a whole, seems to be, in my opinion, those which will bring about an exceedingly close approximation of the actual conditions. The use of a train, engine, car and ton mileage, as adopted for the respective accounts, appear applicable in a great many instances. The use of one in favor of the other is a matter of opinion, even though the results obtained might be, and are, very often practically the same. The obtaining of
2664 actual costs of local and through train and engine service, and then applying the ton mileage, is in itself, bound to bring about very nearly the exact conditions as to the expenses applicable to each class of traffic. The arbitraries assumed appear on their face, to be very conservative. An experience- operating official could, however, more definitely analize and explain the occasion for some of them than I could, owing to the limited investigation or consideration that has been afforded in the examination of this exhibit.

Q. By those arbitraries, you are referring to this 50% engine mileage, and these other matters that have been referred to?

A. Yes, sir.

Q. Now, take up some of this detail. Have you got a copy of this exhibit before you?

A. Yes, sir.

Q. Turn to "K" please, maintenance of way and structures, the proportion of these expenses applicable to freight business as shown by statements in this case, submitted by the Companies, has been divided between local and through train service on the basis of the total engine and car miles of each class during the month of October, 1907, that month being considered representative of the business for the six months ending December 31, 1907. In arriving at the number of engine and car miles we have added 50% to the engine mileage of local trains for station switching, and I assume that each engine mile was equivalent to 2½ car miles. You see the basis of that is the car mile of each class, with these additional allowances
2665 for engine miles of local trains, and for weight of locomotives. I will ask you your opinion of that method of dividing the maintenance of way and structures?

A. I would say that the total engine car mileage, is, in my opinion, practically the closest approximation that can be arrived at. It is practically equivalent to the gross ton miles which is frequently used.

Q. Is this the accepted basis for dividing expenses of car mileage?

A. Yes, sir, it has been in my experience; the engine mileage is especially applicable to maintenance of way expenses.

Q. Attention has been called to the fact that the proportion—probably a large proportion of the maintenance of way and structures expense is due to other causes than the running of trains, wind and water and things of that kind. I would ask you what effect, if any, that should have upon the division of this kind of car mileage basis?

A. I should say that the accounts or other parts of the service that are affected by other elements would, in nearly every instance, or in

a great many instances, be placed there, you might say, for the benefit of the train service indirect, and should therefore fall thereon.

Q. Your idea is, I gather, that it is for the use of the trains?

A. Yes, sir, in other words, in my experience, I have never had it brought out that there should be any difference between—any great difference between those two elements; that it is accpted as a general proposition that the entire maintenance of way expense
2666 should be practically considered the same. In practice of railroads I have been with, they follow that theory.

Q. You would think then, there should be no difference made between expense that is caused by the wear of the train, and that caused by the operation of the locomotives?

A. Not a great deal, no.

Q. We have to take the use to which that track is put, in order to find out the expense that will appertain to each class of service on it.

A. Yes, sir.

Q. Take this next account of maintenance of equipment, what do you think of the locomotive mileage and car mileage basis used in the ascertainment of the expense under that head, between local and through trains?

A. I would say the engine mileage and the car mileage is the basis that is generally used by all railroad companies, in arriving at their cost of performance of locomotives, and train and car service, and it seems that those bases are really what bring about, in the greatest measure, the necessity for repairs to the locomotives and cars.

Q. I call your attention to the division of expense under that head, freight cars; the accountants have recognized the additional item charged to the repair of freight cars, that has been reached by Mr. Wellington in his work on "Railway Location." I will ask you if you are familiar with that work and know whether or not
2667 it is a standard work, and accepted among railroads?

A. I understand that it is generally recognized as a very good work.

Q. Have you any knowledge upon which to base an opinion of your own, aside from Mr. Wellington's work, on that subject, as to what would be the proper percentage to allow for these items that are referred to under that head?

A. No, I hardly think I would be qualified to pass an opinion as to the division that might be made on this account, it being more largely of the departments of physical operations, I should say. However, I would imagine that would be a very conservative addition to it, and would cover the results that you seek to obtain.

Q. The next item under that is supervision in general, paragraph "C". I call your attention to the method of dividing that expense into local and through service on the basis of direct charges for maintenance of equipment, and I would ask your opinion as a railroad accountant on that method of dividing supervision and general expense—"C", page 3.

A. I would say that the plan followed here seems to me to be the most equitable that could be obtained; it follows the theory of

what is termed general shop expense; general shop expenses are distributed in a way over the accounts that are affected, and this supervision in general is practically, as I would take it, on that same theory.

2668 Q. Is that considered a sound theory in accounting practice?

A. It is so considered, and has been adopted by the Interstate Commerce Commission.

Q. Is it in force in business affairs as well?

A. I have never had any experience in business affairs, but from conversation with accountants in commercial enterprises, I should judge they follow that rule to a greater extent than the railroad companies do.

Q. That same method is followed throughout these exhibits, for all supervision in general, and for general expense, and your answer in regard to this particular exhibit, head, is applicable to all that particular class of expenses?

A. Yes, sir, I think so.

Q. Don't the railroads, when they do work for another railroad add a certain percentage, say 10%, for supervision and general expense?

A. Yes, sir.

Q. That is common practice?

A. Yes, sir.

Q. And they charge it in proportion that the direct costs are apportioned?

A. Yes, sir.

Q. The next I find is traffic expenses; these are divided on the straight revenue basis; although accountants state in their opinion, that this unduly burdens the intrastate business, owing to the fact that a considerable portion of the traffic expense is incurred in an effort to secure competitive business, while it is well known

2669 that intrastate business is largely non-competitive; this was used by the railroads in their evidence and it has been used by the State. I will ask your opinion upon that as a division for dividing traffic expenses?

A. The division of these expenses as a whole, upon the revenue basis, on the ground that no other basis is as near applicable, results in unduly burdening the state traffic with expense, while known from their nature to be directly chargeable against interstate service. Therefore, it will appear, we should first locate those heavy expenses directly incurred for interstate service, and such as foreign agencies, traffic associations, industry and emigrant bureaus, etc., and then proportion the balance on the basis of local and through revenue, train mileage, as being the nearest unit reflecting the results obtained by the energy applied.

Q. Do the railroads, at the present time, keep their books in such shape that a division could be made along the lines that you have suggested?

A. Yes, the classification of operating expenses brings out largely these foreign agencies that I speak of, that in my opinion should

be considered entirely for the benefit of interstate service. I have heard of instances where they claimed a foreign agency, an outside agency we will call it, has, to some extent, pertained to state or local traffic, but I think such instances are something like Halley's comet, they are few and fair between, even more so than that
2670 comet, and I think for that reason all the railroads could very easily, for approximation, consider these outside agencies located off the line where the expenses are very great too, consider them as being applicable to interstate service, that it would be sound accounting.

Q. Your objection to this division is that it charges too much to the state traffic?

A. Too much to the state traffic, when it is a well known fact, I believe almost any accounting official would say, that the majority of the traffic expenses are for the interstate business.

Q. Almost any basis you would take, short of the separation of accounts, as you have indicated should be done, would be subject more or less to the same objection that the revenue objection would be there, wouldn't it?

A. Yes, after locating these heavy charges, the balance that would remain, would, in my opinion, be so small that almost any basis you would apply would not affect results to any great extent,—that is, the results of the total operating expenses.

Q. Turn to the next head there, transportation expenses, I call your attention to the fact that they have made an allowance there, under the heading of station expenses, a double number of intrastate tons, in order to provide for two handlings of intrastate traffic, and one handling of interstate traffic. I will ask you to express your opinion on that division? That is "A" under 4.

A. I should say that it is certainly a very conservative esti-
2671 mate, and if anything, it takes care of the extra expense that might be applicable to station service on that account.

Q. In that connection, I want to call your attention,—from the evidence in these cases, introduced on behalf of plaintiff railroad companies, that is, that cotton, which has a large movement in Arkansas, and is all interstate traffic, has three handlings, usually taken up on the way train to compress points, and there compressed, and re-loaded after compression, and shipped to interstate points, and also that grain, which has a large movement in the state, is shipped into the state principally on milling and transit rates, and shipped out of trade centers, most generally on way trains to point of destination, and is usually an interstate shipment, and would have three handlings; should those matters and others of like nature be considered in determining the amount of station handlings?

A. Yes, sir, I should think it would be necessary to consider them very largely; taking those facts in consideration, it would necessarily follow that this condition should be reversed, wouldn't it? That these extra handlings should be charged in that instance to interstate instead of intrastate traffic.

Q. On the other hand, there is evidence here that there is a large trans-state movement, which would not receive so much handling;

it is a class of interstate traffic. I believe about 51% of the
2672 Iron Mountain traffic is trans-state. Would that receive less handling than other interstate traffic?

A. It would to a certain extent, especially so far as way service is concerned.

Q. There is another piece of evidence in the case in that connection, that I call your attention to also, and that is traffic in and out of Memphis and Fort Smith is interstate traffic and has two handlings within the State, owing to the geographical locations of those two cities; I will ask you if that is a factor also to be considered in determining the amount of station handlings?

A. Yes, sir; I should think so.

Q. The next item to which I call your attention here, is hard and terminal expense. These are divided in local and through business, on the basis of the number of cars handled at terminals, as explained under the head of maintenance of yard locomotives. What is your opinion of that method of dividing yard and terminal expenses? That is paragraph "B", on page 4.

Q. The basis of handling terminal expenses,—dividing, I should say terminal expenses on the number of cars handled, appears to me to be the most applicable that can be found. In my experience of handling different terminal accounts, I found that in a good many instances, other bases had been obtained or arrived at, you might say, with different companies, more for the reason that probably one company had certain advantages; that is, they might want to
2673 sell, but generally they were all equally interested; it is a practice to divide the expense on the basis of cars handled.

Q. You refer to joint terminals when you refer to the advantage of one road over another?

A. Yes, sir, joint terminals owned by one road.

Q. One making a profit off its terminals?

A. Yes, sir. In those instances, car mileage per car handled would probably be cast aside for any arbitrary basis that they might desire to put in.

Q. But where you were going to divide two classes of traffic of the road itself, what do you think of this method?

A. I think that it is equally applicable as it would be in using that basis for division, where the roads have the same ownership in the terminal, where they seek to obtain the actual cost and that is the object. In other words, where the ownership is equal, there is an endeavor there, by using the number of cars handled, to obtain, as near as possible, the actual cost to each, and if it is used for that purpose, it certainly can be applied as between two classes of traffic.

Q. The next heading to which I call your attention, is engine house expenses "D" on page 5; these are divided between local and through service on the basis of engine miles of each class of service during the month of October, 1907, assuming however that the local engines required 12% more engine house service than other engines and this basis is based on the average engine run in
2674 the two classes of service. I will ask your judgment of the fairness of that division?

A. That seems to be about the most applicable that can be reached.

Q. Now "F," other train expenses, divided between local and through, in proportion to the train miles of each class of service; what do you say about that?

A. I would say that is about the nearest applicable unit in that respect.

Q. Turn to page 7, the method of dividing train cost, the total ton miles, of interstate and intrastate freight handled during the period,—divided between local and through service, and the train cost is divided between intrastate and interstate in proportion to the volume of traffic of each account handled in each class of service. I will ask you your opinion of that method of arriving at the proportion assignable to state and interstate business.

A. After obtaining the total cost of freight service, I should say that the ton mileage would be the nearest unit applicable. The difference in the cost of service of the different classes of freight, as a whole, would be comparatively small.

Q. You mean by classes, state and interstate?

A. Yes, sir, and the next thing to obtain would be the nearest unit, caused by any fluctuation in those expenses.

Q. I gather from your answer, that your idea is that the two classes, state and interstate, move together?

A. Yes, and the other expense is practically the same. The only exception being the yard and terminal expenses, that
2675 are a very small proportion of the whole, so that when we take the total operating expense and arrive at the cost per ton per mile of handling, why there would be a very slight difference in the cost of through service.

Q. Those differences in cost have been taken care of before they reached that point?

A. Yes, sir.

Q. I infer from your statement, that you recognize the difference in the cost of handling intrastate freight business being more expense, and I will ask you if in your opinion, all those elements of extra cost have been properly taken care of and allowed in this method of dividing expenses.

A. Yes, I think they should be more than taken care of.

Q. In other words, you think the allowance has been too much for the interstate?

A. Yes, sir.

Q. Take up the passenger business, without going into the detail of it, you are familiar with this method of division here, I believe, about the only difference is they don't carry any division between local and through trains, but it is carried more on difference in equipment; the division is made on that between engines, coaches, mail and express, Pullmans and so forth; I ask your opinion of that method of arriving at a division of expense?

A. I should judge that that is an element that certainly
2676 should have been considered, and giving it the consideration you have, it takes care of the differences that might arise in handling of that service.

Cross-examination.

By Mr. MOORE:

Q. What did I understand you to state your relations with the Texas Railroad Commission to be?

A. Auditor and expert accountant.

Q. And what is the character of work done by you in that capacity?

A. Principally the compilation of statistics from returns made by the railroad companies, and investigations or verifications of any data that they might furnished when called upon in connection with any case we might have before us for hearing.

Q. How many railroads have you in Texas, in a general way of course, I mean?

A. Our last report showed that there were 86, my recollection is, 86 railroads recognized as common carriers.

Q. Do you remember about what their total mileage is?

A. No, I don't recall it; I have the report, I can get it.

Q. There is no use of that, the number of railroads and mileage operated in your state, keeps you pretty busy in your making compilations, does it not?

A. I can give you an idea as to the mileage; there is some-
2677 thing like thirteen or fourteen thousand miles of straight main line mileage.

Q. The extent of railroad business in your state, keeps you pretty busy, doesn't it, making compilations from reports and so on, that you mentioned?

A. Yes, sir.

Q. Where do you do your work?

A. At Austin.

Q. At the office of the Commission?

A. Yes, sir, office of the Railroad Commission in the State capitol.

Q. Your work consists in working up and making compilations of the statistical information that comes in their reports of these various railroads?

A. Yes, sir.

Q. I believe you began your career, you say—you might say your industrial career—in 1885, in connection with a railroad in Texas?

A. Yes, sir.

Q. What was the capacity you worked in then?

A. At the bottom of the ladder as office boy.

Q. You began with the Southern Pacific?

A. Yes, sir.

Q. How long were you with them?

A. I might say that these roads I have enumerated here are practically all Southern Pacific interests; they all adopted the same plans and principles in accounting. I have practically been with that system all the time.

2678 Q. How long did you remain in the capacity of office boy then?

A. I think four or five months.

Q. Then what were you promoted to?

A. I took a minor position as clerk.

Q. In other words, what I want you to state is the various duties performed by you in this work, and the character of experience you obtained in this service; take them up one at a time. Your first employment was with the Southern Pacific in 1885; how long did you remain in that employment.

A. From 1885 up to 1890, that would be five years.

Q. What were your duties during that period of five years, that is what I want you to describe.

A. I was voucher clerk, and assisted the general book-keeper.

Q. How long were you voucher clerk?

A. My recollection is, probably about two years of the time.

Q. What were your duties as voucher clerk?

A. Recording of vouchers, and making distributions of them.

Q. What were your duties as assistant book-keeper?

A. Handling what is termed in railroad offices the sub-ledgers, pertaining to accounts with individuals and companies and other roads, covering their traffic settlements.

Q. That brought you down to 1890?

A. Yes, sir.

2679 Q. Then you went with the San Antonio & Aransas Pass Road?

A. Yes, sir.

Q. How long were you with that road?

A. Four years.

Q. What were your duties on that road?

A. General book-keeper the entire time that I was there.

Q. I suppose the duties of book-keeper of a railroad are somewhat similar to those of any other commercial enterprise, are they not?

A. Yes, sir.

Q. And you left that, you went to the Houston, Texas & Central Railroad, did you?

A. Yes, sir.

Q. How long were you there?

A. I was with them a few years, and then went with the Southern Pacific; I was in charge of the general and disbursement accounts,—chief clerk in the office.

Q. In charge of general and disbursement accounts, what were your duties in connection with your office?

A. My duties in that respect were of a supervisory nature, over the entire department; that is over the general books that I have enumerated previously, and the disbursement department, embracing the handling of vouchers and pay-rolls, and statistical data compiled from records showing the operating expenses and earnings.

Q. Did you have any duties to perform in the way of dividing

operating expenses as between the different branches of the service?

2680 A. Not at that time.

Q. Your duties were to keep records of what came in?

A. The actual facts.

Q. When did you go from the Houston, Texas & Central, from that employment to the Southern Pacific?

A. I think in about 1901, that I went with the Southern Pacific at Houston.

Q. How long were you with that Company?

A. About two years.

Q. What were your duties there?

A. In compiling statistics principally; that is where I had the experience of making the division of earnings and operating expenses, as between the freight and passenger service; that is where I had the actual experience of working at that.

Q. What do you mean by actual experience in dividing earnings between passenger and freight; did you say the earnings?

A. I mean the actual experience in doing the work, calculations.

Q. In other words, your experience was in clerical work?

A. Yes, sir.

Q. You had nothing to do beyond working up the figures?

A. No, sir, I will say, however, that doing that clerical work, that in schedules that were prepared for the different bases in a good many instances, the reasons given were assigned, so as to make any one thoroughly familiar with the reason why the work was performed in that way.

2681 Q. Did you acquire a general knowledge as to the methods of dividing between the freight and passenger branches of the service?

A. Did I acquire any knowledge?

Q. A general knowledge of the methods adopted by the railroads throughout the country?

A. Yes, I would say I had a general knowledge.

Q. When and how did you acquire that?

A. At this time.

Q. What is the system or the method used on the Missouri Pacific system of railroads?

A. My recollection is that they use the revenue train mileage basis; of that, I am not however, sure. In some instances, the engine miles; in some instance the car miles.

Q. What is it they divide on that basis?

A. You asked me if they divided the freight and passenger; that was your question as I understood it.

Q. What are you referring to now, revenue or expenses?

A. I understood you to say the expenses.

Q. How do they assign the revenues between those two branches of the service?

A. Between freight and passenger?

Q. The passenger?

A. The revenue very largely shows for itself.

Q. Does it altogether?

A. Not entirely.

Q. What proportion of the revenue is it that is not self-divisable?

2682 A. That would be a very small proportion, I think.

Q. What part, please, of the service?

A. I would take it, the principal part would be the miscellaneous revenue.

Q. What is miscellaneous revenue?

A. Revenues that are obtained, we will say, from rents of buildings, and earnings from the sale of privileges at stations, and things of that character.

Q. How is that divided between freight and passenger service?

A. I don't recall right now what rule is followed generally. Most roads have different usages, and a good many of them don't attempt any division in miscellaneous.

Q. It must be done in some way; it must be charged somewhere, to some account, in order to keep up the method of bookkeeping, wouldn't it?

A. My recollection is some of the roads use the revenue basis on that; the proportion between freight and passenger revenue.

Q. Divide it on the earnings basis?

A. Yes, sir.

Q. Isn't that the pretty general rule in the absence of some other——

A. Yes. I believe it is.

Q. Now, that is a pretty considerable item too, on some large roads?

A. Yes, it is quite an item.

Q. Is there any better method that you can think of for dividing that, than that manner; understand, it is incapable of divis-

2683 ion except in some arbitrary manner, do you know of any better method than that?

A. No, as far as earnings is concerned, I believe the dividing of earnings on earnings is about as close an approximation as you can get.

Q. We are speaking now of expenses; is it indivisible in any other way?

A. Yes, in a general way between freight and passenger.

Q. When you went back to the Houston & Texas Central from the Southern Pacific service, what time was that?

A. In May 1903.

Q. What duties did you discharge with that road, from that time on?

A. As chief clerk in general and disbursement accounts, practically in the same position that I had held previously.

Q. You were brought very little in contact with divisions, I suppose?

A. Yes, except at this later date, the company had gone into then, the more extensive manner of working up statistics, showing these divisions between freight and passenger, as we had not done when I was first connected in that capacity.

Q. Were your duties with regard to them, were they the same as they had been before, in recording and entering and of a clerical nature?

A. Yes, sir, except that they were more extensive than before we had established these statistical bureaus.

2684 Q. There was some more minute divisions, I suppose you mean, the division extended perhaps in more directions?

A. Yes, that is what I mean.

Q. The duties were multiplied in that way?

A. Multiplied by having compiled statistics of this character that we had never had before.

Q. Your duties were of the same nature, carrying out in a clerical way, the rules, whatever they were, that you found established there?

A. The rules we found established there, and the rules that we made from our own notions, based on the conditions as we saw them.

Q. What were your methods in freight and passenger divisions I would like to have you state it in a general way?

A. The method was the engine mileage, and train mileage and car mileage.

Q. What did you divide on the basis of engine mileage?

A. Principally the maintenance of way expense, and then under maintenance of equipment, locomotive expenses.

Q. And on the car mileage, what did you divide on car mileage?

A. The principal expense there represented is the repairs of cars.

Q. What were the other units you mentioned, that is the engine and car,—what was the other?

A. Train mileage.

Q. Revenue train?

A. Yes, sir.

2685 Q. And what was divided on that basis?

A. The revenue train mileage was applicable mostly to transportation expenses and general expenses.

Q. What is the length of that road, the Houston, Texas & Central?

A. 791 miles, is my recollection.

Q. What is its termini.

A. Houston to Dennison, that is considered the main line.

Q. What are the different kinds of expenses embraced in maintenance of way and structure accounts?

A. Mostly repairs of roadbed, and track, as bridges and buildings, fences, road crossings.

Q. What is it that produces the necessity for a large amount of repairs, of that kind, is it produced by wear and tear of passing of trains or from other causes?

A. I should say, an operating official would be better able to answer that than I could; I would imagine that wear and tear would be the principals.

Q. You would imagine wear and tear would be the principal causes of the necessity of repairs?

A. Yes, sir.

Q. You don't profess to be an expert on that subject?

A. No, sir, I would just answer that generally.

Q. Is it on that idea that you think that the expense should be divided on the basis of the total engine and car miles?

A. Yes, sir.

Q. That is the reason why you think so. I want you to tell me your reason for thinking that any per cent at all should
2686 be added to the engine mileage of local trains, and for what purpose it should be added? Why do you think that is proper?

A. I testified in respect to that, that I did not feel qualified to be able to state any reason for such addition, that in a general way, that would be considered right.

Q. You would have no independent opinion based on your own experience of that?

A. No, sir.

Q. You never operated a locomotive, did you?

A. No, sir.

Q. All your knowledge of locomotive operation is from keeping books in the office, I suppose?

A. Yes, sir.

Q. Do you feel qualified from any experience you have ever had, in connection with railroads, to form an independent opinion of your own, as to what would be a proper basis of dividing the expenses incident to locomotives, locomotive repairs?

A. Well, it would only be based on the practices that I have seen followed.

Q. That is what I mean?

A. Those practices that have been followed—reached after consultation with officials of the operating department.

Q. And whatever opinion you have of it is based upon your belief in the competency of others who were more familiar with the subject, to adopt proper methods? That is a fact?

2687 A. Yes, sir, and the practices I have seen.

Q. And it is not based on your judgment, derived from your own experience?

A. I have had no experience in that line, to arrive at any judgment.

Q. You wouldn't have an independent judgment of it, outside of the practices upon which you say you based your opinion, would you?

A. No, sir.

Q. Now, for instance, in making up the statement I had before me, to which your attention has been called, 50% has been added to the mileage made by yard locomotives, to provide for possible extra maintenance due to yard service, and then 50% more has been added to the mileage of road locomotives in local service to provide for possible extra switching mileage, and then again, 50% has been added to that switching mileage, to provide for possible extra maintenance due to switching service, being in the main 75% additional. If you were called upon to make a division of that, and to make provision for any extra service based on any knowledge

that you have as to the incidents of the service, you couldn't do it, could you?

A. I could probably do it if I had opportunity to give it sufficient time and study to look into different conditions.

Q. You haven't had that up to this time?

A. No, sir, not in this case.

Q. And for that reason, you wouldn't feel qualified to say whether that basis is correct or not, without having an opportunity
2688 to give it more investigation and study than you have up to this time?

A. Yes, sir.

Q. You say you would or would not?

A. I would not want to qualify.

Q. Have you made any study of Mr. Wellington's book of "Railway Location"?

A. No, sir, I have not made any particular study of it.

Q. Have you read the book through?

A. I have read the book, part of it.

Q. How long ago was that book prepared?

A. The edition that I saw was first prepared way back, I think in 1881 something like that; it has been brought down to more recent date though.

Q. You spoke about new methods that were adopted by the Houston & Texas Central Railway when you went back there the second time; they involved a good many changes in the method of dividing and proportioning these expenses, didn't they?

A. I won't say they made any cha-ges, because they have never had any system of division before that time, at all.

Q. When was that, the period you speak of, when you went back there?

A. 1903.

Q. At the time Mr. Wellington wrote his book along about 1880 or 1881, somewhere along there, there wasn't really any general method adopted and there was very little experience in determining, among railroad officials, in making divisions of that sort.

A. This did not have reference—at least, Mr. Wellington's
2689 book has no reference to divisions between classes of service.

Q. I understand that this quotation from it does not, but what I want to know is whether these divisions were recognized and adopted, whether railroad officials had experience in making them, at the time that book was first prepared by Mr. Wellington, without regard to whether he treated of the subject or not. I want to get information as to whether that method was in effect at the time he wrote that book?

A. I should say, from what I have read that at that time, probably there was methods observed of division.

Q. I misunderstood you then, I thought you said there was no method.

Q. You asked me directly in respect to the line I was with—at least, I understood it that way.

A. Have you any idea from your reading of Mr. Wellington,

upon what he based this statement of 21.5% of the repair expenses of freight should be allowed, and that on account of starting and stopping at way stations, 13.5%, on account of terminal handling.

A. No, I didn't give that any particular study.

Q. You don't really know what ground he bases that on, do you?

A. No, sir.

Q. What do you understand, from your own knowledge and information, to be the difference in the amount and extent of terminal handlings, that is, between through and local trains, and traffic that is carried on through and local trains?

2690 A. The difference in the terminal handlings?

Q. Yes?

A. Well, I don't feel able to qualify to be able to enumerate any differences that may occur in handling of traffic at a terminal, other than to state my belief in a general way, that is practically more at a terminal for handling local service.

Q. What is that opinion based on?

A. Based a good deal on conditions as I have observed them, I would say.

Q. What have been your opportunities of observation in that respect?

A. Visiting around at stations, seeing trains made up.

Q. Do you mean visiting stations in an official capacity?

A. In both.

Q. What occasions have you had occasion to visit them in that way?

A. I have had occasion to go to stations for the examination of their accounts, and verification of agents' accounts.

Q. What opportunities on such visits did you have to observe the method of handling trains, and any differences that might exist as between the two classes of trains?

A. Only in a general way.

Q. Just as any other passer-by or person who happened to be there might observe it?

A. Yes, sir.

2691 Q. What character and different kind of expense—expense of maintenance of way—is included under the item of "supervision and general"? It is near the bottom of the page on exhibit K.

A. Under "maintenance of equipment"?

Q. Yes. Tell me the different kinds of expenses included in that. What are the different kinds of expenses embraced under the sub-head of "supervision and general"?

A. Well, not having compiled this exhibit, I would not be able to state what is included in that item. I would have a general idea, taking the classification of the Interstate Commerce Commission, what it is intended to cover. I can give you that if you want to take the classification.

Q. What is meant by the term "direct" charges for the "maintenance of equipment" used in that connection?

A. I would understand that to mean the charges located, direct to any particular account.

Q. I do not know that I understand what you mean by "located to any particular account"; make that a little more definite and tell me what you mean by that, please.

A. I would mean by "located to a particular account" for instance, the repairs of freight cars being located directly to the account covering the class of "freight car."

Q. Speaking of that, can you locate repairs to freight cars as between local and through trains?

A. The only basis that they have followed is by taking
2692 the car mileage of cars in a local train in proportion to the cars in the through train.

Q. What is it that produces the necessity of repairs of freight cars?

A. The particular necessity is the wear and tear occasioned by the distance that these cars travel. That is the greatest element.

Q. One of the elements, then, is the length, you might say, of the journey the cars make?

A. Yes, sir.

Q. Now, I suppose another one is the weight of the car and its contents—the weight of the contents.

A. Yes, that would have an effect.

Q. What would be the difference, or would there be any difference in your judgment, in the wear and tear upon a car hauling sixty tons of freight and one that is hauling five tons.

A. There is bound to be a difference, but it is unlocatable from the fact that the car may today be in the service of carrying sixty tons, and may be tomorrow it may get a rest and carry five tons. It would be hard to locate any great difference.

Q. If either branch of service is characterized by a heavier loading, that is to say, if the cars in the local trains were twice as heavily loaded as the cars in the through trains, or vice versa, as a
2693 rule; and if the loading of the cars effects to any extent the wear and tear, would you think it proper to make an allowance on that account?

A. Well, an allowance might be considered, but it would be so small that I do not think for the purpose of an approximation it would be necessary.

Q. You recognize this simply as an effort to approximate: you do not regard it as anything more?

A. An effort to approximate it.

Q. What is included in "station expenses" under the head of "transportation expenses" referred to in this exhibit on page 4?

A. "Station expenses" as this term applies here, would include the wages of agents and their clerks, warehouse watchmen, laborers, operators——

Q. If a large proportion, say one half of the tonnage of one or both of the railroads which are engaged in this litigation, should be of a character that did not require that service, do you believe that the method of division adopted here would be correct?

A. Under those circumstances this would not apply.

Q. What is "yard and terminal expense" under the general transportation head?

A. That generally includes the expense of the switching engine; switching crew; fuel and supplies for the engine.

Q. That is divided on the basis of the number of cars
2694 handled?

A. Yes, sir.

Q. Suppose the character of service rendered to the cars engaged in different classes of traffic were materially different, and that difference ran through and characterized the classification as applied to the cars engaged in the traffic; would the number of cars handled properly reflect the difference of the expense?

A. As near as could be obtained.

Q. Possibly as near as could be obtained, but would it correctly reflect the relative expense?

A. It would be such close approximation that there would hardly be any difference——

Q. Just to illustrate: suppose we take a case of two cars: one of those cars is handled simply by detaching it from one train and attaching it to another; practically one movement.

Another car would require three movements maybe:

Would you say that it would be correct to apportion the expense incident to that part of the service between those two cars on an equal basis? Just simply to say, here are two cars and we will divide it equally between them.

A. Not if those were the actual conditions that existed in connection with each car.

Q. What are the elements that enter into and control the relative consumption of fuel and engine supplies on different roads?

2695 A. I would say that the length of run of the locomotive would be one of the elements. The capacity of the train would no doubt have another large effect on it.

Q. In what way would those considerations affect it?

A. The fact of the train running a greater distance, I think even to the layman's mind, would bring about the additional consumption of fuel.

Q. Those things, I suppose, differ on different lines of road, too, do they not?

A. Oh, yes.

Q. What is your observation or do you know about the fact of their being a difference in the character of service in the respect mentioned by you on different lines of railroad.

A. I do not feel qualified to make any statement in respect to that, hardly.

Q. Would you feel that you could ascertain and determine the relative consumption on one line of road by ascertaining what the relative consumption had been on another line of railroad at a different time, for a different period?

A. I do not know that I could. I think an operating official could.

Q. Do you believe that would be a fair basis of determining the question as to the road upon which the——

2696 A. If any one making the assertion that the conditions are the same would be thoroughly familiar with the conditions in each instance, I would imagine that would be satisfactory.

Q. It depends on conditions of that sort, I suppose?

A. Naturally.

Q. Do those things vary at different periods on the same line of railroads?

A. I should judge they would.

Q. You would have to assume, in order to take on the same road the consumption at a given period—you would want to test it by the same period, at least by a period when the character of traffic with reference to the volume that entered into it was similar, would you not?

A. Yes, to obtain results, I would.

Q. It would be still more important, would it not, in testing one road by the performance on another, to know that the conditions were similar, would it not?

A. It certainly would.

Q. What are the heavy traffic expenses which you think would be chargeable entirely to interstate traffic.

A. Principally the outside agencies, termed "foreign agencies" located off the line of railroad—take, for instance, a line running through Arkansas that would have a large Eastern agency in New York, Philadelphia, Pittsburg—manufacturing centers where they maintain large, and frequently very expensive offices, to obtain traffic for these lines.

2697 Q. You assume, I understand, that the service rendered by those foreign agencies have no effect upon the intrastate traffic and base your view upon that assumption: is that correct?

A. That is the idea.

Q. What are the duties, generally, of these foreign agents?

A. I would say that is their principal duty, the soliciting and obtaining of traffic.

Q. You mean by that, traffic that goes—we will say from one section of one State into another section of the country or state.

A. Traffic that practically goes from the territories that they represent. They represent territories in these manufacturing interests.

Q. Let us assume that each of these railroads engaged in this litigation have an agent in Chicago for the purpose of soliciting traffic: that agent will solicit traffic that will probably be carried from Chicago to various points in Arkansas?

A. To various points in Arkansas and even beyond.

Q. We will say the State of Arkansas.

A. Yes, sir.

Q. And, on the other hand, he will solicit traffic that will involve a movement from Arkansas to the territory which he repre-

2698 sents his companies in: that is true, too, is it not?

A. To some extent, yes, sir.

Q. Do you say that the traffic that is influenced in that way does not affect intrastate business in the State of Arkansas?

A. It is interstate business if it moves from this territory into Arkansas and it is certainly interstate business if it moves from Arkansas into this territory that he represents. I do not see how you can charge it to intrastate in any way.

Q. Suppose you are an agent of the Cotton Belt Railroad in Chicago and you are able to influence a shipment of one hundred car loads of freight to points on that line in the State of Arkansas: after that freight is carried to Arkansas what becomes of it?

A. After it is carried into the State of Arkansas?

Q. Yes. Is it not distributed on local trains and to local points in the State?

A. Not necessarily on local trains; or, or at any rate, it would not be considered local traffic regardless of the train it was on. It would be interstate traffic regardless of the distribution after it reached Arkansas.

Q. So you do not think it affects the local business at all?

A. No, sir.

Q. Have those agents any other duties to perform besides
2699 soliciting freight?

A. That is the principal duty. I doubt if they have any other.

Q. Are there agents for the purpose of soliciting immigration into the State and procuring industries to be located in the State?

A. Yes, sir.

Q. Do they have any influence on local traffic in the State?

A. Not as far as this foreign agent is concerned.

Q. You do not think that should be made a charge on intrastate traffic?

A. No, sir.

Q. I want you to explain to me, Mr. Fitzgerald, what you understand the method is of dividing train costs adopted in these exhibits; just explain to me, please.

A. As I understand it, they have obtained the actual cost of the local and through trains. They have apportioned that to intrastate and interstate on the basis of the number of tons carried, of each respective class of freight.

Q. In other words, it is apportioned between state and interstate business on the ton mile theory, is it not?

A. On the ton mile theory.

Q. Do you regard the ton mile theory as a proper theory of apportioning the expense of state and interstate traffic?

A. I regard it as the nearest applicable unit that affects
2700 the train service generally.

Q. Is the expense of handling and moving different kinds of tonnage uniform, or is there a difference in the different classes of traffic?

A. Taking the different classes of traffic as a whole, my idea is that moving a ton per mile, there is very little difference as a whole.

Q. Does the length that it is moved have any influence upon the cost per ton per mile of moving it?

A. I should say not a great deal as between the two different classes of traffic for the reason that they are moved on local and through trains. The fact of the two different classes of traffic moving on both classes of trains would bring about very little difference in the final results of the cost per ton per mile, in my opinion.

Q. You know we have problems of this sort on averages to get down to a basis: if you knew that the average length of the haul of the intrastate freights were—we will say fifty miles, and the average length of haul of the interstate was 150 miles, you would take that as indicating the average difference of the service insofar as the length of haul was concerned, would you not?

A. No, as I say, the fact of the different classes of freight moving on both kinds of trains, I do not believe that there would be any great difference.

2701 Q. In the question I asked you we are not dealing with the difference in train costs, but in the difference of the cost of handling state as against interstate.

A. Yes, I understand that.

Q. Now, if the average length of haul of the two kinds of traffic, were as I stated a moment ago, respectively 50 and 150 miles, you think that would not influence the cost of the service of moving the two kinds of traffic?

A. Not when it comes to arriving at the average per ton per mile, no. I do not think it would influence it to any noticeable extent, in the average.

Q. You think the cost would not be influenced, either, by the difference in the character of the tonnage?

A. I do not see why the difference in the character of the tonnage would have any effect, on the same class of tonnage.

Q. What I mean is this: interstate traffic is made up of a great variety of different sorts of commodities and different classes of freights:

The state traffic is also made up in the same way:

What I want to ask you is this: have those differences an effect in determining the relative cost as between the different kinds of tonnage carried in both state and interstate traffic?

2702 A. Yes, I should say they would, if the conditions brought about so that there was a different commodity that required a heavier train expense, it would result in a different average.

Q. Would it cost as much per mile to move a car load of brick one hundred miles as it would to move it twenty five miles?

A. I have never been able to get any cost on the moving of any particular commodities.

Q. How are the rates affected by those two distinctions? would it have an influence on the rates?

A. No, I do not think the rates are governed by——

Q. The rate diminishes in proportion as the distance increases, does it not, in railroad transportation?

A. That does not always govern, the distance.

Q. What is the general rule in state traffic?

A. I do not believe there is any general rule followed. The general rule is to go out and get the business regardless of what you have to—that is, on interstate traffic.

Q. I am speaking of state traffic.

A. Well, in state traffic probably the distance would be considered, of course.

Q. It is a minor quantity, though, is it? Is that what you mean to say?

A. No, it is not a minor quantity; not as much so as in the interstate.

2703 Q. Did I understand you to say that railroad rates were not adjusted with reference to the cost of the service that is incident to the handling of the freights?

A. I would say that generally speaking. I am not a rate man, though, and not qualified to say what the basis of rates are; but generally speaking——

Q. How do they manage to keep railroads running if, they do not have some reference to the cost in adjusting the compensation for the service?

A. Their guesses have been on the right side, I suppose.

Q. Then, you think that railroads are different in that respect than all other industrial and commercial concerns?

A. To a greater extent, yes, than the commercial business.

Q. There is no relation between the adjustment of rates and the cost of the service? Is that what you say?

A. I did not say there was none. I said that it was seldom considered or not often considered.

Q. Then, if it is not often considered, that practically means that the rates are adjusted without reference to the cost, does it not?

A. Yes, sir.

Q. In that respect, would you say that that is true of industrial and commercial business, usually?

A. I have never had any experience in any other line of business. I would not be qualified to say what they do, generally.

Q. What is your idea about a man that is manufacturing brick, for instance, or cloth? Does he not adjust his price somewhat with reference to what the cost is of producing the thing he has to sell?

A. Yes, and he can very likely do that.

2704 Q. Do you think that the railroads disregard in their rates, those conditions that would be regarded by the man engaged in manufacturing?

A. No, I would not say that. I think that as a prime instance, they, of course, consider distance and cost, but they get away from that when they are making rates on a great deal of their business. I do not say that the railroads do not consider that entirely. That would be going too far.

Q. Mr. Fitzgerald, to go back for a moment to that ton mile theory: what is your view as to the relative cost per ton mile of moving or transporting a heavy and dense article—we will say brick

or heavy steel rails; those being articles that are not easily susceptible to damage and in respect to which there is very little expense in the way of loss and damage—as compared with the cost of moving light and more valuable commodities, we will say baskets. Let us compare baskets with a car load of steel rails or brick:

What is your idea of the effect of the difference in the characteristics of those two kinds of freight, upon the expense per ton mile of moving it?

A. There are certain conditions in the movement of one class there that are probably off-set by conditions in the other that it would be hard to be able to tell what the differences would be.

Q. So, in your judgment, when you even it all up, those differences would not affect the fairness of the application of the ton mile theory? Is that your idea?

A. Yes, sir.

2705 Q. You stated in answer to a question propounded to you by Judge Hill, that the arbitraries that were allowed in the exhibits, in this case by Mr. Wharton, provided for the difference in the expense of moving state and interstate traffic:

Please tell me what those arbitraries are that you had in mind in making that statement.

A. Well, these arbitraries here—this is fifty per cent added to local engine mileage in station switching; the engine mileage multiplied by two and one half to get the equivalent in car miles; extra mileage added under locomotive repairs.

This item under freight cars of approximation arrived at by Mr. Wellington.

The mileage added for stopping and starting expense. All the way through here.

Q. Do you think those allowances for arbitraries would cover the difference in the cost of handling that may exist in the expense of handling state and interstate traffic?

A. I would say, at first glance, without being able to study the conditions that exist in each instance, that they appear to me to be fair. That is only in a general way that I would say that.

Q. Have you had sufficient experience in transportation and in the operation of trains to qualify you to judge of that, do you think?

2706 A. No, that is why I qualified my testimony by saying that I believed an operating official could more thoroughly pass on that and explain it.

Q. You do not claim to be competent to pass upon those questions?

A. No, sir.

Q. Mr. Fitzgerald, I understand from your statements that your experience in connection with railroad accounting has been confined to Texas roads, has it not?

A. Yes, sir, it has.

Q. Have you had any experience in dividing expenses between states?

A. No, the only experience I ever had in that respect was the

time that I have shown that I worked for the Southern Pacific, where we had a line in Louisiana and Texas, for which we had to make an Interstate Commerce report. The expenses then were divided arbitrarily, unlocatable expenses being divided on a mileage basis, road mileage and train mileage.

Q. Is that the extent of your experience?

A. Yes, sir, as between states.

Q. Who prescribed the method of division that was adopted in that case? I mean what official of the railroad?

A. I do not recall.

Q. What connection did you have with it, Mr. Fitzgerald?

A. Why, I was voucher clerk at that time.

2707 Q. You simply did the clerical work?

A. Yes, sir.

Q. Have you ever had occasion to give any careful consideration to the revenue basis of dividing expense between states, and between state and interstate?

A. Not in my railroad experience, I never have had. Since then I have studied the question some.

Q. When did you first see the formulas that were contained in these exhibits that were filed by Mr. Wharton in this case?

A. At the time they were offered in evidence here.

Q. Some two weeks ago?

A. Yes, sir.

Q. You had no opportunity to study or consider the methods that were adopted there prior to that time?

A. No, sir.

Q. Your statements are based upon the knowledge acquired in respect to them since the exhibits were filed in this case? Were you here at the time those exhibits were filed, some two weeks ago?

A. Yes, sir.

Q. Did you go back to Texas?

A. Yes, sir.

Q. Did you resume your work in connection with the Texas Commission when you went back?

2708 A. I did to a certain extent, but at the same time devoted a good deal of time to the consideration of the facts as shown in these exhibits.

Q. And that is the extent of your acquaintance with the methods adopted there, such thought as you were able to give it during that time?

A. Yes, sir.

Q. You stated on your examination in chief that the gross ton mileage was equivalent to the engine and car miles, I think: in what way is that correct?

A. I meant they were practically in the same proportion for the reason that taking the engine miles and the car miles we have everything except the tons in the train and the weights of the engine, and those would probably fluctuate in the same proportion. That is what I meant by that. They would be greater, but they would naturally fluctuate in probably the same proportion.

Q. You think that would be true of the contents of each train, Mr. Fitzgerald?

A. Very nearly so.

Q. And for those reasons you still maintain that the engine and car miles would be equivalent to the gross ton mileage?

A. In approximation it would bring about very nearly the same results, I should say.

Q. Did I understand you to say that in your opinion the
2709 revenue basis of a large portion of the expenses of a railroad which you placed at sixty percent, goes on regardless of the revenue and that part of the expense does not depend in any way upon the volume of traffic?

A. Yes, sir.

2710 Redirect examination.

By Mr. HILL:

Q. In discussing with Mr. Moore the division of miscellaneous revenue, I understood you to say that you had no objection to dividing revenue on revenue.

Mr. Moore asked some question about expenses which I did not quite catch: I will ask you if you made any statement about dividing miscellaneous expenses by miscellaneous revenue?

A. No, sir, I did not understand his question to have any reference to any expenses whatever.

He started out, as I recollect, in dealing with the division of miscellaneous earnings and my idea was that it would be proper to divide revenue on revenue, and that is really where I intended to stop.

Q. You mean the common?

A. Yes, the miscellaneous.

Q. Which is not definitely located?

A. Yes, which is not definitely located to anything on the relative proportion of the other earnings that are located.

Q. You did not understand any question about the division of expense on that?

A. Not in that connection, no, sir.

2711 Q. Mr. Moore asked you some question about how much of the wear and tear on tracks was due to the passing of trains: I do not recall your answer about it:

I want to know if it would affect your opinion as to the division of maintenance of way on car mile basis, whether a large or a small part of the expense of maintenance of way was due to natural causes like weather or wind?

A. No, sir, I hardly think it would. The prime motive is there to carry these expenses, these outside expenses, we will say, that are affected by other elements. They are there for the purpose of maintaining the track which is affected by the car mileage, we will say. For that reason I don't think that any material difference would be made there.

Q. As I understand you, it is a question of the up-keep of the plant for the use of the train and whether the expense incurred in

that up-keep is due directly to the use of a plant by the trains or by natural causes that that would not make any difference in dividing the expense on a car mile basis: is that correct?

A. I would answer from the experience I have had with roads adopting the engine and car mile as a basis for maintenance of way expenses, as a whole, that would make no difference what would be the cause.

Q. Mr. Moore questioned you about items in the exhibits under the head of "Supervision and General" and asked you what was included therein: What did you understand was included
2712 in those items of "Supervision and General"?

A. From the terms used on the statements or exhibits, I would take it that the expenses falling under those heads as prescribed by the Interstate Commerce Commission classification have been followed.

Q. Mr. Moore questioned you about whether you had had any experience in your railroad work of dividing expenses between state and interstate:

I will ask you if you have had occasion to consider, investigate and study that question since you left the railroad service?

A. Yes. While in the railroad service the question had not been considered or worked up to any great extent, but since I have been with the Commission we have considered and studied that question to a great extent.

Our conclusions in that respect have been to start with obtaining the unit of revenue on each class of commodity. We have made changes in our reports for this year on that basis and that is as far as we have gone, the intention being not to make any changes in connection with the expenses until we are more satisfied as to a plan that might come nearer bringing an approximate result.

Q. You mean, that you are trying to find out from the railroads the cost and the revenue on given commodities, is that it?

A. On given commodities.

2713 Q. That is what you are now working on?

A. On different commodities and classes of traffic, both local, intrastate and interstate, and we have formulated a plan for that.

Q. So this question of division between state and interstate is a pretty live question before your Commission right now, is it not?

A. Yes, sir, very much.

Q. Mr. Moore questioned you about how much time and consideration you had given the exhibits in this case and you answered him and in your answer you explained what time you had given:

I will ask you if there is anything in these exhibits that a railroad accountant is not in general familiar with? That is, are any bases used that are not familiar to railroad accountants?

A. Eliminating the percentages that have been added arbitrarily I don't see that it requires any considerable time to reach a conclusion in respect to the bases that have been used, owing to the fact that they are so generally adopted and in practice.

Q. These are largely elemental bases in railroad accounting, are they not?

A. Yes, sir.

Q. I believe you stated either in your dierct or cross examination, that the constant expenses, or a large percentage of the expense of a railroad company, irrespective of the volume of traffic: have

2714 you any authority or reason upon which to base that statement?

A. Yes, sir, I obtained that from a work here that I have that is considered an authority on railroad matters.

Q. What is the work?

A. It is entitled "American Railroad Rates," by Walter Chadwick Noyes.

Q. I wish you would read into the record his statement on that subject, on which you relied in giving your testimony, giving the page.

Mr. MOORE: I wish to enter an objection to that because I do not think it is competent.

A. On Page 17 there are tables showing the different classes of expenditures and "proportion of constant expenses to total expenditures" and "Proportion of fluctuating expenses to total expenditures."

Under the first heading is shown:

"Fixed charges.....25%
General Expenses..... 3%
Maintenance of way and structures.....10%
Maintenance of Equipment..... 7%
Conducting Transportation.....14%"

That aggregates 59% and I merely used 60% as an average in my statement, not recollecting the exact figures.

Q. You had in mind the authority that you quoted in making that statement?

A. Yes, sir.

2715 Q. Is that a recognized authority on the subject?

A. It is, as I understand it, yes, sir.

Q. Mr. Fitzgerald, Mr. Moore questioned you about the use of a ton mile theory, as he called it, of dividing expenses: I would ask you if the ton mile division here in these exhibits between state and interstate, after these various expenses have been worked out as shown in the exhibits, is the ton mile division of expenses as commonly understood when it is referred to as the "ton mile theory"?

A. No, I would take it not; that the ton mile theory is most probably meant to be the using of ton miles only, applicable to the total expense.

Q. Where does this differ from that?

A. This differs in the location of certain items actual before you make this division.

Q. And the location between different classes of train service, too?

A. As well, making it, in my opinion, a closer approximation than if we apply the ton miles as a whole.

Q. In your opinion, is this a closer approximation of an actual condition than the use of the ton mile as it is commonly done?

A. Yes, sir.

Mr. MOORE: I will ask you not to put your questions in such a leading form, Mr. Hill.

2716 Recross-examination.

By Mr. MOORE:

Q. With the exception of the location of certain items mentioned in your last answers, is not the method adopted by the state's accountants in the exhibits in regard to which you have been testifying, the ton mile theory of division of expenses between state and interstate traffic?

A. The ton mile theory—I don't quite understand what you mean.

Q. You have heard the expression "ton mile theory" and "revenue theory," and perhaps others spoken of, respectively, as bases for dividing expense of operation between state and interstate traffic, have you not, Mr. Fitzgerald?

A. You might term it a ton mile theory in so far as the exhibits show that it treats with certain expenses. It shows for itself.

Q. You stated on your re-examination that the division made in these exhibits was not the ton mile theory and when asked to state the difference between the division that is contained in these exhibits and the ton mile theory of dividing expenses, you said that it was in the fact that certain items of expense have been located in these exhibits:

The question I ask you is, if with those exceptions—aside from those exceptions, is not this method of division made on the basis of ton miles?

2717 A. Yes, I would say, making those exceptions, that it is.

Q. What part of the "miscellaneous revenue" did you have in mind in the statement referring to that part of it which is not located?

A. Those items that are enumerated, such as miscellaneous earnings not applicable to——

Q. I know, but this afternoon you spoke of certain parts of miscellaneous revenue that could not be located: I wish you would point out what proportion or what part of miscellaneous revenues it is that cannot be located as between state and interstate traffic?

Mr. HILL: I did not say state and interstate.

Mr. MOORE:

Q. What part of it is it that cannot be located?

A. As between what?

Q. I am asking you what you refer to, if not between the two classes of traffic we are discussing, then what are the classifications between which it cannot be located?

A. It cannot be located between the classes of traffic or classes of service, a good deal of it.

Q. There is not any part of the "Miscellaneous revenue" that cannot be located for the purpose of determining whether it accrued from the state business or from the interstate business, is there?

A. Well, I would have to go over the detail of classification
2718 of operating revenues to answer that.

Q. Have you had any experience as to the division of expense of "Maintenance of way" between local and through trains?

A. Division between local and through trains?

Q. Yes?

A. Have I had any experience?

Q. Yes.

A. No, sir.

Q. You have not?

A. No, sir.

Q. You stated that in your experience in dividing "Maintenance of way expense" the car miles had been used: what was the character of the division to which that was applied to, Mr. Fitzgerald?

A. Division between freight and passenger.

Q. You referred a while ago to the division of general expense and expense of supervision, under the head of "Maintenance of way" prescribed by the Interstate Commerce Commission which you say is followed: what is the division prescribed by the Interstate Commerce Commission?

A. I referred to it being analagous to the general shop expenses under "Maintenance of Equipment" prescribed by the Interstate Commerce Commission as being chargeable over the various accounts that are affected.

Q. Do you know how the Interstate Commerce Commis-
2719 sion treats that item of expense "General & Supervision" under the head of "Maintenance of way" in the matter of dividing it between the various branches of service?

A. Only in a general way. I have not had the recent rulings.

Q. What is your understanding about that?

A. That the general shop expenses are divided over the accounts affected according to the work that is done of each account.

Q. What shop expenses enter into "Maintenance of way" matters?

A. Not "Maintenance of way"; this referred to "Maintenance of Equipment" this supervision that you speak of.

Q. You referred to an order of the Railroad Commission of Texas, made with a view of dividing expenses as between state and interstate traffic. That order was enjoined by the Courts down there, was it not?

A. I was not speaking of an order in reference to a division of expenses. I referred to an order respecting—not an order either, but the consideration that we have been giving a division of revenue; that was what I referred to. I did not say anything about expenses.

Q. Division of revenue?

A. Yes, sir.

Q. Explain that a little more fully?

A. Judge Hill asked me if we had given any consideration
2720 to the question of division of expenses between state and interstate service. I replied that we had the matter under consideration and had been giving it a great deal of study. That we had, however, only reached so far, the division of the revenue. That now that we have reached the division of revenue we expected later to obtain some bases for the division of expenses in order to obtain the net.

Q. Have you adopted a plan for the division of revenues as between those two lines of traffic?

A. Yes, sir, we have adopted one.

Q. What is that?

A. It is a division between actual—an actual division of freight transportation by commodities, showing it between local, intrastate and interstate.

Q. Does not that divide itself?

A. Yes, sir, that will divide itself.

Q. It does not require any consideration or plans to divide that?

A. It does not require any plan, but we put the plan into effect. It is a question of obtaining the result from that plan.

Q. You say the basis of division contained in the exhibits that have been discussed today are familiar to accountants and are largely elemental: has that basis been used for the purpose of dividing expenses between local and through trains, or has it been
2721 used for the purpose of dividing between freight and passenger and on lines that cover more than one state, between states? Is that not the way on which those bases have been used heretofore?

A. They have been used, in the experience I have had, as a division between freight and passenger.

Q. Mr. Fitzgerald, I wish to call your attention to the volume you introduced a while ago and from which you quoted, "American Railroad Rates" by Noyes, and ask you if at Page 37, he does not make this statement in regard to the relation of the cost of service to the rate of transportation:

"1. The additional expense incurred in rendering the particular service—cost of service in its narrowest sense—determines the minimum charge and is consequently an element in fixing the rate. It is always important to ascertain that amount of tare—the proportion of dead to paying freight. Freight carried in half empty cars costs more than full loads. It is equally of consequence to know whether the cars can be returned loaded or must return empty. Other consideration which to a greater or less degree affect the actual expense to the railroad of moving the particular freight, and consequently enter into the rate, are (*a*) the bulk of the goods transported; (*b*) the weight; (*c*) the method of packing and protection; (*d*) the extent of the shipment and whether in carload lots; (*e*) the kind of cars required; (*f*) the necessary speed, and (*g*) the necessity for ice or heat. Mileage, of course, is also a most important factor."

Do you regard that statement of Mr. Noyes' as a correct representation of the conditions of which he is speaking?

A. Not being a practical operating man, I don't feel qualified to pass on Mr. Noyes' statement at all.

Q. I believe you stated Mr. Noyes' was recognized as an
2722 authority?

A. Yes, in making rates, as it is termed here. We have to accept this also, I suppose, but as far as I am concerned I couldn't pass on it.

Redirect examination.

By Mr. HILL:

Q. You spoke of the division on a ton mile basis here being the ton mile as used with the exception of those items as were actually located: what do you mean by the "exception of the items actually located"?

A. I meant that if you made those exceptions, why your basis was on a ton mile basis. That is, if you made those exceptions.

Q. Just what exceptions are you referring to?

A. All that are included in the exhibits.

Q. In "Maintenance of way" and "Maintenance of Equipment"?

Mr. MOORE: No, he read them this morning; 50% allowed in one place and 50% allowed in another.

The WITNESS: I enumerated all of them; all of the exceptions that are in the exhibits.

Mr. HILL:

Q. Here is the point I want to get at: I will have to put it as a leading question to make myself clear:

You mean by these exceptions those which are actually found, like loss and damage, wages and fuel, or do you mean exceptions of accepting these standard bases like "Maintenance of Way"
2723 and " Maintenance of Equipment"? I want to get your idea.

A. As I understand the question—would this be on the ton mile theory, as it is termed, if these other bases are eliminated?

Q. Yes, what bases were you referring to? That is what I want to get into the record.

A. I am referring to the entire exhibits; that if you eliminate everything there then you bring it down to nothing but a ton mile basis.

Q. I believe that you have already stated that having made these exceptions, that you got a more actual approximation than if you used a ton mile, broadly, so to speak.

A. I believe that, pertaining to a good many of the matters on the bases prescribed in those exhibits, brings about a nearer approximation.

Q. In referring to this division of unlocated expenses, "Miscellaneous revenue", say rent of buildings or something of that kind: was that division not the revenue on a revenue basis of these

unlocated items, between state and interstate or passenger and freight, or between some other classes of traffic?

A. What division do you refer to, Judge?

Q. The division of the unlocated "miscellaneous revenue": say, the rent of a building; common miscellaneous revenue.

2724 A. In what instance do you mean?

Q. In answer to Mr. Moore's question about how you would divide those unlocated items of "miscellaneous revenue" were you referring to a division between state and interstate or a division between freight and passenger? You testified you have known of it done on revenue on revenue?

A. I had in mind the division between freight and passenger. I think that the division between state and interstate would probably follow in the same line.

2725 HENRY WILLMERING, being recalled for cross-examination desposed as follows:

Cross-examination.

By Mr. MOORE:

Q. Have you the formula I asked you to prepare?

A. Yes, sir.

Q. What is your relation with the Oklahoma Corporation Commission?

A. I have been designated Auditor in charge of its Division of accounts.

Q. What are your duties?

A. My duties are to prescribe accounting systems under the direction of the Commission, for various public service corporations operating in the State of Oklahoma, and to analyze the returns made to the Corporation Commission of Oklahoma, the reports, monthly returns and annual returns, and to direct the compilation of statistics compiled therefrom, and my principal duties are to investigate all branches of public accounting bases, and to recommend to the Commission systems of accounts for public utility companies operating in the State of Oklahoma.

Q. Has the commission a rate clerk, an agent who has duties to discharge in connection with railroad business?

A. It has a man in charge of its Traffic Department.

2726 Q. Who is that man?

A. Mr. C. B. Bee.

Q. What are his duties?

A. His duties are to keep in touch with rate situations throughout the United States and particularly in Oklahoma; to see that all tariffs are properly filed in a systematic way, and to direct the filing of same; to keep posted on rate affairs throughout the country in general, and to assist the commission in prescribing rates for railroad companies operating.

Q. Has the Commission any other assistants in the discharge of its public duties besides its auditor and rate clerk?

A. It has a force of about twenty men.

Q. What are their duties, clerical principally?

A. They are assigned to assist Bee and myself, and to assist Capt. Lee, the engineer of the Commission.

Q. I believe you stated on your examination in chief, you began your first employment in connection with a railroad, as yard clerk of the Pennsylvania Company in the City of Chicago?

A. Yes, sir, in 1892.

Q. How long did you remain in that position?

A. Several months. The positions I occupied in the Pennsylvania service was yard clerk at the 55th Street Yard, and local car accountant at that yard office; afterwards, I was assigned to the downtown local freight office; I had charge of the reports issued to the auditor for waybills outbound; it was as a billing clerk
2727 that I entered the service of the Pennsylvania Co.; that was the extent of my connection with them.

Q. How long were you employed by the Pennsylvania Railroad in Chicago?

A. I believe a little over a year.

Q. How old were you when you began in their employment?

A. 21 or 22; I had some previous experience prior to that, but I have not put it into the record.

Q. I was going to ask you what your occupation had been before you took employment on the Pennsylvania Railroad?

A. I assisted my father in shipping grain and live stock from Iowa points; I was bookkeeper for him part of that time.

Q. What was the character of your duties as yard clerk in the Chicago office?

A. Ordinary duties assigned to a yard clerk.

Q. What are they?

A. Checking up the yard and trains that arrive in the yard, keeping a record of the arrival of cars.

Q. How long were you engaged in their service as yard clerk?

A. I couldn't tell you; my service with the Pennsylvania Co. was about a year and a half.

Q. What was your next service after yard service?

A. With the Wabash.

Q. I mean with the Pennsylvania; you enumerated two or three lines of work that you did there; what was the next one that you mentioned?

A. Local car accountant for the 55th Street yard.

Q. What were you duties in that capacity?

2728 A. The duties were to enter up the cars in a systematic way, in a record kept for that purpose, and indicate whether they were empty or loaded, and indicate the billing in the car record, showing the disposition made of the car, by symbols we used for that purpose.

Q. What was the next duty you spoke of?

A. Abstract clerk in the downtown office.

Q. What were your duties in that connection?

A. To report waybills forwarded, showing the different charges

and the prepay, and to strike a balance with the cashier on prepay, and on advance charges.

Q. That was your line of work with the Pennsylvania Co.

A. Yes, and the billing of freight.

Q. Where did you go when you left the service of the Pennsylvania Co., what was your next employment in connection with the railroad service?

A. With the Wabash Railroad Co.

Q. When did you enter that employment?

A. A short time following the time I left the Pennsylvania Co.

Q. That was in 1895 or 1896?

A. I don't recall the year, somewhere around about that.

Q. What were your duties?

A. My first assignment was clerk in the claim and tracing department.

Q. What were your duties?

A. In tracing shipments received and forwarded from Chicago and in looking up records generally, with relation to claims
2729 that were submitted for payment.

Q. How long did you continue in that service?

A. Less than a year in that particular desk.

Q. What change was made?

A. I was afterwards assigned to the cashier's department as bookkeeper.

Q. What branch of accounts were you employed in, in connection with those people?

A. Accounting for revenues, and compiling statistics to show the cost of handling tonnage there through the warehouse, and compiling statistical information with relation to station business generally, and preparing the payrolls for that station.

Q. You spoke of the warehouse—you mean the warehouse in Chicago?

A. Yes, sir, they were quite extensive; I think they had two or three hundred men working there.

Q. How long did you remain with the Wabash?

A. I remained with the Wabash,—I was made cashier, and I was an agent; I was with them until sometime in 1902 I believe.

Q. Until 1902 That was several years ago?

A. Yes, sir.

Q. What was your business as cashier?

A. Collecting revenues and accounting for them.

Q. The ordinary duties of that office?

A. Yes, sir, at a large station like Chicago.

Q. Were you located at Chicago?

A. Yes, sir.

2730 Q. Any special branch of the Company's service which engaged your attention?

A. What do you mean?

Q. Were you the general cashier or were you the cashier—were your duties as cashier limited to some department of the company's service?

A. Limited to the freight service.

Q. Did it cover all the departments of the freight service?
A. All revenues in any way collected in the City of Chicago.
Q. Those duties were local to the business of Chicago?
A. Yes, sir.
Q. In other words, you were the cashier at that station, and for the business transacted at that station?
A. I was held responsible for cash collected at that station and accounted for.
Q. Your duties were to account for, hold and take care of cash collected there. You disbursed it too, did you?
A. I remitted it to the treasurer of the company.
Q. Where and when did you act as agent on that line?
A. At Chicago Ridge, located in the outskirts of Chicago, interchange point with the Chicago Junction Railroad and Chicago & Western R. R.
Q. Is that in Chicago?
A. It is in the outskirts of Chicago.
Q. It was a local station there?
A. Junction point with the Belt lines.
Q. Your duties with those was as ordinary station agent?
A. Yes, sir, accounting for freight revenues and passenger
2731 revenues, and handling of tickets and express matters.
Q. The duties usually discharged by a station agent?
A. Yes, sir.
Q. And you were engaged in that service until 1902?
A. Yes, sir.
Q. In any other branch of service than you have enumerated?
A. No, sir.
Q. What road were you connected with after you left the Wabash?
A. M. K. & T., Missouri, Kansas & Texas.
Q. What was your engagement with that company?
A. My first assignment was as cashier at Cleveland, Okla., afterwards I succeeded as agent.
Q. Where is Cleveland in Okla.?
A. In Pawnee County, in the oil producing district.
Q. How large a place is it?
A. They had a population of about five thousand at that time; the maximum revenue was about $40,000 a month—it was one of the best stations on the M. K. & T. R. R.
Q. You were stationed at that place?
A. Yes, sir, I was local agent there.
Q. What is the *station* between local agent and station agent?
A. There is really no distinction.
Q. I suppose you discharged the duties of station agent?
A. Yes, only the duties are more extensive, and more responsible than those performed by station agents at ordinary local stations.
Q. That grew out of the great volume of business there?
2732 A. Yes, sir.
Q. Duties that were of the same character?
A. Yes, sir, only more extensive than those ordinarily performed by a station agent.

Q. You say that place had a population of four or five thousand?
A. It did at that time.
Q. What has it now?
A. It is a city of the first class now; it was recently made a city of the first class, and the requirement is 2500 under the Oklahoma laws; it is not as large as it was at that time.
Q. How long did you remain there in that service?
A. I resigned in May, 1907.
Q. What were your next duties in connection with railroad work?
A. Since my assignment with the Corporation Commission of Okla.
Q. When did you become connected with the Corporation Commission?
A. November, 1907.
Q. When did that Commission get organized and enter upon the discharge of its work?
A. In November, 1907; that was the beginning of the Commission, and the organization was, as far as the accounting and the statistical and accounting department is concerned, was under my direction.
Q. Your experience in disbursing the moneys of a railroad and in statistical work is confined to local agencies and local points
2733 that you have enumerated?
A. In so far as actual experience is concerned, I have always kept my ears and eyes open, as the fellow said, and kept informed on all branches of the service.
Q. What I am speaking about is your experience in duties that have been discharged by you in the employment of railroad companies?
A. Along lines I have indicated and testified to, yes, sir. Though I might say, since the beginning of the Commission, I have given all my time, attention and thought to this accounting problem, and have been diligently searching for the truth.
Q. Has the Oklahoma Commission been endeavoring to find some basis of dividing and apportioning expenses of railroad operation?
A. Yes, sir.
Q. Have they ever adopted any system?
A. They are at sea just like the accounting officials of railroad companies, they are Tyros, they are beginners.
Q. You have never been able to arrive at any satisfactory results?
A. No, sir, we can never get the accounting officials of the railroad companies to agree to anything or submit any proposition.
Q. How long have you been engaged in trying to arrive at the truth?
A. Ever since almost since the beginning of the Commission.
Q. Did the Commission submit formulas to the railroad or
2734 did the railroads have the matter left to them?
A. They submitted a formula; the first form was submitted to the accounting officials of the railroad company; it was similar to the one prepared by Commissioner Colquit of Texas; I think that was submitted to the Railroad accounting officials in the year 1908,

and it was entirely ignored;—that is, in so far as its effectiveness was concerned; there was no hearing, in connection with it.

Q. What was provided for in that formula?

A. Revenues were to be kept in three divisions; local intrastate, interline intrastate, and Oklahoma prorata of the interstate business, and there were various bases used for the division of expenses.

Q. Did you ever submit any other formula to them?

A. Yes, we had a hearing in May, 1909; the accounting officials failed to agree—prior to that, we had a conference in May, 1908; in May 1908, we had a conference with the accounting officials in which Mr. Selig of the Katy——

Q. It is not worth while to go into the details that occurred; I just want to know the results?

A. The results were that the accounting officials failed to agree.

Q. So there never has been any satisfactory results obtained yet?

A. We are getting very satisfactory results in a way now, from a revenue standpoint, but not from an expense stand-
2735 point.

Q. Have you a copy of the order that embodied that formula you spoke of, which was prepared by the Oklahoma corporation Commission?

A. I haven't a copy with me.

Q. Will you furnish me a copy?

A. I will. Which formula do you have reference to?

Q. The formula you spoke of as having been submitted, based on the form of the Texas Commission. *Q.* And the second one?

A. The second is our accounting order #201.

Q. Will you furnish me with a copy of that?

A. Yes, sir.

Q. And also of the formula you prescribed, similar to the Texas formula?

A. It was a tentative formula, submitted to the railway companies at that time; it was not a formal order.

Q. Could you obtain a copy of it?

A. I think so. I will try it.

Mr. HILL: We will object to that.

Mr. MOORE: We will settle that after he has furnished it.

Q. Have you ever had any experience in operating a railroad as an operating official of a railroad?

A. Define the word "operating official," and I will be able to tell you.

Q. The sense I used it in, any experience that brought you in contact with the practical operation of a railroad?

A. Yes, agent of the M. K. & T., at Cleveland, Okla.

2736 Q. What did you learn in regard to railroad operation?

A. I learned facts in regard to the operation of local and through freight trains, and passenger trains from every day observation, and every day experience.

Q. If you have enumerated all your experience, you have never had any experience as an operating official?

A. I merely executed the orders of the operating officials.

Q. You never acted in any capacity that connected you with the movement of trains, further than your duties as station agent?

A. Under the supervision of the operating official, yes, sir.

Q. Have you had any experience that would enable you to judge of the relative expense of operating a through and a local train?

A. Every day experience, yes, sir.

Q. What is the experience that would enable you to pass upon the relative expense of operating those?

A. Every day experience with the M. K. & T.

Q. You mean as station agent?

A. Whatever you are pleased to call it, yes, sir; my every day observation in the service of the M. K. & T., and since my service with the Corporation Commission, riding freight trains, and riding on passenger trains, for the purpose of discovering the truth.

Q. What experience have you had—the experience you have had is of that kind, not as one who was charged with the movement of trains?

A. No, sir, not in direct charge—in moving trains, in
2737 what respect do you mean?

Q. In moving trains along on the tracks of the railroad?

A. I have had direct charge of switching and movement of trains at Cleveland; there is where we handled from forty to fifty cars per day. I gave the directions to the conductor.

Q. In what way did you have charge of that?

A. I had complete charge of his train while at that station.

Q. Tell me what your direct*ion* connection with switching service was?

A. At Cleveland, Okla.,—to go into details, we handled, during the boom, the oil excitement, from twenty to sixty carloads per day, and the team track and side track facilities at the beginning was limited, and it was under the direction of the superintendent of the line,—he gave me authority to take care of that yard, to see that there was no blockade there. Our division terminal point was across the river two miles away, and it was my business to take charge of local trains, of the local train crew, to direct switching operatings and the placing of cars, and to prevent a blockade in the yards from the division terminal point, and duties of that kind at a place where business was extraordinary.

Q. That was the extent of your duties in connection with switching service?

A. It gave me every day observation of local and through trains.

Q. Just the same observation of any other man working
2738 around the station, he could see what was going on?

A. It would all depend upon the man.

Q. Of course, but your opportunity was the same as any other man working at the station?

A. Any other man working at the station did not have the opportunity to direct the operation of the trains.

Q. Did that experience qualify you to form an opinion, which you think would be well founded, as that of an actual operating

man and superintendent of the operations of a railroad, or someone directly connected with the movements of trains, as to the relative costs of locomotive supplies, fuel, etc., as between local and through trains?

A. You are confining your question to locomotive supplies, and what other proposition?

Q. That is the proposition, whether your experience as station agent at Cleveland qualified you to form a judgment that would be well founded, on the basis of your own experience as an actual operating man, as to the proper division of the expense of locomotive supplies, as between through and local trains?

A. No, at that time I had no reason to give any thought to locomotive supplies, but since that time, as an accounting proposition, I have given it much thought and study.

Q. I am not asking these questions for an idle purpose, what I am trying to get at is to ascertain to what extent the experience you have had with railroad operation would qualify you to form a judgment, and what the value of that judgment would be
2739 as compared with other men that have been directly connected with it?

A. You are confining your comparison to locomotive supplies, are you? If you will confine your questions to the real operation of local and through trains——

Q. Can you answer the question?

A. You are confining yourself specifically to locomotive supplies; I had no reason to investigat*ion* locomotive supplies at that time, but since I have.

Q. Did your duties qualify you specially to form a judgment as to the basis of dividing expenses of maintenance of freight cars as between local service and through service?

A. The maintenance of freight cars can be actually located to the car; there is no reason for having any division between local and through trains; one car could be in a through train one day and in a local train the next day.

Q. How have you divided it in your formula?

A. Divided what?

Q. The expense of maintenance of freight cars?

A. Between what?

Q. Between through and local service?

A. On the basis of straight car mile basis.

Q. I thought you stated it could be actually located?

A. You confined it to the particular car itself?

Q. No, I asked you—what I asked you is this, I asked you if you were familiar with subject so as to qualify you to form a judgment as to the proper basis of dividing the cost of maintenance of
2740 freight cars, as between local and through service?

A. I think I am qualified to do that, yes, sir.

Q. What experience have you had that would qualify you to do that?

A. The experience I have related, and the constant thought I have given to these matters, and the testimony I have heard in cases

I have heard tried before the Corporation Commission of the State of Oklahoma, and the testimony of every prominent railroad man in cases heard before the Corporation Commission of the State of Oklahoma, and from conversations and inquiries made to operating officials in the railroad service.

Q. What is the experience that you have had to qualify you to do that?

A. I have related my experience.

Q. The experience that you rely upon for your qualification, is that which you have already stated?

A. Yes, sir, and every day observation of the movement of trains.

Q. I want to call your attention now to some of these matters; I understood in your examination in chief, that you stated that the value of property of a railroad should be divided upon the ratio of the expense?

A. On the ratio of the cost of doing business, yes, sir.

Q. On what theory—on what ground do you base that view?

A. On many.

Q. Will you state them please?

2741 A. It is the best bases and most equitable bases that I know of, and the revenue basis which has been submitted by some accounting officials, is erroneous, and the cost of doing business ought to be and is, in my judgment, the best basis, for the reason that it is more rigid, and not elastic like the revenue basis; the revenue basis would probably cause the value of property to be changed by ups and downs or the increase or decrease of rates, and Judge Vandeventer used it in his opinion written with reference to the temporary injunction granted in this case——

Q. Any other reasons upon which you base that? What has been your observation of the method that obtains in the ascertaining of the value of other classes of property, other than railroad property?

A. We have had no occasion to make any division of the value of property within the confines of the state; we have attempted to get the actual cost of property within the state in order to get the value.

Q. Do you know of any class of property other than railway property, used for industrial or manufacturing purposes, for the purpose of producing revenue, upon which the value is ascertained on the basis of what it costs to operate it?

A. At this time, I cannot call to mind any, no, sir.

Q. If you were going to buy a manufacturing plant today, and you wanted to get at it for the purpose of determining what you would offer for it, would the matter of primary consideration

2742 be to you—would it not be rather the revenue that accrued from its operation, rather than the cost of operating, except as that cost might be one of the factors that entered into the results of its operations?

A. In its entirety it would be; the earning power of the plant would be a factor, yes, sir.

Q. What body of officials assess railroad property in Oklahoma?

A. The Board of Equalization.

Q. Do you know whether they assess it on the basis of the cost of operating the roads?

A. A basis of that kind is not necessary, because they assess it in the entirety; an assessment is based upon the cost or upon the expenditures made for the property; it is carried on the balance sheet; the costs of construction and replacement value are all taken into consideration and the stock and bond issue is taken into consideration; they use various bases.

Q. You say your commission deals with public utility corporations in Oklahoma. Have you any water or gas companies out there?

A. Yes, sir.

Q. Do you know how the values of property are arrived at?

A. We don't make those.

Q. You come in contact with them,—in ascertaining the values of an industry of that sort, isn't it done upon the basis of their revenues?

A. No, the cost of property is primarily taken into consideration.

2743 Q. Isn't the earning capacity a very important factor?

A. I don't think they give any consideration at all to the earning; the principal consideration is the capitalization, and the actual cost of the property, disclosed by their books.

Q. If property that costs a hundred thousand dollars,—we will take two propositions, each cost one hundred thousand dollars; one is earning 10% on the cost, and the other is losing 5% on the cost; what effect would those revenues have upon the value of those properties?

A. It depends on how economically those two properties are managed.

Q. We will assume that they are managed equally as well.

A. Same kind, same class of business?

Q. Yes, sir.

A. Same value?

Q. I won't say that; we are trying to find out the value?

A. The same cost?

Q. Yes, sir, one is losing money and the other making it?

A. There would be something wrong with the direction of the property.

Q. What would be the effect upon the value of the property, would the one that makes a profit and the other which makes a loss, be equal in value.

A. As a business proposition, it might have some effect in the price you or I would be willing to pay for the property.

Q. Wouldn't it be the dominant and controlling factor in determining the value of the property commercially?

A. The profits derived from it in business would have

2744 something to do with the value of the property.

Q. Do you not know, if you desired to determine the value

of the property, wouldn't you determine it on the basis of the revenues?

A. As an entirety?

Q. Yes?

A. The revenue would have something to do with the earning power of the property as a whole.

Q. It is a factor out of which the earning power grows; there cannot be any earnings unless there is revenues?

A. Profits are a great factor in all properties.

Q. I am speaking about the revenues; the gross revenues, you can't determine what the profit is, without taking into consideration first its gross revenue.

A. In all cases you have to take into consideration the revenues in order to find your profits, but that would not have anything to do with the value of the property, the revenues alone.

Q. There are a few leading matters I want to call your attention to, without an argument about them, and I want to see what your understanding is in regard to them; first, the productive power of property engaged in an industrial pursuit, is the most important factor in the determination of the value of the property, is it, or is it not?

A. Of course, the profits or losses have something to do with it.

Q. The most important factor in determining what profits are made is the gross revenues that accrue from the operation of the industry?

2745 A. That is one of many factors.

Q. That is the all important factor, isn't it?

A. No, sir, the prudent and economical management would be taken into consideration.

Q. I am going to assume the most prudent and economical management you can think of; in every case that I put that is assumed; in property that you want to ascertain the value of, isn't the first thing to be considered the gross revenue that can be produced?

A. I don't attach any importance to the gross revenue of that kind; if it was prudently and economically managed, as you say, I would make a rigid examination of the books and records to find if they paid more than the property was worth, what it cost, what it could be replaced for,—the revenues in themselves, would not be a very important matter provided there was an opportunity to make greater profits by some changes in property, or by the installation of new devices or changes in the management.

Q. I have excluded things of that sort, by assuming that the property is well managed. The point I want to get at is this, if revenues are not the basis commercially speaking, upon which the value of property of that character is based very largely, in connection of course with the cost of the property, or what it might cost to replace it in its condition——

A. I don't understand why you persistently use the word "revenue;" I have said that profits and losses have something to do with it.

2746 Q. I want to ascertain the importance of the total revenues as one of the elements in arriving at the value of property in the instance I am giving you now?

A. Revenues as a whole should be given some consideration.

Q. Do you regard them as an important factor or not?

A. In my business, whether it be public utility or mercantile business, the earning power of property must be given consideration.

Q. How do you ascertain that?

A. From the receipts, from the revenues and the expenses, and the resulting profits or losses.

Q. We are getting down now to business; if you want to ascertain the earning capacity of an industry, you first take its gross or total revenues?

A. It wouldn't be necessary to first give that consideration, no, sir.

Q. You have to take that?

A. That would be one of the factors in arriving at the profits or losses.

Q. The other factor would be the expense of operating?

A. It would.

Q. And the difference would be the profit or loss?

A. Yes, sir.

Q. In as much as the revenue is the basis of ascertaining the value of property, in so far as the value depends upon its productive power, and the expense of production is also another factor but the leading or controlling element or factor in determining

2747 whether the property has producing capacity that gives it value, is the revenue that the output will produce—I will ask you, isn't the revenue, the earnings, a better representative of the value of property than the expense of operation, if you have to take one or the other as a represemative of value of the property, would you not consider that the revenue would be the more logical than the gross expense of operating it?

A. No, I would not.

Q. You do not think so?

A. No, sir, I want to explain that answer.

Q. I would like for you to do it.

A. When I said that I would not, I had in mind the division, the different parts of the property on the basis of revenue, as are used in these rate cases, the property as a whole itself, the revenue would be given some consideration of course, and the resulting profits and losses, but confining my answer to these particular rate cases, and the division of property between state and interstate business, the revenue basis for either division of expense or for the division of property is all bosh, it is an absurdity, it is humbuggery; I have worked it out in all its different phases or branches; and it always results in giving one class of business unreal profits, and charging up property to a certain class of business, the values of certain classes of property which is unreal, which can be analyzed and discovered from analyzing the statistics and the accounts; it is

a very nice theory, but when you apply it to the existing
2748 conditions, you find that it is an imposition under a seemingly fair pretence.

Q. What do you think about expense as a fair basis of ascertaining the value, the cost of operation as a fair basis of ascertaining the value?

A. I believe that it is more equitable than any other basis that has been submitted.

Q. You stated in your examination that freight rates are made by the travelling freight agent or contracting agents or persons of that kind, intending, I suppose, to convey the idea that it is done by subordinary officials, what do you base that statement on?

A. Actual experience—everyday experience.

Q. Give me some instance now?

A. Freight rates are largely made on tradition and not on condition; commercial conditions and competition are taken into consideration; from my observation and from my experience, the travelling freight agent is employed for the purpose of contracting business and feeling the pulse of the business interests adjacent to the line of road or in his territory. If he finds that the standard rates will not move the stuff, he recognizes that there is a great amount of tonnage at a certain place which will move providing that rate was made reasonable or right, or would not be prohibitive,—it is recognized that rates have frequently been made that are lower than
the standard rates, and I have heard a great many prominent
2749 traffic men testify, some of the best in the United States, and I have cross-examined them and have repeatedly asked them if rates were made on the cost of service, and I never heard one of them——

Q. You are going outside of my question?

A. I never heard one of them reply that the cost of service had anything to do with regulating them.

Q. The question I asked you was this, to point out to me the instances which you have known of, where freight rates were made by these subordinate agents you have mentioned?

A. From my own knowledge, at the time I was located at Cleveland, Okla., in the service of the Katy, the standard rate as I recall it, for logs and rig timbers for oil wells from Cleveland to Tulsa, and Cleveland to Bartlesville, was somewhere around ten or eleven cents; there were many rigs torn down in the Cleveland field, and I was asked the rate to those points; the shippers indicated that the rates were prohibitive, that they could not move the old stuff into this new territory at those rates, and I took up the matter *up* with our commercial agent, and told him if the rate was reduced to four or five cents, the stuff would move, and he took it up with his superior at St. Louis, and the rate was recommended and billing order was issued.

Q. Who was that commercial agent's superior at St. Louis?

A. The general freight agent.

Q. So you have got it away from the assistant up to the general—

do you know who he consulted before he gave you that special rate?

2750 A. The rates primarily indicate—I don't mean that rate was made by the traffic man or traffic men, but they primarily recommend the making of the rates; they knew the territory and reported to the superior officers—the cost of service had nothing to do with making such rates.

Q. If I understand the instance you have given was an exceptional one for the purpose of moving certain specific and specified articles?

A. While in the service of the Wabash and Pennsylvania I have known contracting men to make over night rates, and right along, special rate orders would be issued.

Q. I asked you for an instance and you gave me one in your experience; I am confining my question to that, and asking you if the condition out of which that special rate was promulgated in the general offices of the Company at St. Louis, upon the recommendation of the commercial agent and yourself, if that wasn't an exceptional and especial condition that existed down there? Confine yourself to that instance?

A. It was the result of one of a good many special conditions.

Q. What are the others of many?

A. Well, in the establishment now of the brick plant at that place, I was connected with the commercial club at that point, and we had plenty of shale located there, but the prospective builders of brick plants indicated that it was a one line town "we can't do business at a one line town, there is no railroad competition here,

2751 while your shale is good, and your inducements in other respects are good, we might be held up on account of there being only one railroad, by prohibitive freight rates." In connection with the commercial club, I recommended that the standard rate from that point to other points throughout the state be materi*ally* reduced—I took the matter up with the commerical agent, and as a result, the brick plant was built there, and the rates were given very much reduced.

Q. You wanted to build up an industry there?

A. Yes.

Q. You made the suggestion to the commercial agent?

A. Yes.

Q. Do you know who he went to?

A. To his traffic superior.

Q. It came up to headquarters, and they are finally passed upon?

A. Yes, sir.

Q. To get back to my question, I asked you if there was not an especial condition existing at that place out of which the concession was made as to the rate on timbers, of which you spoke in the first instance? That was an exceptional instance, wasn't it?

A. It might be——

Q. It was a rate made for the purpose of transferring certain material that had ceased to be needed at one place to another place, and they couldn't afford to do it under the general rates, and they,

made an application for a special rate that would enable them to move the stuff from one place to another?

2752 A. That wasn't my motive, and I don't think that was the actual motive.

Q. I am asking you if that wasn't the actual facts?

A. It was to get business, to get tonnage, to move, to get some revenue.

Q. It grew out of those special conditions, and if that concession had not been granted, the material would not have moved, would it?

A. It might have been teamed over; it would not have been moved on our line of railway.

Q. In making a special rate on material for brick, that was to get an industry started up there, that was the purpose for that?

A. One of the purposes, yes, sir.

Q. Do you know whether the traffic officials who acted on the recommendation made by the commercial agent, acted in total disregard of what it would cost to move that, or do you know whether they considered it or talked it over among themselves—I am speaking about your information?

A. The prime object was to get business?

Q. I am asking you if you know the methods that actuated those men, and do you know whether they, in determining that question, in their conference if they had any conference among themselves, or if one man did it, that they acted without regard to the cost of service and that was not involved in their consideration?

A. I believe he did.

Q. That is your opinion, do you state it so you can swear

2753 to it?

A. I will state it this way; it occurred to me this way: as it would to any sane man; if the old rate which was reduced about one-half was made upon the cost of service, the new rate must be made less than the cost of service, and if the new rate was made upon the cost of service, the old rate must be unreasonable.

Q. That is a process of deduction upon your part?

A. I have asked the question repeatedly of prominent traffic men, and they have never yet stated that they made rates upon the cost of service.

Q. Have you read any of the testimony in this case?

A. I have read some of the testimony of Mr. Doddridge and Mr. McPherson.

Q. Did you read the testimony of Mr. Watson, who is one of the traffic men of the Cotton Belt Railroad?

A. No, sir.

Q. Did you read the testimony of Mr. Perkins, who is General Freight Agent of the Iron Mountain Railroad?

A. No, sir, I have heard the testimony of every prominent traffic man——

Q. To go a little further into the instance you have mentioned, did the changes in rate go any further than to accommodate special conditions that existed there, or was there any general change in

rates applicable to the haul of the kind of material that was involved in those two instances you have mentioned.

A. It applied a much lower rate between Cleveland and the
2754 final destination.

Q. In the first place, as to the hauling of those particular logs, and the manufactured product of brick——

A. They were factors that were taken into consideration.

Q. Don't you know as a matter of fact, that railroads, like all other industrial concerns, have to make exceptional rates and regulations frequently, to meet exceptional conditions, that when they do *they,* they are not changing the prices which they charge in their general operation, don't you know that?

A. What prices do you refer to?

Q. Don't you know that fact, that railroads, under such conditions as you have described, in two instances you have referred to, might well make an exception on account of the special conditions, and still not abandon a rule that it might have to so graduate its rates so that the business could be conducted at a reasonable profit.

A. Such exceptions were repeatedly made, and were of almost daily occurrence, and the same exceptions were made for other conditions, and from my own knowledge in the City of Chicago, I know those exceptions were made daily, almost daily; we received special billing orders for billing of certain commodities almost every day.

Q. Their frequency grows out of the large volume of business and immense number of transactions that grows out of the conduct of the business of the railroad?

A. It only illustrates and illuminates the fact that rates are not based on cost of service.

(Question read by request of plaintiff's attorney.)

2755 A. That follows, yes, sir.

Q. A railroad 25 miles long would not have so many occurrences of that sort as one 2500 miles long, would it?

A. I wouldn't think so.

Q. That rather illustrates the effect of a large volume of business and of the ramifications of business in bringing about these special instances?

A. Competition would be taken into consideration and commercial conditions.

Q. You stated on your examination in chief, that the Railroad Commission of Oklahoma, I think, made complaint about a lumber rate from the Louisiana and Texas lumber zone to Oklahoma. I wish you would explain to me what that complaint was, and what was done with it?

A. The attorney general of our state, after an examination of the tariffs and the rates applicable to lumber traffic moving from Texas and Louisiana points, through the State of Oklahoma to points of destination in Kansas, Iowa and Nebraska, and other states north, came to the conclusion that there was a discrimination against Oklahoma in that lumber moving from Texas and Louisiana producing points to points distant two and three hundred miles in

Oklahoma at a rate of 23 cents per hundred pounds, and that such lumber also moved from the same points of origin to destinations in Kansas, Missouri and Nebraska, at the same rate, a distance of six to nine hundred miles, he came to the conclusion that there was a discrimination against Oklahoma in that lumber was
2756 carried from such producing points to points in other states, where the distance was three times as great, for the same rate of charge.

Q. What was done about it?

A. I am going to give you a history of the case. He suggested that we make a graphic illustration of this.

Q. You mean the Attorney General?

A. Yes, sir; and we prepared a map showing in colors how this rate worked.

It seems that there have been some provisions in the charter of the railroads, the Choctaw, Rock Island and Santa Fe, granted them by Congress, that the rates in Oklahoma should not be higher than the rates charged for similar traffic in Kansas and Arkansas.

He took the matter up with the railroad executive officials and the railroad executive officials suggested that they have a conference at Kansas City to see if they could not come to an agreement of some kind to equalize these rates, the Interstate rates into Oklahoma.

The Attorney General presented the matter to the railroad traffic officials and executive men; the latter seemed to be surprised, from what the Attorney General tells me, that such conditions ex-
2757 isted. They were not familiar with it and they came to the conclusion that their traffic men were discriminating against Oklahoma in the readjustment made of rates.

That was a very graphic illustration of the fact that rates are not made on the cost of service.

Q. What changes were made in rates——

A. The reduction of two or three cents a hundred pounds, in rates to Oklahoma points. In some instances more, I think.

Q. They were complaining that the rate being charged was too high, were they?

A. Well, that fact and discrimination and other things, generally. They wanted to present the matter to the railroad executive officials to see if they could not make a readjustment.

Q. I suppose if a readjustment was made that would be conceding that the rates were too high?

A. I do not know what they had in mind.

Q. What did the Attorney General and the people complaining about it have in mind?

A. We used it to illustrate graphically in our rate cases that the rates are not made on the cost of service. We used it for that purpose in our rate cases.

Q. Complaints were not made for that purpose, were they? The purpose was to get relief, was it not?

A. We wanted the readjustment of the rates.

Q. That was not in the interest of principle, but it was to
2758 save money to your shippers, was it not?

A. I got it indelibly impressed on my mind from the point I have stated——

Q. I am trying to get you to distinguish between impressions on your mind and the facts in the case:

What I want to know is what was the complaint? Did your people feel they were being charged too much on grain shipped from Texas to Louisiana?

A. That was lumber.

Q. Lumber, I mean.

A. Oh, yes, we felt the rate was high.

Q. The trouble about that was in the adjustment of the rates in that zone that extended from Oklahoma North into Kansas?

A. Up into Nebraska.

Q. Which you testified in your examination in chief was seven or eight hundred miles across, did you not?

A. Approximately that; whatever the distance is. Of course the distance can be secured from the Official Guide.

Q. Now, the logic of that was that the rates under that adjustment—assuming that the zone was from five to eight hundred miles in length and they charged the same rate on the near side as on the far side from the point from which the shipment originated—is that they were charging too much in your country and too little
2759 up on the Northern borders; was not that about the logic of it?

A. We supposed they were making rates to secure profits out of their business; that would naturally follow. The point was particularly that the complaint was, "Why are you charging twenty three cents a hundred to Omaha from Texas producing points and charging the same rates to our border at the Red River?" It was put up to them in that way. We wanted the traffic men and executive officials to answer the question.

Q. The point I want to call your attention to is this: if a blanket rate of weight to a zone which covers a large territory is unreasonable it is because the rate is discriminatory is it not, growing out of the fact that it would perhaps be too high on one side and too low on the other, with reference to the length of haul and interest of the shippers? Is not that the real basis of your objection on the ground of discrimination?

A. That would be a good way to put it.

Q. Now, putting it that way, so far as the question of relation between the cost of service and the amount paid for the service is concerned, it would equalize itself: if they got too much for this side of the zone and too little for the other side, the probabilities are that when you got to the middle it would be just about fair.

A. That would not follow, because there are intermediate
2760 lines hauling that would participate in the haul.

You want to equalize the cost of service. They say, if a rate is twenty three cents at a point three hundred miles away and

twenty three cents at a point one thousand miles, there must be a happy medium——

Q. They must find a happy hunting ground?

A. That cannot follow in all cases because there are other lines participating in that haul; there may be a half dozen lines participating in the haul; and interchange of the cars at junction points; rebilling and weighing in transit; all those things must be taken into consideration, and it might follow if the haul was entirely upon one line of railroad that the case might equalize itself, but such is not always the fact, and in the great majority of instances the real conditions are that there are probably four, five or six carriers involved in the haul.

Mr. HILL: Then there are discords even in the happy hunting ground?

A. Yes, sir.

Mr. MOORE:

Q. If twenty three cents is a reasonable rate on lumber from Monroe, La., to Independence, Kans.—which I understand is an intermediate point in that lumber zone for the transportation of the freight—would the fact that two roads instead of one participate in the haul render it an unreasonable rate?

A. You mean the fact in itself that two roads participate in the haul?

2761 Q. Yes.

A. Oh, that fact alone would have nothing to do with it in particular; that fact alone.

Q. If commercial and competitive conditions are such as to create a necessity for establishing zones of that kind you refer to, for the shipping of a product, we will say lumber, to establish a blanket rate applicable to the zone; if the railroads in order to meet that condition should prescribe a rate that was too high with reference to the cost of the service at one point than at another point in the zone—in other words, a rate which the shippers on the farther side of the zone might be satisfied with and feel they were getting a low, cheap rate, but which would dissatisfy the shippers on the other, the nearer side, and cause complaint of discrimination because the rate there was higher than it should be with reference to the cost of service; while it might result in some inequality or injustice as among the patrons of a railroad, the shippers, does it impair or destroy the principle that the rate is fixed with reference to the cost of service, taking it as a whole and in its totality and applying it to the entire territory covered by the zone, assuming it might be an injustice on one side and might be more liberal than it should be on the other?

A. On that particular commodity?

Q. Yes.

A. Yes, because it would be impossible for the traffic men

2762 or any other human being in the first place to find the cost of service on that particular commodity.

Q. That comes back to the question of whether it can be done;

what I am trying to discuss with you is whether there is an attempt to do it. Your testimony is that they do not seek to do it. I am speaking with reference to that, whether they can do it, not whether it is practicable.

A. No, I do not believe they give any consideration whatever as to the cost of service. What they want is to get the business and produce the revenue.

Q. How can you produce revenue unless you adjust your rates with reference to the cost involved in its production?

A. If you really haul a commodity for one half the cost of service, you are producing some revenue, you are paying part of the expense; you might be paying transportation expense and maintenance, and you might not pay the pro-rata of the interest and fixed charges; all those things enter into the matter.

Q. Speaking of paying transportation and maintenance expenses—you are assuming that train would run empty if there were not a load of lumber to take up from Louisiana?

A. I am basing my conclusions from my own knowledge and upon the testimony of prominent men—some of the most prominent railroad men in the United States—basing it upon testimony from Mr. Kruttschnitt; Mr. Lincoln, formerly with the Missouri Pacific-Iron Mountain—I think he was the head of the Traffic Depart-
2763 ment; Mr. Hill of the Great Northern, and Mr. Fish, formerly of the Illinois Central, in their testimony given before the Senate Committee, at the time the Hepburn Bill was up; and on the testimony of many prominent railway officials in cases heard before our Commission.

The point that is always prime among those traffic men is to get the business, have a return haul—anything to get the business.

Q. So your testimony, then, as based on what you have read in the statements of others?

A. What I have read and heard, and what I have observed.

Q. Not upon any knowledge you have?

A. Yes, it is based on my own knowledge, part of it.

Q. You spoke about a return mileage on commodities: is not that a factor that would enter into the consideration of the cost of service, whether by giving a low rate and using it you could get a return haul?

A. The return haul is given a great deal of consideration.

Q. And it has a great bearing on the question as to whether a railroad company is earning more or less than the cost of service in transporting a certain article?

A. It has a bearing on the revenues as a whole, but has nothing whatever to do with the cost of service.

Q. If a railroad could establish a rate that would enable it to
2764 haul a large volume of lumber from points in Louisiana to East St. Louis and there load the cars with coal to go back in the opposite direction, would it not be justified as a business proposition and upon consideration of all the elements that are usually considered by men in any given business transactions, and among

others, the profit that could be made out of it in making a low rate for the purpose of bringing about a condition of that sort?

A. Naturally, an up-to-date traffic man would want to get a return haul in his empties and if he saw the tonnage in sight, if there was no restriction, he would be tempted to make a very low rate to load those empties for the return movement. At the same time, he would not give the cost of service any great consideration. It would occur to him, likely, "well, it is putting some revenue into the coffers of the Company and something will come out in the wash at the end of the year" and that is about the result?

Q. You said that getting a return loading was an inducement: why is that so? Why does a railroad official make a low rate on the business going in one direction because they can get a loading in the opposite direction on return cars?

A. To produce revenue, to get the money.

Q. Is it not because, while the rate may be low and the profit may be very small on hauling the lumber North, when you get the return loading of coal going South, in the case I put, that

2765 taking the two together it would be a profitable business?

A. A very low rate on the return movement.

Q. Whatever the rate may be—what I mean is this: if the railroads on the consideration that you speak of, namely, in order to get a return haul, will make a very low rate, is it not because taking the two directions together, the going and the coming, they can make money out of it?

A. They take it under the impression that something will come out in the wash at the end of the year and they will have something to show for their efforts.

Q. You do not mean to say, do you, that railroad men seek business on any other basis than the purpose of making money for the Company?

A. At least they believe they are doing some good for the Company. I think they honestly believe they are, but I do not think they know anything about the cost of service, and I do not think they give that any consideration. I am sure they do not from my personal knowledge and from their testimony.

Q. Would you not think railroad earnings would be a very uncertain quantity if the cost of the service was totally lost sight of in fixing rates? How else can they make dividends?

A. On some lines they have an index to the cost of service. For instance, on the Hill and Harriman lines it is an axiom to watch the cost per ton per mile.

2766 Some traffic men, for instance on the Pennsylvania and Wabash Railroads, they receive an average of the cost per ton per mile.

On the Pennsylvania road, in recent years, the average expense per ton per mile has been less than five mills.

Q. You say average expense?

A. Yes, it has been much less than five mills. Now, that is an average; it is an average for all; it is an average for silks and coal moving in the same train. It is an average for iron ore and for

perishable goods; an average for first class and for lettered classes, the low classes; commodity rates.

He has an average there. It might occur to him that, if I make a rate less than five mills per ton per mile I am taking it at a loss to my company. I believe that some traffic men, from the testimony they have given, use that as an index to cost, the average cost per ton per mile, and that is sort of a guide for them.

Q. What is the purpose of that? Why do they want that if they do not care anything about the relation?

A. In the actual order of railroading the cost is worked out on that principle, in getting an average cost per ton per mile.

2767 Q. So it does come back, in the end, that there is in the minds, even of railroad traffic officials, a consideration for the relation between cost of service and the compensation for it; that is true, is it not?

A. Yes, they have some idea; but in the actual making of the rates they do not always take that index they have there into consideration. It occurs to them sometimes, well, here is some business offered; do we want it; had we better let it move over our rails; the other fellow might get it, and I will take it.

Q. Now, Mr. Willmering, let me ask you right there: say one of those roads that you refer to ascertain from its statistics that the average cost per ton mile is five mills; do you believe that the officials of that railroad, having gone to the trouble to ascertain that fact, would haul a train load of the most fragile and at the same time the most valuable commodities that are known to the railroad traffic, at the same rate per ton that they would the least valuable, and the heaviest and least liable to damage or injury—commodities, I mean of that class? Do you believe that any railroad official would do that?

A. Haul a high class commodity at the same rate as a low class commodity?

Q. Yes.

A. I believe there are instances where they have done that and I believe you will find exceptions to the classifications——

2768 Q. I am not speaking of exceptions. Every rule has an exception. Among lawyers and judges it is said that the exception proves the rule.

What railroad officials conduct their business in that way? Do you know any case in which, as a rule of practice, a car load of glass, fine Bohemian glassware of the highest value and most liable to breakage (if I am correct in that) would be hauled at the same rate that a car load of brick, stone or lumber?

A. The traffic man would be governed by traditions, by the rules that were handed down to him by his predecessor, and the classifications that were made in the beginning.

Q. Well, let us go back to the predecessor; would he have disregarded those conditions?

A. There is a beginning to all things, and in the beginning the commodities were classified in the Official and Western Classifications, and at the time those classifications were made and built by these railroad traffic men—the cost of railroading—in the beginning

the cost per ton per mile was very great. For instance, on the Pennsylvania road from 1864 to 1870, it was probably fifteen mills; today it is five mills.

2769 At the time that this classification was made it may have been submitted and agreed upon in the seventies when the average cost was high and it is handed down from time to time, and it still remains in the classification at the old rating. Of course, the traffic men then are governed by the old traditions instead of the cost of service.

Q. What is the object of the classifications made by this Western Classification Committee and other bodies engaged in that kind of work?

A. Well, there are a great many new things manufactured that have not been classified and they get together and agree upon a classification of some new thing; and oftentimes complaints are made about erroneous classification, or high classification, and those complaints are made by the shippers in their meetings at the conferences.

Often it occurs to them, now we have to get more revenue, we might raise a few of these things to a higher class. Instead of raising the rate they raise the classification. All those things are taken into consideration.

Q. My question was what is the object of classifying commodities as done by those Committees.

A. The object is to prescribe rules and regulations for the government of their employees, principally, and to submit it in a way that they can——

2770 Q. Is it not the object, just as the name implies, to classify freights that are transported by a railroad with reference to the application of the rates that are made by the companies after the classification is made?

Mr. HULL: Had you finished your answer?

A. No. Consideration is given to the casualty risk in different commodities; some commodities may be rated higher than low grade stuff that ordinarily move. All those things are taken into consideration at the conferences. They make corrections and amendments to the classification.

(Previous question read.)

That is the prime object, to classify the quantities, the things moved.

Mr. MOORE:

Q. What are the general rules governing these classification committees in making that classification?

A. What are the prime motives governing them?

Q. No, by what rule are they governed in making that classification as between different articles of freight?

A. Oh, bulk and the casualty risk, the lading, space occupied by the commodities; these are given consideration.

Q. Why do they consider those things? Why do they give consideration to those elements?

A. I am not a mind reader. I could not tell you that. They are governed by opinions and their own theories.

I have seen so many conferences of these men when they get together and they are about as bad as insurgents and straight Republicans in Congress. They cannot agree among themselves. They have some suggestions to make; they get all mixed up and finally the ideas are adopted.

2771 Q. You doubt the wisdom of their methods sometimes?

A. I doubt the wisdom of their theory, because I have disproved it.

Q. I believe there is a first class, is there not?

Mr. HILL: I suppose Mr. Willmering is your witness on all these propositions?

Mr. MOORE: No, I am cross-examining him on things growing out of what you brought out, whether there are any relation between the cost and the pay for the service rendered.

Mr. HILL: We did not go into classifications at all.

Mr. MOORE: I know, but it has a bearing on it.

Q. I was asking Mr. Willmering how many classes there are of the Western Classification Committee.

A. Five hundred classes, one to five——

Q. That is sufficient for my purpose.

A. The lettered classes are from A. to E.

Q. What are the characteristics of that which is included in the first class, with reference to the cost and risk of transportation?

A. Well, the value is given consideration, and in case of loss and damage, the liability for loss and damage. It would be a hard matter to state what factors enter into the matter, because of the traditions governing and the making of exceptions.

As I stated before, these men do not agree among them-
2772 selves—the traffic men—as to how some new thing should be classified, some new invention, or some new thing manufactured. Sometimes the question of policy enters into the matter. The question of policy in this respect: here is a new industry established. If we class that as third we might not get the business. It may be they could not afford to manufacture and move the stuff.

If we classify it as fourth we might get some business from it. Things of that kind all enter into it—commercial conditions govern, competitive conditions, all those things are taken into consideration.

Q. When those exceptional conditions arise, they depart from the general rule, do they?

A. Those are not exceptional conditions. The traffic men meet those conditions every day.

Q. Mr. Willmering, are not weight, bulk and value, primary considerations in the making of classifications and is not that obvious to any one who will take the classifications and look at them?

A. That is one of the many primary——

Q. That is obvious on the face of the classification is it not?

A. It is built on that theory to a great extent, but it does not always follow that he conditions follow the theory. Other matters are taken into consideration.

Q. Are those not elements that enter into and very largely
2773 influence the cost of handling the transportation?

A. I will never believe that the cost of handling has anything to do with rate making, because I never discovered it.

Q. I asked you if as a factor—not what any man's notion may be—weight, bulk and value do not affect the cost to a railroad company of transporting goods?

A. Those are numbered among some of the many factors that enter into it.

Q. You spoke of the Pennsylvania Railroad and the Hill Railroad collecting statistics for the purpose of ascertaining the average cost per ton mile for transporting freights and getting out an index of that:

Does that index also show the average length of haul?

A. The average length of haul is sometimes worked out, but I think it is very rarely given any consideration by the traffic men; it may be in some cases.

Q. The question I asked you is, if the index they prepared does not also show the average length of haul of all the freights that bring about the average cost of five mills, or any other average that may be ascertained.

A. The particular exhibits I have seen of the Pennsylvania Company, and the Wabash Company, in the exhibits showing cost
2774 per ton per mile, the revenue per ton per mile, and profits or loss per ton per mile, have not shown the average haul, and where the average haul is shown in such compilation it is the average haul for all business. It is intrastate and interstate, car load and less than car load, all thrown into one, and the average is taken from that. Of course that in itself—I have heard traffic men say they have given the average haul theory some consideration, but I have never heard them explain comprehensively why they have given it any great consideration.

Q. I will ask you further if those indexes which you have in mind do not show the average haul of various commodities, not the general average of all, but the various commodities that are classified and shown in that index.

A. No, I do not recall seeing the commodities classified and the average haul given for classified commodities.

Q. We will leave out classified commodities: perhaps the word does not convey the correct idea. You say they classify and they get an average: do they not divide that into commodities and do they not give the average length of haul for commodities?

A. I believe coal is separated, but I think all other commodities are thrown into one whole. I believe, as I recall it now—I am speaking from memory—The Pennsylvania made a separate compilation of coal.

Q. Does the index, kept by the Pennsylvania Company, contain no other of the average haul except such as is applicable to
2775 the coal?

A. I do not know now. I have not seen such a statement.

Q. Does the index show the percentage of empty cars moved under a given expense that is moved by it?

A. The Pennsylvania Co. go into very great detail in working out statistical information and doubtless in regard to the empty movement and loaded movement, both East and West. They give that some consideration for the purpose of showing in which direction the volume of empty movement is.

Q. Is not all that done for the purpose of giving information to those who have charge of the traffic of these roads in regard to the relation between the cost and the revenue that accrues to the Company from its business?

A. It gives a mean. It is the average of all of the stuff that moves, at the end of a given period. While it gives an index as to the average cost—if you have the average cost at five mills—it is left to the conjecture of the traffic men whether the five mills covers the haul of silks and satins, or whether it is for coal. It is up to him to make a good guess and that is all he does.

Q. Do you mean to say when he gets that index he puts the same rate on a car load of silk as on a car load of coal?

A. If he gives special attention to that index that would follow that he would do that. He exercises some judgment with regard to the traditions, the classification that has been prescribed
2776 for him in the past.

Q. Now, Mr. Willmering, I want to ask you this question, and I would like you to understand it fully before you answer:

Is it not true that the purpose of this index which you have described is to establish for the benefit and use of the traffic men, the average relation between the cost of service and the revenue that is produced by it, and do not the traffic men in their application of it to the current business which arises on their road, act with reference to the effect that the characteristics of the freight to be carried—bulk, weight, value, etc., would have in determining the proper application of that average to the particular commodity upon which they fixed the rates?

A. They are governed by the classification of commodities in the Official or the Western, or other clasifications in common use, and, as I stated before, the only real index they attempt to use in the real art of railroading, is the average cost per ton per mile. It has been worked out on the Pennsylvania, since 1864. That gives them an average cost per ton per mile and that is the only unit that they ever use of cost.

Q. That is a starting point in fixing the rates, is it not?

A. It ought to be of some assistance to the traffic men in
2777 making rates, because it has been constantly used for finding a unit for cost of service. It ought to be of assistance, but I do not believe the up-to-date traffic man in railroads, or traffic men that have come under my observation, and from my knowledge while in the service of the Company that any consideration is given to the real cost of service of any particular commodity.

Q. Is not a good deal of expense involved in getting together the statistics that are embodied in that index?

A. Yes, in getting the index, the average cost per ton per mile, each individual way bill—it is compiled from each individual way bill and the real distance between point of origin and point of destination for each particular commodity on that way bill is carried out into ton miles; and the railroad companies have used and compiled those expensive statistics for years and years and it has been the unit for cost, the ton mile. I believe it is a——

Q. Why do they go to all that expense and trouble if they do not use it after they have obtained it?

A. I have wondered about that myself, Mr. Moore. I have wondered why they did not use their own unit to find the cost in these state rate litigations. That is truly remarkable.

Q. How often does the Western Classification Committee revise its classifications?

A. They meet very frequently. I have not kept posted on that.

2778 Q. Don't they do it every six months?

A. It is likely they meet semi-annually.

Q. What is the purpose of making those revisions?

A. To classify new things that are manufactured and to lower or raise classifications and meet new conditions.

Q. The purpose is to revise and adopt the former classifications to existing conditions and circumstances at the time of the revision, is it not?

A. Yes, to commercial conditions and to competition—competitive conditions. Oft times stuff that has been classified to second class may be reduced to fourth class and the factor of bulk and of liability, etc., that consideration, if it entered into the previous classification, is destroyed there if they reduce it from the second to the fourth. It is due to some new condition, competitive, commercial, or some question of policy.

Q. It shows they are getting away from the traditions you have been talking about, does it not?

A. The only way they get away from traditions is to meet competitive and commercial conditions. It is not the cost of service.

Q. For what purpose do they entertain and hear complaints from shippers about classifications?

A. Ordinarily the complaints are described as discrimination.

2779 Q. The complaints are based, are they not, upon the proposition that the classification results in too high a rate upon the commodity that the man who makes the complaint has to ship?

A. It is likely that the men will make a complaint, claiming that the classification makes a prohibitive rate and that they cannot move the stuff on that rate; that they want a lower rate classification.

Q. The rating then depends upon the classification?

A. Excepting commodity rates.

Q. And to the extent that the classification is controlled by the characteristics of the different articles that are embraced in it, such

as weight, bulk, and value, that have been mentioned, those characteristics also affect the rates that are based on that classification?

A. They are numbered among some of the many which affect it.

2780 Q. In what cases did you make an examination of railroad witnesses referred to in the former part of your testimony?

A. In a number of cases before the Corporation Commission of Oklahoma, and in cases remanded by the Supreme Court of Oklahoma for the further taking of testimony before the Corporation Commission of Oklahoma.

Q. Have you been assisting in conducting trials of that character?

A. Yes, sir.

Q. Are you taking an active part in the litigation now in progress between the Oklahoma Corporation Commission and the railroads, in regard to the rates in that state?

A. Lending all the assistance possible, yes, sir.

Q. In looking over the paper you handed me in response to my request, where you prepared a formula showing your method of dividing operating expenses between state and interstate, I notice the first item is "Maintenance of way":

A. That is the first general account, yes, sir.

Q. That you divide on the basis of car miles, straight?

A. Yes, sir, as between local and through trains.

Q. Do you divide that expense as between passenger and freight?

A. Between passenger and freight?

Q. Is that expense divided by the railroads as between passenger and freight?

2781 A. After the expense is divided between passenger and freight, after the actual freight expense has been ascertained.

Q. How are they divided between passenger and freight?

A. On the basis of the revenue train miles, it should be, except Account No. 17 "Docks and Wharves", which would be assigned to freight.

Q. Why do you change the basis of division when you come to divide between local and through freight trains?

A. In the hire of equipment the car mile is used and is a recognized basis. Armour Company and refrigerators are paid on the basis of car miles. It is an established basis and it would be more equitable for the reason that one day it might happen that a local freight train would have the greater number of cars, and the next day it might be that the through freight train would have the greater number of cars. It is a better average than the train mile. It is recognized in railroad accounting as a——

Q. When did you ever know a division of "maintenance of way" expense to be divided between local and through trains in railroad accounting?

A. There would be no necessity for such a division until this litigation occurred between states. There has been no necessity for it. The railroad accounting officials have not given any attention, study

or thought to that division, until these matters came up very recently.

2782 Q. Has there been any system of division practiced by the railroads in their method of keeping accounts, as between local and through freight trains?

A. They are just as deep in the mud as we are in the mire, because they are of recent date, as between state and interstate. But the basis I have suggested here, in my judgment, is a fair basis—an equitable and a just basis, for the reason that the expense of "Maintenance of way" is common to all classes and characters of traffic. It is not caused by any particular class of traffic, and the expense or outgo for "Maintenance of way" is caused by the acts of Providence, acts of God, whether a wash-out, deterioration of ties owing to weather conditions. In all truth and in all logic, the car mile ought to be accepted for the basis of division between local and through.

Q. If that is true, why should it not also be used as a basis of division between passenger and freight trains?

A. Well, we have made a concession to the railroad companies in that respect and have accepted the theory arvanced by the railroad officials themselves.

They were first to advance train mileage for a division between passenger and freight business, and where the charges could not actually be located, in a great many of the instances, between passenger and freight, might be assigned directly to passenger and freight traffic accounts.

2783 One of the principal reasons why we have accepted the revenue train mileage basis for a division between freight and passenger, where the expenses cannot be located, is just a concession to the majority of the accounting officials. It is accepting the railroad's own theory.

Q. Who made that concession? You say "we". Whom do you mean by "we"?

A. I mean we who represent the states in this litigation, especially in Oklahoma.

Q. What is your view about what would be the best basis as between passenger and freight?

A. As between passenger and freight? For the "Maintenance of way"?

Q. Yes?

A. I believe the car mile basis would give us the basis where the degree of accuracy would be greater than the degree of inaccuracy.

Q. Now, Mr. Willmering, in making that statement, don't you go counter to the concensus of opinion and practice, as put in practice and continued by all railroad accounting officials?

A. I would not say all—I believe if it was shown up to the railroad men—railroad accounting officials that now recognize the revenue train mileage basis in so far as "Maintenances of way" is concerned, I believe they would agree that the car mile would be the

2784 more equitable basis, everything considered.

Q. What I am intending to ask is this: what is and has been the practice among railroad accounting officials?

A. The practice has only been applied in the division of freight and passenger expenses; the revenue train mileage, with the exception of on account "Docks and Wharves"—all the charges made to that account is caused by freight traffic.

Q. What part of the expense of "Maintenance of Way" is assignable to the freight and what part to the passenger traffic?

A. It is common to both. It is not assignable to either one, except on an arbitrary basis.

Q. I understand that, but you stated some parts would be assignable——

A. One particular account, "Docks & Wharves". The charges and outgo from that particular account are assignable to the freight, not assignable to passenger, because it is not caused by the passenger traffic—with the exception of that one account under "Maintenance of Way & Equipment".

I don't suppose that the Iron Mountain or any of the roads connected with this case have any "Dock and wharf" territory. I am speaking with reference to the Interstate Commerce classification of "Maintenance of way expense".

Q. What proportion of the expense of "Maintenance of Way"; what part of it is directly attributable to the wear and tear produced by the operation of trains on the tracks, and what part is

2785 attributable to other causes?

A. The part that is attributable to wear and tear of cars or trains would be infinitesimal compared with the entire outgo, but in the maintance of way and structures the elements and the acts of Providence would cause the greater part of the outgo.

Q. Are station buildings included in that term "structures" as used in that connection?

A. Oh, yes.

Q. Fences, telegraph poles, and so on?

A. Yes, sir.

Q. Why should that expense be divided on the basis of the cars used?

A. The road is built for the purpose of moving cars over the rails. That is primarily the purpose.

Q. I can understand why the damage produced by the wear and tear to the rails by the wheels should be made a direct charge and apportioned that way, but I have observed a number of indirect charges, that you have divided them with reference to the earnings, you say?

A. I have made no apportionment of any expense there on the basis of earnings.

Q. I do not say that you did. I mean the state acountants in this case.

A. They merely made a test and followed the theories advanced by the railroad company's experts, and applied figures to the railroad's theories.

2786 Q. How do you know that to be the case?

A. They have attempted to make a test of the theories of Mr. McPherson and Mr. Doddridge and apply it to conditions

existing in Arkansas. They followed their ideas to a great extent and made a test to bring out facts and figures resulting from the theories advanced by Mr. McPherson and Mr. Doddridge. That is the way it appears to me and it occurs to me they made a painstaking effort to put a test to the theories advanced by the railroad experts.

Q. I observe that you make no allowance on account of local service in your division, you divide it straight:

In Exhibit K, filed by Mr. Wharton, he adds 50% to local engine mileage for station switching.

A. Yes, that is an arbitrary allowance and it is favorable to the interstate business. It is following the theory advanced by the railroad experts and it is unfair to the state.

Q. Why?

A. Because it is both, foolishness. The idea of wanting to charge additional maintenance for switching expense to local freight trains. Anyone that has been in the railroad service and observed these things daily would know that it is humbug.

Q. You think there is no more station switching on local than on through?

A. Certainly; but the local trains are doing switching
2787 for the through trains in reality, under existing conditions——

Q. What do you mean?

A. A through train sets out—a carload of interstate freight. That through train don't stop there to spot that car at an industry track, or spot it for unloading or loading a the team rack or the industry located at that station; but the way freight train, which is the workshop of a railroad, it goes along, follows that through train and performs that switching service——

Q. You think an extra charge ought to be made the other way?

A. I believe there ought to be some plan devised where the time employed by the local train crew to that particular character of switching—which ought to be ascertained and could be, for the future; for the past there has been no record kept of it.

Q. In your view it should be charged to the through instead of the local train?

A. The through train should be charged in reality for whatever service was performed by the work train.

It is a misnomer, calling a way freight train a local train and trying to confine it exclusively to freight traffic, which, by inference, a great many railroad experts have tried to either mislead the layman; it is unfair on the part of the railroad experts by inference to assign all this extra cost to a local freight train, and by
2788 inference allow someone to believe—who is not familiar with the real conditions—that this local train performs exclusively service for state business. It is a wrong inference for those railroad experts and it is unfair for them to assume anything of that kind.

Q. There has been something said in this case about what they called the "peddling" business, in connection with the distribution of state freights, and it has been treated as an extra source of expense

which is not attributable to the interstate business? Is there any additional switching connected with that in any way?

A. The peddling business? You mean less-than-carload business?

Q. Yes, and I mean the peddling distribution of state freights: Is there any extra switching involved in that?

A. Yes; it costs more to handle less-than-carload business per ton per mile, than it does to handle carload business.

Q. Where would you assign that extra expense?

A. If the greater number of ton miles was found to be interstate, I would charge it to the interstate business or through trains or whatever class of trains carried it.

If the greater amount of less-than-carload miles was state business, of course it should carry the burden of that extra expense.

Q. Let us suppose that we have a local train starting from Little Rock, going to run 100 miles: it carries some interstate
2789 freight that was switched on to it from the interstate train that came into the station where this shipment originated: It has a number of cars of state freight for distribution along the line; that stuff was brought in Little Rock and taken out in small packages and is to be distributed. It has to stop at all the stations to peddle it out: that is what they mean by "peddling trains".

A. Making delivery of less-than-carload.

Q. Let us asume that the greater part of the delay in the distribution of those freights results from the state freight—while you have interstate freight on there, that has to be delivered at a few—two or three stations; the other has to be distributed among a dozen stations:

Take a case like that and state where the extra expense growing out of switching and other service incident to the distribution or peddling of that, should be assigned?

A. How many carloads of state freight have you?

Q. I don't know.

A. I want to know the ratio of that train. Your assumption ought to be based upon some example that would be——

Q. If you wish to illustrate it you can do so.

A. I would not like to answer that question unless you would indicate what is in your train.

Q. I would not undertake to indicate that except that it has state and interstate. The state distributed locally and the interstate among two or three of the larger stations.

2790 I am not asking you for amounts, I am asking you where you would apply the extra expense growing out of the service incident to the peddling out of that state freight?

A. I would have to have the tons and ton miles in your train of each character of traffic. The question could not be answered with any degree of accuracy by any one unless they know what is in your train.

Q. You cannot answer it unless I give you the contents of the train?

A. If you want to know that, I want the character of the tonnage.

Q. Mr. Wharton has assumed that each engine is the equivalent to two and one-half car miles, in Exhibit K for the purpose of division of "Maintenance of way and structure" expense: You do not make that concession, do you?

A. No, he is too liberal to you people.

Q. What do you think about that?

A. He increases that local engine 50% because he has added 50% here to a local car mile, and a corresponding increase is made for the engine miles. He is extremely liberal in that allowance, in favoring the interstate business.

Q. Do you think that any allowance at all should be made on that account?

A. Not for maintenance of way, no, sir.

Q. Do you know on what basis that allowance is made by
2791 Mr. Wharton?

A. I suppose he has accepted some of the theories of the railroad experts in this case.

Q. Do you assume that because you do not know of any reason why he should adopt that equivalent of two and one-half times?

A. It is absolutely absurd to me. I don't know of any reason for it.

Q. How about the 50%——

A. It is favoring the interstate business without any reason. He is doubtless following out some theory advanced by some of your experts.

Q. If it is proper to make an addition to the local engine mileage on account of station switching, is 50% a proper amount?

A. I would not make any allowance whatever, because the local train is the workshop for the railroad, as I stated before, and performs switching services for these through trains.

Q. Now, going to "Maintenance of Equipment":

You have divided the expense of maintaining locomotives in two parts, yard and road. You divide the yard expense on the basis of yard mileage and the road expense on the road engine mileage. You make no allowance on account of possible extra maintenance due to yard service in your division, do you, as was done by the State?

2792 A. Not as between through and local trains, no, sir.

Q. Do your views differ about the propriety of that from that of the state accountants?

A. Yes, sir, they have again been liberal with you by following the theories advanced by Mr. McPherson.

Q. Why do you think Mr. Wharton was wrong in making that allowance?

A. Because it is not real. It is an arbitrary allowance that has no ruling of law.

Q. Before I leave that, what is this yard engine mileage, what do you include in that item?

A. Mileage made by the yard engines.

Q. How do you ascertain that?

A. From the reports rendered by those in charge of yard engines,

whatever method might be in practice by the railroad companies; that is ascertainable.

Q. Is the yard engine mileage divided between local and through service?

A. On the basis of the actual cars handled for each class of trains. That can be ascertained by check made of the wheelage reports and other reports made by the yard.

Q. How do you ascertain that?

A. By the car numbers of each train when they come into the terminal and go out.

Q. I thought that was on the basis of yard engine mileage: that would be car mileage if it was divided on cars——

2793 A. Well, it is ascertainable and should be divided on the mileage made.

Q. How would you ascertain that, Mr. Wilmering? I want you to explain that. If it is ascertainable I want to know how it could be ascertained.

A. I have not made an investigation of the method of keeping this mileage with reference to the Iron Mountain System, but I have every reason to believe that it is ascertainable.

Q. How do switching engines handle cars in switching them? Do they do it just indiscriminately, take up a number of cars, some belonging to one service and some to another?

A. The local train comes into the division terminal where they employ yard engines and yard crews. The road engine is detached and sent to the roundhouse and the yard force with the yard engine, under instructions from the yard master, breaks that train up and distributes it, or makes up other trains from the cars in that train, and vice versa, with refernce to the through train. The cars in each class of trains can be identified from the car numbers and a record can be kept.

Q. Does anybody in the railroad yard office keep a record of the yard engine mileage performed in the yard work? Do you know of any such instance in practice by any particular railroad?

A. That is a matter that I have not personally investigated

2794 and the records submitted in the case should be accepted.

Q. I want you to give me your opinion as an accountant, as to whether it is possible to keep an account of the yard mileage of engines engaged in that service? I mean mileage of yard engines engaged in yard service?

A. I am not prepared right now to give you an answer in detail, but it is a matter that I have not investigated so far as the Iron Mountain or the Cotton Belt accounts are concerned.

Q. My question is broad and applies to any railroad whether it is possible to do it?

Is it not impossible to do it on account of the nature of the service?

A. I am not prepared to give you the answer that your question deserves at this time.

Q. I will ask you further, if in point of fact, the mileage of yard engines is not, on account of the impracticability of keeping it any

other way, measured by time, and if, under the regulations and rules of the Interstate Commerce Commission, it is not kept at the rate of six miles an hour and accounted for on that basis?

A. I indicated that I wanted time to investigate this proposition before I gave you a technical answer.

Q. Now, let us see how you are going to divide your road engine mileage: you do that straight, do you?

A. Yes, sir, on the mileage of the road engines of each
2795 class of trains.

Q. Mr. Wharton added 50% to the mileage of road locomotives in local service to provide for extra switching mileage, and then added 50% to the switching mileage of the local train engines to provide for extra maintenance due to switching service, making 75 % additional to the local engine mileage: you do not make that allowance, do you?

A. No, sir, it is a very liberal allowance and it is favorable to the interstate business, and does not exist in reality. There is no reason for it.

Q. You think then that Mr. Wharton fell into error in doing that?

A. No, I think that Mr. Wharton was painstaking in his effort to follow the theory advanced by your experts in this case and apply the real figures to their theories and using their theories of maximum cost.

Q. You divide the expense of maintenance of freight cars on straight car miles, too?

A. Yes, sir, straight car mileage basis.

Q. Did you take into consideration the element of repair due to stopping and starting of trains at way stations, and due to the extra terminal handling of cars?

A. Not as between local and through.

Q. Why not?

A. Because it is absurd. One day the same car might be in a local and the next day in a through train.

2796 Q. You do not think Mr. A. M. Wellington would state an absurd thing?

A. I don't think he took into consideration the distinction, or made a distinction between local and through trains, to the extent that it should be applicable to a division of expense between state and interstate business.

Q. You think Mr. Wharton made a mistake in applying the statement quoted from Mr. Wellington on that subject in the way he did?

A. I think he wanted to be fair and impartial and that he wanted to follow the theories advanced by your experts in this case, and he wanted to apply those theories to real conditions and make a test. I think that is what he has accomplished. He used the maximum expense in all cases.

Q. I did not ask you if you thought Mr. Wharton wanted to be fair or liberal: I asked you if you thought he fell into a mistake

when he applied the proposition asserted by Mr. Wellington in his work that 21.5% repair expense of freight cars should be added——

A. For what reason?

Q. He set it apart as representing—as an extra applicable to cars in the local service, and if you will turn over and look on the next page you will see what he says, and in connection with it he has also set apart 13.5% for the repair expense: he does that on the authority of Mr. Wellington.

2797 A. He did not define it as a distinction between local and through trains. He is talking about——

Q. This is what he says:

"Mr. A. M. Wellington, (Page 203) says that the stopping and starting at way stations is the cause of approximately 21.5% of repair expenses of freight cars, and that the terminal handling is the cause of approximately 13.5% of the repair expenses. Taking these elements into consideration the maintenance expenses may be divided as follows:"

Then he added:

"Stopping and starting 21.5%.

Terminal handling 13.5% :"

I want to know if you think Mr. Wharton was correct in following Mr. Wellington's authority in making the division he did there?

A. Mr. Wellington made no distinction between local and through trains. The stops he refers to would doubtless occur in the through as well as in the local train. Through trains stop for train orders; they stop for crossings, and while the damage to the cars might be occasioned by these frequent stops, they occur in local as well as in through trains, and there should be no distinction between local and through trains.

Q. Now, we will turn over on the other side of it and see what Mr. Wharton says further about it. He says:

"Assuming that each local train makes a stop say each five miles and each through train a stop say each 20 miles, the local service should be charged with four times as much as the through service, in proportion to car mileage, for the expenses due to stop-

2798 ping and starting. Assuming also that each car in local service receives two terminal handlings (including handling at local stations) to each terminal handling of a car in through service, the local service should be charged with two times as much as the through service, in proportion to car mileage, for the expenses due to terminal handlings."

What do you say as to that?

A. That is rather a violent assumption. I think it is too much assumption of theory and it will not meet the conditions that really exist.

Q. Is it your idea that the whole basis and ground work of that division made by Mr. Wharton is wrong?

A. No, the basis is all right, but the extra arbitrary in making excessive charge to local trains and favoring through is wrong. The arbitrary added for additional cost.

Q. Do you understand that why he made that was in order to

make these divisions apply to the per cents Mr. Wellington said should apply to certain parts of the service?

A. My understanding is that he made that to apply these theories advanced by Mr. McPherson and Mr. Doddridge, and also in accordance with the theory advanced by Mr. Wellington.

Q. Why do you assume that the car mileage is a proper method of dividing the expense of maintenance of freight cars between local and through trains?

A. The car is the unit for the repairs and the repair is made to the car, and the greater the number of car miles made—it is the best unit that I know of.

2799 Q. Is the damage to cars in service affected by the weight and extent of the loading?

A. In my judgment, the weather and elements have a great deal to do with the damage to cars. That is the reason and cause for repairs.

The same as with a house that you build; there is a certain amount of depreciation and deterioration from the weather and the elements. The car is standing out on the side track. It is not under shelter like the engines are part of the time, and a greater part of the damage in my judgment to freight cars is from other causes than that of moving over the rails. A part of the damage is caused by overloading sometimes but that is the exception. The principal part of the damage, in my judgment, is caused by the weather and the elements and owing to not being sheltered like road engines are when they are out of service.

Q. What effect does the frequent stopping and starting of cars have upon them?

A. That has some effect.

Q. Does it not have a considerable effect?

A. To a part of the equipment of the car, yes.

Q. Mr. Wilmering, would not the damage to the car be influenced to a considerable extent by the extent of its loading and of the handling in the way of switching it?

A. Oh, yes, that would have some effect, but as between local and through trains there would be no distinction because

2800 the car may be used for through or interstate service today and local service tomorrow. Those things must be considered.

Q. When you divide this on a basis of car miles you disregard all differences?

A. We use the car mile as a unit. Today that car might be in interstate service and tomorrow in local service, as I stated before. Those things must be taken into consideration.

Q. If a large part of, or at least to the extent that the damage to cars does not depend directly on the miles run and depends on elements and such things as painting and renewals and depreciations of that sort which is caused by the elements—on what ground can you say that that kind of expense would be charged on a car mile basis?

A. We have got to use some arbitrary basis and in railroading the

cost account has not been brought down to the fine point that it has in industrial accounting. It might follow that some day a better basis could be determined, that the repairs could be identified with each individual car, and that the car itself could be identified as between train service. In view of the fact that an accounting has not been made or planned that would produce results of that kind, I don't know of any better basis than the car mile.

Q. But it is an arbitrary assumption, is it not?

A. We must use some arbitrary basis because it is a new thing among railroad accountants themselves, this division of in-
2801 terstate and state expenses. There has been no occasion for it until these recent litigations have occurred. Many railroad accounting officials have told me that personally they had not given it a thought until recent years, this division between state and interstate business, and for that reason they had not established any methods or any system for real cost accounting. And further, I understand you have a pooling arrangement with the Iron Mountain and that your expenses are not identified with the car outgoes, and that is the best basis in your case that I know of.

Q. Do you believe that railroad accountants ever will be able to ascertain the expense attributable to each individual car?

A. That they ever will be able to do it?

Q. Yes.

A. A great many things have been accomplished in accounting in recent years. I don't think it is impossible to do that, no, sir. I think that each individual car can have an account established and all expenses due to that car can be located to an extent where the degree of accuracy will be greater than the degree of inaccuracy.

Q. I believe that you testified that you could ascertain it by ascertaining the repairs to——

A. Oh, no; I testified that repairs had been ascertained to each individual road locomotive on the M. K. & T. road.

2802 Q. Have you any idea how many cars of the Iron Mountain system, how many engines are repaired annually?

A. No, the records would be the best evidence of whatever it is.

Q. I understand. We will take engines, for instance: there are at least ¾ million engine repairs annually on the Iron Mountain. I mean distinct and separate repairs. Many of them, of course, made upon the same engines, but separate and distinct repairs.

Would it not require an immense amount of bookkeeping to identify and charge those to the individual engine repairs?

A. It would require a good deal of bookkeeping. The M. K. & T. are doing that today. Mr. Se[illegible] spent nearly a day's time with me showing me the detail of how he accomplished and found out the actual expense of repairing each engine, and an account is kept with each engine for repairs and renewals and the depreciation is charged for each engine.

Q. Didn't he tell you they were trying to keep the same kind of a record for car repairs?

A. He indicated that eventually the railroad accounting officials would be compelled to do that, owing to this state of litigation, and

he had great hopes that they would finally accomplish something in that line.

Q. I suppose we might safely assume that there are 20 cars to an engine, probably, in service; maybe more or maybe less,
2803 but I just say that to illustrate:

Mr. Johnson tells me that there were repairs made of 557,210 freight cars on the Iron Mountain in the year 1909.

Some of them were foreign cars and some were domestic cars.

I want to ask you if you know or could you suggest any system by which each individual car could be charged separately with the expense that pertained to it, and then how would you divide that between the cars that belong to the company and the foreign cars that belong to other railroads?

A. That is a very difficult matter and it would be difficult to accomplish, and for that reason, in the division of repairs to freight cars and renewals, we have used the arbitrary basis of car miles; but I believe that such results will be finally obtained sometime in the future.

Q. What does "Supervision and General" under the head of "Maintenance of equipment" embrace?

A. All other expenses incidental to "Maintenance of Epuipment."

Q. You say you divided that on the basis of direct Maintenance of Equipment: Do you mean on the basis of division you have just been speaking of?

A. On the basis of the located expense; on the basis of the direct in that general account, maintenance of equipment.

2804 Q. What are the direct expenses, those you have been speaking of, damage to engines and cars——

A. Repairs and renewals to locomotives, yard, (*a*) and (*b*) as indicated in the exhibit, and all other expenses incidental to maintenance of equipment?

Q. How do you divide "Traffic Expenses"?

A. Traffic Expenses?

Q. Yes, you stated here on the basis of the total direct for actual expenses accrued within the State.

A. Yes, sir, I will explain that to you.

I would give no consideration whatever to any expense that accrued for traffic expense outside of the state. All those expenses that accrued any where outside of the state should all be charged to interstate traffic and no consideration should be given that for state business. But on the expense that actually accrued within the boundaries of the state, for traffic expenses, I would divide those on the basis of the total direct operating expenses.

Q. What do you mean by "expenses incurred within the boundaries of the state" and by "expenses incurred outside of the state"?

A. Those outside agencies located, for instance, we will take the Iron Mountain Missouri Pacific located in the City of Mexico, San Francisco, New York, Chicago—those offices there are for the purposes of soliciting business from those points to points within this state, for example, for soliciting intermediate hauls across
2805 the continent. All of their time and attention is necessarily devoted to interstate traffic.

Q. You mean in the sense that where the agency is located—if it is located in Chicago or New York, you would charge all of it to the interstate business?

A. Yes, sir.

Q. And if it is located in Arkansas you divide it between state and interstate?

A. Yes, sir.

Q. What would you do with the salaries of the Freight Traffic Manager and his office force?

A. I would charge that to interstate business.

Q. What would you do with the service that foreign agents rendered, who made an arrangement with a theatre troupe to go from place to place in the state on local state trips between points within the state?

A. Your local would have to be business coming properly within the jurisdiction of your commercial agent or district passenger agent located in the state. If the man outside of the state interfered with his jurisdiction it is an exceptional case.

Q. What would you do with that?

A. That is such an exceptional case that the favor might be returned at sometime by your agent within the state. It is interfering with his jurisdiction down here.

Q. Suppose a traffic manager was to tell you that a great
2806 deal of competitive business from common points wholly local business, beginning and terminating in the state, was influenced to go to his road by the efforts of a foreign agency that happened to be located at headquarters of various concerns that had plants and industries in the state: suppose you had such a case as that, what would you do?

A. You would have to show me such a case as that. I don't believe they exist. If they did the traffic officials in this state would return the compliment sometime by soliciting business up in his territory.

Q. You put it on a reciprocity basis, do you?

A. That is what it amounts to in reality. The questions that you have submitted do not really exist. I don't believe those conditions exist.

Q. The paper handed to me by you states that you divide station expense account on a basis of the tons handled, the length of haul considered. I wish you would explain what you mean by that?

A. On all intrastate shipments I would charge for two terminals, for the terminal at the point of origin and the terminal at the point of destination.

For example, if we had 100 thousand tons of state freight and 200 thousand tons of interstate and trans-state freight handled, for
the two terminals I would double the intrastate tons, making
2807 it 200 thousand; then the ratio would be 50% for each, providing the interstate haul was 100 miles or under.

If the interstate average haul was over 100 miles, I would then charge the interstate tons for an extra division terminal.

If the interstate haul averaged over 200 miles, I would charge it with another handling at the division terminal.

I found from actual experience, and I can testify from my own knowledge, that the interstate, both carload and less than carload, is actually handled at division terminals, and this theory that has been advanced in this case and applied by Mr. Doddridge—this bridge theory—that this trans-state business going over a state as though it were on a bridge, does not in reality exist.

There are too many cripples side tracked or ditched in these supposed solid through trains and I have not given that any consideration at all, because it don't exist. I know from my own knowledge that cars of lumber handled from points in Louisiana and points on the Iron Mountain in Louisiana—I recall some moving to points in Oklahoma that have been delayed in transit from 60 to 90 days and have been weighed four or five times in transit; the way-bill itself showed that this bridge theory is an absurdity. It is nonsense and it don't exist in reality. It occurs to me Mr. Doddridge and
2808 McPherson tried to apply the ideal theories in railroading for the most economic management possible, but they have not accomplished their ideals and never will, I don't think.

So for that reason and owing to the fact that these interstate cars both less than carload and carload are handled at the division terminals if the length of haul is greater than 100 miles—that also double the tons handled in order to ascertain the ratio.

Q. Have you read the testimony of Mr. F. E. Ward in this case?

A. No, I have not read his testimony.

Q. Have you read the testimony of Mr. Sewall or Mr. Whitenton?

A. I believe I read Mr. Whitenton's affidavit in the application——

Q. No, I mean his testimony?

A. No, I have not.

Q. According to that basis you have just stated, you would charge all interstate freight, including trans-state freight, one terminal and then an additional terminal handling for every 100 miles?

A. Yes, considering the 100 miles as an average of the distance of division points.

Q. So you would charge all the freight that you cover under that interstate and trans-state with those terminal charges, would you?

2809 A. Yes, assuming the division terminals were 100 miles apart.

Q. Mr. Wilmering, I have heard some testimony in this case about the average length of haul; has that anything to do with these terminal expenses?

A. Well, it is a well known action in railroading that the longer the haul the less charge per ton per mile, in short hauls the rate per ton per mile is always greater for both state and interstate, than it is for long hauls, and particularly so for state business, because on short hauls the standard local distance rates ordinarily apply, and on interstate business the business is largely competitive and the rate of charge is low in comparison to the ton per mile.

Q. What do you include in that item of "Station service"?

A. I include account 68, "Station employés," Account 72, "Sta-

tion supplies and expenses," and Account 100, "Telegraph and Telephone operation."

Q. That includes all of the stations as far as the station agent, cashiers, stenographers, clerks, bill clerks, platform men, truckmen, warehouse——

A. Warehouse men, freight loaders and unloaders, tally men, delivery men——

Q. You charge that to trans-state freight every one hundred miles in passing through the state of Arkansas?

A. Yes, sir.

Q. Do you know what the percent of trans-state tonnage
2810 on the Iron Mountain road is?

A. No, I don't.

Q. The exhibits in this case show that the trans-state tonnage of the Iron Mountain is 51 per cent, and on the St. Louis Southwestern it is 64 per cent, the ton miles on each line:

Would there not be a pretty considerable——

A. The ton miles would not be the index. It is the tons handled. The tons handled, I see only represent 33.61 for trans-state——

Q. You say that would not be a proper index, a proper criterion?

A. Made on the basis of the tons handled instead of the ton miles.

Q. On the Iron Mountain railroad the tons handled are 33% of the total and on the St. Louis Southwestern 44% of the total: To that extent in those proportions, that tonnage would be chargeable to these expenses every hundred miles passed over in going through the state of Arkansas?

A. A percentage or the ratio of tons handled as to character. Whether trans-state, local, interstate or state, would not appeal to my mind in any way whatever, because it is actually handled at these division terminals irrespective of character or class.

Q. Mr. Wilmering, a carload of goods starts from St. Louis
to go to Alexandria, Louisiana: that car passes through
2811 Hoxie, the division point in the state of Arkansas: are there any charges collected on it at that station?

A. No, the expense of collecting the charges would be infinitesimal compared with the entire expense attendant at stations.

Q. What duty does the station agent at Hoxie discharge in regard to that carload?

A. He has general supervision of the yard and ordinarily has the direction of the yard master——

Q. What does the cashier do?

A. He accounts for the revenue.

Q. I mean about that particular car of freight: what has he got to do with that?

A. He might have a great deal to do with it, depending on circumstances and conditions which happen in railroading every day. It might be the agent has assigned to him the duty of making damage reports or advising the proper officials with regard to a car with a hot box, or a car in a damaged condition; or it may be the car would be transferred at that division point.

Q. What if it is not in a damaged condition?

A. It would be incidental to station expenses, that is all.

Q. What are the duties of the bill clerks and the delivery man, what duties would they discharge?

2812 A. Well, those positions are all incidental to the station service. Of course, the cashier might devote all of his time and attention to the passenger business in selling tickets and not any part of his time to handling freight. He might have an advising clerk to give his attention to the freight accounting. Different conditions exist at different stations.

Q. I called your attention to those details, not so much because they are of any importance, but I wanted to ask you in connection with those details to which I have called your attention, if a very large proportion of the service that is rendered covered by this heading of "Station expenses" is not absolutely inapplicable to trans-state freight in its passage through the state of Arkansas?

A. Oh, no; I don't recognize that distinction or any distinction between the service performed at terminals as between any character of freight.

Q. I am not talking about terminals, but division points.

A. Or division points, then. I have in mind the division point I am acquainted with.

Q. And you make no distinction?

A. I have given that much careful thought and consideration and have come to that conclusion; I cannot draw any distinction nor any theory. If you apply the existing conditions to the theories advanced you find the theories are destroyed.

2813 Q. Do you propose to divide yard and terminal expenses on the basis of cars straight without any allowance of any sort?

A. Yes, sir, because it is obvious that it does not in reality cost any more to switch a car for a local than for a through train.

Q. What is "yard terminal expense", that is, what does it include in connection with the operation of industrial tracks, tracks to elevators and things of that sort?

A. It is incidental to the yard service, the placing of cars at industry tracks.

Q. Do you undertake to say that an equal amount of service is rendered to the cars containing trans-state shipments and those containing local shipments?

A. Oh, yes; they switch the trans-state cars around in the same bunch of cars that they switch the other cars, and they often break up blockades on the sidings.

Trans-state cars are not exempt from switching at all. They get just as much shifting and switching as the other cars. The theory is nice, but the conditions differ from the theory.

Q. Let us see, now, to illustrate:

There are five carloads of freight originating at Little Rock; one of them may be at the Dickinson brick plant, an industry there; maybe another one is at a lumber yard; maybe another one is at a cotton compress; there are three of those cars that are hauled in

to those different plants and industries at which they had to be loaded, empty. That involves a movement. Then there
2814 was a haul back from the point at which they were loaded, to the yard in which they were hooked on to the train: That is true, whether an interstate shipment originating there, or a state shipment originating there; and it is also true of shipments coming in and destined to Little Rock, both interstate and state business: Do those services pertain to trans-state shipments going through the state of Arkansas?

2815 A. It is not applicable to any distinction that can be drawn between through and local trains; there could not be any distinction drawn there, because if switch engines performed that service at division terminals, or at other places where the engine is maintained for the through train, it equalizes that.

Q. Are not trains made up of cars that carry these different kinds of freight, trans-state, interstate and state?

A. That is theoretical; it is the exception when that is true; sometimes they carry a through car of cattle through the state; it is all theory, all bosh.

Q. You assume to divide the fuel and locomotive expense on the basis of the actual expenditure in the two branches of service?

A. Yes, sir, in so far as the actual expenditures for each class of engines for local and through engines and the other accounts incidental to that, fuel and locomotive expense is divided on the basis of locomotive expense for that particular item?

Q. Is that possible?

A. The account can be kept for each engine, and it can be ascertained; on some roads, the firemen signs a receipt for coal delivered to his engine; I think an accounting can be made for that.

Q. Those expenses, I suppose, run irregularly, and vary on different roads, or do they or not—fuel and locomotive expenses?

A. Yes, I have heard it said by some of the railroad men, trainmen, that one fireman could get more service out of a certain amount of coal than another; there are a great many things
2816 that enter into it; it depends on the grades, and on the condition of the roadbed a good deal. There is no distinction between local and through trains.

Q. Do you think you could ascertain the relative consumption of coal on one road by statistics you gather from the operation of locomotives on another road at another time and place?

A. No, but if you would get the total locomotive miles and divide that—you would divide the actual expense for fuel by the total locomotive miles, you would get an average, and with the average, you would strike a happy medium there, and I think it would be possible as a system for the railroad.

Q. That is not the way you propose to divide it?

A. No, sir, I would want to go into actualities as much as possible on these things; for some future accounting we have to take past accounting into consideration, and these things you can plan for the future, but your plans won't work for the past.

Q. Pass over these other details; you stated the conclusion that

you would finally apportion all train cost that we have been talking about on the basis of ton miles?

A. Yes, the established unit used by railroads for years past.

Q. It is the ton mile theory?

A. No, sir, it is a fact; it is the unit that is used in the real art of railroading.

Q. It is the ton mile basis of division?

A. It is the unit used by railroads, used for years and years.

2817 It has been used by the Pennsylvania and Wabash for many years.

Q. How long has it been used by the Wabash system?

A. I think I know of statistics compiled in '74 by the Wabash; I know of statistics followed by the Pennsylvania back in 1867, and some by the Houston & Texas Central way back in 1860.

Q. Dividing the expenses for conducting state and interestate traffic——

A. That is a different thing; that is a new thing; everybody is a "tyro" in that, the railroad and state's accountants are all beginners at that.

Q. Is that the only unit of division that is used by railroad accountants?

A. Yes, except one that was invented by some shrewd railroad lawyer for these cases,—the revenue basis.

Q. What are you speaking of now?

A. This theory that it does not cost any more to earn a dollar by switching freight, than it does to earn a dollar running a passenger train, or freight train, or carrying a mail car; that is the foundation for it; it is absurd.

Q. I thought you said under the system of apportioning expenses between state and interstate business, that it had not been attempted by railroads until recently, wasn't that what you stated a moment ago?

A. No uniform system has been established.

Q. What I want to get at is this, for what purpose has the ton mile unit been used in making divisions which you referred

2818 to in your answer awhile ago.

A. In this proposition here—we tried to explain that to you; this exhibit submitted by Mr. Wharton, I believe that he really endeavored, and by the pains-taking methods he employed, and by the rigid way in which he went after the facts, that he attempted and did apply the theories that were advanced by numerous railroad experts with reference to the difference in cost of operation of local and through freight trains, and that he, after he located on their theories the maximum additional cost for local trains, then the final apportionment has been made upon the long established ton mile unit, after the extra cost has been ascertained.

Q. Isn't there some other unit such as train miles, and car miles used by the railroads for the purpose of making divisions?

A. Thos- divisions are incidental to a particular class of expense, with the locomotive mile and with the coach mile; those are classes of expense that are incidental to the equipment.

Q. Now, aren't those two units, car mile and train mile, used right in conjunction with ton mile by the railroads, all the time in practical accounting?

A. Not for cost, not for division of expenses.

Q. Isn't there three units, and according to railroad practice, aren't those units used concurrently and directly for the purpose of bringing about the divisions that are made by railroad ac-
2819 countants in the different branches of the accounting service?

A. They are used in the division of expenses as indicated in my exhibit here, and are used in the division of expenses for the reason that they are incidental to a certain part of the expense, certain primary accounts,—incidental to certain primary accounts, but here is the proposition you are selling tons carried one mile, while the rates are based upon the ton; you are selling transportation and the unit is your ton; what we want to find out is what does it cost you to carry that ton.

Q. The railroads are not selling tons?

A. You are selling ton miles.

Q. What the railroad is selling is that space in its car which is occupied by the tonnage it carries, and that service which is necessary to move that tonnage, that is what the railroad is selling, isn't it?

A. The unit for measuring it, and the unit for selling it, is the ton mile.

Q. You have already testified that the railroad divides between passenger and freight cost of maintenance of way on the revenue train mile basis?

A. Yes, that is the basis that has been commonly accepted by accounting officials; we have accepted their basis so far.

Q. There is one instance in which the ton mile hasn't been used; don't you know that running right through it, these various unites are used concurrently for different purposes?

2820 Q. (con'd.) And that none of them has ever been used by a railroad in keeping its accounts for the purpose of dividing its expenses of the traffic, between state and interstate?

A. I don't quite get the drift of that question.

(Question read.)

A. We are using these road miles, engine and yard miles for separation of expense between local and through trains, in order to ascertain the actual application of your own rules to conditions as they exist, or to establish rules that have been used by accounting officials to real conditions that existed, in order to find what is this extra cost, and whether it leads up to the maximum resulting from the preconceived notions of these railroad experts. After that has been located according to their theories, then the final unit is the railroad company's known unit, long established, and used by them,—the ton mile unit, and that finally determines the cost per ton per mile.

Q. In order to clear the matter up,—we seem to be talking at cross purposes—I will get you to explain what you mean by speak-

ing of ton mile as the railroad's own basis; I want to understand just what your meaning is?

A. It is the standard of measure or unit for freight cost, in the real art of railroading, that has been used for many years. The results are accomplished only after great expense and compilation from waybills, and it is an expensive undertaking, and if
2821 there was no real use for it, why would the railroads expend this money for working it out? And if it is not a good unit, why has it not been discarded? Great railroad men, very eminent railroad men, instruct their operating officials to watch the cost per ton per mile, and the results of operation over divisions, under the superintendents or direction of division superintendents and general superintendents, is watched from the ton mile unit by the executive officials. Why is it used?

Q. You referred in your last answer, I suppose, to the data used in the preparation of that index you spoke of this morning, for the purpose of ascertaining the cost of moving tonnage?

A. Yes, sir.

Q. Isn't it a fact that freight ton miles, freight car miles, and train miles, are the three units used in preparing and getting up that exhibit, and in connection with the total cost of moving tonnage?

A. Yes, the train mile is used to measure the efficiency of train service, and is frequently referred to by operating officials; the ton mile is used to determine the real cost of moving the tonnage in such trains, and from my own knowledge and from my own experience, I know, as I stated before, operating officials are cautioned to watch its cost per ton per mile; it is known; it is the standard for measuring for cost, but the traffic man who sometimes thinks the operating man is trying to step on his corns, with refer-
2822 ence to rate making, and he absolutely ignores this cost per ton per mile, and they have so testified in answer to questions which I submitted to them and that is the reason I state that rates are not made on the cost of service; they have an opportunity to get the average cost, but they don't make use of the index they have got, for the purpose of rate making.

Q. Is it the operating man who directs the method by which this cost is to be ascertained?

A. No, the executive officials really direct, and the accounting officials work it out for them, and this cost per ton per mile is constantly before the operating man, the efficiency of his division and the efficiency of his superintendents is judged by that cost as a rule. He has got the old man up at the home office jacking him up if he doesn't get the tonnage over the road,—ton miles—and when it comes to this rate litigation, from what I could extract from these accounting officials, they don't believe in the revenue basis themselves,—very eminent men—but these railroad lawyers, they ask them what is the simplest method, and they say "this is, the revenue basis is simple and not complicated", and he says "which is the best for us"—"the revenue basis shows the best result", and he says "We will use it, that is what we want."

Q. How did you get that information; have you ever been present at any conference between railroad officials and their attorneys?

2823 A. I extracted that from Mr. Nay on the witness stand, and Mr. Douglas; I can truthfully draw that inference from the replies they made.

Q. I will ask you now to tell me what testimony there is of Mr. Nay in which you extracted that,—what case was that?

A. It was a case down in Guthrie, Okla., in the rate cases remanded by the Supreme Court of our state down in Guthrie, sometime in November, 1908.

Q. Last November?

A. Yes, sir; It was the inference I got from his testimony, and in private conversations I have gotten a good many things that I wouldn't want to detail here.

Q. The details are confidential but the results are not. I want to ask you the question; you haven't answered that question I asked you awhile ago, if in making up this index which you have described so elaborately, freight train miles, freight car mileage and ton miles are not all used as factors?

A. They are used as factors in arriving at the final results; they are long established and recognized factors in railroad accounting.

Redirect examination.

By Mr. HILL:

Q. You referred to some statements that the Commission
2824 of Oklahoma wanted the railroads to make, a tentative plan of dividing the revenues and expenses between state and interstate; that was worked up early in the Railroad Commission's work, and you stated, as I understood you, that that was not agreed to by the railroad departments; do you mean that they did not agree among themselves, or did not agree with your commission?

A. Principally, they did not agree among themselves; they scrapped among themselves to beat the band in our conference; one would indicate that the other was crazy and the other would say "back at you."

Q. It wasn't a failure to agree with the auditors on one side, and the Commission on the other?

A. No, we made a number of concessions to them in the matter.

Q. Was that plan substantially what you have submitted here,—the plan here, you think that would best work out?

A. The tentative plan that we offered then?

Q. Yes.

A. No, the plan we started with was a plan approved by Commissioner Colquitt of Texas, but the same bases are used, car miles and the yard engine mileage, and the same numbers are involved, but there are arbitraries which we have since discovered were too elaborate and others that were too rigid, and ran favorable to the state and others unfavorable to the state, and I have come to the conclusion, by working out the figures, that have been submitted since and that

reports, that the basis is not as refined as the one we have at
2825 present to submit, and we finally permitted the railroad officials to make any division of the operating expenses they might themselves elect, and they have yet failed to elect a basis for separation between state and interstate. The reports issued by the Rock Island, indicate that there is no basis known by which such a division can be made, and recently they have complied with the order to some extent, by using the formula offered in the Arkansas rate cases, but they qualified their oath on the return, which destroys the effect of the basis.

Q. You mean the reports that have been submitted by the roads that dismissed their suits, and are testing the court tariff for a year, are those the formal reports you are referring to?

A. The basis used in these injunction cases, this revenue basis.

Q. They are making it on that now are they?

A. Some of the roads are, yes.

Q. Have you made that formula an exhibit to your testimony yet?

A. No, sir.

Q. I wish you would file this plan as Exhibit "C" to your deposition?

A. I will do so.

Q. Do you think that this Exhibit "C" is nearer a true separation of state and interstate business than the tentative plan that you worked out, and which Commissioner Colquitt had worked out in Texas?

2826 A. Yes, sir.

Q. I don't know that I quite understand your position on the local and through service, and I will state what I gather, and ask you if it is right and if not, wherein it is wrong; that you don't think it right to charge these additional sums which have been called arbitraries, like 50% local train for extra switching, and others, because you regard the local train and the through train as both doing state and interstate traffic, one helping the other one, and that the difference, if any, in the expense of local over the through, should not be recorded in the final division between state and interstate?

A. That is the position I have taken, yes, sir, that the services are largely reciprocal; there is a sort of reciprocity, and at division points where they employ yard engine service, it is true that the yard engine performs the switching for the local trains as well as the through trains, but all the switching that is performed for through trains as a rule, with very few exceptions,—as a rule all switching performed for through trains, interstate business, is completed by local way trains, at way stations.

Q. You don't question, as I understand you, that some of these would be correct if it were right to make the charge at all,—say Wellington's division based on more frequent stops for the local train as over the through—but your objection goes to making any
2827 allowance of that kind, when you go to consider a final division between state and interstate?

A. I object to making any such allowance; it is unfair to state

traffic, and extremely favorable to interstate, and the result is, you have extra profits on the interstate business; a lot of the through trains work is finally performed by local way trains.

Q. It is in evidence here that the Iron Mountain pools its car repairs with the entire Missouri Pacific System, on car mileage basis, and the percentage to Arkansas is ascertained on the car mileage basis, and so charged up in the exhibits filed by the railroad companies in this case; accepting that as a fact, could any other unit than car miles be taken to apportion the cost between local and through trains?

A. It is the commonly adopted unit and basis, and I think the basis that I submitted there is very fair.

Q. I understand that irrespective of its being a fair basis, but I say where they have reached the item of expense under that head between Arkansas and the other states that are in the pooling arrangement, you could not give any other basis upon which to separate that, could you?

A. No, the same basis ought to follow to the end.

Recross examination.

By Mr. MOORE:

Q. Who prepared this formula, "Exhibit C?"

2828 A. I did personally myself, without any advice of counsel.

Q. When was it prepared?

A. I had it in mind in my direct testimony, and prepared it last evening.

Q. Since you came here to St. Louis?

A. Yes; however, I would have prepared it before if the business of the Corporation Commission of Oklahoma had not taken all my time and attention.

Q. Is there any difference between that formula and the one prepared by Commissioner Colquitt of Texas?

A. Yes, sir.

Q. What is the difference?

A. There is a great deal of difference; in the first place, in maintenance of way and structures, the expenses between state and interstate is divided on the basis of the loaded car miles; I have used all car miles; I have never made a comparison to find what real differences there were; in fact, when I prepared that exhibit, I did not use or make any reference whatever to Mr. Colquitt's plan, but if you desire it, I will introduce Mr. Colquitt's exhibit and a comparison can be made.

Q. I will ask you to file it as exhibit "W."

Mr. HILL: I will object to that; it is very long; I have a copy, and I have gone through it; I have no objecting to going through and taking the bases and comparing them, but I object to its introduction.

A. I will file it as Exhibit "W," subject to the ruling of the master.

2829 R. D. PARKER, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. State your name, age, residence and occupation?

A. I am 32 years old. I am a civil engineer by profession; I am at present employed as expert engineer for the Railroad Commission of Texas.

Q. How long have you been employed by the Railroad Commission of Texas in this capacity?

A. Since January, 1909, about a year and a half.

Q. You say you are a civil engineer by profession?

A. Yes, sir.

Q. Were you educated as an engineer?

A. Yes, sir.

Q. In what institution?

A. Our own state University,—Texas.

Q. You took a university course in engineering.

A. Yes, sir.

Q. After you finished your engineering course, what business did you then follow?

A. I went into the government service for about six months; after that, I went into railroad location and construction work and remained there about—in that and kindred work—for about four years. For the past eight years, exclusive of the time that I have been with the State Railroad Commission. I have been employed in

2830 the operating department of the Houston & Texas Central Railroad and H. E. & W. T. and I. & G. N. R. R. service; my service with the I. & G. N. was principally in connection with construction matters. My duties in the operating department were confined to maintenance of way work. I had charge, when I quit the railroad service, of about six hundred miles of line; the direction of all bridge and building and track work, and the handling of all construction work, the work pertaining to that department was all under my jurisdiction.

Q. Did your work and duties bring you into contact with the operating conditions upon the road on which you were engineer?

A. Yes, sir, constantly, particularly for the last four years of my service.

Q. What was your service the last four years that brought you particularly in contact with the operating officials?

A. In directing the maintenance of way forces, it was necessary for me to be practically two-thirds of my time on the road; sometimes more than that. That movement over the road was on passenger trains, freight trains, in and about yards and terminals, and in fact, every part of the operating department nearly.

Q. Your duties then carried you into observation of the operating system of the road over which you were working?

A. Yes, sir.

Q. Since you have been an official of the Texas Railroad
2831 Commission, what have your duties been?

A. The examination and valuation of railroad properties within the state, for the purpose of making valuations as a guide to that commission in the limitation of stocks and bonds, and examination of facilities for railroad operation and railroad service where complaints were made, or where the commission desired to make any investigation involving particular conditions or physical conditions on railroads, and in addition to that, I have in charge,—that is, I represent the Commission in their jurisdiction over interlock and signals, which carries with it necessarily some information as to the method in which trains are operated.

Q. Have you made a study, both from books and actual experience and observation, of operating conditions upon railroads?

A. The study, since I have been out of college, has been largely a study of actual conditions that have come under my observation.

Q. Have you examined the exhibits in this case as filed by the state?

A. Yes, sir.

Q. I want to ask you,—I presume you have had no accounting experience?

A. No, sir, except so far as it pertained to maintenance of way work; when I was actually engaged in railroad work and in the study, I would naturally give it time, being interested and de-
2832 sirous of obtaining information that would be valuable to me in the future.

Q. Are you familiar with the basis or units on which expenses are apportioned to maintenance of way and maintenance of equipment and things of that kind?

A. I think I understand the units that have been used in these exhibits.

Q. Has your work made you familiar with the use of these units that you find applied in these exhibits? I am referring to "car miles" and "engine miles"?

A. Yes, from an operating standpoint, I think I am.

Q. The first application of any of these units is under the head of maintenance of way and structures, where there is a division made between local and through service on the basis of the total engine and car miles of each class, during a given period. I will ask your opinion of that division of this expenses between those two classes of service?

A. To my mind, it is about as representative a unit as could be applied; that is a unit that is representative of the service.

Q. There has been some question raised as to the amount of expense under that heading of maintenance of way and structures which would be occasioned by actual running of trains, and that which would be occasioned by the elements; have you formed an opinion from your service in the maintenance of way work as to the percentage of that?

A. I should say that there is no definite mathematical division

that you could make between it, but my opinion would be
2833 that possibly 90% of the expense of maintenance of way are not directly due to the wear and tear of track and structures.

Q. Assuming that to be the case, what is your reason for using the car mile as the unit to measure that division of expense between the two classes of trains?

A. It is representative of the service; the only classes of trains that we have operated over the roads are through and local trains; the road is built to carry freight; in so far as the freight business is concerned, and that is the means of carrying it, or the use that is made of it.

Q. You understand these accounts are relating to the freight department?

A. Yes, sir.

Q. You think then the representation that represents the use made of it, is the proper unit?

A. Yes, sir.

Q. In making this division, and in arriving at the number of engine and car miles, there has been added 50% to the engine mileage of local trains for station switching, has your attention ever been called to the switching that is done by locals at stations?

A. Yes, sir, local trains do practically all the switching.

Q. I wish you would state your opinion as to what percentage should be due for that switching service?

A. I think the mileage shown here for switching service for local trains is certainly a generous one. There is one test that occurs to
my mind in connection with that, and that is the relative
2834 amount of main line and sidetrack mileage. I believe in the case of the Iron Mountain, the statistics show that there is about one-third of the side-track mileage, as compared to the total amount of main line mileage, and if the local train in service used every one of the side-tracks one time, naturally it would only be about 33⅓%, and then another thing, a great deal of side-track mileage is used by through trains as well as local trains.

Q. The next item in this case to which I desire to call your attention, is that the accountanats have assumed that each engine mile was equivalent to 2½ car miles.

A. I presume that is calculated on a wheelage basis; a 12 wheel engine and 8 wheel tender would be 20 wheels compared to an 8 wheel car.

Q. Is that about the proportion used in this Southwest country?

A. You might say that is the maximum, except in the new type of locomotives, Mallet compound, which are practically two locomotives connected with one boiler and one firebox; that is called articulated; the locomotive is hinged in the middle.

Q. Where are they used?

A. In mountain divisions; I believe the Santa Fe has some in use and some of the western lines; I think the first one was exhibited here at the World's Fair.

Q. You are not referring to that exceptional class?

A. No, sir, there are none in the Southwestern country that I know of.

2835 Q. The next item of maintenance of equipment; the expense under that head is divided between yards and road locomotives, on the basis of locomotive mileage of each class during a given period; what do you say to using that basis to divide that expense of locomotives under maintenance of equipment?

A. It occurs to me that that is a little bit high.

Q. I am asking you first as to the general proposition, not about the percentage; the expenses are divided between yard, local and through, on the basis of the locomotive mileage of each class; I want to know if that is a proper basis of dividing that class of expense?

A. It occurs to my mind that that is.

Q. That 50% mileage made by locomotives to provide for possible extra maintenance due to the yard service——

A. That is the charge they have added on account of extra maintenance and not extra mileage.

Q. And then they added 50% to the mileage of road locomotives in road service to provide for extra switching, and then have added 50% to the mileage of road locomotives in local service to provide for the possible extra switching mileage, and again have added 50% to the switching mileage of the local train engines thus ascertained to provide for the possible extra switching, making 75% added to the engine mileage; that is what I want your opinion on, the arbitraries or added percentage, added to cover that phase of the case?

A. As I said awhile ago, I think the arbitraries are ex-

2836 cessive; they go a little bit ahead in the exhibits; the accountants who have prepared this report have applied an arbitrary of 13½% for repairs or maintenance of freight cars, due to terminal handling, which means switching practically, and I don't see why an extra amount should be added to locomotive repairs for maintenance of switching service more than for the cars; one reason for that is that the locomotive is heavier, a stronger machine, and does not suffer by the impact in switching as much as the cars, which are lighter structures.

Q. Do you think that the 13½% under the head of freight cars is a proper allowance?

A. I don't know; I believe I would raise that some, to possibly 16 to 20%.

Q. Take that other percent, taken on authority of Mr. Wellington, 21½% for the expense of stopping and starting the freight car.

A. The same criticism of the application of that arbitrary to the local for switching would apply; I mean, the same arbitrary applied to yard locomotives would apply to the locals doing the work.

Q. How much do you think that should be?

A. I don't see any difference in the two—the local and the switch engine, except in favor of the local engine.

Q. Those latter arbitraries were added upon the authority of Mr. Wellington's work. I will ask you if you are familiar with Mr. Wellington's work?

A. Yes, sir, we used it as a text book in my studies in
2837 engineering department at college.

Q. How is it regarded among engineers, and men studying the questions that are treated in his work?

A. It is taken as authority.

Q. Some question has been raised as to the date of Wellington and the date of this table from which this was taken; I believe it has been put back as far as 1887, the date when it was made; have you given any consideration to the effect of time upon these items?

A. Yes, sir, some.

Q. Have you any authority that would show any reasons or show any changes in the conditions?

A. I have before me the report of American Railway Engineers & Maintenance of Way Association, volume 5, of 1904, and on page 695 is a statement similar to Mr. Wellington's with some slight changes, which was compiled by Mr. G. B. Berry, now chief engineer of the Rock Island System.

Q. Read into the record so much of the statement as is pertinent here?

A. He contributes in table 2 on the page heretofore given, the statement showing the distribution of cost of locomotive repairs on the Union Pacific Railroad, and he applies to freight and work engines 7.35% of the damage due to getting up steam and terminal work, and to switch engines 12.474%.

Q. 12.47 where 13.05 is allowed in Wellington?

A. These figures I have just given apply to locomotive repairs;
the figures quoted here from Mr. Wellington are applicable
2838 only to freight cars; the figures given by Wellington for damage due to stopping and starting at way stations is approximately 21.5%, and Mr. Berry's table, the repairs to cars due to the same service is 20%, and the repairs due to terminal handling in Mr. Wellington's quotation is 13½%, and Mr. Berry's is 16%.

Q. Makes a total of 36, where Wellington's total makes a total of 35?

A. Yes, sir.

Q. What is your opinion of those Wellington figures and Berry figures, from your observation?

A. I think the switching damage is probably correct, but I don't think the comparison between local and through trains, in regard to damage due to stopping and starting is correct for the reason that the stops made by the local trains, exclusive of way station stops that the local trains have to make, that the through trains don't have to make, are about the same. Those stops are stopping for water, railroad crossings, stops to meet trains, stops to take water, etc.

Q. You recognize that these different items for which arbitraries have been allowed, are items which in the physical handling of the local train are causes of extra expense on that train over the through train.

A. So far as maintenance of way is concerned.

Q. This is maintenance of equipment we are on now?

2839 A. Yes, as far as switch service is concerned, I think cars get more damaged in switching than in any other way; next to that is deterioration due to weather conditions.

Q. Weather conditions would apply to both classes of trains?

A. Yes, sir.

Q. The point I am getting at is this, these various elements set forth here in maintenance of equipment for which arbitraries have been added, I will ask you if they are elements of extra cost of physical handling of one train over the other?

A. Yes, in so far as local trains do the switching and the through trains do not.

Q. And the more frequent starting and stopping, if that does exist?

A. Yes, sir.

Q. Then these arbitraries that have been put into these exhibits, in your judgment, and on the authorities you have read, sufficiently cover those elements of extra cost?

A. Yes, sir.

Q. According to the views you and these authorities express, they have more than covered it?

A. Yes, sir, from my observation, I think that is true.

Q. I am not discussing at all with you the question of whether it is right to charge those up between state and interstate, but merely between the physical handling of the two classes of trains?

2840 A. I understand.

Q. Is all this switching done by local trains for use of its own traffic?

A. No, sir, the local train carries through traffic as well. You mean as to state and interstate?

Q. No, I am disregarding that; that is a fact the traffic carried on local trains, or does it do any switching for traffic carried on through trains?

A. Yes, the through train frequently stops at a station in order to set out a car or pick one up, one that has been placed first out, as they call it, for the through train to come along and pick it up.

Q. Is that the common practice?

A. Yes, sir.

Q. And who would put it out for the through train, and who would take it away?

A. The through trains would set it out on the track to be taken up by the local train and set to the industry or set to the house track, taken to the stock pen to be loaded and do the various other station switching service.

Q. Has your observation as to the handling of through and local trains from division terminals been such that you could explain just how that service is handled in the division terminals?

A. Both classes of trains move into terminals and are broken up and classified and switched alike.

Q. Now, turn to yard and terminal expense, that is at page 4, these are divided between local and through business on basis of cars handled at terminals as explained under main-

2841

tenance of yard locomotives. I will ask you your opinion of that division?

A. I think it is logical and about as true a measure of the services as you could get.

Q. Now, the station expenses are not divided between local and through, but are divided between intrastate and interstate business, in proportion to the volume of traffic that each class handled at the station, that is "A" under "Transportation"; what do you think of that as a proper basis?

A. Well, in some respects the local conditions in the state in question would control that. From my observation, the basis is a good one. The division between intrastate and interstate—its handling is really the question.

Q. What I was particularly asking about. I wanted to call your attention to, was whether the division of that upon the amount of tons handled would be a proper division?

A. Yes, sir, I think it would, the relative amount of each business would reflect it.

Q. It would of course by local condition that would govern; the number of state or interstate or intrastate would govern?

A. Yes, sir.

Q. After the cost was ascertained, in the ways set forth in this exhibit, between the local and the through trains, then in the seventh sub-division of it, you will find that it is divided be-
2842 tween state and interstate on the volume of traffic of each, carried on the ton mile basis; I would ask you your opinion of that basis for that purpose?

A. It is as good a division as I know of; it is one that has been accepted and used for a number of years in the railroad service, in railroad accounting.

Q. You know that from your study of operating reports and your study of these railroad accounts, I presume?

A. Yes, sir.

Q. These various bases that are used here and applied to each of these items to which you have been testifying, I believe you stated at the outset were recognized bases by the railroads for various divisions which they made. I will ask you if in your own opinion, the expense between state and interstate could be properly divided on the basis of the revenue derived from each class of that business, state and interstate, and fairly reflect the cost of operation, as you have observed the cost of operation?

A. No, I have no conception of a division on the revenue basis, as reflecting in any manner, the way in which the service accrued; in the first place, the idea of expense carries with it the cost idea, and the basis would be on the cost not on the profit that accrues from the business; and any manufacturing establishment predicates the price of their commodity on the cost basis plus a reasonable profit; the railroad company has transportation to sell; while
2843 I don't mean to say that the cost of service controls the making of rates, there is a great many items that enter into that.

Q. After observing operating conditions then, you would not regard the revenue basis as a fair basis?

A. No, sir, of course I am not an accountant.

Q. I am asking you your view point, as you have observed and studied operation, whether those operating expenses which you are familiar with, and which you have studied, and incurred I suppose, can be properly reflected in a division between state and interstate by the revenues?

A. I don't believe they can, no, sir.

2844 R. D. PARKER, examination being resumed, deposed as follows:

Cross-examination.

By Mr. MOORE:

Q. Mr. Parker, you have stated that you had charge of about six hundred miles of railroad at the time you quit the railroad service, that you were employed in construction work and maintenance of way work; I suppose by that, you mean do you not, that you were engaged in such construction and re-construction as was necessary to keep the tracks in proper condition,—changes and additions?

A. Yes, sir.

Q. You were engaged in the line of your profession as civil engineer, in that work, were you not?

A. Yes, sir, a good many practical details that came up, it is true did not require engineering knowledge, handling men, etc.

Q. Your work was along the line of your profession?

A. Yes, sir.

Q. I suppose your studies have been along that line, have they not, for the purpose of perfecting yourself in your profession?

A. Yes, sir.

2845 Q. You were asked if your work brought you in contact with operating conditions on the road. In what way did it bring you in contact with operating conditions?

A. The construction work I had reference to in that case particularly was betterments of the existing line and improvements; naturally, those improvements were made upon all parts of it where trains were operated, and the other business of the road carried on.

Q. In that way, while you were engaged in your work as civil engineer in supervising such work and changes as were made, you mean you had the opportunity the presence gave you of observation?

A. Yes, sir.

Q. You stated that your studies since you left college have been largely of actual conditions that came under your observation. Has that also been with reference and from the standpoint of your profession as civil engineer?

A. My work has been in that profession, yes, sir, but at the same time I have made an effort to study operating conditions for my information, and in order to broaden myself.

Q. You did that, I imagine, in a very general sort of way?

A. I did it in every way possible.

Q. What I mean is, you did not actually undertake to participate in directing operating movements?

A. No, sir, my jurisdiction did not extent to the movement of trains, except in my work, work trains and trains handling
2846 material were under my jurisdiction.

Q. What you observed was what a man whose opportunities of observation was, from being at times where the work was going on, what his opportunity was to see,—that is what you mean I suppose?

A. Yes, sir.

Q. What was your title while you were in charge of that maintenance of way work?

A. Resident engineer.

Q. And your duties were such as those usually discharged by a resident engineer?

A. Not necessarily. The Southern Pacific organization is different to most of the roads, and I understand, different to the Gould Roads. The engineers are put in charge of track and bridges and building; they have jurisdiction over it and issue orders direct to the men; they control the labor, handling of material and direction of the work.

Q. That organization is not the same as on the Iron Mountain lines?

A. No, sir.

Q. There is a difference?

A. Yes, sir; my understanding is, that on the Gould lines, a resident engineer is only engaged in construction work, that is, new lines, branch lines, spur tracks to industries, and making surveys, that they do not actually handle the work and are not directly in charge of it, that the superintendent is the operating official
2847 that handles the track department, directs the roadmaster and bridge superintendents. In our case, the bridge superintendents and roadmasters are directed by the resident engineer, and the resident engineer in turn reports to the engineer of maintenance of way, and the superintendent too.

Q. If your impressions as to the duties of the engineering department on the Iron Mountain lines is correct, your understanding of the difference between their duties and the duties that were discharged by you, is that in addition to laying out and directing the construction or re-construction work, and you also had charge in a larger extent than they do on the Gould lines or Iron Mountain road, of the performance of the work, execution of the work, of the plans prepared by the engineering department?

A. My understanding is,—at least with the Gould lines in Texas,—the engineers make the plans and the operating department carry them out, and they act in an advisory capacity in a measure, as far as the location of line is concerned, grades and curvatures, etc.

Q. Is there a large volume of trans-state movement of traffic in the State of Texas over the railroads?

A. There is over the Southern Pacific lines; the movement of traffic from New Orleans and Galveston to the west, California points and intermediate points, between El Paso and California points, and there is a movement on the I. & G. N. to Mexico
2848 points; as I say, the greater part of the traffic was destined to Texas; it is right on the border of the United States——

Q. Are you familiar with the manner in which the two railroads engaged in this litigation handle their trans-state traffic in passing through the State of Arkansas?

A. No, sir, I can't say that from personal knowledge. Operating conditions, however, in the southwestern group do not vary a great deal.

Q. At the same time, it depends to some extent on the manner of handling that may be adopted by the railroad that is under consideration, as to the incidents of handling a particular class of track?

A. In so far as the method is concerned, I don't think there would be a great deal of difference. Operating men from Texas go up into the other states, and the operating men from Arkansas and the Territory go into Texas. They all have established methods by which railroads are operated and they do not vary materially.

Q. It is in evidence in this case for instance, that the Iron Mountain has established a yard at a place called Dupois, I believe, east of the Mississippi River opposite St. Louis, in which they classify and make up trains, classify cars and make up trains carrying trans-state traffic to Texas and Louisiana points, and that those trains are so arranged with reference to the handling of them en route, that those cars which are necessary to be detached in passing
2849 through the state can be handled with one movement; for instance, grouping them together in moving the train, if such an arrangement as that does exist, wouldn't it have the effect of diminishing the extent of terminal service applicable to that class of traffic?

A. Naturally, if the solid train moves through the state as a solid train, where there is nothing but an exchange of crews, engines and cabooses, that would be true, but I imagine there would be a very limited amount of that kind of business.

Q. I do not assume that it goes through as a solid train. My question assumes the contrary. Assuming that it is not a solid train made of cars carrying trans-state freight, but that it is a train in which there are cars to be set out in the State of Arkansas, but those cars are so grouped that they can all be set out on one movement.

A. It depends on the traffic in the train.

Q. Wouldn't that simplify and diminish the cost of terminal handling?

A. Somewhat; it depends on the relative proportion of the two kinds of business.

Q. In what manner do you understand that station expenses are divided?

A. In this exhibit here, it was divided up on the number of tons?

Q. You mean the total number of tons moved for the six
2850 months in question here?

A. The total number of tons handled.

Q. The total number of tons handled by the Iron Mountain Railroad in the State of Arkansas during the six months' period in question here, is that your understanding?

A. Yes, sir.

Q. If that is correct, and if the record in this case shows that 33% of that tonnage is business that passes across the state of Arkansas, would there not be a difference in the amount of terminal service rendered to that third of the traffic?

A. Yes, it would probably have some effect on it; you are mixing in your question, terminal handling and station handling.

Q. I used the wrong term, I meant station service, instead of terminal service.

A. There might be some effect, but I think the trans-state service would have the same expense attached to it in station work, in keeping the passing record of cars, checking cars in yards and telegraph service; the telegraph operators engaged in the movement of this trans-state traffic which you speak of, would have duties with reference to that, as well as this intrastate traffic. In some cases, the icing of cars, as I understand is done by station men, though in larger places, the different refrigerator transfer lines handle it through their own agents.

2851 Q. Would it in your judgment, be anything like as great as the service rendered to the local state freights and the interstate freight that originates or terminates in the State of Arkansas?

A. I would say the proportion would be in favor of the intrastate business, that is, as compared with what you call the trans-state business.

Q. Wouldn't you think then in that case, that the application of the division,—I mean on the basis of the number of tons handled in the state,—that class of expense would be unjust to the local traffic?

A. I don't know that it would; I don't know any nearer basis that you can establish.

Q. Do you know whether a great deal of that station expense is chargeable to and grows out of the incidents of the handling of L. C. L. freight?

A. Yes, sir, but usually the proportion of less than carload freight is very small; that is, the proportion as compared to the total volume of business.

Q. That is true, but when you take the ratio that there is between that and carload business,—state business,—it is pretty hard, isn't it?

A. Yes, these agencies are maintained for business as a whole.

Q. That is all very true, but I want to call your attention to the fact while L. C. L. business is not a large proportion of the business of a railroad, it is a considerable proportion of the state
2852 traffic, and it is not an unimportant proportion of the interstate business which originates or terminates in the state,

while it is an infinitesimal proportion of the trans-state business; I wish to call your attention to these three conditions that exist and ask you if in view of those conditions, it would be a proper basis of division of station expense?

Mr. HILL: I think it would be only fair to state the percentages of L. C. L. interstate and L. C. L. state.

Mr. MOORE: I have no objection.

Mr. HILL: Here is your exhibit #26, he can state them from that.

Mr. MOORE: Just let him answer the question as I put it; we do not accept that.

A. I think you have exaggerated the proportion of less than carload traffic in your state and interstate business, in the way the question is framed; it is a very small proportion I think in both; the carload movement would be in excess.

Q. Regardless of the proportions of carloads and less than carload traffic interstate and trans-state business, isn't the expense of state less than carload traffic much larger per ton mile than the trans-state less than carload, so far as the State of Arkansas is concerned?

2853 A. I don't know what the local conditions are in the State of Arkansas.

Q. Isn't there a difference between the two classes of traffic which exists of necessity and would apply everywhere, which would establish the proposition that a very much larger proportion of the expense is applicable to state L. C. L. than to trans-state L. C. L.

A. I think it would; the trans-state L. C. L. shipments move through the state in solid cars, probably they are not broken at stations, except perhaps at some points where they make transfers of the cars into different cars; some particular cause might come up in the operation of trains that it would be best to handle it that way, where it could be handled or transferred cheaply, but that less than carload movement which passes entirely through the state, of course, would not be as much affected as the less than carload movement within the state, or as between the State of Arkansas and the other states, or interstate business.

Q. Leaving out of the question for the present the proportions, but assuming that there is a class of traffic, carload and less than carload, to whatever extent those differences may exist, isn't it true that the plan adopted by the state of dividing station expenses according to the number of tone handled in the state is unfair as between the trans-state traffic and the other classes of traffic?

A. I don't think that it is; they have assumed a propor-

2854 tion here of one to two, I think; they assume that each intrastate ton is handled twice and each interstate ton once. I don't think that is unfair; it would represent conditions, I think,—that is in Texas it would.

Q. That assumption of the two state handlings of state business and one of interstate is not made as a concession because a greater or less service is rendered to one than the other, but because there

is in fact two station handlings of every ton of state freight and one of every ton of interstate freight, so that it does not change conditions at all; that is not an allowance in favor of any one class of traffic?

Mr. HILL: Are you testifying to those facts, Mr. Moore?
Mr. MOORE: I think they are in evidence here.
Mr. HILL: I think the very opposite is shown by the testimony.

Q. If that is correct, that there is in fact two station handlings of state freight to one handling of interstate freight, does the allowance which is made there and which you have just called attention to, do more than place each one on the basis it belongs on, as far as station expense goes?

A. Yes, sir, I think so.

Q. And it still leaves the effect upon any different condition that might exist in relation to trans-state movements of freight
2855 the same as we have been discussing, doesn't it?

A. I don't think it would affect trans-state movements a great deal.

Q. Judge Hill called your attention to the fact that in the formula contained in Exhibit K, after the cost was ascertained in the way set forth in that exhibit, between local and through trains, then the seventh sub-division of the exhibit divides it between the state and interstate on the volume of traffic of each on the ton mile basis. He asked your opinion of the correctness of that basis to which you answered that it was a good division, and one that had been accepted and used for a number of years in railroad service and railroad accounting.

A. My understanding is it is used in railroad accounting; I do not qualify as an expert accountant, and my judgment and opinion of these bases is largely upon what it conveys to my mind in point of equity.

Q. I am calling your attention to it now to give you an opportunity to explain what you do mean; you do not mean to state that there has been any system of accounting in practice by railroad operators, by which the cost of railroad operation as between state and interstate traffic has been divided on the ton mileage basis?

A. They have not settled that question yet, as I understand
2856 it.

Q. I am asking about railroad practice and the manner in which division- are made by railroad accountants?

A. I cannot say as to the detail of the compilation of the figures.

Q. Do you know of any instance in which any railroad operative or accountant has assumed that the ton mile basis would be a proper basis upon which to divide the expense of operation as between state and interstate traffic?

A. No, sir, I do not believe I have ever heard them commit themselves to that; in fact, this subject is a rather new one.

Q. In expressing your view as to the value of the gross earnings as a means of division for the purpose of adjustment, speaking of, and for the purpose of illustration I suppose, you stated that the

basis should be on the cost, not on the profit that accrues from the business, and then in illustrating you say, any manufacturing establishment predicates prices of their commodity on the cost basis, plus a reasonable profit.

A. Rather than on the profit basis.

Q. Rather plus a reasonable profit?

A. I said rather than upon the profit; I think my answer explained it later on; if not, it should. I meant to say the cost of production controlled in making the prices. It was not my intention to state that the prices of the commercial establishment
2857 were based on the profit at all, but upon the cost of production, and the price would be that cost of production plus a reasonable profit.

Redirect examination.

By Mr. HILL:

Q. Following this explanation, and considering the two sorts of revenue that a railroad company receives, one from state traffic and one from interstate traffic, pre-supposing a reasonable profit is put into the rates for each, in order to make the revenue basis of dividing the expenses equitable, that proportion of profit on each rate would be the same, wouldn't it?

A. Yes, sir, for a mathematical ratio to be correct, it would have to be the same.

Q. That is another element of uncertainty in the revenue basis, as well as the fluctuation in the cost of service?

A. Yes, sir.

Q. If rates were made on the theory that you have suggested about a manufacturing plant, to be the cost of production plus a reasonable profit, there would be no occasion for any extra expense being adjusted to state or interstate as the case might be, would there?

A. No, sir.

Q. In referring to the station expenses apportioned on the
2858 basis of two tons for interstate and one ton for state—I mean, one ton for interstate and two tons for state traffic, I will call your attention to the cotton movement and the grain movement. Are you familiar with how those two commodities are handled, in a general way without the detail?

A. Yes, sir.

Q. Both are interstate commodities very largely; how many handlings would those commodities have, in the usual course of transportation?

A. In the case with the most of the cotton movement in our state, it is moved from point of origin in cars and placed at the compress and compressed in transit at the first compress it comes to; the commission has a rule of that kind, requiring them to stop at the first compress en route; it is handled there, the railroad company doing one handling and the compress company people the other; then the cotton is moved to ship-side for export, or to the mills where it is consumed in the state; hardly any compressed cotton moves to local mills; that proportion is very small; most of it is export cotton.

Q. That is a negligible quantity; that represents then three handlings; do you know how grain is handled into Arkansas from the northwest?

A. They have a milling in transit rate?

Q. Are you familiar with that?

2859 A. Yes, sir, it would be stopped at the mill and converted into the finished product and then shipped out.

Q. The finished product is largely a fiction, but that is the theory upon which it is moved?

A. That is the theory upon which the rate is made.

Q. That would have three handlings, wouldn't it?

A. Yes, sir.

Q. Have you, in making your statement that this is a fair division, taken those factors into consideration?

A. Yes, sir.

Q. I believe it was explained to you also about the terminal handlings of all interstate business of Fort Smith and Memphis, wasn't it? The evidence on that was explained to you?

A. Yes, sir.

Q. I want to call your attention to these figures which I give you from Exhibit 26; that exhibit 26 is filed by the Iron Mountain Railroad, showing the freight business of one month; it shows that the trans-state L. C. L. tons were 8,482 tons, and the total trans-state tons were 216,249 tons; you will find that in the first column, the L. C. L. being less than 4% of the total trans-state; considering that condition, whatever may be the station service accorded to trans-state L. C. L. tons, would that proportion to which I have called your attention, affect, as a general proposition, this division?

2860 A. Very slightly.

Q. Now, in division terminals, there is a station expense there; would there be any difference in station expense and division terminals between intrastate and interstate or trans-state either, in going through the division terminal I mean.

A. No, sir, it is all handled alike.

Q. Now, Mr. Moore assumed in one of his questions to you, that all intrastate traffic had two terminal handlings at a station, and all interstate, not referring to the trans-state, had one. Is that a correct assumption as you understand railroad operation?

A. It is not a fixed rule, no. He made the assumption and I agreed to it.

Q. You answered according to his assumption; I ask you if his assumption squares with your knowledge of operating conditions in that respect?

A. No, sir.

2861 C. B. BEE, being first duly sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, age, residence and occupation?

A. C. B. Bee, past thirty, Ardmore, Carter County, State of Oklahoma, present headquarters, Guthrie, capital of the State of Oklahoma. My position at present is rate expert of the Corporation Commission of the State of Oklahoma.

Q. How long have you occupied your present position with the Corporation Commission of the State of Oklahoma?

A. Since the 26th of December, 1907.

Q. What have been your duties in that position?

A. I have had entire charge of the rate department, and as such, have advised the Commission as to rates in effect in different states in the southwestern part of—the south and southwestern part of the United States, and the interstate rates in effect, the conditions governing freight rates, and assisted the Commission in making freight rates to govern shipments in the State of Oklahoma, and generally handling the rate situation in the state for the Commission.

Q. That has been your duty and to that you have devoted all your time since you have been there?

A. Yes, sir, to that and assisting shippers of the State of Oklahoma in cases before the Interstate Commerce Commission, and such matters, as that; my entire time has been devoted to rate matters.

2862 Q. Prior to your present position, in what work were you engaged?

A. At the time I took the position with the Commission, I was acting as Assistant General Freight Agent of the Mexican Central Railway.

Q. How much service have you done in railroad work?

A. Over ten years.

Q. In what different capacities, just briefly give your railroad experience?

A. I started in as stenographer to the division superintendent, his office stenographer; promoted from that to car stenographer, and through the different positions in the superintendent's office, such as overcharge and damage clerk, chief clerk, and then on the road with the superintendent as handy man, going where he directed; from that to the motive power department with the assistant superintendent of machinery, and numerous positions in the motive power department, and my last service in that department was balancing power, and I was transferred to the freight department, holding all the positions in the freight traffic department up to acting as assistant general freight agent; that is, commercial agent, all the rate positions, first, second, third and fourth rate clerk, chief

rate clerk, chief clerk of the rate department, commercial agent, division freight agent, general agent, and back into the office.

Q. Has your work in these various lines caused you to
2863 observe and in a measure familiarize yourself with operating conditions, as well as traffic conditions?

A. To a large extent, yes, sir.

Q. Since you have been an official of the Corporation Commission, have you made a study of operating conditions as affecting your work?

A. I have spent a very large part of my time in doing that.

Q. You are familiar with the rate situation, I assume from your previous answers, in this southwestern territory?

A. Fairly well.

Q. I will ask you what relation interstate rates prevailing in the southwestern territory, particularly in Arkansas and Oklahoma that you are familiar with, bear to the cost of the service, and what consideration is given in making interstate rates, to the cost of service for work done.

A. Other than a fixed figure which has sometimes been recognized in railroad rate making, I have never known of the cost of service entering into the making of a freight rate; that fixed figure has now been discarded, entirely by all traffic officials; it was the old bug bear of five mills per ton per mile, which was for years considered the actual cost of service on long hauls. That figure has been dropped, and no traffic man at present uses it, and freight rates are not made on the cost of service.

Q. What considerations govern the making of interstate freight rates?

2864 A. All the traffic will bear.

Q. Explain just what that means in rate making parlance?

A. It takes into consideration the commodity of the traffic, the value of the commodity, the points between which it is moving, the competitive conditions surrounding the movement, and, of course, regard is given in all instances to the nature of the commodity, and that is the nearest that a traffic man ever comes to the cost of service; the rates on a low value commodity, and one which will suffer very little from damage, are considered low grade commodities, while the reverse is true on high grade commodities; no traffic man would consider the same rate on oil as he did on sand, but he would not be attempting to place the cost of service upon the two, but rather the liability, and the rate that the two commodities would stand.

Q. That is, the relation of one commodity to another?

A. That is it exactly.

Q. That is best expressed in the classification of commodities, isn't it?

A. That is true; the classifications as published today largely govern those things.

Q. But even those classifications are full of exceptions, are they not?

A. Yes, sir, and made largely upon guess work.

Q. Are the exception sheets to classifications prevailing in Oklahoma?

A. Yes, sir.

2865 Q. Are you familiar with the exception sheets prevailing to the Texas common points?

A. I am.

Q. Is that large or small?

A. Very large.

Q. Are you familiar with the exception sheets prevailing in Arkansas traffic?

A. Yes, both state and interstate.

Q. That puts another variable quantity into the rates, doesn't it?

A. It does, and right in there, I might add that there is a feature which shows that rates are not built upon the cost of service, as one example comes to my mind now; emigrant movables moving from Oklahoma into Texas or Texas into Oklahoma, take Class D, I believe it is—C or D; while if they are moving Oklahoma to Kansas or Kansas to Oklahoma, Missouri to Oklahoma, or Missouri from Oklahoma, they take class "A"; if they are moving through Oklahoma from Missouri or Kansas to Texas, they take class "D," so that there would be absolutely no relation to the cost of service in the movement.

Q. That is a commodity where the liability for damage is considerable, isn't it?

A. One of the highest known, but it is a commodity at the same time, that railroads never seek to make a profit out of.

Q. Are you familiar with the zone or blanket rates that prevail throughout the Southwestern country on many of the large commodities, like lumber, grain and cotton?

2866 A. Yes, sir, and citrous fruits, coffee.

Q. I wish you would explain that zone proposition, and what effect it has in showing whether the revenue is proportioned to the cost of service performed by the railroads?

A. The rates on lumber, as I remember them, are from the Texas and Louisiana fields through Oklahoma, 18¾ being the last rate in Texas, and a rate made by the commission, slightly raised at the first station in Oklahoma, gradually varies until the last station in Oklahoma northbound on the Kansas line pays a rate something in excess of 26 cents. That rate immediately jumps in Kansas to 27 and a fraction, and goes on until it gets to Kansas City, Missouri, where it drops back to 23, if I remember the figures; for years the 27 cent rate existed in Oklahoma, but at a conference between the Commission and all of the railroads operating in Oklahoma, this rate was reduced to points in Oklahoma in order to keep a case from being filed before the Interstate Commerce Commission, which would have resulted in a general reduction of all lumber rates, and the only reason for the high rates at the northern points of Oklahoma, is that it only applies at two or three little stations where no business moves, and it was to keep Kansas from having her feelings hurt very badly in having a 23 or 25 cent rate at her border

that it was not reduced; they were afraid she would go before the Interstate Commerce Commission

2867 Q. That is a recent adjustment.

A. Yes, sir, May, 1908, I believe it was.

Q. Is that characteristic of every zone or blanket rate with which you are familiar?

A. That is the general condition.

Q. Our inquiry is more particularly confined to the situation in 1907; were you familiar with the lumber rate from territory south of the Arkansas river to the gulf *to* Mexico, that prevailed at that time—I really don't know whether there has been any change in it?

A. I am. There have been slight changes, but only slight.

Q. Give the effect of that as it existed at that time, if you remember it?

A. At that time the intermediate rates were higher than that—what was then known as terminal rates, rates applying to St. Louis, Kansas City, and often higher than the rates applying to Chicago. The Omaha rate at that time, if I remember, was 26 cents, or 25¼ cents, and the Chicago rate was 26 cents, while the blanket rate through the south, after leaving the Texas line, was in the neighborhood of 27 cents.

Q. I believe our map shows in 1907 that it was 23.

A. You are on the direct line; through Oklahoma it was 23 on the direct line, on the Katy, and I think you will find it in Arkansas, off the main line, they went to 26 and 27½.

2868 Q. For that service there was a 23 cent rate in that territory to one of these northwestern points; for that service, what different hauls were made of the commodity?

A. If the rate was 23 cents to an Arkansas point, and 23 cents to Kansas City or St. Louis, there was a difference from three to six hundred miles in the haul for the same rate.

Q. Suppose this lumber originated down in Louisiana on another line than the Iron Mountain or one of these, how would that rate be changed or distributed, whichever it happened to be?

A. They had through rates in effect with those lines and had divisions in effect,—I don't remember what the Iron Mountain's division was.

Q. I am not asking the actual division, but the proposition is whether that 23 cent rate would be divided with other lines?

A. Yes, sir, with numerous other lines, sometimes as high as three were interested in the division.

Q. That 23 cents would be distributed over as many lines as the commodity was handled?

A. Yes, sir.

Q. In ma-y of those cases, tap lines that had very short hauls would get a division?

A. Yes, sir, they got a division up to 1907; the tap lines did get a division of the rate.

Q. Are you familiar with how grain is handled into Arkansas, I mean on what rate from the northwest?

2869 A. A large part of it is handled in there on a flat scale.

Q. Milling in transit rate?

A. Milling in transit privileges being granted on it.

Q. That is an interstate movement?

A. You mean grain for local consumption in Arkansas?

Q. Yes.

A. It is handled in there from Kansas and Oklahoma, and the mills in Arkansas have the privilege of milling that grain and shipping it out at the balance of the through rate.

Q. How is it shipped out after it reaches a distributing point locally, through trains or in what manner?

A. If going to a local point, it is shipped on a local train; going through, it would probably be shipped on a trans-state train if they ran them.

Q. Depending upon the destination I presume?

A. Entirely.

Q. How are the rates made for this grain that moves from the northwest into Arkansas and consumed in Arkansas. On what basis?

A. Generally a territory is taken and embraced in a group; now, the Kansas rates to Arkansas, of course, I am not familiar with as I have not looked them up, but I know there are rates in effect from points in western Oklahoma which extend over to the center of Oklahoma, and those rates are flat, regardless of the point of origin, whether the extreme western point or central point of the group, or the eastern point of the group—the rate would

2870 be the same to Arkansas points.

Q. By a flat rate, you mean one that is flat for the group, irrespective of the number of carriers that handle it?

A. Absolutely.

Q. Now, in the practical working of these flat rates, what regard if any is had for the cost of service performed?

A. There can be no contention that the rates are made upon the cost of service, for a car of wheat moving from Alba and from Enid take the same rate; either one is exceedingly high and above the cost of service, or the other is exceedingly low and below the cost of service, where the rates are the same, and it is impossible to say that those two rates being exactly the same are built upon the cost of service in both instances.

Q. Owing to the difference in the length of the haul, and conditions under which they are handled?

A. Yes, sir.

Q. And the number of participating carriers in the common rate?

A. Yes, sir.

Q. There are various terminal handlings in that, and there would be large differences in the terminal handlings.

A. That is true; grain might come over one line direct, it might originate over at one station south of there and move at the same rate and move over three lines, and be handled through the larger towns and the big junction points where excessive handling charges occur.

2871 Q. How is cotton moved?

A. Handled?

Q. Handled and moved, state or interstate?

A. Cotton originates at one point, originates where it is grown, delivered to the railroad company on their platforms; if they are filled, upon their right-of-way, by the railroad company loaded into cars; moving generally at their option to a compressing point, there held on the cars until ordered to the compress; delivered to the compress, unloaded by the railroad company, again taken from the compress when the pressing is completed; loaded again by the railroad company and handled to its final destination, that cotton being treated as strictly L. C. L. freight.

Q. L. C. L. in its movement or final movement?

A. In its entirety; rates on cotton are always quoted regardless of quantity; the rate on one bale of cotton is the same as the rate on a thousand bales.

Q. I don't know about the cotton situation in Oklahoma, but it is an admitted fact in this case that there is practically no cotton consumed in Arkansas?

A. I know the State of Arkansas well enough to state that the part of the cotton consumed in Arkansas would be infinitesimal.

Q. The rate that you have been referring to then is a through rate from the point of loading of the cotton to its point of
2872 final destination, which is under these circumstances, necessarily out of the state?

A. Entirely so.

Q. It makes that whole movement, with possibly an infinitesimal quantity, an interstate movement?

A. Exactly. One thing more; in that cotton movement, cotton when billed from the point of origin to the compressing point is always billed on the local rate; it is then state business and so considered; it goes into the compress at this local rate, and when forwarded to its final destination, the rate from the point of origin to the final destination is charged, and either the local rate that has been paid in, is refunded entirely, or the difference between that and the rate from the original point of origin to the final destination is paid. That depends altogether on the consignee, how he wants to handle it.

Q. In this case, it is a proved fact that while the actual movement is as you stated, so far as the revenue is concerned, it is all carried as interstate revenue? How is that first movement of cotton usually made, on local or through trains?

A. It generally originates at small places and moves on local trains, either to the division point or to the compressing point straight, and as a general thing, the compresses are usually so situated that there is one at the end of each division, so that it seldom has to move by a terminal point to get to a compress though
2873 oftentimes the railroads allow big hauls for long distances and in some instances allow cotton to pass one compress and go to another.

Q. I believe you had some litigation before the interstate Com-

merce Commission, between McAlester and Muskogee on that proposition?

A. Yes, sir.

Q. What do you say as to the expensiveness of the cotton traffic as compared with the average traffic handled by railroads?

A. I think that cotton in its entirety is the most expensive commodity handled by the railroad companies.

Q. What are your reasons for that?

A. I think it entails great expense and more liability upon the railroad company than any other commodity handled, and the reason is that it requires a large force to load and unload. As a rule, cotton is loaded at small stations where there is but one man employed; it is necessary to bring the section foreman into that station to load that cotton on, else employ people there in the town to load it. Oftentimes, railroad companies pay the owners of the cotton to load it for them. Care must be taken to get a perfect car in which to load this cotton. After it is loaded, railroad companies by their rules require that the doors be batted, which requires an additional expense, and this batting is always thrown away at destination, unlike grain doors which are returned. This
2874 cotton must be placed in the yards at the compressing point, and it is a very unusual thing, during compressing season, if there is not an extra switching engine at all large compressing points; as cotton is not handled upon its arrival at the compressing point, but the people who own it hold it and there is no way for the railroad company to tell what car is next going to be called for. I have seen as high as five hundred cars of cotton laying in a yard, and some of them would be there twenty and some thirty days, some only three days, and every time a car is called for, it generally means the switching of that entire cotton yard to get that car out and switched to the compress. Demurrage and storage has not been charged on cotton heretofore; it is now, in order to do away with this extremely heavy expense. After cotton is moved to the compress, it is again put back in the car, the same processing being gone through with. In the cotton countries in our state, some railroads equip their engines with oil burners, in order not to throw sparks. They haul oil a long distance and do not handle oil on other branches of their road; it is merely to protect this cotton. Cotton moving from point of origin to the compress point is in big bales, and I think it requires about 2½ to three cars of open cotton or flat cotton to make one car of compressed cotton, so that
2875 there is that many cars moved into the compress which must move back empty for other cotton, and the liability on the cotton is very strong; it is always loaded at shipper's count at blind sidings, sealed after he closes the doors, seldom counted by the agent; fires have often been known to occur where there was a question as to whether there was a bale of cotton in the car at all.

Q. What is the casualty rate on cotton?

A. High, exceedingly so; once a fire starts in a bale there is no telling when it will stop, or when it will be discovered.

Q. What kind of rates are made on cotton to final destination? Do they vary with the distance, or what kind are they?

A. Ours is a flat rate of seventy cents.

Q. In what territory?

A. That is the rate to the New England destination from Oklahoma.

Q. Ours is 85 I think, but I am not certain; I would like to know how you get into New England States at less than Arkansas?

A. It is 70 cents to Galveston; we have a flat rate of 70 cents, I don't know just where it applies to.

Q. I am just inquiring of the principle?

A. It is a flat rate to the entire cotton group. There is a flat rate from our country to Galveston, and a flat rate northbound.

Q. Mr. Bee, have you inquired of a traffic man as to the
2876 rate from Arkansas to Boston?

A. I have; I understand that from Little Rock it is 80 cents, and from Fort Smith practically 85.

Q. What I am seeking to ask you—to what territory generally speaking without going into details, does that flat rate apply?

A. I should judge it would apply to what are called New England mills.

Q. And that would be anywhere in New England irrespective of distance unless there is some arbitrary charge to some given point?

A. There are some lines not participating in those rates possibly, but as a general proposition, I would say it would apply to all the New England States.

Q. The first end of that rate, does that usually call for an eighty cent rate from Little Rock and adjacent territory?

A. As a usual proposition that rate would apply from territory immediately surrounding Little Rock and some distance on either side, but owing to the Mississippi running along at their door, there may be some exception to that rate in Arkansas which I would not know.

Q. The Cimeron runs along your doors too, doesn't it?

A. So does the Cotton Wood.

Q. The point I want to call your attention to is this, that cotton starts at various points near by, goes to the trade center like Little Rock or Fort Smith, and is carried to Boston or nearby towns
2877 there, on a flat rate; I will ask you if that flat rate is irrespective of the number of participating carriers that handle it?

A. As a usual proposition it is.

Q. Then that eighty cents contains many divisions, or if it were possible to have one line of rails, there would be no division?

A. Yes, but I don't know how it would be possible to carry it to New England on one line of rails.

Q. That is carried between many terminals, I presume?

A. Yes, sir, and through the highly expensive terminals too.

Q. Do you know the blanket rate on the citrous fruit; I don't mean the actual figures but the principle upon which citrous fruit is handled from the west?

A. Yes, I think the rate is flat from the Colorado common points, I believe; that is, California fruit coming through, it is flat from Colorado common points, if I remember the rate.

Q. Let's see the practical operation of that; suppose there would be two cars of oranges started out from Los Angelos, carried from Los Angeles to El Paso, and over the Iron Mountain to St. Louis and then on East; one of those cars is dropped out—say there is a series of cars, one dropped at Houston, Texas, one at Texarkana, one at Little Rock, and one at St. Louis, and a half dozen carried further east, and the last one ends up at Portland, Maine, what would be the rate on those various cars I mentioned?

A. I don't know whether that rate applies to that Maine
2878 territory or not; assuming it does——

Q. Substitute New York for Portland, Maine?

A. I will assume that it applies to New York, but I don't know whether it does or not; assuming that it applies to New York,—and the tariffs on file here are the best evidence of the application of the rate, there would be a haul in there of approximately a thousand miles over that between the Little Rock car, the New York car, and if the New York car was pulled on the cost of service, there would be an exceedingly high profit made out of the Little Rock car or vice versa, somebody would lose money in carrying that car to New York.

Q. That is a trans-state movement so far as Arkansas is concerned?

A. It is what would be called a trans-state movement.

Q. If that is largely a trans-state movement, so far as the Iron Mountain and Cotton Belt is concerned, there would be a pretty small proportion of revenue attach to these companies for handling across Arkansas, wouldn't there?

A. You mean the revenue they would receive per ton per mile would be slim?

Q. They acquire their revenue in this case on a mileage scale?

A. Yes, probably the eastern lines would require the largest part of it.

2879 Q. I mean the proportion on the mileage scale would be for probably a run of three hundred miles through Arkansas?

A. Yes.

Q. And it would be at the rate of a pretty thin scale?

A. Yes, sir, such a rate on that car would be exceedingly slim, because the Southern Pacific would likely originate the business, and as the originating line would demand a large share of it, and the line at destination having the market would also demand probably a little larger share than the mileage pro rata, and I imagine a shipment of that kind handled by the Missouri Pacific would return a very small rate if they handled it.

Q. Have you just looked at the maps that are filed as exhibits in this case, showing the zone or blanket rates on various commodities, and are you familiar in a general way with the zones that are shown in these maps?

A. Generally speaking, yes, sir; I have had occasion to work in

these zones to some extent; Oklahoma is a part of most of these zones.

Q. There is a map there on Texas common points?

A. I am thoroughly familiar with that.

Q. State the effect on the revenue of shipments passing through Arkansas under that Texas common point schedule?

A. The conditions could be so changed on two carloads of freight of exactly similar commodities, loading from a given point
2880 of origin, to separate destinations in Texas that the revenue received by the lines participating in the business would be almost double on one car what it was on the other. That Texas common point rate applies from the North to the south, and from the east for a long distance west; the highest distance between two points being 662 miles, in what is known as common points territory.

Q. That is at the Texas end of it.

A. Yes, sir, I think that is the highest distance; I figured it out the other day for the Interstate Commerce Commission.

Q. How would that result be brought about?

A. The result would be brought about by two shipments originating at St. Louis, the cars being loaded with identically the same commodity, one being destined to Texarkana, Texas instead—take to the first point in the common point territory of Texas—I believe there are two stations in Texas (Referring to map) "Take two shipments originating at St. Louis, handled over the Iron Mountain, one destined to the first station in Texas, on the T. & P. R. R. south of Texarkana or west of Texarkana, the other being destined Big Springs, Tex. which appears from this map to be the end of the common point territory. The distance between those points is in excess of five hundred thirteen miles," and the rate would be exactly the same. Dividing the rate by the miles handled, figuring in mills per ton per mile, it would show a figure nearly one-half for the car destined for the last station as for the car destined for
2881 the first station. The exact figure would be easily worked out. In other words, the haul on one would be something over 513 miles more than on the other, and the rate would be the same per hundred pounds.

Q. What effect would the distribution of that rate between the different carriers in Texas, have upon the matter?

A. The other carriers in Texas would receive a part of the rate.

Q. Within that Texas zone would there be different carriers handling this commodity?

A. Yes, you can figure rates from defined territory to Texas points that would require the handling of three or more carriers to deliver the shipments.

Q. And others where it would be handled by one—the Cotton Belt I expect would.

A. That is really two railroads, the St. Louis Southwestern Railroad, and the St. Louis Southwestern Railroad of Texas. While really it is one line, it is two different corporations; the same would

be true of the M. K. & T., or any of those lines; they are all separate corporations when they get into Texas.

Q. Take further back from St. Louis, suppose it originated in Pittsburg?

A. The same condition would exist, but naturally the further back you got, the less disparity there would be in the rate, because
2882 the longer the total haul, the less disparity in the final result; if you take further south from St. Louis to the last point shown in defined territory on the Iron Mountain, which would be from this map, Grand Glaize, Ark., take a carload of freight from that point and figure to the first point in Texas, and a carload from that point and figure to a large point in Texas that this defined territory covers, it would show about three to one.

Q. Then run the other end of the scale; how far back does that go—to Pittsburg?

A. Yes, sir, that is the eastern limit.

Q. That, of course, takes a higher rate than to St. Louis?

A. Yes.

Q. The rates to Pittsburg and places in that country would be the same as the Pittsburg rate?

A. In the group surrounding Pittsburg, the towns would take the Pittsburg rate; the Chicago territory would take the Chicago rate; St. Louis territory, the St. Louis rate.

Q. Suppose there was a shipment from Pittsburg territory, say outside of Pittsburg from the steel mills to the farthest large town in Texas, what would be the farthest large town?

A. Big Springs.

Q. How many divisions do you suppose that rate would have?

A. How many carriers?

Q. I suppose each carrier would represent a division of the rate?

2883 A. Yes, I imagine you could break that up into ten or twelve if you were a mind to, or you could hold it down to probably three or four.

Q. There would be several?

A. It would generally take at least six carriers to handle it.

Q. From that territory in there down to the common points in Texas, that would pass through Arkansas on one or other of these two lines?

A. I would say the average would be four or five lines that would handle it.

Q. There would be a fluctuating condition of the revenue apportioned to Arkansas railroads handling the shipment?

A. Yes, it would hardly be the same on any two courses.

Q. It would be pretty near impossible to make it the same on any two cars, I suppose?

A. That would depend largely on the basis it was divided, whether it was a mileage pro rata or arbitrary pro rata or constructive mileage pro rata.

Q. Are all of those factors used in making divisions of rates?

A. They are.

Q. Are they variable factors?

A. Very much so.

Q. That seems to be another element that would enter into the uncertainty of revenues?

A. That is true?

2884 Q. Are you familiar with the system of rates from St. Louis to New Orleans and say from St. Louis to Little Rock or any other common points in Arkansas?

A. Generally speaking, yes.

Q. I don't mean the actual rates.

A. I have seen the rates and worked with them at times, had occasion to quote them.

Q. It is in evidence here, from Mr. Watson, that on various articles, I don't recall them now, where there is a higher rate to Little Rock than there is for the same article moving to New Orleans?

A. That would be possible and very probable.

Q. What is the situation that calls for that?

A. The so-called water competition, I presume.

Q. You say "so-called"; are you using that term accurately or figuratively?

A. I am using it accurately.

Q. Have you any water competitive rates in Arkansas and in Oklahoma?

A. We have some to Muskogee that I have never been able to see.

Q. On the Vertigree?

A. I guess it is on some such river, the Arkansas or something.

Q. I wish you would explain in a general way how these rates that are enforced in Arkansas are affected by this so-called water competition?

2885 A. There could be conditions existing under water competition where New Orleans could get into local territory in Arkansas, much cheaper than—on less than carload freight or otherwise, than merchants located in Arkansas could get into it from main producing points. I can illustrate that by a condition existing in Oklahoma that I know of thoroughly, where I do not know of Arkansas rates, and the factors that make them, and that would be necessary to pick out these conditions. At one time rates to Muskogee from seaport territory were such as, compared with Ft. Smith, that Ft. Smith could get a carload of freight in from seaboard territory——

Q. You mean Atlantic seaport?

A. That is known as seaboard territory; Ft. Smith could get a carload of freight in from Atlantic seaport territory, and there peddle it out, that is, L. C. L. it out right at Muscogee's door or ship it out as carload freight to Muskogee's door, cheaper than Muskogee could get that car in, and it was absolutely taking Muskogee's territory away from her; those conditions were changed, and do not now exist; that was due to so-called water competition at Ft. Smith.

Q. That was the Arkansas River or the Porto?

A. One of those rivers that does not bring any freight over it.

Q. There are a large number of rates in force in Arkansas
2886 and Oklahoma, that are based upon the theory of water competition when water competition does not exist, are there?

A. Yes, there are numerous rates based on that.

Q. These instances I have given you are rates that Mr. Watson has testified to, from St. Louis to New Orleans, being lower than from St. Louis to Little Rock for the same commodity—that would be an illustration of it I presume?

A. It would; I presume, they work it out virtually the same way; I would have to have the rates and work them out as factors before I could testify to the exact result.

Q. Can you see any reason in rate making why Little Rock should not be recognized as a water point as well as New Orleans?

A. I have not been down the Mississippi often enough, but I cannot believe that these are water points; I live at an inland town, Judge Hill, in an inland state, and we people who live away from the water do not feel very friendly towards water competition.

Q. You haven't got any navigation on the Cimeron yet to affect the rates?

A. Yes, we have pleasure boat navigation three weeks in the year, and get hung on the sand bars then.

Q. What is the common method of making state rates—I mean in our southwestern country?

A. You mean by railroads?

2887 Q. What are the rates that prevail in states in the southwestern territory, commission rates or voluntary rates?

A. Most of the states now have a combined commission and legislative and voluntary rates; in Kansas, there are a number of voluntary rates, a number of commission made rates, and a number of legislative rates; in Oklahoma, we have on some lines, Commission made rates, voluntary rates on the same lines; on some articles and on other lines, we have all voluntary rates; Arkansas, I understand, has some court rates and some commission made rates.

Q. They are all merged into the court rate now?

A. Texas has all commission made rates; Missouri has Commission made, partly voluntary, and Mississippi and Louisiana the same.

Q. The evidence in this case shows that all interstate rates are commission made rates.

A. That is due to the commission having adopted the court tariff, I presume.

Q. Those in litigation here are commission made rates; I was asking for the prevailing rates; that has been explained. Now, I will ask you, on what basis is a state rate usully framed?

A. Arbitrary strictly.

Q. Mostly distance rates aren't they?

A. Yes, sir.

2888 Q. Speaking of the classification, what effect does the classification have on the state rates. Do commission and voluntary rates carry exceptions to the Western Classification as well as interstate rates?

A. Some of them do; some of them carry exceptions; some states

in the southwest carry other than the classifications naturally, but all states that adopt the western classification carry exceptions to it.

Q. You have a classificaion system of your own in Oklahoma don't you?

A. No, sir, we carry the western classification.

Q. What do the railroads do?

A. The commission has made no class rates yet, but the railroads have carried the western classification with exceptions, the commission has held a hearing on a proposed order, and I think the rates will be checked in in a very short time, and while I am not giving away any inside secrets or anything, they will be checked in on the western classification with exceptions.

Q. Applicable to the State of Oklahoma?

A. Yes, sir.

Q. It is in evidence that the Arkansas Standard Distance Tariff was based on the western classification, subject to exceptions therein.

A. Yes, sir.

Q. What effect does this variation in the classification that you have just explained, have upon the revenue?

2889 A. It is possible to change the revenue materially by variations in classifications.

Q. In what way; that is clear to your mind as a traffic man, but to the lay mind it would probably require a little explanation of just how it is done.

A. As a sample we will say the first class rate is 40 cents, and the second class is 30 cents; a change was made in the classification, and the exception would reduce it to second class; it would immediately change the rate from first to second, and would make a change in the revenue of the railroad of ten cents a hundred pounds.

Q. What effect does the sum of the locals have upon interstate rates?

A. The sum of the locals have little effect upon interstate rates; the Interstate Commerce Commission have said that where the through rate exceeds the combination of the locals, it would be considered prima facia unreasonable, and they virtually by that, restricted the railroads to the application of the combination of the locals, but it should be further understood in that connection, those rates are supposed to be voluntary rates of railroad companies, long in existence, and the Interstate Commerce Commission have more than once refused to accept as one of those factors a state made rate.

Q. That is, say Oklahoma would make a certain rate, and Arkansas would make a certain rate, this principle would not be ap-

2890 plicable.

A. No, sir, and it is not applicable so far as actual practice is concerned, even now, because I can pick out, and did the other day on the witness stand, where the Sante Fe Railroad charged on interstate business from Kansas City to all points on their lines in Oklahoma—that is, to a large number of points on their lines in Oklahoma, rates that are in excess of the combination of the locals, and it was a fact that was not known by anyone concerned before, and I

suppose it will be corrected by changing the state rate or the intersate rate.

Q. Going back to the question I asked you a moment ago, as to the difference in classification, suppose Oklahoma classes a commodity one way, and Arkansas classes it different, how would you get the sum of the locals.

A. Easily.

Q. You could work that out?

A. Yes, sir.

Q. But it would be a different revenue in each state, owing to the different classification?

A. It would be a different revenue, but the through rate might be affected; it might be lower than the through rate published by the railroad companies.

2891 Q. I want to read you some of the testimony in this case given by Mr. Frank Nay, the Comptroller of the Rock Island Lines. He was discussing the revenue theory of dividing expenses and these are the statements to which I want to call your attention:

"Q. And it will, of course, be inaccurate to the extent that the proper relation does not exist between state and interstate rates?

A. Yes, sir; I think that is true.

Q. And when the rate does not represent the cost of the service it would not be of any value at all, would it?

A. Well, if there was such a rate, no, sir; it would not be. If there was any such rate that did not represent the cost of service at all.

Q. Now, Mr. Nay, does not the rate presuppose it covers the cost of service and a profit also?

A. Surely, I should think it would. As I say, I am not a rate maker, but it would seem that the railroads should have some profit or return upon their investment.

Q. There should be two factors in that rate; one, the cost of the service; and the other, the profit to the railroad company in performing the service?

A. If I were making rates, I think as a novice I would use those two factors. I suppose there are others. There are commercial conditions which necessarily govern; and, of course, the density of traffic, which reduces the cost of the service."

Q. You see from this statement that Mr. Nay says he is not a rate maker and elsewhere he says his knowledge of rates is theo-

2892 retical. He is dealing with the proposition of whether the revenue produced from the rates is a proper measure of the cost, and states that it does not represent the cost of the service, or if there is not a proper relation between state and interstate rates that the revenue basis has no value?

Now, calling your attention to that, I will ask you what is your opinion from your knowledge of the rates, of the relation between the state and the interstate rates.

A. There is no relation whatever between state and interstate rates other than the relation enabling a local jobber to do business.

Q. That is a commercial relation?

A. Entirely.

Q. Elsewhere in this testimony it further appears in Mr. Nay's testimony (pages 354 and 355), in concluding an answer he says: "If they were in exact proportion all the time, the revenue basis would be a perfect basis." That is referring to the two classes of rates, intrastate and interstate.

Then this question was asked:

"Q. And if it represented the cost of the service? You would have to have that also?

A. I presume if they were in proper relation to each other they would represent the relative cost of the service. When I say "in proper relation to each other" I mean in reference to the cost of the service.

Q. Some of these traffic men use that term in an entirely different sense. I think your use of it is correct, but you will see from
2893 the testimony the others use it as having a proper adjustment to the commercial conditions. A just rate of one trade center with another trade center. That is the reason I was particular in calling your attention to it. You mean by it a proper relation of the cost of the service; isn't that right?

A. That is what I had in mind.

Q. That is what you had in mind in your testimony generally, I assume?

A. The proper relation?

Q. The proper relation of cost, you mean?

A. Yes, sir; the proper relation in regard to the cost."

Q. I have read that to call your attention to the two uses of the term "proper relation" in regard to the freight conditions, and "proper relation" in regard to cost, and ask you from your knowledge of the rate situation, where is there relation, if any, between state and interstate rates?

A. There is no relation whatever between state and interstate rates other than a commercial relation which will enable both to do business. But insofar as cost of service is concerned, the basing of rates upon that feature, there is no relation whatever between state and interstate rates and it is impossible to have any relation between them.

Q. Why is it impossible to have any relation between them?

A. Well, the difference in distance is so great that
2894 a rate made on one basis would not apply on the other.

The distance from St. Louis to Oklahoma points—and I prefer answering your questions as to a certain extent, hypothetically and theoretically, as I am to use Oklahoma instead of Arkansas; I prefer to use that as I am thoroughly familiar with those conditions—the rate from St. Louis to an Oklahoma point is predicted upon a haul of about six hundred miles, or somewhere in that neighborhood.

The haul within Oklahoma on a given shipment, like commodity, would approximate fifty miles.

Now, there is no relation directly between the six hundred mile haul and the fifty mile haul. It is impossible to make a direct relation between the two and meet the conditions that have to be met.

If rates could be built entirely upon what we call a scientific mileage scale there would then be the chance to have each shipment pay its pro-rata part of the cost, but in the conditions existing, this freight from St. Louis comes in competition with Atlantic seaboard freight which is handled via Galveston; it comes in competition with German and English made goods handled in trans-state steamers to Galveston, Texas, at a very low rate; practically brought over in cotton seasons as ballast in the boats.

The rates from Galveston are then made to points in Oklahoma.

The same conditions exist in New Orleans. Competition
2895 from St. Louis must meet that from Ft. Smith and that from Texas centers.

The result is that the relation of the rates from St. Louis to Oklahoma do not take into consideration the local rates in Oklahoma, but the rates from the surrounding States and Territory that supply Oklahoma with the same commodities that the St. Louis rates apply to.

Q. That is sort of a trade balance?

A. Absolutely so; a necessary condition in order to market the product.

Q. Take an illustration and see if I get your idea clearly: you are familiar with the Arkansas Standard Distance Tariff?

A. I am.

Q. Take the lumber schedule that moves on a mileage distance rate, I believe, with a rough material rate into the saw mill:

Compare the rate for lumber moving from a saw mill in Southern Arkansas, moving first into a saw mill, probably from some tap line; then manufactured into lumber at the saw mill and shipped out to Little Rock Fort Smith, or any other intrastate point:

Compare that movement with a similar movement of lumber shipped from Lake Charles, La., on a twenty-three-cent-rate to Omaha:

What relation would there be between the revenue in the
2896 lumber shipment under the Arkansas Standard Distance Tariff and the relation of the revenue derived under this interstate tariff in that zone?

A. It is impossible to make a comparison. There is no comparison there.

Q. Mr. Nay says that unless there is a proper relation based on the cost of the service between the two, the revenue theory would be of no value.

A. There is no possible chance to make a comparison between those two rates. They are not related to one another in any way. One does not depend upon the other. One is not taken into consideration in making the other. They are as unlike as black and white and no comparison can be drawn between them. A man would be foolish to try to draw a comparison between two sets of rates, because no two factors are entering into the rate that are the same except the proposition of the railroad handling the business.

The rate from Louisiana points to Omaha and all intermediate points, is twenty odd cents. At which point are you going to take

it to compare it with the Arkansas rate to find the comparison? There are no two things entering into it that are comparable.

Q. Suppose we get something that can be compared:

It is in evidence here that lumber shipped from points in Northern Louisiana to St. Louis would carry an eighteen cent rate,
2897 but if that were shipped from the same point into Little Rock, it would carry a twenty two cent rate, going over the same track, originating at the same place, part company at Little Rock, get a twenty two cent rate for the haul to Little Rock and eighteen cents for the haul to St. Louis; and a similar shipment that happened to be within the State, the same length of haul, would have still a different rate fixed by the Standard Distance Tariff:

What relation would you figure out existed there?

A. I have worked rates a long time, but I fail to be able to find any relation between those rates. There is a competitive condition, Judge, that creates that eighteen cent rate at St. Louis, which the railroad sees fit to meet. That was years ago. I understand from traffic men that it does not exist today, but the rate exists, and that competitive condition that did exist caused that eighteen cent rate from Arkansas and twenty two cent rate from Texas and Louisiana fields into St. Louis. There was not any state rate in Arkansas or Oklahoma that had anything to do with the making of that freight rate, and when they came along to make the Oklahoma and Arkansas rates I do not think they took that rate into consideration.

We find in Oklahoma, in some instances, there are six cents difference between the local rate in Oklahoma, between two given points, and the rate from Texas to that point.

2898 In one place there would be eight cents and in another place there would be ten cents. There was no reason for any of that. There was not any mileage condition that could possibly bring around the exact differences or anywhere in the neighborhood of the differences, and I fail to see where a man can draw a comparison between a state rate and an interstate rate and say they are related to one another, and when built upon the other, there is a condition under which a man could compare a state rate and interstate rate, possibly, on a revenue basis, to see if one was paying its pro-rata part of the cost as compared with the other.

Q. What would that be?

A. The traffic moving interstate on each different commodity would have to be of the same proportion as the traffic moved in the state on the same commodity and then the rates would have to be so far apart as was found the difference between handling state traffic and interstate traffic and if each rate was built upon that exact factor then a man could take the revenue theory and so on that basis could be divided the expense, but I know of no other conditions under which the revenue theory could be taken.

Q. That is a condition that does not seem to be existent, as gathered from your testimony.

A. It not only does not exist, but it is impossible for it to exist.

Q. Let us see if I quite follow you: suppose you take
2899 lumber: to make the revenue basis fair there would have to be the same proportion of lumber moved in the State business as in the interstate business?

A. Exactly.

Q. And in addition to that, there would have to be the same rate per ton per mile?

A. Plus the extra cost.

Q. To start with, you would have to have the same rate and then you would have to take care of the extra cost of short haul?

A. That is it exactly.

Q. Then, would you not have still another factor to take care of?

A. What is that?

Q. The profit the road is entitled to make on both classes of the shipment, in addition to the cost of service?

A. That would be taken into consideration, too.

Q. You are assuming that the profit is included in the rate?

A. Absolutely.

Q. Without that condition existing, then, you would be very much like Mr. Nay; you would think the revenue theory had not much value?

A. It would have no value at all. There is no condition in which it can have any value as between state and interstate rates.

2900 Q. I handed you a few moments ago a statement to read, from Mr. Nay, about the relation that existed in the classification between state and interstate.

A. Yes.

Q. Do you remember it?

A. Yes.

Q. I wish you would state the substance of the statement as he understood it and the way you understand the facts to be. I will look up the page and hand it to you.

A. While you are looking for that, I will show you a difference between state and interstate rates:

The rate from St. Louis to Mulhall, a distance of approximately 590 miles, is $1.30 on first class. This yields something over twenty two mills.

The rate from St. Louis to Oklahoma City, approximately 640 miles, has a rate of $1.30 also. This yields approximately twenty mills.

Now, I do not see any possible way to compare a state rate with one or the other of those, and if you are going to compare it, which one you should accept to say the interstate rate is built with—on the one they get two mills per ton per mile more than they do on the other, and I fail to see where the factor comes in that can be compared.

Q. Here is the statement (page 360):

2901 "Q. You understand the state rates certainly in Arkansas and probably in many other states, are fixed by the Commission; so the railroads do not get a guess at them. So you must interpret Mr. Johnson's testimony here as referring to interstate rates?

A. Yes, but by examination of the two I find that practically the same relative cost of first, second and third classes in car loads exist with the Commission as with the interstate rates.

Q. You differ with lots of these witnesses, like Mr. Watson, very much, Mr. Nay.

A. His judgment is better than mine. I say practically the same. I have not compared individual rates. But what I mean, Judge Hill, is to say, for example, here is an Arkansas rate, a rate for first class 50% more than the rate for fourth class. In the interstate rate tariff the rate for first class is double the rate for fourth class.

What I mean is that they have preserved a relation and fixed a higher charge for the commodities that are classed as first-class in this classification than they have for those fixed as fourth class.

Q. That is following out the classification. And I suppose they run along general lines with not much difference. But Mr. Watson in our last hearing took a great many instances of the leading commodities in the State and pointed out where there was an improper relation between state and interstate rates."

That is the point I want to call your attention to, as to whether as a practical matter, not as a theoretical one, whether this relative cost between first, second and third class exists between interstate rates and Commission rates.

A. I do not think they do. The rate from St. Louis to Little Rock, the fourth class rate, is forty five per cent of the first class rate.

What I understand is the average haul in Arkansas on
2902 state rates, the Standard Distance Tariff shows that the fourth class rate is 66.6 of the first class rate. In other words there is 21.6 per cent variation between the two.

Q. That is the percentage of the relation between the two?

A. Exactly.

Q. It is just another factor in addition to the fluctuation in the rates that reaches to the revenue.

A. Exactly.

Q. You do not find Mr. Nay's theoretical illustration in practice?

A. No, I have worked it down to every possible point in the voluntary rates of the railroads in Oklahoma and the voluntary interstate rates of the roads, and there is not a single instance I have ever found that they were the same.

I went into that theory to try to find out if they were built upon such a basis.

The Chicago-Guthrie rate is 58 per cent, fourth class of first; the Oklahoma rate on the Santa Fe is 53.44 per cent.

Q. Is that a voluntary rate?

A. Both are voluntary rates. I do not see where any adjustment comes in.

The Chicago-Missouri rate—I will call fourth as against
2903 first, as that seems to be the one Mr. Nay took up—that is forty per cent; Chicago-Guthrie rate is 58 per cent; St. Louis-Kansas City rate is 45 per cent; St. Louis-Guthrie rate is 63 per cent; the Kansas City-Guthrie rate is 65.3 per cent.

The percentage of class rates from Chicago to the Mississippi River and Missouri River to Colorado common points I find the average is 51.2 per cent.

Now, in all of those there is absolutely no comparison whatever, so I fail to see—none of those rates will compare with the local rates as assessed in Oklahoma, and I do not see where the comparison comes in as he has it, 50 to 50.

Q. That kind of rate making is right square up against the Western classification?

A. It is just as I understood Mr. Johnson, of the Cotton Belt, testified before the Interstate Commerce Commission, that the rates in Oklahoma and Arkansas had been made in a hap-hazard way and were never straightened out.

Q. Let us see if I can find what we have here—this is Mr. Johnson of the Iron Mountain, traffic man—J. M. Johnson.

A. I was talking about S. C. Johnson.

Q. This is another Mr. Johnson. He says:

2904 "But in making rates is the general average of cost of moving the commodity taken into consideration in fixing a rate that will be compensatory in the moving of any particular commodity? I refer to the general average of cost you have spoken of, as shown by your records at the end of the year.

A. No, sir, rates are not made that way. By experience we have some knowledge of about what we ought to have for the service in question, but rate making as a general proposition is largely a guess and the railroad people claim that by experience they are much better able to guess correctly than the other fellows. There are so many factors entering into the cost that it is impossible to determine the cost of moving the different classes of freight. And we can only determine in a general way, from experience, about what is fair and compensatory."

2905 Mr. MOORE: I object to the statement of counsel that this is the testimony of Mr. Johnson in this case.

Mr. HILL: It is not the testimony given by Mr. Johnson in this case, but it is the testimony of Mr. Johnson in another case.

Mr. MOORE: Brought in here by hearsay.

Mr. HILL: I am not asking how it was brought in here. I am asking what is his opinion of the rate situation?

A. To a large extent it is true.

I don't think, Mr. Hill, that a traffic manager or a general freight agent making the freight rate, ever looks at the cost of service.

If at the end of the year the financial reports showed that the railroad was losing money and he was instructed to get more money than he did, the chances are, 99 out of 100, that the rates that would pay the increase would not be the low commodity rates. He would go after the rates that could stand it. He would be afraid to tax it on to the other rates because that would put them out of business entirely.

Q. That would be good railroad business?

A. That would be sound logic.

Q. That might change the relation between state and interstate that Mr. Nay speaks of?

A. I don't think it exists, so you can't change it any.

2906 Q. Now, Mr. Bee, from your knowledge and information of how revenues are derived by the railroads from the two classes of traffic, state and interstate, I wish you would state your opinion of using those revenues as a measure to divide the costs of the service, state and interstate.

A. I think it is more than unfair to take the revenue basis to divide the cost of service, because the revenue basis within itself has already added to the state business—the rates have already added to the state business an added charge. They include within themselves an extra cost for doing business, and this can well be shown by the comparisons that I got from the railroad's exhibit 26—I believe that is Mr. McPherson's.

Q. No, that is Mr. Johnson's.

A. On less-than-carload freight, leaving out trans-state entirely, it shows that 20,573 tons were handled, interstate; 8,031 tons were handled, state.

Using the factor suggested by Mr. McPherson in his testimony, of five tons per car, of less-than-carload freight, this will give 4,134 cars moving an average distance of 109.53 miles for interstate business, and 1,602 cars moving an average distance of 57.18 miles for intrastate business.

It is shown that the car mileage of state business is 16.8 per cent of the whole. (I am entirely disregarding trans-state business compilations.)

2907 The revenue received from these two classes of freight was about 30 per cent, for the state business. Now, although it performed 16.8 per cent of the actual car mileage of the two classes of freight, it paid 30 per cent of the revenue, and to divide the expense upon that basis you are going to make this 16.8 per cent of the freight, the actual car mileage, pay 30 per cent of the expenses.

If you will take the excess mileage of these interstate cars, as compared with the state cars, we find that the excess is 361,305 car miles, and this, at the Missouri Pacific rate for empty cars, of ten cents a mile, would give $36,130.50, if these cars had been handled empty. For new cars going somewhere else they would receive for that service $36,130.50, or more revenue than the state business brought in. That is merely the excess of empty car mileage over the state car mileage.

Further than this, the average revenue received from this interstate business was 33.230 mills.

The average haul of state business was 57.18 miles.

This secured for the railroad companies, on the interstate business moving the same distance that the state business did, a revenue of $1.90 per ton.

From state business moving the same distance, they received 67.275 mills, or $4.84 per ton, showing an excess that state

2908 freight paid over interstate freight, moving right along the same distance, of $2.94 per ton, which would take care of all the extra cost of state business and leave a whole lot besides.

Q. These gentlemen that testified here, talked about this less-than-carload business being the most expensive business the railroads handle?

A. There is no doubt about it being the most expensive business—not the state less-than-carload, but the less-than-carload business is without a doubt the most expensive business a railroad ever handles, and it realizes less profit on that in the long run than it does on any of the business. But when you take into consideration that every time a pound of state less-than-carload business is delivered there are two pounds interstate less-than-carload handled along with it, and under the same conditions.

If all less-than-carload business, interstate, was handled from St. Louis to Little Rock, the conditions might be different, but if you will take a shipment destined from St. Louis to the first station north or south of Little Rock, on the Iron Mountain, or Fort Smith or any other point you please (outside of a terminal point), you will find that that business is brught into Little Rock in what is called a "package car" and is there unloaded and checked into another car, and proceeds out the same as does a state shipment.

2909 It not only receives the same service at Little Rock that the state shipment receives, with the exception of making out way-bills, but it has received in addition the service of unloading it from the car it came in.

I have checked these things time and time again—not in the state of Arkansas, of course, but in other states; in Oklahoma, Missouri and some in Kansas, but most of my investigations have been in Oklahoma, and I have found that trains proceeding northward from the heart of Oklahoma carry more freight in their local peddling trains, which originated at points north of Oklahoma, than they do of freight that originated in Oklahoma. It has simply been brought there in a solid car, split up and then going back for distribution, making a back-haul and receiving exactly the same service that the state less-than-carload is receiving, with the exception of making out the way-bill at the original Oklahoma point, but to counteract that they have unloaded that freight and checked it at that station.

Q. Which would be a heavier expense?

A. More liability and more work attached to it.

Q. The substance of that is, that while this class of freight, less-than-carload, is the most expensive to handle, this revenue derived under the state less-than-carload is 30 per cent greater?

A. It is more than that. It is thirty per cent for the entire run as compared to 16 per cent for the entire tonnage.

2910 Q. I want the rate per ton per mile.

A. It is almost double, 33.230 against 67.275.

Q. In round figures, they have got double the amount of revenue for the state less-than-carload that they have for the interstate less-than-carload?

A. Yes, sir; per ton per mile.

Q. Now let us come to the carloads: is there any difference in the

cost of them, any such difference that you have got to divide it on the revenue theory and then add 200, 300 or 400%?

A. There is a very slight difference in the cost of handling the business. Of course there is a larger per cent of state business handled on local trains than there is interstate business handled on local trains, but there is not a larger per cent of the local train that is state business than is interstate business. One often makes the statement, without intentionally deceiving those who are sitting around and listening and interested, that the percentage of state freight exceeds the percentage of interstate freight. So it does, as to the whole, but it does not exceed that part which is loaded on the local train, and that is the only thing that figures in the expense of that local train which is without a doubt the most expensive train run over the road.

Q. How much of the switching is done for the through train by the local train?

2911 A. Virtually all of it. All cotton is picked up and carried to a division point, at least. The through train sets out cars at a terminal point and the local train takes them out to their destination.

The local train sets the empties for the grain and for all of that movement and brings it back into the terminal and gives it to the other train. But for a local train it would be impossible to run through trains. There is no question about that. They might run through trains in Arkansas—in Missouri, without a local train in Missouri, but if they did they would have to have them in Arkansas. They might cut them out of one state, but they could not operate through freight trains unless they had local freight trains.

Q. I will call your attention to another matter that is in evidence and ask you if you know anything about that: that is the lumber traffic:

It is in evidence here that logs are hauled to a sawmill in the local train. They are to be manufactured and shipped out to St. Louis and outside of the state. They are carried sometimes to the nearest division point on local trains, and sometimes on the local train directly to the saw-mill point: are you familiar with that situation?

A. I am. The through train handles nothing except freight that originates for it at big towns, unless in exceptional instances if there is a carload of perishable merchandise for some

2912 small jerk-away station. The through train may get instructions to stop there and get that; it has been set out—what we call "first out" at the end of the track; they have to make one cut; they pick it up and then go ahead. That, however, is exceptional.

The local train is supposed to clear up its division and get everything into the terminal, north or south or west, whatever direction.

Q. The local train is clearing up the way for the through train to go out without any interruption?

A. Yes, the local train lays on the side until the through train gets through. The through train has a time-card right which the local train has to regard and has to observe. She starts from one station

to another and finds a little more work at a siding than she expected; her time is up; she cannot make the next station. The result is she goes into a "hole" and stays there for one, two or three hours, waiting for the through train to come along, sometimes having a man walk to the next station to telegraph——

Q. It is sort of a "beast of burden"?

A. Yes, and it is the one that you can never put the last straw on the camel's back and break it.

Q. Is it serving state and interstate, both?

A. So inseparably that you cannot find it.

Q. I would infer from some of this testimony that it did not serve the interstate?

2913 A. The man who testified to that either did not know or was not fair.

Q. Of course he was fair. He was going on a theory, probably.

A. A man who has ridden in local freight trains knows the work that they have to perform.

Q. Now, Mr. Bee, have you made any examination of this trans-state proposition?

A. I have gone into it thoroughly.

Q. I want to call your attention to the fact that in this case the tons per mile of trans-state, on the Iron Mountain, is fifty one and some fraction; the tons about thirty three per cent of their traffic. The Cotton Belt is a little higher, forty four in tons and about sixty four in ton miles:

Some of these gentlemen have thought that that trans-state business went through the State like it was on a bridge. Occasionally they would strike a pier and change an engine and caboose, but the train stood out there on the main track—or maybe took a siding while they changed the engine and caboose and shifted on through, and that was the way that trans-state traffic was conducted. They say it did not use a great many of the facilities the other traffic used and that it was the least expensive of all the freight handled, and was very profitable and remunerative.

2914 I will ask you if you have made any study of that condition of affairs.

A. I have.

Q. I wish you would state what you found in it.

A. I found in practice that the trans-state trains are seldom run. There are few roads that can afford to run those trains that are known as exclusive trans-state trains.

A train will start out of St. Louis or Kansas City or some other point, with all of the red ball freight—that being the highest class of freight a railroad handles—that there is in the yard. If there is not enough there in the yard to make out a red ball train, they put in green ball, and anything else to make up their tonnage. They proceed South until they come to a point where there are some more cars of red ball freight. They immediately reduce by putting out their green ball, or common freight, and set in the red ball. This continues all the way along the line. Every time they find a car of red ball they reduce a car of green ball, or common freight, and

take in the red ball freight, with the desire to expedite that movement as much as possible.

Q. Is it at division terminals where that change takes place?

A. Mostly division terminals, but it will be done any-
2915 where else that they find it. If it is freight that has to move they will stop and take it out.

I presume trains going into Little Rock would carry a solid red ball train, that is, I presume a solid red ball train could go into Little Rock which would have fifty or sixty percent of its tonnage for Texas and the rest would divide up and go somewhere else, with the result that other cars would be put into that train. Even if a trans-state train was run through it would necessarily require that prior to its arrival the division terminal of the main line be cleared or left open at least ten, and maybe twenty or thirty minutes before its arrival. The switching engine goes on its way. It has gone to the yard to get the caboose; cleared another track somewhere else for the extra engine to run up on. The change of engines is made. The switch engine must then take the caboose and put it away. The other engine must be put in the round house—using the facilities of the terminal all the time.

Q. What about inspection?

A. The train lays on the main line as a rule, or on a passing track, while it is being inspected as to the boxes on the train, to see if it is properly oiled, if the packing and the journals are good, and everything is delayed in the yard while that through train is standing there. I have often seen where they were delayed one hour or an hour and a half in the yard and everything was tied up.

2916 Q. Suppose the inspection would develop that it was a bad order?

A. The car would be cut out, set on some side track and the train made up again and proceed on its way. Or maybe it would be something that could be fixed and they would jack the car up and change a journal, or something of that kind.

Q. We had in evidence here from a gentleman in Little Rock who had been a switchman down there for a good many years, who testified that such a train went through there in the five years he worked there—an onion train from Texas that went North. That was the only one he knew of that went through on a bridge.

Would what you have testified to be applicable to the onion train?

A. Absolutely, that onion train would receive that service.

Q. If there happened to be a car in that onion train that was out of order the whole train would be broken up for switching purposes?

A. To set that one bad car out.

There are other trans-state conditions that come in there of what would be trans-state freight. The Fort Smith & Western operates out of Ft. Smith to points in Oklahoma and does a very good business.

The Midland Valley operates from Ft. Smith and likewise does a good business.

2917 Both of these railroads depend entirely upon some trunk line to give them their local business. Their local business from point to point on the line would not be near sufficient to sustain them. It would not start to sustain them. The natural result is that the Santa Fe, having a line parallel them at numerous points; the Rock Island and Frisco also, and the Katy, are not so anxious to make divisions with them as are the lines that do not parallel or meet them at competitive points.

The Kansas City Southern, St. Louis, Iron Mountain are two lines that do meet them at Ft. Smith and who do have joint arrangements with them on traffic from Kansas City and other points. Now, this traffic is all trans-state traffic. It originates in Missouri and Kansas and is destined in Oklahoma, but every bit of that traffic is handled through the terminals at Ft. Smith or some other points.

In the Southern part of the State I understand the Missouri Pacific secures a lot of lumber which is brought up into the State, transferred to other lines and goes away. The same condition exists at Memphis—for the purpose of this case I understand Memphis is included in Arkansas.

Q. That is right.

A. And all of these conditions bear burdens upon trans-state traffic.

Cotton originates in Oklahoma; is brought to Ft. Smith is compressed and goes out on the Missouri Pacific.

2918 Cotton seed meal, hulls, originate along the Midland Valley and Ft. Smith & Western up into Ft. Smith and go North and South via the Missouri Pacific and other lines.

All of this freight is trans-state, but it all uses the terminals at Ft. Smith or at the junction point wherever it is delivered to the connecting lines.

I notice Mr. McPherson said in his testimony that no trans-state express was handled in Arkansas, that it was merely overhead and went through. The same condition exists on trans-state express as exists on others.

Q. Let us illustrate that Ft. Smith & Western situation there: Take some point on that, that had a shipment through to Boston: What would be the logical line for that to go, say cotton?

A. Well, if the Missouri Pacific get there and hustle that traffic the natural result is if the soliciting agent can secure it it is going to come into Ft. Smith and routed North via the Missouri Pacific.

Q. Compressed at Ft. Smith and carried on to Boston over the lines of the Iron Mountain and connecting carriers?

A. And its connecting carriers.

Q. What is the practice about scaling or weighing?

A. There is a feature that will come in on trans-state

2919 business. The rules of the railroad company are that all freight should be scaled at the first track scales. In business that originates in Kansas or Missouri, going into Arkansas;

originating in Texas or Louisiana going through Arkansas, which originates North or South as the case may be, coming from Louisiana, Texas or Kansas and Missouri, would be weighed at the first scale in the State.

Q. Now, to illustrate that: there is a large lumber movement from Northern Louisiana, North of Monroe; it passes on to interstate points in trans-state movement and is scaled at Dermott or McGehee —Dermott would be the first scale: there is quite a tonnage North of Monroe:

What handling would that trans-state lumber get?

A. On account of its location, I imagine McGehee would scale most of that lumber, which would be scaled in Arkansas. The rules are to scale at the first scale track.

Q. I think there is a large cotton movement from Northern Louisiana down there, very considerable, that the compresses at McDermott—or McGehee would be the first compress point——

A. They would not scale cotton.

Q. I am talking about compression.

A. That would depend on the traffic arrangements, but it would be compressed at the first compress.

Q. The usual rule is to compress at the first point, is it not?

2920 A. At the first point unless there is some exceptional condition.

Q. There seems to be some use, then, in trans-state business of State facilities, rather than going over on a bridge, as you have found it?

A. Yes, and I have found that the trans-state trains are very heavy users of terminal facilities within the State, very often. I have watched it very carefully.

Q. Now, passing to such trains as you spoke of, like Mr. McCutcheon told about in regard to the onion train: what is the usual way that that trans-state train there is handled?

A. There is another expense that comes in. If Arkansas destined all of their own freight that came in there—there was no trans-state—if everything has its destination within Arkansas it would be unnecessary to have the large terminals they have and to have the long passing tracks that they necessarily do have. There would be numerous operators who would not be maintained for night service, and incidental expense of that kind that would not be borne except for trans-state trains.

The trans-state freight is—the through freight is the long freight. It is the freight that is carrying the most business and the result is that it uses the long track for passing. They have got to have longer tracks in order to pass than if simply handling local trains, in order to allow these trains to pass without serious delay.

2921 They keep telegraph operators at closer points.

Q. Do they ever put out passenger trains too?

A. Sometimes they do, but not as a rule. That is an exception when the passenger goes in the "hole" for the freight train.

Q. What about these night operators? Do they run the local trains at night?

A. Not unless they have over-time work; those are exceptions.

Q. Before we get away from that Ft. Smith situation; I suppose you are familiar with the fact that Ft. Smith is a large furniture manufacturing center?

A. I understand it is. I understand a lot of lumber goes there that is sawed up and made into wagons, and wagon material, and brought back.

Q. What about other shipments, say to Tennessee or Alabama, or lumber that originated in Oklahoma?

A. It would be trans-state originating in Eastern Oklahoma.

Q. That can be done under rough material rates?

A. Yes, they do that under milling-in-transit rates, I think. I understand they have some in effect. I don't know the extent of them.

Q. Are you familiar with the oil movement, Mr. Bee?

2922 A. Generally speaking, yes, sir.

Q. How is oil usually handled?

A. Oil is a commodity which is handled peculiarly. Certain days in the week are specified as "oil days" and on those days the railroads move what is called oil cars. That is to prevent damage to other freight by forcing them to handle oil and loading it in the same car with vegetables. I have heard some statements that the smell of the oil would permeate sacks of flour and such things as that and absolutely ruin them. It would get up against the dry goods, run through the boxes and ruin the silk and dry goods. For that reason the Commissions in most States have permitted the railroads to designate certain days in each week on which oil trains should move and not force them to move it on other days.

Q. It seems in Arkansas they are complaining about being required to move it certain days.

A. I don't see where their complaint comes in. It would be a penalty upon them if they were forced to move it every day. It would not be a penalty, but if the Commission grants them certain days in which they can ship it, they are doing the railroads a favor and are avoiding the danger of ruining other traffic. If they should be forced to furnish their own equipment——

Q. I am not speaking of oil trains.

A. Well, they call them oil trains; they are oil cars.

2923 Q. I suppose you have a much heavier oil movement in Oklahoma than we have in Arkansas?

A. They speak of them as oil trains. They are not. They mean the days on which oil should be carried. There is no such thing as "oil trains," except the trains carrying fuel oil, to the refineries or places of that kind, to the places of consumption.

Q. What is the difference in the terminal handling between one of these through trains and a local train?

A. At the terminal?

Q. Yes.

A. Why, the difference is simply this: that the local train when

it comes in has already done its switching; its cars are all made up in order, and when the switching engine in the yard gets hold of a local, all it has to do is to cut the cars out. They are already in order—the red ball in one place, the green ball and other freight all broken up. That is the requirement that the local train shall bring its cars in in that way; while a through car comes in in the condition as it leaves the previous point. It is generally made up at the previous division or terminal point—and as near that condition as possible, but the services are virtually the same. They have the distributing of these cars around the different tracks, set
2924 them out and fill them to make a new train; set them away for the next morning; take them around to the different industry tracks.

I should say that a through train going into a town like Little Rock, setting out its entire train, and a local train going into a town of that size, the through train would have three times as much work on it as a local train would, because more cars would be destined to Little Rock and more to be delivered.

Q. After considering all of those various phases of this question, I wish you would state your opinion as to what, if any, is the extra cost of doing state over interstate business.

A. That is a hard problem to answer, Judge Hill. I have tried to come to some positive decision on that basis. The main factor in state business over interstate business, that I have been able to find, is one additional terminal expense.

Q. Take that condition in Arkansas, about the cotton, lumber and grain we were speaking of this morning, where there were so many extra handlings of the interstate freight:

A. That would more than offset it.

Q. There is another proposition in this case—I don't know whether or not your attention has been called to it—about Fort Smith and Memphis being interstate points and all of that traffic carried as interstate shipments?

A. That creates a lot of traffic that has double the service in the state, and possibly Memphis and Fort Smith would handle as
2925 much traffic to points in the state of Arkansas as would the entire state, with the exception of Pine Bluff and Little Rock. Take those out of the state for interstate shipments, and the business from Fort Smith and Memphis would possibly equal all the rest of the business.

Q. Taking the general survey of the situation—

A. I mean less than carload business.

Q. —what would you say of the fairness of dividing the expense between state and interstate traffic in the state of Arkansas on the basis of the revenue received from each class of traffic, and of the revenue on the interstate being apportioned to Arkansas on a mileage pro rata—on the ratio of the main line mileage of the Iron Mountain?

A. I would say that the railroads were getting more than what they were entitled to.

Q. You are referring to the revenue without any extra cost?

A. Absolutely.

Q. Why do you think they would be getting more than they are entitled to?

A. Because right there, in the example that I worked out, they are getting $2.94 a ton more revenue from state than interstate freight, the only additional service being one terminal; while their entire revenue from interstate freight terminating in Arkansas is but $1.90, and they are receiving an additional here of $1.04
2926 more for the extra terminal than they got for the entire handling of the other shipments.

Q. I believe that example was on the less than carload?

A. Yes, sir.

Q. I want to give you approximately the figures here: on the revenue per ton per mile, 12 mills for state and 6 mills for interstate.

A. The same conditions would work out. It is two to one, the same as this other.

Q. Those are not exact. I am using round figures on it: that would more than take care of any extra cost, as I infer from your testimony?

A. It would.

Q. Now, if you divide the expense in proportion to the revenue, you apportion double the expense to start with: is not that a fact?

A. That is a fact.

Q. That would be more than doubling it after you have already taken care of that expense in that rate?

A. Yes, sir.

Q. I want to call your attention to a situation that is in evidence here by the railroad accountants:

After the injunction was obtained in this case and the railroad went out of the business of fixing rates, the railroads readjusted their rates, both state and interstate.

2927 The third month following their free hand in this, it was shown that the Cotton Belt—in the month of January 1909—increased their interstate revenue nine and a fraction per cent, and their interstate revenue ninety-six and a fraction per cent, per ton per mile:

If a calculation was then made as to the amount of expense that would be apportioned to the state, where would it leave the state of Arkansas?

A. If it was continued on indefinitely, the intrastate business would soon pay the total expenses of the road, on a revenue basis.

Q. What do you think about this relation or "parity" as some of them called it, between the state and interstate rate? When they had a free hand they increased their interstate rates 9 per cent and their state rates 96 per cent.

A. I think that is just as much of a parity as ever existed between state and interstate rates.

Q. I said "rates": it was the revenue?

A. I think that is just as much of a parity as ever existed in rates, and any man who tries to create that parity between the two is going to get himself where he cannot get out.

Q. It is not there?

A. It is not there. It is impossible.

2928 I want to add there that the traffic men themselves say, the longer you haul the shipment the cheaper you can handle it per ton per mile. That is a misunderstanding. I don't think any traffic man will go on the stand and say you can haul a shipment 200 miles cheaper the second hundred than the first hundred. But the fact is that by reducing the rate per ton per mile, you are still paying your terminal expense, and the cost of the haul just the same, 100, 200, or 300, with the exception of the terminal expense; and of course the longer you have to go you can exact a smaller fraction on each mile to pay that terminal expense with, and that is the only reason that I know of why it costs less to handle the shipment a long distance than a short distance. After a shipment goes over one terminal or one division, it costs just as much to handle it——

Q. You mean the cost per ton per mile?

A. Yes, or the cost as a whole; any way you want it. The terminal expense at origin and destination has to be taken care of, and if you can haul that shipment 500 miles you can take a less figure on each mile to pay those two terminal expenses, than if you are going to haul it only 100 miles. The actual cost of transportation is just the same, if the condition of the road is the same.

Q. Suppose this factor enters into it: suppose the longer the haul, the more intermediate carriers?

A. That is largely true.

Q. And the rate is thinned out by every division?

2929 A. It continues to thin all the time. A shipment passing through interstate from road to road will stand a heavier terminal expense, right here in Kansas City than it would cost to be delivered in Oklahoma. I understand that the expense there has been figured out at $4.80 or about that.

Q. Do you refer to St. Louis or Kansas City?

A. I meant Kansas City, $4.80 there, from line to line. They have never contended it cost over $2.60 to deliver freight in Oklahoma, at our largest and most expensive terminal we have.

2930 Cross-examination of Mr. BEE.

By Mr. MOORE:

Q. What is your age, Mr Bee.

A. Past 30; something over that.

Q. Do you mean it is under 31.

A. Yes, sir.

Q. I beileve that you stated that your first connection with railroad work was as stenographer to the Superintendent?

A. Yes, sir.

Q. What road was that?

A. The Mexican Central. All of my railroad experience was on the Mexican Central.

Q. Where is that located?

A. It runs from El Paso, Texas, to the city of Mexico; from Irapuato to Guadalajara, which branches from Torreon to Saltillo.

Q. It will not be necessary for you to go into those details. It is a Mexican railroad?

A. Yes, sir.

Q. How old were you when you went into the service of the superintendent of that road?

2931 A. Less than twenty.

Q. That was about ten years ago, then?

A. Eleven years ago.

Q. Who was the superintendent, Mr. Bee?

A. Mr. E. S. Banks, was the first one.

Q. What was his position?

A. Superintendent.

Q. General Superintendent?

A. No, superintendent; division superintendent.

Q. How long did you work with him in that capacity?

A. I think I was in with Mr. Banks three or four months and then I went to Mr. Ben Collins.

Q. Who is Mr. Collins?

A. Division superintendent also.

Q. Did he succeed Mr. Banks?

A. On another division.

Q. How long were you with Mr. Collins?

A. Something over eight or nine months.

Q. What was your next service after that?

A. With Mr. Jennings, the assistant superintendent of machinery.

Q. And what was your position with him?

A. I was first in the office as his private secretary and next I had charge of what was known as "1315 reports"—delays on the road. And from that I had charge of the work in the shop,

2932 checking engines into the front shop or back shop; taking the engineers' reports and designating the work to be done on them and issuing orders for supplies and material; checking the work nightly to see it was being gotten out.

Then I was in the office as his chief clerk for probably 2½ months.

Q. Were you acting as Stenographer during that period also?

A. Only for about the first six weeks.

Q. What did you say was the name of that party?

A. Mr. Jennings.

Q. I don't recall what position you said he held?

A. Assistant Superintendent of Machinery.

Q. Where was his——

A. Mexico City.

Q. What were the duties you performed for him?

A. I was his secretary.

Q. I suppose that was to attend to his correspondence. How long did those duties continue?

A. I think I was doing his actual work about six weeks, if I remember correctly.

Q. Then what was the change?
A. I went there and took the 1315 reports.
Q. What are they?
A. The delay reports.
Q. Delay of what?
A. Delay of engines on the road.
2933 Q. What did you have to do with it?
A. I had to take those reports up and see what the delay was, going to the transportation department to see what the conductors reported was the cause of the delay on those particular trains, and investigate the general cause of the delay. If I thought the delay was too great, I would take it up with the engineers personally and demerit them for the delays—and such work of that nature.
Q. To whom did you report?
A. I reported direct to the general manager, in Mr. Jennings' name. Everything from the department was reported in his name.
Q. How long were you engaged in those duties?
A. If I remember right, three or four months.
Q. What was the next duty assumed by you?
A. I then had charge of the shop work.
Q. Were you still with him?
A. Still with him all this time.
Q. What were your duties in connection with the shop work?
A. As I stated, checking engines in and out of the shop; taking engineers' reports of the work that had to be done on them; making orders out to the shop; drawing the necessary material.
Q. That was checking engines in and out for repairs?
2934 A. Yes, sir.
Q. How long were you engaged in that work?
A. I don't remember those months exactly, Judge. I would say about the same time as on the 1315 reports.
Q. About three months?
A. Three or four months, I should judge.
Q. What were your next duties?
A. I was with Mr. Jennings entirely, doing whatever he wanted me to do. Most of that time was spent in checking the power on each branch of each division; seeing that there was sufficient power on one division to move the business given us by another division——
Q. Mr. Jennings was division superintendent?
A. No; assistant superintendent of machinery. He had charge of all the territory north of the half line—I won't mention those Mexican names because they will confuse the record; the superintendent of machiney had charge of the line north of that—Aguas Celientes——
Q. Is that the time to which you referred when you said you were acting as handy man for the superintendent?
A. Yes, sir.
Q. That is, assistant superintendent of machinery?
A. Yes, sir.

Q. Where were you located at that time?

A. Our headquarters were in Mexico City. We were
2935 there about just a fraction of the time at the different shops and on the road all over.

Q. What were your duties at the shops at each place?

A. I was just into the shops and out of the shop, taking the power into and out of the shop.

Q. You mean checking engines?

A. Yes, and their capacity and the standard at which they were working. If an engine was rated at full standard and I found on checking it up that she was doing only $\frac{2}{3}$ of the work rated——

Q. What did you do with that information after you had it?

A. It was merely to check the engines back and forwards.

Q. That was reported to some one?

A. No, it was simply to change the engines, that would be the result of that. It was reported to him, of course, all information reported to Mr. Jennings.

Q. And any change that was made, was made to orders given by Mr. Jennings, I suppose?

A. Oh, sure.

Q. You were acting in the capacity, we might say, of a clerk or a sub-ordinate of Mr. Jennings?

A. Absolutely.

Q. What were your duties on the road?

A. The same thing.

2936 Q. How long were you engaged in the discharge of those duties?

A. I was with Mr. Jennings something over a year and the balance of the time was in that work.

Q. Then what was your duty?

A I then went to the traffic department.

Q. Whom were you employed by there?

A. Mr. T. F. Ryan.

Q. What was his position?

A. I was in the office as his secretary.

Q. What was his position?

A. General Freight Agent.

Q. You went in as his secretary?

A. Yes, sir.

Q. And you attended to his correspondence, I suppose, and performed such duties as a secretary usually performs?

A. Yes, sir.

Q. How long did you remain in that capacity?

A. I should say 2½ or 3 months.

Q. Did you then give up your work as secretary?

A. No, I then went to the Traffic Manager.

Q. You left that department?

A. No, just merely from one room to another.

Q. You just passed through a door?

A. Yes, sir.

Q. What was the change?

2937 A. None at all; a step up in salary.
Q. You were working for the same party?
A. No, for the traffic manager.
Q. You did the same class of work? As secretary?
A. Yes, sir, the same thing.
Q. Who was the Traffic Manager?
A. Mr. H. Lawton.
Q. How long were you with him?
A. About three weeks.
Q. Then what happened to you?
A. I was promoted to the rate desk.
Q. What were your duties at the rate desk?
A. At first it was to learn the rate business.
Q. Whose superintendence or direct employment were you under at the rate desk?
A. Mr. Lawton was the head of the department. Mr. Ryan was really in charge of the department.
Q. How long did you act in that capacity as rate clerk?
A. Well, I went into the office—I think I was the fourth assistant rate clerk for about two weeks. Then I took the third assistant's position. I was there probably six or eight weeks. Then I took the second assistant's position. I was there some months—I never kept track of the time—and then I jumped to the chief rate clerk's position, and from that to the chief clerk's position in the traffic department.
2938 Q. What were your duties as rate clerk?
A. Checking rates and checking way-bills that might came into the office. At that time we had to check all United States railroad bills; advising the agents over the state the proper rate to apply. After the general freight agent or the assistant agent had been into conference, the report of their conference would come back to us, and we would check in the different rates, United States Mexican lines, the Water Mexican lines and our own lines.
As chief rate clerk and chief clerk, I would talk to parties who came in and wanted special rates. I would investigate their business and decide on the rate if I thought a new rate was due them it would be submitted to the general freight agent for his approval and put into effect.
Q. What do you mean when you say you "checked" rates? What does that cover?
A. Adding combinations of locals to find if any of those rates were lower than our through rates. To check up our tariffs in connection with other lines' tariff and see that our rates were in line; that we were not charging higher or lower than the other roads were; making up figures for new rates desired in comparison with the United States or other foreign lines; general work of the traffic department.
Q. Were there competing lines in the territory?
A. Some of our territory was strongly competitive.
2939 Q. How long were you engaged in that service, Mr. Bee?
A. I couldn't tell you, Judge, the exact number of months

or days that I was engaged in that service, for this reason; I never kept any track; I would be backwards and forwards.

Q. You spoke a while ago about an advance of salary when you went from the superintendent——

A. No, from the general freight agent to the traffic department.

Q. What was your salary before and after that change?

A. I think I was drawing $225 with Mr. Ryan and I got $270 with Mr. Lawson.

Q. That as on the silver standard?

A. That as on the silver standard.

Q. You were not paid on the gold basis?

A. No, sir.

Q. Your work was in the traffic offices, was it?

A. Entirely; all of that work was in the traffic department.

Q. Where was that?

A. In Mexico City.

Q. What did you do after you ceased to be chief rate clerk?

A. I was promoted to the Commercial Agent at Torreon.

Q. What were your duties there?

2940 A. To solicit traffic and watch freight conditions. We had peculiar conditions as commercial agents in Torreon. We had to make reports monthly upon the conditions of service of receiving; conditions of service our competitors were receiving; the time made by our lines and by competitors' lines; general soliciting—work of that kind.

Q. Did you have any change of salary when you made that change in occupation?

A. I was getting $300 a month. I don't remember when the change came. Besides that, liberal expenses were allowed me.

Q. What was that equivalent to in American money?

A. At that time about $167.

Q. How long did you act as commercial agent?

A. I believe at Torreon about nine months.

Q. Where is that place, what part of Mexico?

A. It is about 300 miles south of El Paso, possibly four hundred. We handled kilometers. I believe the dis- is 642.

Q. What was your next experience, Mr. Bee?

A. General Agent at Monterey.

Q. What do you mean by "General Agent?"

A. A change in title, with virtually the same duties.

Q. Practically the commercial agent?

A. As far as work is concerned.—The only thing is when you are a commercial agent you seldom have anyone under you, but as general agent I had three, and sometimes four soliciting men

2941 under me.

Q. In that position, where were your labors confined to?

A. The entire northern part of Mexico. I had jurisdiction over the commercial agent at Torreon and the general agent at Saltillo, whose title was general freight and passenger agent.

Q. How long were you engaged at that?

A. I don't think they left me there but four months.

Q. Your business was to get business to come there, I suppose?

A. And watch the general operations of the road in my territory.

Q. What do you mean by that?

A. Watching the movement of trains to see that we were making time; making reports to the general and traffic manager relative to unnecessary delays and finding out the cause——

Q. That was for the purpose of seeing that your customers got satisfactory service?

A. That was the idea of that, entirely.

Q. What was your next change, Mr. Bee?

A. Our assistant general freight agent, Mr. Synder, who was in charge of the United States traffic, failed in health and he was promoted—changed at least, not promoted, to the position of agent at either Los Angeles or San Francisco, and this left the Assistant General Freight Agency open at Mexico City. I was then changed

2942 with Mr. Bryant, who was commercial agent at Mexico City. He was put to be general agent at Monterey. I was transferred to the commercial agent at Mexico City, and for the balance of my time, my title was commercial agent at Mexico City; though very little of my time was spent as such, I was at Mr. Snyder's desk from that time until I left the service of the road.

Q. What year was that?

A. I went there in 1906, if I remember right, either the last of 1906 or the first of 1907. I don't remember the dates because I kept no track of them at all.

Q. You were there how long?

A. In the neighborhood of a year.

Q. Did you have any change of salary when that transfer was made?

A. I did, fifty dollars.

Q. Your salary was then $350 in Mexican money?

A. Yes, with $5.00 expense a day, while I was in the office, which made a great deal more.

Q. You spoke of a position as acting assistant?

A. Yes, when I was acting—I was doing Mr. Snyder's work during the entire year.

Q. During his absence?

A. He was gone for a year and I was promised by Mr. Ryan if I would stay until January 1, 1908, I would be given the position, but I left there—I resigned the 18th of December—although my resignation did not take effect until January 15th, I understand.

2943 Q. What were your duties during that year?

A. I had charge of all the soliciting forces in the United States and Mexico; the soliciting of business and the general work of watching our freight service as compared with the other railroads; checking in pool reports with the other lines, and making such rates on United States traffic as was necessary also submitting the same to the general freight agent for his approval.

Q. Those salaries probably go into "traffic expense" under Mr. Wharton's division?

A. You will have to ask Mr. Wharton about that. I refuse to answer any questions as to accounting.

Q. Why do you not think you should go into the subject of accounting?

A. Because I know nothing about it. I might have some general ideas, but they are what I have picked up in my work and I have not worked a day at it.

Q. You have no experience in accounting?

A. I could not follow it for a minute and I don't care to answer any questions relative to accounting.

Q. That was the termination of your service with railroads, was it?

A. Yes, I received a telegram on the 18th of December, 1907, offering me this position with the railroad commission of Oklahoma.

Q. When did you enter upon the discharge of your duties
2944 with the Commission?

A. My salary commenced December 26th——

Q. When did your duties begin?

A. I was there that day. I made a trip over into Texas and Arkansas, and, I believe, Wisconsin. I believe I went into Minnesota for the Commission, before I went into the active duties. I had to stand an examination.

Q. That was a civil service examination?

A. No, just an idea of the Chairman.

Q. That was Mr. Love?

A. Yes, sir.

Q. When did that commission get organized and begin its regular work?

A. I haven't the least idea. The statehood was on November 17th and when I got there on December—I really got there about January 1st or 2nd, settling down to work, and there was some proposed order issued when I got there. In fact, I believe there was a hearing on December 2nd or 3rd under the 30 day clause. I presume the first order must have been issued—January, I meant to say—the first order must have been issued in December, as the first rate went into effect either in February or March.

Q. What were your duties in connection with the Oklahoma Commission? I will first ask you what was your title?

A. Well, in charge of the rate department; an official designated on the records of the Commission as "Rate expert."

Q. What were your duties as Rate Expert?

2945 A. It is very hard to answer those questions so one can understand.

I have charge of the rate department. With my assistants I keep a record of all the tariffs, both state and interstate, affecting Oklahoma.

We are constantly checking the rates that apply in Oklahoma as applied in other states; asking the railroads to change such interstate rates affecting Oklahoma as we find inconsistent with other in-

terstate rates; filing suits before the Interstate Commerce Commission; and making rates in Oklahoma—of course that is done by the Commission.

I furnish the Commission with the figures and all the factors.

I appear for the State and attend all examinations. A rate is proposed to be checked in by the state. The railroads contest it. I appear for the State and show the reasons why the rates should be checked in.

Q. You mean that you conduct a hearing——

A. No, the Commission conducts the hearing, but I appear as the State's witness and also as the attorney for the State in some instances; in both capacities; both as a witness for the state and as an attorney for the state.

Q. What is the character of the litigation you institute before the Interstate Commerce Commission? On whose behalf is it?

A. For the people of the state of Oklahoma.

2946 Q. Are the complaints of the business men of Oklahoma made through your Commission?

A. Very largely, yes, sir.

Q. Who represents their interests in those matters?

A. The Commission.

Q. Do you act for it?

A. Very often I have acted as attorney and witness, both.

Q. Is there very much of that?

A. In the way of formal and informal together, there is considerable.

Q. How much of your time does that consume?

A. Oh, a question of that kind would be hard to answer, Judge, because I have some assistants in there who work those papers up and when I get them they are all—I get them first in the rough shape. I make a notation across the face of them of what I want and they came back worked up in proper shape.

Q. In a general way, that is the character of the duties you discharge as rate expert?

A. To a certain extent.

We have checking of Pullman rates. We are checking every character of rate that affects Oklahoma, and in addition to that we are making station checks for the state.

Q. What are those?

A. Checking station agents to see the increase and decrease in the business, and the manner in which the business is

2947 handled.

I have inspectors to check up and see if the Commission's orders are complied with.

I make regular trips on freight trains through the state. I have my inspectors out at different times during the year making their reports to me; work of various characters, Judge, in a year's time.

Q. Does that work there in connection with the Commission take up all of your time?

A. Every moment, unless I steal off for a day or two, as a man generally does.

Q. I believe you are now engaged in a rate litigation with the railroads of Oklahoma?

A. I believe the state is, yes, sir.

Q. Are you connected in any way with that?

A. I guess I am connected pretty strongly with it. I was responsible for a lot of those rates—or at least I advised the Commission of them. Some of them I did not appear in at all.

Q. Are you participating in any way in that case, or taking any active part?

A. Yes, I am preparing data all the time for those cases, although, further than the original affidavits that were filed in the proceeding for temporary injunction, there has been no specific call on me—the Attorney General has in numerous instances called for certain data that we furnished.

2948 Q. You referred somewhere in your testimony to your having testified frequently; was that in this case?

A. No, that was in the Interstate Commerce case. I never testified in those cases. I made ex parte affidavit.

The Southwestern Shippers Traffic Association vs. the Santa Fe is the case I spoke of. I believe the Missouri Pacific is a party.

One reason, Judge, why it would be impossible for me to advise you as to the percentage of time spent in any given duties is:

As an example, the other day, I was checking the local freight. With me I had two tariffs I wanted to check up. Between stations I checked those tariffs. At stations I checked the work of the local freight. I would have to have kept a stop watch on myself to tell you what part of the time was devoted to one or the other of these.

Q. Is that a specimen of what is going on all the time?

A. That is an example.

Q. What effect does the increase in the volume of traffic have on the cost of the handling of traffic?

A. I should judge it would reduce it. That is, reduce the handling of each unit, not the total cost. It would increase the total cost, but it would reduce the cost of handling each unit.

Q. What is the accepted view among railroad operating officials on that subject?

2949 A. The greater the traffic, the less rate one can afford to make upon it.

Q. Is the rate that a railroad can afford to charge or a schedule of rates, I might say, to conduct its business successfully, affected by the age and growth of the road as the railroad develops?

A. I think so, largely, Judge.

Q. You stated that this figure here——

A. 5 mills per ton per mile.

Q. This index figure was never figured by any traffic man?

A. I don't think today it is used.

Q. What is your source of information?

A. I have heard Mr. Stanley Johnson, supposed to be an expert on matters of that kind— of the Southwestern lines—say upon the stand that the railroads had abandoned it.

Mr. Vorhees, General Agent of the Frisco; Mr. B. M. Flippen,

Traffic Manager of the Missouri; Mr. J. R. Koontz—one of the brightest railroad men of the day—I have heard these man say so.

Q. Did they say why it was abandoned?

A. They said it was unreliable.

Q. Did you understand that it was abandoned altogether or abandoned as the traffic——

A. I understood that the figure had been abandoned to
2950 its use in making rates.

Q. On what occasions did you hear those gentlemen testify about that?

A. I heard Mr. Johnson and one of the others testify before a Commission.

Mr. Flippen told me so personally. I was talking with Mr. Flippen about that. The case that caused that discussion was one before the Commission, wherein a vegetable rate was up for discussion and the railroads sent an expert down there who testified that the Commission's rate was unreasonable in that at its lowest point it paid 37 mills per ton per mile, whereas the cost of service was 5 mills. As soon as the railroad heard how their expert testified they came to the front to repudiate the statements.

Q. You stated on your examination in chief, in explaining how these rates were made, that rate makers took into consideration the commodity; the value of the commodity; the points between which commodities move; the competitive conditions surrounding the movement of them and that regard is given to the nature of the commodity:

What is the object in considering all those elements?

A. To get all the traffic will stand out of the rate.

Q. You stated that rates on a low value commodity and one that suffers very little from damage, are made low; while the reverse is true on high rate commodities; that no traffic man would consider the same rate on oil as on sand:

2951 Let me ask you, why would a traffic man consider those elements and those differences as between low and high grade commodities?

A. For two reasons. First, he would not take oil at the sand rate, even if he could not move it at any other rate, because it has with it certain elements that he knows at a glance, would be entirely too risky to take at such a low rate. He would know that the liability clause alone in there would heap up his rate and that he could not afford to handle it on that account, so far as oil at the sand rate was concerned.

When he comes to take the sand rate into consideration his first thought is to move the sand and he puts as high a rate as he thinks the sand will move under. Very often they check a rate and find that the sand does not move, with the result that the rate is skinned down a little.

The feature of liability is what I had reference to and the additional feature that he knows it will stand a good deal better rate.

He knows that oil at its destination is going to be worth 10, 12,

or fifteen cents a gallon, and he knows it is competition and that it has to get here.

Q. That is the element of value?

A. The element of making the rate, and then the element of liability, which will keep him from getting below a certain
2952 figure; no fixed figure, except that he will get what he considers a remunerative rate out of the business.

Q. Is the desire to get a remunerative rate the cause of his taking those elements into consideration? Is that his purpose in doing it?

A. To a certain extent, yes, sir.

Q. And in order that he may determine whether the rate fixed will be remunerative or not, he takes those elemnts into consideration?

A. He cannot tell whether the rate will be remunerative but he can judge as to remunerative return, taking those into consideration.

Q. And he does that and approximates it as nearly as he can?

A. No, not altogether because at times he knows he is not getting remunerative rates, but he has to handle the business just the same.

Q. According to your standpoint, he will get the nearest approximation to remunerative rates in consideration of those different elements?

A. He will not go below that basis if he can get away from it.

Q. Is that not a cardinal rule of action by which all sensible mer are goverened?

A. I don't think there is any reason why a man should ever go below cost of service and that does not say that he stops there
2953 and takes that rate that he considers remunerative. If he finds the traffic will bear a higher rate he puts it on.

Q. What does the consideration of cost of service consist of, if it is not the consideration of the very elements you enumerated as those rate making men would consider?

A. They are the cost of service so far as he knows, but the actual cost of handling a given commodity, no rate man knows what it is.

Q. Then it follows from that, does it not, that while the rate making man has not possessed himself with that degree of knowledge, he does the best he can in view of his ignorance?

A. That is true enough.

Q. And he does take those elements you have mentioned, for the purpose of trying to get a remunerative rate?

A. He comes along on a long distance interstate haul, and gets 18, 20 or 22 mills per ton per mile, on less than carload; he thinks he is doing pretty good and takes the business at that.

Q. Does he not also consider the length of haul?

A. I say, for a long haul, but he does not know what that is costing to haul. He cannot say he is making any degree of profit.

Q. He will assume though, will he not, that there is an advantage in a long haul, and make some concession on account of the length of haul?

2954 A. I don't think he is presuming there is any specific profit. He thinks it is paying his road and goes on and takes

the business. But when he comes in to make a competitive rate and to meet the rate that is already in, he doe*d* not take those conditions into consideration at all. The only thing he takes into consideration then is, can he get this man into that market, at any rate.

Q. To beat his competitor?

A. No; to get in on the same ground that his competitor gets in on.

Q. In the adjustment of their rates, do the rate making men give any consideration to the volume of their business?

A. In special rates they do, yes, sir. I don't think they do——

Q. You stated it was an accepted axiom that as the volume increased, the cost diminished: What is the reason for that?

A. I presume it is. It is a generally known fact that where there are twenty cars moved from a given point, you can afford to give a less rate than for an occasional car.

Q. Would a competent rate man be influenced in the rate he would make upon a given commodity that moved in large volumes, by the fact as to whether he could obtain a reciprocal tonnage and in that way avoid the hauling of empty cars, for the purpose of handling that traffic?

A. I used to think they would, Judge Moore, but I have come to the conclusion that the rate man figures very little on
2955 that.

When I was rate making we used continually to hunt a traffic in the direction of our empty car mileage and were willing to make any rate we could——

Q. So far as your experience goes, that is the case?

A. No, not as far as my experience goes. I said in my rate making with the Mexican Railways it was always our policy to give as low a rate as we felt we could, if we could produce a traffic moving in the same direction of our empty car mileage.

Since I have been with the Commission I have had occasion to request the railroads to do that very thing and have never succeeded in getting them to make a low rate in the direction of the empty mileage.

Q. You are speaking with reference to the railroads in Oklahoma?

A. And those operating through Arkansas as well.

Q. I wish you would give me some of the instances you have in mind, in which you have requested railroad officials to consider the matter of reciprocal tonnage?

A. It has been definitely ascertained that on all lines leading from Oklahoma south, that the business for the loaded movement is in the southbound direction on Oklahoma lines. We have asked them to give us a less rate from the south to the north, into Oklahoma, than what we had in the opposite direction. They have refused to do this. We have the same rates from Galveston
2956 to Oklahoma points, as you have from St. Louis to Oklahoma—that is comparatively on the distance, $1.30 and $1.33—which figures about the same rate per ton per mile.

Q. Is not that a different proposition?

A. No, sir: the empty car mileage is northbound and they are bringing up these empty cars and not securing new business. The business is handled through Newport News, but if they gave us a low rate we would get the business running through Galveston.

Q. I do not clearly understand just the position you portray: I thought you were talking about a case in which there was tonnage both ways and you requested some concession on that account?

A. No; your question to me was, that where — is an empty car movement—you did not ask it, but your question implied that where there was an empty car movement in a certain direction, that if a railroad could secure traffic to fill those empty cars——

Q. No; you misunderstood:

My first question was whether a railroad could not afford to make a lower rate where that condition prevailed, and then I asked you if that was not a consideration that a rate making man would consider: you stated it was not, and then you spoke of instances——

A. I stated it was when I was in the rate-making busi-
2957 ness, but that it was not today, for the reason that the railroads were refusing to do that very thing.

Q. I supposed you had in mind a case where they had tonnage to move in the opposite direction?

A. It is where they could get tonnage to be moved if they put the low rate in, but in view of the fact that they do not put in the low rate, they can't get the tonnage.

Q. Who are the officials of the railroads to whom you have made that application?

A. All the lines operating through Oklahoma, with the possible exception of the Missouri Pacific.

Q. Give me the names of the traffic men you refer to?

A. We were in conference with Mr. Koontz, of the Santa Fe, the General Freight Agent; and we were in conference with the Rock Island and the Frisco——

Q. With whom?

A. I don't remember, because one day Mr. Shubert or Mr. Allbright or Mr. Brown might come into conference.

Q. Did you confer with all three of those gentlemen?

A. I say, for the Rock Island it is hard to say, because one day one will come and the next day another will come.

Q. With whom did you deal for the Frisco road?

A. I presume with Mr. Vorhees.

Q. What was the business that they refused to haul northbound?

2958 A. All commodities.

Q. You mean general freight?

A. Yes, sir; general freight.

Q. Well, do not the railroads carry all the freight that goes north destined to points their lines will reach?

A. Yes, but if they put in a low rate, they would get freight that does not go north; they would create freight they don't get today; they would fill up those empty cars that are going up light.

Q. What do those cars haul that come back empty?

A. Grain, cotton, machinery and general merchandise for Texas distribution.

Q. Your proposition was to influence the traffic representative of the railroads to lower the rate on miscellaneous northbound traffic, with the expectation that they would build up an opposite trade?

A. They would.

Q. What was your view about it?

A. This—so strong was the view that we organized the Southwestern Traffic Association and the matter is now handled by the Interstate Commerce Commission.

Q. You were proposing to them to make an effort to develop a traffic down there in that way?

A. Yes, to bring a traffic from the Atlantic seaboard points and bring it by its natural gateway, Galveston.

Q. To divert it from the inland rail lines?

2959 A. Inland sea and rail routes. It moves sea, anyway, to some of the Atlantic coast points.

Q. To go back: we have gone a good way from the point we started:

In view of what you have stated in connection with the elements that are taken into consideration—since you have been discussing this subject this morning—with reference to the effect of value; length of haul; liability incident to the haul, the nature of the commodity; and in view of your statement that those matters are considered by traffic men, although you think they have not the information as to what the cost is, I want to ask if you think it is correct that traffic men do not give any consideration to the cost of service in fixing rates?

A. I think they give very little——

Q. Then why do——

A. —consideration to the actual cost. Now, understand me. I don't want to be understood as saying that a traffic man is going to solicit a shipment or make a rate on any figure that might come into his head. I don't want to put a traffic man in that light. I don't want to indicate for one moment that any traffic man is that much of an idiot. But I mean, he is not figuring what the cost of service is. He does not know that the cost of service represents six mills for 100 mile haul or eight mills for a 50 mile haul. He has no figures of that kind. He takes a rate and tries to get

2960 what he can out of it. He has in his head, probably, an arbitrary figure that he will not go below, but if he was asked tomorrow to testify as to the cost of service, he would be unable to do so. He is trying to hold the business down so his road can get some money out of it. He is taking business and instructing his men to take business which is paying him enough, or he thinks is paying him enough. He considers he has to take it to keep his trains moving.

Q. And you stated a while ago that he could not give the cost of service?

A. Or even approximate it.

Q. In the nature of things, it is quantity that is unknown to him,

yet in fixing the rates he regards the cost in so far that he will not fix a rate which is non-remunerative, and he does consider these elements you have mentioned?

A. He would fix that on a new rate and a rate over which he had the power to make it; there is no doubt about that.

Q. That is where the conditions are normal?

A. Where the conditions are entirely in his power. The other might be a condition where he would not have any power over the rate at all. Some one else might have stepped in there ahead of him.

Q. What is the object of the creation of these Classification Committees?

A. To assist the railroads.

Q. In what way, Mr. Bee?

2961 A. Why, by specifying certain men to do a certain work that can be done better than by saying the whole should do it.

Q. Is not the classification made on the basis, of the very elements, with reference to the factors that you spoke of awhile ago, as matters that would be considered by traffic men in fixing the rates? In other words, do they not consider in making that classification, the value, weight, bulk; liability to injury and therefore damage liability; all those things? Do not those Committees in making their classifications take those things into consideration for the purpose of creating a classification that will enable the railroad, by applying their rates to it, to create rates with reference to the cost of service, in so far as that cost is affected by those factors?

A. I don't know about the cost of service. They are supposed to take those factors into consideration——

Q. Do you know why they do that? Why——

A. They are taken into consideration to a more or less extent; the value of the commodity; the shape of a commodity as against another commodity, more than anything else.

I have been in those meetings and listened to a part of the proceedings and there comes in more the question of one article to another article, than anything else.

2962 I never heard the cost of service discussed—what it costs to handle a box 14 x 14 x 16, but it was the whole, the nature in which that box would load, and the liability from loading other commodities along or beside it. All of those features were features in the cost of service.

Q. Is not the relation, this relative quality and a comparison between the different subjects of traffic, the consideration of it, the very essence of the adjustment with reference to the cost of service?

A. No, sir, if you knew the cost of service of one, then it would be.

Q. Let me make myself a little plainer: the Western Classification Committee, we will say, puts a higher classification on glass than it does on sand, does it not? It costs more to handle the glass than it does the sand——

A. That is one of the factors and another factor is that the glass

is much more expensive than the sand and will stand a higher rate, and that is one of the main—liability is one of the factors followed in making the rate, and the value of the commodity is one of the factors. Those are factors which they use.

2963 Q. Do you know Mr. F. O. Becker, Chairman of the Western Classification Committee?

A. Very well.

Q. Mr. F. O. Becker testified in this case, and he stated in his testimony that his committee, in making up classifications, primarily take into consideration, the density of the article——

A. In other terms, that is its loading capacity.

Q. But that is not all he said, because he said, the lighter and more fragile it is, the more it costs to transport it—page 469—that naturally follows, isn't that the object in making the classification?

A. Yes, the difference between the two commodities.

Q. He says, secondly, the value, because the greater the value, the greater the risk, which enters into the cost of handling and transportation?

A. And he could have added, the value of the commodity would indicate the higher rate the commodity could stand.

Q. He was asked if the space the article occupied had anything to do with it, and he said it did.

A. That was answered in his first proposition.

Q. He was then asked if the cost of transportation included the transportation, service, and handling and risk incident to handling, entered into the classification made of it, and he said always.

A. I fail to see where Mr. Becker could make that answer, for this reason, that Mr. Becker and his committee are making a

2964 general classification applicable over what is known as the western classification territory. Part of that is the line of the Atchison, Topeka & Santa Fe, partially double tracked, and with the highest standard of maintenance, kept to the highest standard of maintenance, over which their engines can pull the heaviest trains with little hardship, and at the same time it controls the little Oklahoma Central Railroad in Oklahoma, which is built on a heavy grade, and on which engines could not pull a fourth of the tonnage that they could pull on the Sante Fe; if his classification represents the cost of service, I would like to know whether it represents the cost on one road or on the other road.

Mr. HILL: I don't think it is hardly fair to read that answer, without reading his qualification; he says further on, that they have no statistics of the cost of service; I don't think you have put his testimony fairly to Mr. Bee.

(WITNESS:)

A. I don't think that he could answer that way.

Mr. MOORE: If it is qualified, I want to get it in here.

Mr. HILL: Page 472 on cross-examination.

(Mr. MOORE:)

Q. On page 472, Mr. Becker further stated on cross-examination, in answer to question of how they got the cost of service: "We know
that it costs to transport; that it costs to handle; that the
2965 element of risk necessarily enters into the cost; we, of course,
do not know the total cost, but all of these are factors in the total cost." Then he was asked if he used per ton per mile as a basis in ascertaining the cost of a given line of road, or through a given country, and he answered "No," that he gave no consideration to that.

Mr. MOORE: Anything else you want to call his attention to?

Mr. HILL: Yes. "You know this element of risk exists, and you bring to bear your experience and your observation on that, isn't that a fact?

A. Yes sir.

"Q. You have no actual figures on that.

"A. No, sir, not definitely.

Mr. MOORE:

Q. Counsel for defendant in this case have made some additions since I have asked these questions, for the purpose, very properly I think, of bringing before you another statement of Mr. Becker, that the Committee in making these classifications, does so, in so far as it is possible for them to do it, with reference to the cost of service. Do you agree or disagree with him on that?

A. I agree with him, as I said before, that classification is built
upon the relation of the cost between the two articles; it is
2966 not made on the actual cost of service to handle it, and I
don't think Mr. Becker intended that; as between the first and second classes, Mr. Becker is trying, in making the classifications with his committee, to so arrange those two commodities that they bear a relation to each other, but not that they bear a relation to the cost of service, but to each other, and as far as traffic conditions are concerned, the revenue coming from them, he feels that one commodity will stand a higher rate than the other, and it goes in the classification higher, and that is what I think Mr. Becker refers to when he says the cost of service is the basis.

Q. Isn't it also true that traffic men in making rates, are influenced by the same considerations?

A. To a certain extent they are, yes, sir, not to the actual exact cost of service,—I want to be understood at all times, in making a statement that a traffic man or any traffic man takes into consideration the cost of service or the approximate cost of service; that I mean that he attempts it between the two articles only; rates are made upon a comparison entirely.

Mr. HILL: I would think it would be fair to give this other statement——

Mr. MOORE: You will have to go into that on re-direct examination.

Mr. HILL: I think when you question him about the testi-
2967 mony of a *a* witness, a full statement would only be fair.

Judge DOOLEY: That would seem to be so, but the question is, is it exactly the same subject.

Mr. MOORE: If you will give me the page I will see.

Mr. HILL: The last question page 476, printed volume #2.

Mr. MOORE: No, I will not bring that in, that is talking about a special condition down in Texas. I am talking about the general conditions.

Mr. MOORE:

Q. On your examination in chief, counsel read you certain quotations from the testimony of Mr. Nay, the auditor of the Rock Island Railroad, in which Mr. Nay stated if the rates represented the cost of service, he presumed they were in proper relation to each other, and when I say proper relation to each other, I mean with reference to the cost of service; and a number of quotations are made there; now I want to call your attention to some other statements made by Mr. Nay that were read to you. Mr. Nay made this further statement, page 343, vol. 2: "The position I have taken is that the cost is not the only factor that is taken into consideration, that the cost is considered. Now, of course, rates might be based—

I can conceive of a case where rates might be based largely
2968 on something else than the cost. But if they were made in such a way as not to consider the cost at all, then of course, the values of the figures for dividing expenses between state and interstate would not be very great. But, in my experience, I do not recall rates of that kind." On page 345 of Mr. Nay's testimony, attention was called to the testimony of Mr. Watson, that the commission tariff of Arkansas was not properly constructed, so far as the relations of commodities and classes was concerned as bearing upon the proposition that he was testifying in regard to. Then he was asked the question: "Assuming Mr. Watson's statement to be true, would it be proper to use the revenue derived from such a tariff as the measure of cost of the operation of intrastate traffic? A. I think it would be proper, as I say, because I think it is the best basis I know of. It would not be accurate, and I think Mr. Watson's testimony would bear out what I have said, that he does consider the cost of service when he makes a rate, although not entirely perhaps." Further, on the same page, he is asked if the revenue derived from such a tariff—referring to the Commission tariff which Mr. Watson had spoken of—would be a measure of the cost of intrastate traffic, and he says "Yes, sir, it would be a measure, not an accurate measure, but I think the best known measure." Don't those statements from Mr. Nay coincide practically with the

suggestion made by you in your answers to questions I have
2969 asked you, that in your view it is impracticable to ascertain the cost of handling commodities separately, and that any consideration that is given, is given relatively, and that it is naturally inaccurate; now, is that not in accord with the views expressed by

you, and is not the testimony of Mr. Becker, to which your attention has been called by myself and by counsel for the state in this case?

A. To an extent it is, and to an extent it is not; Mr. Nay says he still thinks those factors should be used for dividing the cost, and he says that they are not made upon any relation to each other, and if they are not, I fail to see how you could divide the cost upon them; if they are not properly made as to the factors of cost, I don't see how you could.

Q. Isn't Mr. Nay's statement, that while they are not made entirely and fully, and there are other considerations entering into them, that they do afford a measure by which the relation of cost can be ascertained between the different articles of transportation?

A. I don't think you could find any measure of dividing the cost if the rates are not based relatively properly; if baskets were taken at a less rate than bar iron, I don't think there would be any way by which you could divide the cost by the revenue received from those two commodities.

Q. Are your statements in this case based upon that idea?

2970 A. No, I don't know that those conditions exist; if they did exist, I understand Mr. Watson testified the tariff was not properly built as to the relation of one article to another, and as an example of that, I say if baskets were taken at a less rate than bar iron, you could not use those factors in dividing the cost, because if you did, you would be making bar iron pay a higher rate than baskets were paying, when it is a known fact that it can be handled at a much less rate, and there comes again the question of cost; none of us know the cost of handling 100 pounds of baskets or 100 pounds of iron, but a traffic man knows that 100 lbs. of iron will cost less to carry than 100 lbs. of baskets; he knows at a glance, just looking at the two commodities, that 100 lbs. of iron can be handled at a figure much cheaper than 100 lbs. of baskets.

Q. Is that the reason rates are made higher on baskets than on iron?

A. Yes, sir, exactly; those things come into view; 100 lbs. of baskets is much more valuable than 100 lbs. of iron; they would stand a higher rate; every condition gets into it.

Q. It follows then, doesn't it, that the adjustment of rates is not made regardless of the cost of service?

A. I would say that they were made regardless of the cost of service, but not made regardless of the relative cost.

2971 Q. I want to understand the difference.

A. Use *that* the word "relative" as between the two items.

Q. You concede then that in the adjustment as between the different articles of transportation, the element of cost is a consideration?

A. What is considered an element of cost, and that is true only when a man is making a rate where he has no ties holding him down at all.

Q. What you mean by that is, that there may be an exceptional condition in which that rule would be departed from?

A. If he is making a competitive rate he cannot lay to that a moment.

Q. Do you assume that traffic men, even one engaged in making competitive rates, so far lose sight of what it costs to handle traffic that they will make a rate which will not afford compensation and on which they will lose money?

A. Yes, sir, I know it is done.

Q. Take for a moment this Texas lumber rate, about which so much has been said, do you understand that the Iron Mountain Railroad and Cotton Belt Railroad will take traffic under those zone rates upon which they will lose money?

A. My idea is, Judge, that that 22 cent rate blanket from Louisiana and Texas to St. Louis, is an unremunerative rate.

2972 Q. That is your idea; do you know that from any direct connection with the matter?

A. No, sir, nor do I know any other man that does know.

Q. Suppose the general freight agent of the Iron Mountain Railroad, and the Assistant General Freight Agent of the Cotton Belt Railroad have both testified in this case, and they have both testified that as to certain territory and certain parts of the lumber that moves under this arrangement, they decline to participate, and to use their schedules; if those men are correct in that statement, it follows, doesn't it, that even in that exceptional condition, they do conduct the business, the traffic of their companies, with reference to the cost involved in the rendition of the services?

A. There might be other factors; there might be some line they do not care to participate with.

Q. They put it on that ground, that they did not care to participate where it was non-remunerative.

Mr. HILL: Where did they say that?

Mr. MOORE: I will call your attention to it before I get through with it.

Mr. MOORE:

Q. If those gentlemen make that statement, you would not be prepared to dispute it, would you?

2973 A. Not as to their ideas, no, sir.

Q. And it would follow then, wouldn't it, that even in that case which has been brought up here as a very high example of improvidence on the part of the railroad officials in rate making, even in that case, they though they were acting with reference to the cost of service?

Mr. HILL: Who has brought that up as the heighth of improvidence?

Mr. MOORE: I think you have.

A. I would say if the general freight agent answered the question that he refused to participate in the movement because he would lose on it, he was figuring that out of that 22 cent rate that at times from the extreme southern part that he was not making a figure of profit, and his idea of what would compensate him for what he

was making on the northern end of it, and that he was trying to make some one else bear the burden.

Q. It is in evidence in this case, that there is a reciprocal movement with reference to that lumber traffic and grain traffic, to which your attention has been called; I will ask you if a traffic agent of a railroad, in adjusting rates with reference to the cost of service, and whether the business would be remunerative or otherwise, would not properly take into consideration the factor of the traffic being balanced back and forth and that reciprocal feature.

2974 A. Yes, sir, if he was not excepting one of those factors, the original factor that moved the cars, if he was not accepting that at a competitive rate which was considered by him a low rate, but if he was, then he should not accept northbound movements at the same rate, or if the original movement which moved the cars should show a good figure and should be a good rate, then he would be justified in accepting the movement in the opposite direction of almost any kind.

Q. Suppose I would say, here is a commercial condition that exists, and if we don't put in as low a rate as we can afford to put in, we are going to do this section of the country an injustice, and cut them off from the market, and in addition to that, we have competing lines, and if we do not do that, we will lose all that business; now, if we can haul another commodity in the opposite direction at six cents a ton per mile, and if we can make that on the other movement, we will make money both ways, would you say that was disregarding the cost of service?

A. No, sir, if he could get any commodity that would pay him six cents per ton per mile, he would handle it quick.

Q. I mean mills, of course.

A. That would be a factor in rate making; there is no ifs and ands about it; I knew what you meant; there is hardly anything that moves, even in carload rates at six cents per ton per mile.

2975 Q. You are referred in your testimony in chief to a fact which you said showed that rates are not built upon the cost of service, and cited an instance in which emigrant movables transported from Oklahoma into Texas, or Texas into Oklahoma would take Class "D"—"C" or "D," while if they were moving Oklahoma to Kansas or Kansas to Oklahoma, or Missouri from Oklahoma, that they take Class "A;" if they were moving through Oklahoma from Missouri or Kansas to Texas, they take Class "D," so that there would be absolutely no relation to the cost of service in the movement; then you state in that connection, that the liability in transportation of that class of traffic was the highest known, and in the same connection, you say that it is a commodity that railroads never care to make a profit out of,—I suppose because of the higher degree of liability.

A. I mean that it is a traffic that seeks to build up the country and railroads handle it at a low figure in order to build the country up.

Q. Aren't those low rates always given in consideration of a release of that high degree of liability?

A. Sure. There is no doubt about that, but even then there is a degree of liability, and I think there is more claims paid on emigrant movables pro rata, than on anything else that moves.

Q. But if an emigrant goes to an agent to ask for rates on
2976 movables, the agent wants to know immediately whether he will make a waiver of liability?

A. Down to $10 a hundred pounds.

Q. And the classification under which it will move always depends upon that, doesn't it?

A. No, sir, that doesn't affect the two classes of rates; both are predicated upon a waiver; I believe they are "B" and "D" and "A" and "C" if I remember the rates specified; I know there is a difference of two classes between Oklahoma and Texas and Missouri and Texas or Oklahoma locally; it is "A" and "B" in Oklahoma and north, and "C" and "D" in Texas and north, but the waiver is there in both cases, down to $10 per 100 lbs. Really, I mean that the railroad companies did not seek to make a profit; I did not mean upon account of its being a high liability commodity, but because railroads are seeking that traffic upon any figure they can get it.

Q. That is one of the cases in which they give an exceptional rate in order to build up the country by getting emigrants there?

A. Yes, sir, that is the idea, but at the same time, the difference between the rates in Oklahoma and through Oklahoma shows that the cost of service is not an element in making the rate, because they would have to make the same rate in both cass, if it was.

2977 Q. I don't know whether I can quote your figures exactly, but to illustrate the principle, assuming that the rate on lumber from some point, we will say in Oklahoma to Little Rock is 23 cents, that the rate is the same from the same place to Kansas City, I want to ask you if you know whether in the transportation of that product from that place to Little Rock, there is a reciprocal return movement,—whether the cars brought there do not go back empty?

A. I could not answer as to that.

Q. Wouldn't that be a very important factor in determining the relation of those rates?

A. That would be a factor, yes, sir.

Q. Do you know that the rate which you speak of—my impression is you said 18 cents.

A. What is that rate?

Q. The lumber rate from that territory to Little Rock?

Mr. HILL: It is 18 cents from that zone to St. Louis, but 22 cents from that zone to Little Rock.

Mr. MOORE:

Q. Whatever it may be, I am not assuming to quote your figures.

A. What figures I quoted were put in my mouth, I didn't quote them from personal knowledge.

Q. You don't know anything about the conditions under
2978 which that product is transported at those rates, do you?

A. Only generally.

Q. The facts are, I am informed, as a matter of information, and I think it is in the testimony in this case, that the rate from those sections, that rate that was given you, is only when the tonnage is moved through on the lines—I am speaking with reference to the railroads in this litigation, on the Iron Mountain and Cotton Belt Railroad,—those rates apply and only apply where lumber can be moved all the way over their rails, and that rate does not apply when there is a connecting line participating in the movement. You don't know whether that is so, or not?

A. No, sir.

Q. That would affect it also, would it not?

A. Naturally, it would mean no division for the other lines, and having the rate for themselves.

Q. In that connection, I want to call attention to the case you cited here, an instance you cited; you stated that the rates on lumber as you remembered them, from Texas and Louisiana fields to Oklahoma were 18¾ cents?

A. That is the maximum rate in Texas.

Q. That gradually varies from the last station northbound on the Kansas line until they pay something in excess of 26 cents, and that rate immediately jumps to 27 and a fraction in the State of
2979 Kansas, and goes on until you reach Kansas City and there it drops back to 23 cents?

A. Yes, sir.

Q. In connection with that condition, you stated that at a conference between the commission and all the railroads,—that is the Oklahoma Commission you mean?

A. Yes, sir.

Q. This rate was reduced to points in Oklahoma, and then you give the reason?

A. Yes, sir.

Q. You said in order to keep a case from being filed before the Interstate Commerce Commission, which would have resulted in a general reduction of all lumber rates, and the only reason for the higher rates at points on the Oklahoma line is that it only applies to two or three little stations there; why would that have been brought before the Interstate Commerce Commission and why would that have been the result?

A. Because it was a violation of the long and short haul clause, and I think we could have very easily have persuaded the Commission,—proved to the Commission, if they could afford to haul lumber to St. Louis and Kansas City for 23 cents, they could afford it to Oklahoma at the same rate.

Q. Meaning, I presume, the cost of service in hauling it was not taken into consideration?

2980 A. To a certain extent the cost of service would come into consideration; if they could haul to Kansas City and St. Louis for 23 cents, they could certainly haul it to Oklahoma, half way, intermediate point for that.

Q. It was your idea, when it came before the Commission, if they could afford to haul it to this point, the longer distance for 23 cents,

they could certainly haul it the same distance, or a shorter distance, for the same or a lower rate?

A. Yes, sir.

Q. Doesn't that involve the very essence of expense in hauling it those distances?

A. No, sir, that 23 cents may be an unremunerative rate to Kansas City; as between the relation between the rates, the cost of service would enter into it; if it represented the cost of service at one end of the line, it would not represent the cost at the other.

Q. That is the ground upon which an appeal would have been made to the Interstate Commerce Commission?

A. To a certain extent.

Q. You say at one time, speaking of lumber, that the intermediate rates were higher than what was known as terminal rates applying at St. Louis and Kansas City. What do you mean by a terminal rate?

A. The rate to Kansas City is considered a terminal rate.

Q. Why is it considered a terminal rate?

A. It is the terminal point; they take the big points and
2981 give them terminal rates.

Q. It is a common point rate, isn't it?

A. No, sir, a common point rate is a rate that applies to a given territory, and a terminal rate applies to a certain point, and it does not necessarily apply backward.

Q. Intermediate rates were higher than at those particular terminal points you spoke of?

A. Yes, sir.

Q. Now, what I want to ask you is,—those terminal points were competitive points, and that is what created that exceptional condition, wasn't it?

A. Not necessarily so.

Q. What did create it?

A. I don't know what created it. Because the line originally making the rate might have had a haul twice as long as to some intermediate point, it is always hard to tell.

Q. Do you know the history———

A. I will give you an example; right now, we have into Oklahoma from Sugar Creek, Missouri; a big oil refinery, we have 17 terminal rates of 35 cents, and the rest of the rates are 43; I have tried for many a day to find out what caused those terminal rates, and I have never been able to say what made them; it is 35 cents to Oklahoma City, Chickashaw, Muscogee, and Enid, but a station either side is 43; we don't secure enough oil from Sugar
2982 Creek to pay the Commission to go before the Interstate Commerce Commission to find the reason for those rates and try to get them reduced; we have so many refineries in our own state, and because it is nothing but these big cities that will draw oil from this refinery, we have never taken the matter up.

Q. It is probably some local condition?

A. I couldn't appreciate a local condition that would apply to 17 points, and not apply to the others; I figured out first that some line

might be the short line, but that wouldn't apply broadcast over the state.

Q. What railroads are they participating in that movement?

A. Frisco, Santa Fe, Katy, and Rock Island.

Q. It doesn't affect transportation in Arkansas?

A. Not that I know of in any way; I was simply giving you an example of what terminal rates sometimes were; they were all called terminal rates in the tariffs.

Q. Were they terminal rates in the sense in which you used the expression awhile ago in its application to St. Louis and Kansas City?

A. Yes, sir, it applies only to that terminal, and does not apply anywhere else; that also means, that the rates do not apply between the terminal and point of origin.

Q. In speaking of rates in the State of Arkansas, lumber rates and others, making a comparison of those, you are not
2983 speaking from personal information and knowledge you have as to what those rates are?

A. Partially so; I have made some comparisons upon them.

Q. I believe you said the lumber rate, you had made no comparison on that?

A. No, sir, generally I have made a number of comparisons on Arkansas rates just for my own benefit.

Q. In speaking of the flat rate on grain from Oklahoma to other states, you stated it was irrespective of the number of carriers that handled that; do you know, say for instance, whether the Cotton Belt Railroad handles any grain that goes from Oklahoma into Arkansas?

A. I couldn't answer that without having the tariff; I know that as high as four or five lines participate in that.

Q. You don't know whether that illustration applies to the line of road of the Cotton Belt?

A. The tariff would be the best evidence.

Q. What is the movement of grain from Oklahoma into Arkansas.

A. You mean is it heavy or low?

Q. No, sir, I not only mean that, but what are the lines by which it moves?

A. The Frisco handles a considerable part of that grain, delivering it to the Arkansas lines; I don't know their junctions where they do deliver, but I often see billing going into Arkansas; and the Fort Smith & Western Railroad handle in connection with
2984 the Sante Fe and the Rock Island.

Q. Aren't the rates on those lines that you speak of, where you speak about the inequalities, are those rates not just for the purpose of enabling grain to move from Oklahoma east?

A. Yes, sir.

Q. What would be the effect if that arrangement were withdrawn, upon the movement of Oklahoma grain?

A. That grain would have to find another market.

Q. It would be excluded from the State of Arkansas?

A. Those rates apply not only to Arkansas, but through Arkansas into Tennessee, all through that country.

Q. That is a commercial condition that is being met by those rates which you speak of as exceptional?

A. I wouldn't call them exceptional, because it is a natural condition existing throughout the United States; the Oklahoma grain rates moving east, is but one factor in the natural conditions that exist.

Q. You state that there can be no contention that these rates are made upon the cost of service, and the reason you say that is, that a car of wheat moving from Alva and Enid take the same rate; either one is exceedingly high and above the cost of service, or the other is exceedingly low and below the cost of service, and it is impossible to say that those two rates, being exactly the same, are built upon the cost of service in both instances. I under-
2985 stand that there is a very large volume of that traffic.

A. I wouldn't say a large volume; there is probably 100 cars a year moved across there, that is, for eastern country; there may be more; I have seen as many as 20 cars at a time.

Q. Is it your idea that railroads are hauling that traffic at less than it costs to handle it?

A. I don't remember the figures on that rate.

Q. You don't give the figures, but you speak of it as an illustration?

A. I spoke of it in this way, that if the rate from Enid represents the cost of handling, then the rate from Alva, which is probably 70 miles beyond, is below the cost of service; if the rate from Alva represents the cost of handling, then the rate from Enid is a high figure of profit.

Q. What is the average length of haul of that grain?

A. I wouldn't care to make an estimate, because that grain moves into Memphis, and the rates apply into Memphis and Mississippi—they apply everywhere.

Q. How far are those two points from the western border of Arkansas.

A. It would be but an approximation on my part.

Q. It is a long haul?

A. Yes, sir.

Q. The terminal handling would be the same whether the stuff was moved from one place to another?

A. Practically so; of course, no grain would originate
2986 right at Enid; it would be brought in there.

Q. Assuming that grain comes across a considerable part of Oklahoma and across the entire State of Arkansas, travels for several hundred miles, would you say that the expense of handling is the same, or that a few miles difference in the haul would make a very material difference so as to make it very high at one point, and very low at another?

A. I was speaking of a shipment into Fort Smith.

Q. If it was Ft. Smith, you don't reach Arkansas territory—it is right on the Arkansas border?

A. It goes into Arkansas, making it interstate grain.

Q. How many miles is it?

A. About five miles I think, I wouldn't state the exact length; that group extends over a much larger territory than that 70 miles; there could be a haul of considerably more than 100 miles difference; our grain crop is from the north and south of the state.

Q. I was speaking of the illustration you made.

A. That illustration was to Ft. Smith.

2987 Cross-examination of C. B. BEE, resumed.

Cross-examination.

By Mr. MOORE:

Q. You say that the cost of moving 100 lbs. of baskets is ever so much higher than 100 lbs. of iron?

A. I think it would be so considered.

Q. Assuming that is correct, wouldn't the revenue more nearly represent the cost of handling those two commodities than the ton miles of each of them?

A. Not if the rate on baskets was lower than the rate on bar iron, it wouldn't.

Q. Do you know how they are classified?

A. Bar iron, I think, is 3rd or 4th, and baskets without exceptions, is either 1 or 1½ or double, according to the way they are shipped.

Q. That would make a good deal of difference?

A. If there were no exceptions.

Q. Assuming those two facts, that it cost more and the rate was higher, which would represent the cost of service better, the revenue or ton miles?

A. The revenue would nearer represent the figure that would represent the cost of service; wouldn't any figure represent the cost of service, but the revenue would be nearer than the ton miles would; that would be presuming they both moved the same distance under the same conditions.

2988 Q. Doesn't the difference in the rate, being based on the difference in the character of commodities, run through the various incidents of the transportation, whether long or short and so on?

A. If bar iron was moving within the state and the baskets without the state, the chances are that the revenue accruing to the lines would be practically the same per ton per mile, and to divide the expense upon that basis would be absolutely foolish.

Q. Judge J. G. Wallace was the chairman of the Arkansas Railroad Commission at the time the Commission rates in that state were made, and participated very actively in making up of those schedules. I want to call your attention to what he says in regard to the basis upon which the rates were figured. He was asked on what basis they were made, and he said the value of the properties had much to do with it. "We considered they were entitled to a

fair return on their investment and amount of traffic they were doing, and we thought would be done under our rate sheet."

Again, he said: in answer to question, if in preparing the schedule of rates, the Commission made any investigation as to the cost of service and operating trains, he said:

"Yes, we considered that the best we could; we found that nothing but actual tests will demonstrate the rate at last, that the railroads themselves cannot sit down and figure out by any rule—they can approximate but they cannot sit down and figure out
2989 just what would be a just rate, but they simply put in a rate and apply it, and if they don't make money on it, they take it out and keep putting in higher rates until they get one by which they can make money; there is a great deal of speculation in it. Of course, men sitting down here, it is all well enough to consider all these things and they do, but then at last, this is the test." Speaking of the commission: "We were going to do just like the railroads." (P. 247.) Now, is that in accordance with the views you entertain in regard to the relation between the cost of the service and the rates?

A. No, sir, I don't think a railroad man puts a rate in to see if it makes money and then puts in a higher rate if it does not.

Q. Your view is different from the Chairman of the Arkansas Commission that put in these rates?

A. Yes, sir, there would be no stability to rates whatever, if that was the condition.

Q. Would there be any stabilities to railroads if there wasn't a relation between the cost of rendering the service and the compensation received for it?

A. When you say "relation," no; the railroad company must earn its remuneration above expenses; it would have to earn that or go into the hands of a receiver.

Q. How can they do that except by adjusting their rates upon such a basis as would afford them proper compensation upon the service rendered, and which will in addition provide a just return upon the investment?

2990 A. My idea and experience has been that rates were put in and were supposed to be put in high enough; I have never known them to be continually raised, but I have known them to be continually reduced.

Q. Why do they reduce the rates as business increases?

A. Because they are always put in at a high figure.

Q. Why is that done?

A. It is general practice.

Q. Wasn't the cause, in putting rates in, in view of what you have just said, that they wanted to put them in high enough to assure a reasonable profit, and isn't the reduction as the volume of business increases, resultant, to a large extent at least, from the fact that as the bulk of business increases, they can reduce their charge for the service, and at the same time obtain compensation for their services?

A. That is partially it, but mostly, it is a question of necessity

for the rate to be reduced. As a rule, everything is made on class rates. Class rates are put in, and there they stay; they are always considered extremely high. A man develops business, and he goes to the railroad company and shows them he has developed a business, and special rates are checked in, as we call them, from that point to his point of distribution; there were no cement rates in Oklahoma except class rates for a long time; cement industries came into the state, and they were checked in specific rates to the
2991 different points of distribution as the business grew. The railroads saw that competition from another point was hammering that plant; they investigated that cement company's books, they find a necessity for a lower rate; they get before their committee and they investigate every detail of that business and a little more is taken off, and then there might be a time that called for an increased rate; say, at the end of the year, there is no profit, then I suppose the railroad would have the choice of raising the rates, or the traffic men would raise such rates as they thought they would stand.

Q. The meaning of that is, if they are satisfied a rate is higher than it should be, with reference to the condition of the business, they will lower it as far as they can without putting it below the cost of production, so to speak, but when they get below that, if they find at the end of the year it costs them more than——

A. I don't know that the traffic man figures the cost of production.

Q. I am speaking about results? He would consider it unconsciously, wouldn't he?

A. Unconsciously; if at the end of the year shows a loss, something has to be done.

Q. Isn't the business of a railroad like the business of a merchant, if a merchant sells a million or two million dollars' worth of goods, he can sell it at a lower rate than another mer-
2992 chant who does not sell so much.

A. That is true enough, but a merchant knows what he is making on each commodity he sells.

Q. That may or may not be true; be that as it may, the same principle that governs the merchant applies to the railroad, does it not? So far as the result is concerned?

A. So far as the total at the end of the year is concerned, so far as the handling of the business end.

Q. It is the total arrived at by the application really, of the same method in toto that applies to other business, but those methods do not apply to details of railroads?

A. I do not think they are, that is, as to the total; as a sample of that, we had before us a railroad that came in and made a showing and asked for an increased rate; the only showing they made was that the rate per ton per mile had decreased; that was the only showing they made, and when we examined it, we found they had increased about 20% in their total net proceeds for the year, but there was merely a decrease in their ton mile rate, which means

nothing in itself; that is really the only thing the traffic man has to go by, is what his road realizes for the year.

Q. You are speaking of the total business?

A. Yes, sir.

Q. The earnings per ton per mile in the aggregate do not throw any light upon the rates in detail?

2993 A. No, sir, not on the rates in detail; nothing in the aggregate throws any light on rates in detail. At the same time, it shows the fallacy of the revenue theory; their total revenues had increased that year very largely, but their cost of earning that had decreased very largely, and if they had divided it on the revenue theory, they would have been in a worse shape than they were the year before to find their cost.

Q. What road was that?

A. The Midland Valley.

Q. That is an Oklahoma Road?

A. Oklahoma and Arkansas,—Fort Smith to Arkansas City.

Q. Did you work out, investigate the matter, so as to ascertain what caused the conditions you speak of?

A. Yes, sir. A sand industry had opened up a few miles from Muscogee, and they were moving a trainload of sand per day; it meant the increasing of their revenue per ton per mile; it meant the handling of that many tons at a low revenue, which would reduce the revenue per ton per mile.

Q. Judge Hill told you in his examination in chief, that the rates of these two roads engaged in this litigation were increased in the month of January, 1909, I believe he said that——

Mr. Hill: I said the Cotton Belt.

Q. 96% increase; Judge Hill used the word "rate"; there was an increase in revenue of 96% he states; does that indicate

2994 an increase in rates to that extent?

A. Not necessarily so, and it might indicate an increase in one rate only.

Q. I see I have not stated that to you as a railroad man would want to state it—it was 96% increase in the average rate per ton per mile. Now, does that indicate a similar increase in the rates?

A. No, I don't think the average increase in revenue per ton per mile, without other factors surrounding it, would indicate anything.

Q. You would have to know the condition of the traffic?

A. I would have to know the tonnage that moved; it might be possible that the business of the road had fallen off, so that the road moved nothing but cotton, which Mr. Watson says they make six mills per mile on; if the tonnage showed an increase of 96% in addition to the increase in revenue, that would mean an increase naturally.

Q. In connection with the movement of grain, you spoke about the terminal handlings; you referred to the tonnage handled through the larger towns and big junction points where you say excessive handling charges occur; tell me just what you referred to by that statement?

A. I mean, it is cheaper to deliver a shipment to a connecting line at a little town than it is at a big town.

Q. To what class of traffic do you apply that?

2995 A. Any kind of traffic.

Q. What is its application to the movement of grain in Arkansas. Tell me what application you make of that?

A. I don't know that I applied it to Arkansas; if it did apply, it would apply to the delivery of traffic at Little Rock or Memphis to the road, as compared to some smaller station; I don't know that I used that example.

Q. I want to know if you intended it in connection with traffic in Arkansas?

A. I don't think I spoke of it in connection with grain; if you will read me the paragraph, I can judge of what I was speaking.

Q. "That is true; grain might come over one line direct, it might originate over at one station south of there and move at the same rate and move over three lines, and be handled through the larger towns and the big junction points where excessive handling charges occur." You were not speaking of the situation in Arkansas, were you?

A. I don't think I was speaking of the Oklahoma grain.

Q. Now, you made a number of statements in regard to handling cotton; you say that cotton is treated strictly as L. C. L. freight?

A. To the extent of the rates being built regardless of the quantity and that it is unloaded and loaded by the railroads.

Q. Is it treated as L. C. L. freight from an operating stand-

2996 point?

A. Inasmuch as the railroad does the loading and unloading, that is the only difference between carload and less than carload shipments.

Q. You say "that not only applies in carrying to compress points, but it applies to the shipment in its entirety."

A. The only difference I know, they will take one bale of cotton or they will take twenty at the same price; they will load one bale and carry at the same rate as they will take twenty bales, handled from a traffic standpoint.

Q. You are speaking now with reference to the application of the rates?

A. Yes, sir.

Q. Not in regard to an operating standpoint?

A. The handling of it is handled the same as L. C. L. freight.

Q. Is it handled in through trains when it reaches compress points?

A. If there was a through carload of merchandise L. C. L. in the same train, it would be handled in the same train.

Q. What does a bale of cotton weigh?

A. Say 525 lbs.

Q. How many units is there in an average carload of cotton how many bales?

A. I have forgotten those figures; I believe it is 20 some odd

into compress; I wouldn't care to state those things accu-
2997 rately.

Q. Can you state the number out of the compress?

A. Probably two and a half times as many.

Q. Can you draw an analogy from an operating standpoint, between such units as that and ordinary package freight from L. C. L. standpoint?

A. Yes, ordinary package cars out of St. Louis to Little Rock, Ark., would be loaded to break bulk, I presume, at Little Rock for surrounding territory, and it would carry, I should say, from seventy to eighty consignments anyway, probably more and probably less, and when that got to Little Rock, it would either be delivered locally or broken up and distributed out. Now, the reverse is true in cotton; cotton is handled into the compress, compressed and then sent south in solid cars; most of our cotton goes to Galveston, south; it is sent to the final point from the compress.

Q. You state that in one case there is probably twenty units, and in the other seventy?

A. Probably 70 or 80 or 100.

Q. From an operating standpoint, with reference to various kinds of service, clerical and physical and every kind of service that is rendered, can you compare those two conditions?

A. Yes, sir, a car of cotton is handled, it has to be loaded at the local station, has to be a waybill made for each bale of cot-
2998 ton; there may be four or five for the car; the waybill is surrendered after the car gets to the compress; they won't deliver it without the surrender of the original bill of lading; they require the surrender of the original bill of lading whether it is consigned shippers' order or whether it is consigned to a definite consignee, they require the surrender of the original bill of lading; the cotton is then sent to the compress, compressed and then goes back to the car; new bill of lading has to be issued; it has to go through, from an accounting standpoint, more details; the money has to be returned to the shipper; the shipment is loaded on the car, and that many expense bills taken out, and then the car is forwarded to final destination, it being only the reverse of the movement the other way; the cotton receiving its L. C. L. movement at the start, and the L. C. L. freight receiving it at the final end. Of course, I do not mean to say that it costs as much per unit to handle cotton as it costs to handle L. C. L. freight; I don't want to be understood as making that foolish statement; I am not considering the density of the carload; there is 20 units probably, or more or less, in an L. C. L. car of cotton, and 70 units or more or less, in a car of L. C. L. package freight. I believe the total rate on cotton is 2 cents per hundred pounds for loading; I believe that is generally the rate paid for loading at the compress. That is hearsay, however.

2999 Q. How does the expense of handling cotton compare with other commodities, in your judgment?

A. I think it is one of the most expensive commodities handled; that has always been my understanding of it.

Q. And do you base that upon the descriptions you have just given?

A. Partially that, and the description I gave the other day; I think the one today is part of it, and the one given the other day is part.

Q. I believe you stated that cotton was shipped to New England States from Arkansas,—we will say from Little Rock at 80 cents a hundred?

A. That is the figure I used.

Q. And over different lines of road?

A. Yes, sir.

Q. How is the rate divided for the movement of it over the different lines, between the different roads?

A. You would have to give me the division sheets covering the movement.

Q. You don't know then?

A. No, sir, I don't know what the movement is; I don't know what it is on any commodity right offhand, because there is so many division sheets that a man couldn't carry any one of them in his head, unless he looked it up just before he came on the stand; sometimes there are ten or twelve division sheets to one tariff, and it would be impossible for a man to remember them. There
3000 are three general bases of division: One mileage, one arbitrary and one constructive mileage pro rata; those are the three general bases used.

Q. Do you know what is the average per ton per mile received on cotton on the Iron Mountain or Cotton Belt Railroad?

A. No, sir, I haven't the least idea.

Q. Well under the division made by both those lines, the lines with which they connect at East St. Louis, they get 47 cents per hundred; work that out and state what they would get for their haul.

A. What is the haul?

Q. 345 miles from Little Rock to St. Louis.

A. That is per hundred pounds?

Q. Yes.

A. It figures about 24 mills.

Q. Would you regard that as unremunerative?

A. No, I wouldn't *not* regard that as unremunerative.

Q. That doesn't illustrate does it, a want of correspondence between the cost of service and the compensation?

A. No, I would say that was a good rate to the railroad.

Q. To go back a little bit, you say that railroads have to frequently send the section foreman and his gang to load cotton at a station?

A. Often.

Q. Does that apply to Arkansas?

A. I don't know about Arkansas; I testified the other day, that I testified to Oklahoma conditions only.

3001 Q. You don't know the dignity of a section foreman and section hand in Arkansas, do you?

A. No, sir.

Q. Now, what do you estimate that it costs to handle cotton and load cotton per hundred pounds or per bale?

A. That is impossible to figure that; the figures are hard to apply. I remember during the last cotton season one morning, they had to bring the section men about four miles to load ten bales of cotton, and then they had to go back to their work; now, they had to put the car up by hand to the loading platform, it was not there where they could load when they got there; they had to set the car, and as they didn't want to wait for an engine, they set it by hand; it took them some time to load it, as they had to load it from the right-of-way into the car.

Q. Do you know what the average cost of loading miscellaneous freights is?

A. No, sir.

Q. Have you any idea, per ton?

A. You mean on the cotton in Oklahoma?

Q. I will say in Oklahoma?

A. I have the figure in my office, I don't remember what it is.

Q. You have no knowledge as to Arkansas?

A. No, sir.

Q. If it comes them from two to four cents per bale in Arkansas, how would you say that compared with the cost of loading
3002 miscellaneous freights?

A. I would say that compared favorably with other freight.

Q. Would you say it costs as much as it does to load and unload miscellaneous freight?

A. I think it costs less.

Q. To load cotton?

A. Yes, if they can load it out for from two to four cents a bale.

Q. Isn't it a fact that that applies in Oklahoma as well as in Arkansas?

A. No, sir, it costs more to load cotton than that.

Q. Is it a fact that it costs less to load and unload cotton under your practices in Oklahoma than it does miscellaneous freights?

A. No, I don't think so.

Q. Have you any information on the subject?

A. Yes, if course it costs less, figuring on the handling of L. C. L. freight; the expense of handling cotton at the compress is small; they pay a very small figure to the compress for loading it; they put their own men in there, and they do it at a very small cost to the railroad.

Q. Doesn't it take a large number of packages to constitute a ton of ordinary L. C. L. freight?

A. Yes, sir, I should think it does; I should think the ordinary L. C. L. shipments would be about 200 pounds.

Q. Do you think the average L. C. L. shipment in state traffic is 200 lbs?

3003 A. I think the average would exceed that in state traffic.

Q. What would it be in interstate?

A. Something less than 200.

Q. I don't know whether I understand you; do you mean to say that packages that are peddled out in state traffic are carried in larger bundles than L. C. L. interstate freight?

A. I mean that the average L. C. L. shipment in Oklahoma——

Q. I am asking you to compare the average L. C. L. shipment in state traffic as compared with L. C. L. shipments in interstate traffic?

A. That is what I am doing; the average L. C. L. shipment in Oklahoma is a heavier consignment than the L. C. L. to Oklahoma.

Q. You mean the packages are heavier?

A. No, sir, I mean the shipment as a whole.

Q. I am asking you the number of packages, separate packages, how many do you require to constitute a ton in L. C. L. traffic in your state business, and in your interstate business?

A. I have never seen any figures on that at all.

Q. Isn't that an important feature in determining the expense of L. C. L. shipments within the state?

A. I have never seen a figure on the L. C. L. shipments made that way.

Q. Wouldn't that be a factor in considering the relative
3004 expense in handling L. C. L. shipments between state and interstate?

A. That might be a factor to be considered; the railroads have never seen fit to produce those figures.

Q. Without having investigated it, do you believe that the L. C. L. packages are broken up and are more numerous to the ton in state traffic than in interstate traffic?

A. I don't believe they are in our state. I wouldn't like to state definitely on that, but our state shipments as a rule, are pretty heavy.

Q. Do you mean the retail business and the local jobbing business out of your trade centers, is conducted in larger units than the wholesale business that consists of buying merchandise in other states and bringing it to your local trade centers?

A. I have checked freight train after freight train in our state, and the 20 and 30 and 40 and 50 pound packages of through freight from Montgomery-Ward and Sears-Roebuck and Simmons Hardware to people in our state is phenomenal.

Q. There seems to be practically a parcel trade between your state and St. Louis?

A. Between Kansas City, Chicago and St. Louis, and between Gainesville, Texas, 7 pound, 10 pound and 20 pound packages and from Kansas City and Fort Smith.

Q. You have a joker down there?

A. I didn't mention the commodity Judge.

Q. That produces a condition that would not exist where
3005 that trade is not carried on.

A. That is part of our business; I presume that the same thing exists in Arkansas, and that Simmons-Hardware and Sears-

Roebuck ship to Arkansas; I know the condition exists in Texas, as I have checked it going to Texas.

Q I understand it is not done very much in Arkansas; if that is correct, that would make a difference?

A. Yes, sir, I presume if it is in evidence, it would speak better for itself.

Q. Coming back to the cotton, you don't know how cotton is handled with reference to loading and unloading in Arkansas, or was in 1907?

A. No more than general information as to how cotton is handled everywhere.

Q. Do you know at what points on the Iron Mountain road and Cotton Belt road, the compresses are located?

A. No, sir.

Q. Have you any knowledge as to the extra expense occasioned by extra switch engines that are employed at compress points in Arkansas on those two roads?

A. Not specifically; I was speaking generally, not as to specific conditions.

Q. Tell me about this batting of cars, how is that done?

A. Nailing strips on the outside of the doors to keep fire from getting through.

Q. Did I understand you to say that material is thrown away?

3006 A. It generally is.

Q. Do you know whether that is done in Arkansas?

A. There are general instructions out to return that material but the percentage that is returned is small.

Q. It is not a very large item of expense?

A. No, it is very small; it would amount to 20 or 30 cents a car, I imagine.

Q. Do you know of any instance of 500 cars of cotton lying in the yards and compress points in Arkansas for twenty or thirty days?

A. No, sir, and I didn't intend to make a statement that at any point 500 specific cars loaded with cotton were in a yard for 20 or 30 days; I mean that 500 cars were in there between those days, and I used that to show the trouble in switching a car; there might be 20 came in and 20 go out, or 50 in and 50 out in the day. I didn't mean to intimate that any specific 500 cars or any number of cars remained there any particular time, but that condition was there.

Q. You said you had seen as many as 500 cars laying there, some would be there ten or fifteen or twenty days?

A. Yes, sir.

Q. Do you mean by that that you have seen 500 cars at one time?

A. Yes.

Q. Constantly there for any length of time?

A. Not in Arkansas.

Q. You know nothing about the conditions in that respect
3007 in Arkansas?

A. No, sir; we had a blockade in Oklahoma at all our compresses when I saw that condition.

Q. You stated further that every time the cotton was called for, it generally required the switching of every car.

A. Generally speaking.

Q. You mean to say that if there were 500 cars in the yard, every one would have to be switched?

A. I mean that you might have to switch ten cars or all of them; there is no way to set those cars first out; you may pick up just one car, and you may have to go through all the switches to get out one car; it is just a case of accident as to where you get it.

Q. In your language, you didn't intend to make these statements as strong as the language I have called your attention to?

A. Not in the sense you have taken it. I did not mean that a general switching of the yard was necessary at all times.

Q. Then you say again, after the cotton is moved to the compress, it is again put back in the car and the same process gone through with again, what do you mean by that?

A. Batting of the doors I presume, or loading it by hand.

Q. In view of your impression as to the extent of the service to be rendered in handling cotton, what is your view as to the relative expense of handling cotton as compared with, I will say, grain
3008 or lumber?

A. I think either commodity is handled much cheaper.

Q. You think grain and lumber is handled cheaper than cotton?

A. Yes.

Q. Do you know the average rate per ton per mile on those commodities?

A. Where do you mean?

Q. In your own state?

A. I have practically the figures, yes, sir.

Q. What is the number?

A. If I remember, grain average is about six and a fraction mills; and the lumber something less.

Q. That is about what is testified to in this case? What is the average revenue on cotton per ton per mile in your state?

A. About 20.

Q. How does the difference in those rates correspond with the difference in handling the three commodities?

A. I think the expense of handling cotton in my opinion, is much greater than the handling of grain or lumber, but I think that cotton is a more remunerative commodity to the railroad than is grain or lumber, if that is the answer you desire.

Q. How is the expense of handling cotton, how does it compare with the expense of handling live stock?

A. It is greater handling cotton than it is handling live stock.

3009 Q. What is your rate on stone and coal per ton per mile in Oklahoma?

A. You mean state business?
Q. Yes.
A. You will have to tell me whether you want the commission rates or railroads' rates.
Q. Railroads' rates.
A. Stone is handled in Oklahoma by the Frisco at a rate of less than 5 mills per ton per mile, part of it; stone is handled by the Santa Fe, I am speaking of where most of the stone moves, at the rate of approximately six mills per ton per mile.
Q. How does the cost of handling stone, taking in consideration the risk and everything, compare with the cost of moving cotton?
A. There is no consideration between them; stone costs nothing as compared with handling cotton.
Q. Five mills of stone against, I believe you said, 20 mills for cotton; don't those rates pretty well represent what you testified about the relative cost of handling those commodities?
A. I think they do.
Q. Doesn't it follow that whether the makers of those rates intended it or not, that they did accidentally—we will assume that there was no design connected with it—got somewhere near, in adjusting the rates, to the rates that existed in the cost of moving the articles.
3010 A. There is no doubt in my mind that they were getting at the relative cost between the two commodities, of moving them, but I don't think they did figure the cost of service in there by any means; I think the stone rates are entirely too low.
Q. Has your Commission raised it?
A. Yes, sir; the result of the stone tariff which was injoined was that——
Q. Never mind about that; you are talking about rates in Oklahoma, you don't know anything about the rates in Arkansas?
A. Generally yes, specifically probably no. I have made some comparisons on your Arkansas rates.
Q. Could you tell me now the Arkansas rates on those commodities which I have been talking about?
A. I have them; I would have to look it up; I remember these two rates because they were specific rates.
Q. I want to call your attention to some little difference between your understanding, and the difference between Oklahoma and Arkansas. I believe you said that cotton is always loaded at shipper's count, and sealed after the doors are closed; you are speaking about the practice in Oklahoma?
A. Yes, sir.
Q. Do you know what the practice in Arkansas is?
A. No, sir.
Q. The methods that prevail in Arkansas in the matter of handling and conducting their business, from an operator's stand-
3011 point, would not be known to you?
A. No.
Q. You don't pretend to have a knowledge in that respect?
A. No.

Q. You undertook to describe the manner in which a train is broken up at a terminal division point; you are not speaking from your knowledge of the manner in which trains are handled on the Iron Mountain road or Cotton Belt road, in Arkansas, are you?

A. Not to be able to swear what was the specific policy, no sir, but I know it is the general policy, and from reading the rules of the Missouri Pacific Railways, I would think that that is the manner in which it is handled in Arkansas.

Q. But all you know about it is your general knowledge and then the information you might have acquired from reading the rules?

A. Yes, sir.

Q. What rules do you refer to?

A. Red Ball rules.

Q. Where did you find them?

A. In the Missouri-Pacific's book of instructions.

Q. Have you got them before you there?

A. Yes, sir.

Q. Let me see what you refer to please?

A. "Instructions governing the movement of Red Ball and Green Ball freight; also schedules in brief, showing through con-
3012 nections, and the time between various Cities."

Q. Show me the rule which you speak of as having a relation to the movement of through trains?

A. One rule here is Rule 5, page 7: "Any Red Ball or Green Ball car set out or left over, becomes at once a preference car for its class, which fact must be indicated on way-bill by attaching form 3407. Should it become necessary to reduce a train in which this car is again moving, it must not be cut out a second time if in good order."

Here is another rule: This book also shows what is redball and greenball freight, listing the different commodities: "Red Ball or Green Ball freight loaded, or received from connections, at an intermediate station, destined to through points, must be moved to the nearest division terminal, and forwarded from there on first train of proper classification. Superintendents should arrange for this movement on their divisions."

That carries out what I stated with reference to handling cars into terminals where they were put on through trains, showing that the local is the work train for it. (17) "Red Ball or Green Ball freight destined to intermediate stations must be moved in trains of proper class to the nearest division terminal. Red Ball or Green Ball freight received or loaded at terminals for local points must bear Red Ball or Green Ball cards to destination. For
3013 movement of such freight between points on same division, the train which will get it to destination promptly will be considered proper train. Superintendents will arrange for such movements on their divisions." (18) Trainmasters must keep informed of the movement of Red Ball and Green Ball freight over their respective territories, and will be held responsible for delays to such freight occurring under their jurisdiction.

And Miscellaneous Instructions, on page 10, which covers the

handling. Those are some of the rules that I have read. I read those to find that the general line of handling that traffic is the same as it is in our state and apply that to other conditions. I want to add to that answer that naturally as any man would before testifying in a case of this kind, I made a trip to Little Rock, trying to familiarize myself with the rules of the Railroad Company, and conditions existing, as best I could, and I have spent considerable time with witnesses for the state who have made these examinations, and I am advised that testimony will be put in this record before the case is closed, that will show the average time that cars going through the state are delayed in the state, is approximately six days instead of 28 hours as the schedule shows they should move, and taking these things into consideration, I think the movements are the same as they are under other general conditions.

Q. When did you make a trip to Little Rock?

3014 A. When the case was set here for the last hearing, about two or three weeks ago.

Q. How long were you there?

A. All of one day and part of another.

Q. So your personal knowledge rests on an investigation made in a day and a half?

A. Yes, sir, there are three days I have had here with the experts of the state.

Q. That is not personal knowledge?

A. No, sir, that is only getting a knowledge of the facts, and asking questions with reference to different conditions that a man could testify to, without testifying from generalities; that was all I cared to know; I was not looking for specific instances.

Q. You undertook in your examination in chief, to describe the movement and handling at division terminals and other places of through trains; you say a train will start out from Kansas City or St. Louis or some other point, with all Red Ball freight, that being the highest class of freight the railroad handles, that there is in the yard, and if there is not enough there in the yard to make out a Red Ball train, they put in Green Ball or anything else to make up their tonnage, where did you get that information?

A. From that little book.

Q. Just point that out to me.

A. Rule 14, at page 8, "Red Ball trains must not handle Green Ball or ordinary cars, except when necessary to fill out, and

3015 such fill-outs will in no way affect the classification of the train. It shall still be a Red Ball train." We understand from "fill-outs," if there is not sufficient Red Ball tonnage, they will carry Green Ball first and ordinary freight second, in order to fill out their tonnage rating.

Q. Does that relate to the making up of Red Ball trains at the place where it originates?

A. Yes, sir.

Q. Are you familiar with the *manner in which the* classification yards of the Iron Mountain Railroad at Dupois, opposite St. Louis.

A. In what way do you mean?

Q. Do you know anything about the classification of freight there?

A. No.

Q. Do you know anything about the manner of conducting the business?

A. Not a particle.

Q. Do you know how cars that it may be necessary to detach from Red Ball trains are arranged in the train, whether any arrangement is made with reference to convenience in handling the business?

A. If they are obeying the rules, I know how they are handled.

Q. What do you find in the rules?

A. Rule 12, "Unless specially authorized, all Red Ball and Green Ball trains must be switched in station order at the initial
3016 point, cars without air brakes, and cars to be cut out en route in the rear. When fill-outs are required, place next to caboose. Cars picked up en route must be put in proper place in train."

Q. What is the purpose and effect of that rule?

A. It means that when a car has to be set out, it has to run up to the station, and either set its own cars out or have a switch engine come on behind it and set it.

Q. What switching movement is involved in that?

A. At least four switches.

Q. I don't know about the number of switches, that is as simple a movement as can be made in moving the cars from one train to another?

A. That is true.

Q. It simply means to detach that car, take it off from the part of the train in which it is placed with reference to convenience in switching, and leave it at some other point?

A. Yes, sir, and that is where I think terminal expense comes in on that train; that switch engine has to do all that switching, put that in that particular order for the Red Ball engine to handle.

Q. What is the character with reference to state, interstate or trans-state of the contents of the car that is switched out of the Red Ball train usually?

A. What is the character of the contents?

Q. A Red Ball train represents, as I understand, a train
3017 carrying through freights to different points?

A. Certain classes of through freights.

Q. Would you say that trans-state freights shipped from St. Louis south, are moved in Red Ball trains?

A. Some classes are and some are not.

Q. We will take merchandise?

A. All L. C. L. merchandise would be in there.

Q. That would be in Red Ball trains?

A. Yes, sir, so would the interstate having a destination in Arkansas.

Q. And trains are made up usually, as far as it can be done, are

they not, of cars conveying the same character of tonnage, is that true or not?

A. Preference being given to the most highly perishable, or highest grade Red Ball freight.

Q. A car attached at St. Louis to a Red Ball train going into Texas which has to be set out at Little Rock or at Hoxie in Arkansas, usually doesn't carry trans-state contents, does it?

A. A car hitched onto a Red Ball train made up at St. Louis?

Q. Made up largely of cars going to the State of Texas, which has to be detached?

A. Usually that is the intention.

Q. That switching expense you spoke of is in detaching Arkansas freight from trans-state trains?

A. Yes, sir, it might be that.

Q. Assuming a movement of that sort?

A. Yes, sir, it would be.

3018 Q. I understand that there may be an accident, a car now and then which will disarrange the service and cause some extraordinary expense, but I am speaking of the regular make up of trains or the regular movement?

A. Wait a moment, that is not the only thing they detach a car for, they might detach a car at a junction point, say at Ft. Smith for an Oklahoma station, which would be entirely an interstate shipment, but it would be an expense on Arkansas, for which Arkansas would receive no revenue.

Q. I understand that, but in cases where cars, we will say, Green Ball or local freights or freights destined for the State of Arkansas are included in the train, the handling of the cars growing out of that condition, is for the benefit of Arkansas freight, isn't it?

A. If it is Green Ball freight that is entirely for Arkansas, yes, sir.

Q. To what extent do railroads attempt, in making up trans-state trains, to avoid mixing them up with local cars that will have to stop in the State of Arkansas, if the tonnage is mostly going to Texas?

A. They put their regular package merchandise cars for Arkansas, and highly competitive Arkansas cars on a train with Texas freight, just the same, because that freight is just as valuable to them as the other, and it is as highly competitive as the other, and they would show no preference of handling Texas freight over Arkansas freight or Arkansas freight over Texas freight.

3019 Q. Do you mean if there were cars enough to handle a train to Dallas, Texas, and there were additional cars going to Arkansas, they would put the Arkansas cars in the train going to Texas?

A. They would make two trains.

Q. And they wouldn't attempt to put all the Dallas cars in one train?

A. They would attempt that, yes.

Q. That is what I mean——

A. From information I have received, I judge they don't do that, for the simple reason that if all cars of trans-state freight passing

through Arkansas have an average delay of approximately six days in Arkansas, it certainly indicates that they have not handled those cars on trans-state trains.

Q. Doesn't it resolve itself into this condition, a train made up of partly trans-state traffic for the south, possibly it has some cars for Arkansas; when they reach the division point in Arkansas with those cars, they simply detach them and take them off that train, and the trans-state business then goes on to its destination; isn't that the movement that is outlined, in so far as it is outlined at all?

A. Yes, adding other cars to the train.

Q. Adding cars which may properly be carried in that class of train?

A. Yes, sir in order to fill out their tonnage.

3020 Q. They want to economize as much as they can by using to the extent of their power; that is a matter of economy?

A. Yes, sir. I have watched the operation of trains in Kansas, Missouri, in Texas, in Colorado, and New Mexico, and I have spent a large part of my time in watching the operation of trains in Oklahoma, and I fail to find that there is any difference materially between the operation in one place and the operation in another, as every general superintendent desires to get the best means of handling his trains that anybody else has, and I think conditions that exist in one state can generally be said to exist elsewhere.

Q. Did you ever work in the operating department of a railroad?

A. Only while I was with the division superintendent, and to a certain extent while I was in the motive power department.

Q. Did you participate personally in handling of trains?

A. Yes, sir, when I was with the division superintendent, I had charge part of the time, of the quick dispatch of trains; I assisted in making up the time card, and I assisted in cleaning the yards out of old freight, and I spent many an hour on the switch engine picking cars out of the yard and making up through trains.

Q. Your duties were mostly discharged in the office, however, were they not?

A. Three months of my time and may be longer, I spent with the superintendent of machinery, and my time was spent almost

3021 entirely on the road; I was never in the office only to write out reports.

Q. How many months were you with the superintendent of machinery?

A. Over a year altogether.

Q. How much of that time were you on trains?

A. I think about five months; it is hard to remember those things.

Q. How long were you with the other man?

A. I had three months on the road continually with him?

Q. Tell me what your position was, in connection with the operation of trains on the road?

A. Simply doing whatever he told me.

Q. That was the handy man work?

A. That was when I was with the division superintendent.

Q. If he wanted something done, he would send you out to do it or have it done?

A. Yes, sir, and I would often be out for a week without seeing him at all.

Q. I want a little fuller description of the duties that you discharged when you were sent out by the superintendent?

A. There would be a blockade—I remember we had a blockade in what was known as the Sialo yards, and I was sent there; I was there five days in cleaning that blockade up; cars had come in there so they couldn't get a train through the terminal. Again,

3022 when I was commercial agent at Terrion, the transportation department called upon me to help clear that blockade, which I did; I worked there, I think, for two weeks.

Q. It was in cases of that kind, you would be sent out in emergency?

A. Yes, sir; I assisted in watching trains; I used to ride locals all the time, see that the agents were properly loading their L. C. L. freight, see that the conductors were quickly handling it, yardmasters were making through trains in station order, and see that the work was properly done on the lines.

Q. The experience you gained in connection with cleaning up this blockade did not represent normal conditions, did it?

A. Not entirely so, no.

Q. That was on that line down in Mexico, was it?

A. Yes, sir.

Q. What kind of road was that in point of construction?

A. It was as good as the average line in Oklahoma, 3600 miles of track.

Q. How was it compared with the Iron Mountain or Cotton Belt?

A. That part of the Iron Mountain line which I have been over in Oklahoma——

Q. That part in Arkansas?

A. I don't know that part of Arkansas.

3023 Q. You said you understood that it would be shown in this case that there was a very great delay in the movement of trans-state trains in the State of Arkansas: to what period does that relate, do you know?

A. I did know, Judge, but I cannot recall it now. I simply know——

Q. Is it not a fact that your impressions—the impressions affecting your testimony in this case—are derived very largely from the impressions you gained in talking with the parties, from whom you obtained that information?

A. No, sir, I have my general experience, backed up by the conditions in Arkansas, which I have taken from these men who have been down there.

Q. So, your impressions in regard to the conditions in Arkansas, are based upon information that you obtained from others, in the manner that you have described?

A. Where they differ from general experience, yes, sir, but they differ slightly from my general experience in such matters.

Q. Did I understand you to say that this very high terminal expense that is connected with the movement of this class of trains we are talking about now——

A. Very high terminal expense?

Q. Yes. How does it compare with the terminal expense to state freights?

A. No difference whatever.

3024 Q. You think not?

A. Not for the amount of work performed.

Q. How would it compare with the switching that is necessary to make up a train to carry state tonnage from some division point and peddle it along the road?

A. There is not a particle of difference. The switching engine goes into its yard to make up a train—you take a classification yard—take Little Rock yard, as an example: I can see no reason why there would be any difference with a switch engine going in there to make up a local or red ball train; he has to take those cars anywhere they may be located; he has to take them all over to a making track, if he has one, and in classification yard he would have one. He is making that red ball up just the same as——

Q. Tell me the relative expense as between trans-state freight and state and inter-state freight.

A. There I agree with you; there is considerable difference in expense.

Q. What does it consist of?

A. The trans-state train would not be handled anything like as much in the trans-state, as state or interstate.

Q. What is the difference in terminal service as rendered each class?

A. The mere making up of the train and putting it together again is the total expense of the trans-state, presuming the car had

3025 been weighed before it came into the terminal; while with the state freight they would have to break that train and in addition deliver that car to wherever it was going—to some private switch track, housetrack, or to the team track.

Q. Mr. Bee, is it necessary to break up the arrangement of the trans-state cars on a red-ball train?

A. No, not exactly break the arrangement of it entirely. They cut out the cars from the back.

Q. Assuming that a train arrives at Little Rock with 25 cars: 20 of them contain merchandise going to Tyler, Texas; the rest contain green ball, going to the State of Arkansas;

Now, what has to be done—tell me what switching, if any, is required to be done for those trans-state cars at Little Rock.

A. None of it is red ball traffic? Let me understand.

Q. I do not understand your fine distinctions there, but 20 cars go to Dallas, Texas, and 5 cars in that train will be detached at Little Rock to go to other places.

A. If that train is made up according to instructions, Judge, the first 20 cars are red ball we will say, and the next 10 cars—assuming

the train is carrying 35—are green ball, while the next 5 cars are ordinary freight:

If that train has no red ball for Arkansas, and no green
3026 ball for Arkansas, and merely one of these five ordinary cars for Arkansas—the switch engine would run in and take that one green ball car out, set the train back again and go on. But if one of those red ball or green ball, and all of the five ordinary cars were for Arkansas, it would require that they take all the train, including that first red ball train, kicking that train out and putting that part back on the train again; that is, kicking the green ball out and put that part back and then set the ordinary freight out. Now, we have set out seven cars of that train. They have got to fill up. Probably their filling up will include three cars for Galveston, or one for Galveston, one for another point and one for another point; they must set those cars in at the exact spots they belong and it means the breaking up of that red ball train to the extent of setting those cars in their station order, if the rules are complied with.

Q. So then, those cars from the time the train leaves St. Louis are put together in station order?

A. They are supposed to be.

Q. If that is true, the Tyler cars will all be together and so arranged that it is not necessary to break up their solidity in the train for the purpose of getting thes cars out?

A. No, sir.

3027 Q. So there is no moving necessary except to attach and detach?

A. Yes, sir.

Q. And the extent of the switching depends on the number of cars to be taken out and put in?

A. And the destination of the cars that are to be put in.

Q. If there is a car or more going to Galveston they would put them in there in the order of the station it is going to?

A. Exactly.

Q. Is not that the most expensive form of terminal service, Mr. Bee, that is known in railroad service?

A. I would not call it the most expensive, for this reason: that the switch engine is delayed while it is performing that service at the main line, or main passing track, while that service is being performed, and it means a delay in that yard——

Q. Let us divide it up and first consider it with reference to the service rendered to the trans-state freight on that:

Confine yourself to that; is not that the most expensive class of terminal handling? Leave out now the consideration you mentioned a moment ago?

A. I cannot see that it would be the most expensive. There
3028 may be a car which is all trans-state and destined to an Oklahoma or Louisiana point, over one of the other branches. That car must go through the same experience in the yard that a state car would go through after it is loaded and pulled in.

Q. Leave that out at present and take the fifteen or twenty cars going to Texas.

A. Then there is very little service performed, but the class of service is just as expensive for the length of time as the other service.

Q. It costs just as much to switch a car fifty yards for a trans-state as for state?

A. Yes, sir.

Q. Referring to your suggestion that the car might be going to some other trans-state point and that car, like the rest of the cars, would be put there in station order, would it not?

A. Yes, it would be put in in the Little Rock station order.

Q. It would not be put in between two Texas cars?

A. Oh, no. It would be the Little Rock station. It would have the same service performed upon it as any other car in the yard. It would be pulled out of the train and kicked over into a passing track, or any place to get rid of it. It would then probably mill around in the yard until they could redball up the train that was going
3029 out that it would go on. It would be switched backwards and forwards into its proper place on that train. There would be no special switching for that car, but it would receive the general switching that the other cars would. It might be handled once or twenty times until it was finally located in its proper place in the train.

Q. What would be the occasion or necessity of handling it twenty times?

A. They might have a bunch of cars behind it——

Q. It might get in the way——

A. Until it was finally gotten into its proper place. I said once or twenty times as to the average; I would have to know the train and see the switching.

Q. I take it that all intelligent operators of railroads devise some system or method by which the greatest economy in the handling of traffic of that character can be obtained.

A. Yes, sir, and if they have a yard large enough they would have a track over; we call No. 3 lead or No. 4 on which trains of this branch would be made up, and that car as soon as the switch engine kicked it out and made its tran-state trains up so it could go on, they would take it on its proper track and there it would lay until——

A. The Arkansas traffic has no interest in the way in which trans-state cars are arranged after they pass through the operators of Arkansas?

A. No, sir, none whatever.

3030 Q. While you were in Little Rock did you see any switching done upon the main track?

A. No, sir, I did not go into the yards at all.

Q. You do not know what the facilities and arrangements there are?

A. No, sir, the same switching backwards and forwards of course——

Q. Do you know whether they have a classification yard there or not?

A. I think they have, Judge, but I cannot say positively. I have seen a list of the classification yards. I paid very little attention to it.

Q. Just one more word on that subject, Mr. Bee: are those matters that you have been describing in detail what you meant by "highly expensive terminals" and "highly expensive terminal services"?

A. To a certain extent. I think where you got that idea—I think you misunderstood me. Where I used this highly expensive terminals in the sense you are now taking, it was a question Judge Hill asked relative to freight East of defined territory and going to Arkansas or Texas, and I said that freight would pass over a number of lines and would pass through these highly expensive terminals mentioned—Kansas City—and stated that I understood the cost there was four dollars and some odd cents to switch from line to
3031 line; that was where I drew special attention to that.

Q. That is not an expense into Arkansas?

A. Not unless the business is destined to Arkansas.

Q. Would it in that case?

A. That is an expense that has to be borne by that traffic.

Q. Is it chargeable to Arkansas in any way?

A. Not to Arkansas. It is chargeable to traffic that passes through.

Q. I see here something about citrus fruits passing upon the red ball trains: you said that that traffic affords a very slim revenue to intermediate lines because the originating line—I think you mentioned the Southern Pacific—would require a large share of the charge for its transportation and the line which handled it at the other end would also want a good share and there would be little left.

A. That was a shipment destined to Washington or New York City, if I remember correctly?

Q. Do you know on what basis the revenue of handling shipments of citrus fruits is divided between the lines?

A. No, sir, I do not; not specifically. But I should imagine the Southern Pacific would ask for a little more than a mileage pro-rate.

Q. How are you prepared, then, Mr. Bee, to state that the revenue of the intermediate line would be very small as *as* compared
3032 with the end lines?

A. If you will remember the question, Judge Hill put to me, he said, if the red ball from the coast to Little Rock and to New York or Washington was the same—he asked me to compare the two, and that is when I said on the shipment to Washington, the rate on the intermediate line would, in my opinion, be small, because I presumed the originating line would ask for better than a mileage pro-rate, and the delivering line would get that much or better. But even if they did not, and it was divided strictly upon a mileage pro-rate and that shipment moved through South via the Southern Pacific and came over the Missouri Pacific, and then went East over other lines, on the same rate that applied to Little Rock, unless the Little Rock rate was an outrageously high one, the revenue accruing to any line would be exceedingly small.

Q. This is not an important matter, but I call your attention to it because you have made statements, I think, wholly upon wrong impressions:

My information is that the lines East of the Mississippi River get sixteen percent of the charge. The remaining eighty four percent is divided on the basis of forty nine percent to El Paso. The rest to the intermediate line:

In view of that fact, would you say that your statement as to the division of that revenue is correct?

A. Yes, sir, because that only leaves 35 percent of that
3033 revenue to be divided between El Paso and the Mississippi River. You said 49 percent of——

Q. I will say now 49 percent of what was left: put it on that basis.

A. That would leave less than 43 percent accruing to the lines from El Paso to the Mississippi River. If 43 percent of that rate had to be divided to—I do not know how the Missouri Pacific got that——

Q. How does that compare with the proportion of the distance from Los Angeles to New York?

A. It would appear to compare favorably, but it must be taken into consideration that the rates East of the Mississippi River are very low compared with the rates West of the Mississippi River. The very fact that they take only sixteen percent of that rate shows that and I want to say right there, that my statement that the line that originated the traffic would demand an excess, shows it when the line to El Paso demands 49 percent of that rate—49 percent of the rate from point of origin to the Mississippi River.

Q. Is not the distance from El Paso to Los Angeles shorter than the distance from El Paso to St. Louis?

A. Not the way the shipment would be handled, no, sir. If the shipment was handled by the Rock Island it might be, but in connection with the Missouri Pacific it would not be.

Q. How large a movement is there of citrus fruits?

3034 A. I do not know that a single car ever moved.

Q. You have not had much to do with this case then as to——

A. I do not know of it; I am simply answering questions that have been put to me. Citrus fruit has to move over some road, but whether it moves that way or how it moves—the Southern Pacific gets part of the business, certainly.

Q. You say that that is carried through terminals and through highly expensive terminals?

A. Yes, sir, it is.

Q. State the exact meaning now of that expression with reference to the expense of moving citrus fruits.

A. I was talking about the terminals it went through. It originates at Los Angeles——

Q. I want you to explain what you mean by the effect of those heavy terminal expenses in the transportation of citrus fruits. I do not understand it.

A. I mean that citrus fruit moving from Los Angeles to Wash-

ington or to New York City, would be one of the commodities they would move through the heaviest and most expensive terminals. That fruit would originate at Los Angeles, where a heavy terminal is charged. It would move through El Paso where I know the terminal rates are exceedingly high. It would probably move to San
3035 Antonio, where again the terminals are high. I do not know whether the I. & G. N. would get it there or not, but if she did she would bring it up to Texarkana, I presume, or to the connection with the T. & P. The Missouri Pacific would likely handle it to St. Louis, again through expensive terminals, crossing the bridge; then through all the Eastern terminals, which are expensive.

Q. Who bears all that expense?

A. The railroads that own the terminals.

Q. Arkansas would not have much to do, then with the terminals in St. Louis, El Paso and Los Angeles?

A. Not a thing that I know of.

Q. What terminals are in Arkansas at which a heavy expense would be incurred?

A. I presume Little Rock.

Q. You were also mistaken in referring to this subject, were you not, in your statement that the Arkansas lines would require their revenue in the case of the shipment of citrus fruit on a mileage scale?

A. I presume they do. That is my presumption, figuring the rate was divided on that basis.

Q. That was your presumption? You did not know that?

A. I did not. I still presume they get their pro-rate from a mileage basis between the lines East of El Paso and West of the Mississippi River.

3036 Q. Is it not a fact that your statements in that connection were simply based upo*m* impression without actual knowledge?

A. That is true. I have said so. The tariff and division sheet, Judge, is the best authority. I am simply stating what I presume to be the case, and if it is different, the tariff and division sheet can be introduced and show that my impression is wrong. I stated at the start, Judge, that I did not care to specify any specific rates extending to or through Arkansas, and I should not be asked for it.

In illustrating additional service in the way of a longer haul that would be required to Texas common points for the same rate of compensation, you stated that the difference between those common points, referring to the first one South of Texarkana, and Big Springs as the other one, was six hundred miles.

A. No, sir, I said I figured a difference between the common points of 662 miles, but I did not say between those two specific points.

Q. "Take two points originating at St. Louis handled over the Iron Mountain, one destined to the first station in Texas, on the T. & P., South of Texarkana or West of Texarkana, the other destined to Big Springs, which appears from this map to be the end of the

common point territory. The distance between those points is in excess of 600 miles."

That seems to be your former statement.

3037 A. I did not mean to say that. That was an error.

Q. Did you look that up before you made that statement?

A. That was an error, Judge.

Q. What is the distance?

A. I tried to get the map the other evening, to measure that. I had it in mind and then forgot it. I did not intend to give any distance from there whatever.

Q. Your testimony to that extent is in error?

A. Yes, sir, to that extent. I did say I had figured the distance between the common points and found one of 662 miles.

Q. How many connecting carriers would participate in the transportation of commodities from Pittsburg to Texas?

A. Oh, I guess a man could figure out a route with six, seven or eight carriers participating in it. I think three or four.

Q. Do you remember what you stated in your examination in chief?

A. No. A man could pick out any number of carriers he wanted.

Q. Here is what you said on that: "A man could pick out routes that would apply to fifteen carriers. If a man took all day to find a route."

You say at one place four or five, and in another you say probably six.

A. I said it could be that many. Those routes are apt

3038 to be a short line. You can start it out of Texarkana and give it to one line and another all the way down.

Q. Is not the usual shipment of shipments of that sort that pass over the Iron Mountain and Cotton Belt via the Pennsylvania into Texas, constituted by three——

A. I would say four. Some other line would probably have a part of that business; deliver to the Vandalia.

Q. That is a Pittsburg line?

A. It might not. Those agents are pretty busy. I would say four, two East and two West. You can take one of those little lines in Texas——

Q. But I want to know what was the source of your information concerning this? Whether you were speaking advisedly when you said five or six.

A. I think I said four——

Q. No, you said five. You said the average would be four or five.

A. That is what I say now; four, or possibly five; not three.

Q. This is the point to which I want to call your attention: Does the increase or multiplication of the lines handling the shipment affect the reasonableness of the rate of the cost of service?

A. Yes, to a certain extent, I think so.

3039 Q. Then, that is a very material matter, is it not?

A. I think the number of lines handling a shipment materially increase the——

Q. It is not likely that it would exceed four?

A. I should say four and possibly five, Judge. It could be handled on three lines. I do not like to be in excess, but I should say four or possibly five.

Q. What would be the occasion of a shipment originating at Pittsburg on the Pennsylvania Lines going—upon any other line than the Pennsylvania between there and St. Louis?

A. A good soliciting agent.

Q. But, Mr. Bee, the Pacific Company controls lines to East St. Louis, does it not?

A. That is true enough and the Pacific lines would accept that business at other points than Pittsburg.

Q. I am taking Pittsburg, though, and the territory reached by the Pennsylvania.

A. Let a shipment originate at Pittsburg, where the Pennsylvania or some subsidiary line would accept that at other points, and a good soliciting agent would solicit a part of that for his own line.

Q. The Pennsylvania Lines have continuous lines to East St. Louis; the Iron Mountain or Cotton Belt have a continuous line from St. Louis to Texarkana——

A. Yes.

Q. —and there they connect with Texas lines——

3040 A. Yes, sir.

Q. —that reach this common point territory?

A. A large part of it. If it was destined to the Santa Fe it would probably have to be handled by some other line in Texas and given over to the H. & T. C. or some other.

Q. The division point of the Mississippi River would be the same, without regard to how many lines handle it through Pittsburg to St. Louis, would it not? Do you know about that?

A. The divisions East and West are the same.

Q. Without regard to how many lines?

A. But the question North and South, West of the river, would be a different proposition according to what I understand. Probably the Missouri Pacific have an arbitrary figure that they would take up to Texarkana and let the lines South divide the balance. Those are tariff conditions, Judge, that I would much prefer you would not ask me about. It is easy for your people to hand you the tariff.

Q. I want to ask you if you went into that on your direct examination——

A. I asked you at the time if you wanted specific instances.

Q. I am trying to ascertain to what extent you were informed in regard to these matters. Do you know the basis of division from Cincinnati points to Texas common points?

A. No, I do not know.

3041 Q. Those are factors used in making that division of rates, are they not?

A. Absolutely so, and I was giving the general conditions under which the rates were to be divided. When specific conditions are inquired into you can furnish me the tariff so I can give it to you.

Q. If it is true that there is a flat rate, an arbitrary, from Cin-

cinnati and Cincinnati points, and from Pittsburg and Pittsburg points, to St. Louis, it is immaterial in that territory whether freight is trabsported over one or three or four lines.

A. It is immaterial to the lines West of the River.

Q. That is what I mean, these lines engaged in this controversy.

A. Yes, but where one line would handle it East of the River there would be three and maybe more handling it West of the River.

Q. What are the three lines that would handle it West of the River?

A. With the I. & G. N. it would have to go through the T. & P. if it was going through the H. & T. C.——

Q. I understood you to say it would have to be handled by at least three lines.

A. No, sir, two or three; probably three. It would be three if the Missouri Pacific was handling it.

3042 Q. What has been your experience in working with a system of rates from St. Louis to New Orleans and from St. Louis to Little Rock?

A. I have not worked with those rates except a general comparison.

Q. Have you had occasion to quote them?

A. I may have quoted those rates in the past; from St. Louis to New Orleans I quoted numerous times.

Q. Have you from St. Louis to Little Rock?

A. Never knowingly. I may have, but I do not remember.

Q. You stated in your examination in chief, as I see your testimony before me, that you had seen the rates and had had occasion to quote them; referring to those two classes of rates.

A. I meant the St. Louis-New Orleans.

Q. You do not mean that that applies to Little Rock rates?

A. I quoted the St. Louis-Ft. Smith rate on numerous instances. I worked with it and compared it, and I presume I compared the St. Louis-Little Rock. I know I did in cases that I had.

Q. Mr. Bee, I think you stated yesterday—I am not referring to your testimony, I am speaking from memory, that there was a condition existing at Ft. Smith which enabled it to encroach upon the commercial territory of Muskogee.

3043 A. Yes, sir. It is not existing, but did exist.

Q. Did you say that that grew out of river competition?

A. I said in my opinion it grew out of so-called river competition.

Q. Why do you think that, Mr. Bee?

A. Well, because railroad men told me those rates were made on water competition.

Q. Do you know what they really are based on?

A. No, I do not know what any rate is based on except what I am told by the man who makes it.

Q. Is not the Ft. Smith-Little Rock rate plus a differential?

A. I presume it is.

Q. Is not the Little Rock rate the Commission rate from Memphis plus the bridge arbitrary?

A. That I do not know.

Q. If that is true, and I think it is in evidence in this case that that is the basis of it, are you not mistaken in saying that so-called river competition fixes the Ft. Smith rate and enables it to encroach upon the territory of Muskogee?

A. Do you mean the St. Louis rate to Ft. Smith and the New York rate to Ft. Smith is made by a differential over Little Rock, which is made by the Commission——

Q. I mean this: that in effect the Ft. Smith is the Little
3044 Rock rate plus a differential; the Little Rock rate from Memphis is the Arkansas Commission rate plus a bridge arbitrary. The St. Louis rate is that plus thirty cents and then East at other central points it is differentials in different amounts—New York one, Pittsburg another, and Chicago another: that is the way those rates are built up.

Mr. HILL: Are you referring to class rates or commodity rates?

Mr. MOORE: I am referring to first class rates.

Q. What I ask you is this: can it be correctly said that water competition fixes the Ft. Smith rate in view of those facts?

A. If you say that the New York rate is made on a differential——

Q. I do not say the New York rate: I am talking about Pittsburg, Chicago, Cincinnati and places of that sort: perhaps New York conditions would be different.

A. New York conditions are what I was referring to. Our rate from Galveston as compared——

Q. What was the character of the tonnage of the Ft. Smith? Did you confine it to some particular tonnage?

A. Merchandise from seaboard territory and hardware; different things of that kind.

Q. How is that affected by so-called river competition,
3045 even from New York? Explain that to me please

A. I mean that the state freight rates to Ft. Smith are made on river competition from New Orleans.

Q. If that is the case and if they were lower rates and control the situation, as explained, *where* in St. Louis and other territory to which the distributing merchandise is consigned would not the business of all that Western territory be swallowed up by New York, because, if New York and its facilities for ocean transportation can fix a rate into Ft. Smith, it can into Little Rock, can it not?

A. I guess it can, but I did not say it fixed the St. Louis rate from Little Rock, or the Cincinnati rate to Little Rock.

Q. You mean that the New York rate was circumscribed and fixed by that?

A. Exactly—whether other rates bore on that I do not know.

Q. Do you mean to say that the effect of that was so extensive and so broad as to enable Ft. Smith to swallow up the business—that Muskogee was——

A. I would not use that term "swallow up" Judge.

Q. It came to the door of Muskogee?

A. Yes, on certain commodities, and the railroads realizing the condition reduced some Muskogee rates, some Ft. Smith rates.

Q. On what commodities were those?

3046 A. I remember hardware and merchandise. Those are the only two things I remember. There were a number of things. At a conference between the railroads and Mr. Sangster those conditions were changed.

Q. I got the impression from your statement that you were describing general conditions, but it seems only special conditions in certain commodities, in which New York would be the basing point.

A. They are seaboard rates that were causing the trouble.

Q. Being the rate clerk of the Commission, you know more about it than I do. I will not ask you to give the rates, but I wish you would explain to me the manner in which the Little Rock rates are built.

A. The Little Rock rates?

Q. Yes?

A. I have never gone into the Little Rock rates to find out how they are built. I have had no occasion to go into them.

Q. In what litigation was it that you pointed out the disparity that you referred to in the Santa Fe rates?

You said that you discovered and pointed out where the Santa Fe rates charged on interstate business from Kansas City to all points on their lines in Oklahoma, or a large number of

3047 points, the rates were in excess of the combination of locals, etc.

A. The Commission proposed to reduce the class rates in Oklahoma—I believe that ruling was sometime in April—and I suggested or proposed on the hearing, a scheme of rates for application in the state of Oklahoma.

Mr. Koontz found I had reduced fifth class to what he thought was an unfair basis and insisted that my idea in that was to make a way to "skin" what was known as the through rate from St. Louis to Kansas City, especially Kansas City to Oklahoma points, and showed how much it would "skin" the rate by using the regular published rate from Kansas City to their station in Oklahoma, Chilloco, and from there south using the Commission rates.

I denied it but he insisted that that was my idea, so after I got off the stand I took his local rates as they exist today in the state of Oklahoma, and added them to the published rates from Kansas City to Chilloco, and found out I had in a number of cases made a lower rate than he was carrying.

Q. You stated that when you point that out you think it will be corrected?

A. I presume so.

Q. Why?

A. It would only require a suit before the Interstate Commerce

Commission to correct it. Under the Commission's decision
3048 the combination of locals should at all times be the through rate—the through rate should never exceed the combination of locals. They are both voluntary rates. They belong there in effect and are prima facie considered reasonable. The difference is slight—from one to three cents.

Q. You state it is impossible for there to be any relation between state and interstate rates and you base the statement upon the ground that the difference in distance is so great that a rate made on one basis would not apply on the other?

A. Further, the competition element entering into it.

Q. Explain to me now in what way the difference in distance would preclude the possibility of a relation?

A. I don't see where a relation can come between a rate for 400 and a rate for 50 miles.

Q. Let us assume that in the state of Arkansas, wholly, a commodity is shipped for twenty-five miles on a rate that will afford a reasonable compensation for the service involved in that length of haul:

There is another shipment of the same commodity going 300 miles, on a rate that will afford compensation for the service involved in the haul of that commodity:

There is a very material difference in the length of the
3049 haul, but may there not be a relation, notwithstanding that difference in the length of haul, as between the rates, in so far as the principle upon which those rates are predicated, is concerned?

A. No, sir. There is only one condition in which I see there would be a relation between state and interstate rates.

If it could be definitely ascertained that the cost of moving a commodity was a certain given figure per ton per mile—that there was a known cost of handling, then there could be a given rate per ton per mile, whether it moved 100, 200 or 1,000 miles. And added to that would be the terminal expense at each point of origin and each point of destination in the United States.

Then you would have a relation between state and interstate rates. But until that time comes—which I am glad to say never will come—there can never be a relation, in my opinion, between state and interstate rates, based on other than a competitive basis.

Q. That would be what you would call an ideal condition, would it not?

A. That would be an ideal condition.

Q. We do not expect to attain perfection in anything in this world——

A. I don't want to see it in existence, either.

Q. If the rate is based upon the cost of service—if the classification on which the rate is made, is made with reference to
3050 the different elements that enter into a rate—the factors in determining the cost of service, does that not create a relation between the two classes of rates built up on that principle?

A. No, sir; for the simple reason that state rates are invariably

built upon a mileage basis, while interstate rates are generally built upon a specific basis from and to a given point. The state rate does not take into consideration as to whether it moves from a large or small terminal. There is no question but what a shipment can be handled at Britan, Oklahoma, at a much cheaper figure than it can be handled at Oklahoma City, and if that shipment originated at Britan and is destined to Moore—a distance of approximately thirty miles, and a similar shipment originates at Oklahoma City and is destined to Guthrie, a similar distance, there can be no relation between the cost of handling those two shipments; none whatever. So how can you build an interstate rate that would compare, with those two shipments, which are absolutely dissimilar?

Q. On what ground and what principle did the Interstate Commerce Commission act in establishing a rule that a rate which exceeds a combination of locals would be prima facie unreasonable—is that not a recognition that a relation between state and interstate rates exists?

A. No, sir.

Q. What is the underlying principle upon which they
3051 act in that regulation?

A. Well, that is a different proposition entirely. If the rate from St. Louis to Wichita is 16 cents, and the rate from Wichita to Oklahoma City is 16 cents, there certainly is no reason existing why a rate from St. Louis to Oklahoma City should be 32 cents. It would certainly incur more expense in the handling—the loading and unloading of that shipment at Wichita, than to pass through Wichita. I don't know what was in the mind of the Commission, but I presume that was the basis upon which they established that principle. But they have gone further, Judge, and said they would not consider a state rate—a commission made rate, a legislative rate, as one of the factors in those conditions.

Q. That is immaterial to the matter we have in hand here now——

A. They say when a railroad voluntarily makes two rates, it cannot make a rate in excess of that for the haul over the entire district.

Q. Do you recognize the fact that the state rates, commission rates, do influence the interstate rates?

A. To some extent they might do it, yes, sir. In some peculiar interstate rates.

I can realize in your state very easily, that a state rate would influence a rate from Memphis. I can realize that in our state, a state rate would have some effect upon the Fort Smith rate.

3052 Q. It is in evidence in this case that a rate was established by the Arkansas State Commission, of 13 cts. a hundred on sugar, for a distance of three hundred miles—there is no traffic of that kind that the rate covers, in fact—but the gentlemen who are members of that Commission testified that that rate was made for the purpose of causing the decrease in the rate from Missouri, by some line of railroad going from Texarkana to New Orleans.

The trains in Texarkana wanted a lower rate for the purpose of

bringing the interstate down to that basis—that is, a state rate—and it accomplished that purpose, naturally.

A. That is a foregone conclusion. There is no doubt but what a state if it has a mind to, can in the exercise of its power absolutely abolish interstate rates or do what they please with them. I think there are very few commissions that have ever done it. We had one case in our state. The rate on cotton piece goods, mixed carloads of dry goods pass through Oklahoma—rate 42 cts. a hundred pounds—lower than they would stop it in Oklahoma. They carried it up on to Kansas City for 42 cts. per hundred—cheaper than they would stop it in Oklahoma. It was shutting our merchants out of business. They could not compete, less than carload, with dry goods, with the merchants in Kansas City.

Our Commission immediately should have proposed an order to establish a rate within the state on dry goods. It was said that
3053 the rate was to be used in making a rate from Ringold, Texas, from Tarroh, Oklahoma, to different towns in Oklahoma, regardless of what use it was intended for. It never went into effect because the Katy immediately reduced their rates from Galveston and the rate never went into effect.

Q. Does that signify any relation between those two classes of rates?

A. No, it would signify that the Commission within the state to protect their own people forced the railroads to do justice.

Q. Forced them to put in a new rate that forced them to change their interstate rates?

A. They did not put in any rate, but the idea of the Commission proposing a rate which if it was put in would have made the same rate to Oklahoma City——

Q. It is in evidence in this case that the Commission's rate established in Arkansas produced quite a revolution in northwestern Arkansas upon the rates of the Frisco road, and the rates were put in with that purpose in view—I will call your attention to his testimony.

Judge Wallace, Chairman of the Railroad Commission, was asked this question:

"Q. Now, your Commission had no jurisdiction to regulate rates into jobbing points from other states?

A. We could influence them, but not regulate them.

Q. In what way could you influence them?

A. We could influence them in this way—that would be hard to explain, but interstate rates are influenced more or less by local
3054 rates; for instance, rates consist of a combination of the locals; in interstate, the through rates cannot be higher than the combination of the locals; freight rates are lowered here and that cuts down the combination of the locals, and in that way it influences interstate rates, especially inbound rates."

Q. Then he says, to illustrate the statement he made there:

"Prior to the promulgation of the Commission's tariff, the Frisco Railroad had interstate rates effective at stations in Arkansas, north of Ft. Smith; that is on its line north of Ft. Smith, with which the

Fort Smith jobbers could not compete; it gave the Missouri points practically a monopoly of that trade, or at least it was so represented to the Commission. The effect was to give the trade to Missouri points, and stations on the line of the Frisco, north of Ft. Smith; as a consequence, the Commission's tariff had no effect—its local rate which was effective anywhere in Arkansas—had the effect to just reverse the order of things, and transfer that trade at all stations north of the line practically to Ft. Smith, and then, of course, the Frisco would have had to lower its rate from St. Louis and other interstate points in Missouri, north of the Arkansas line, in order to have enabled those interstate merchants—that is, interstate as to us, to compete with the Ft. Smith jobbers; now, the same condition of things was applicable in some instances, to a portion of the traffic of all through long line roads. The effect of it would be, of course, not necessarily as I understand it, reducing their revenues or income, but lowering the rates so as to give Arkansas competitors, as to all classes of traffic while between Ft. Smith and north of the Arkansas line——"

Is that in accord with your views as to the effect of state rates?

A. Yes, sir, and I think it is justified. We have a condition existing on the Kansas City Southern. They have a peculiar tariff
3055 of rates in effect to Ft. Smith,—that same tariff on a mileage basis is not in effect from stations in Oklahoma, with the result that no jobbing house can do business in Oklahoma, on the Kansas City Southern.

As soon as the class rates of the Corporation Commission of Oklahoma go into effect—which will be issued in probably ten or fifteen days—they will materially change that condition, and it won't be an unjust change, because the Kansas City Southern has—refused to permit stations in Oklahoma to job on its line.

There will be a condition where the state made rate will influence an interstate rate, and fairly so, and I presume the same condition exists on the Frisco,—they are giving a low rate, what they call their "jobber's special," as well, and making Arkansas pay the penalty.

Q. I am not assuming that the action of the State Commission was improper or unfair. The significance of this power of a State Commission to influence interstate rates, is this, is it not, that it shows there must be a relation: otherwise how can a State Commission by its regulation as to rates influence the interstate rates?

A. There is a competitive relation, a commercial relation, which I admitted from the first, Judge Moore.

Q. How does that bring about that result of putting the two classes of rates on some little parity.

A. It comes about due to the fact that the railroads in
3056 order to—that the railroads must again cut *its* rate to meet those made by the state and when they do that they show very plainly that they are not making the rates on the cost of service. and they have *in* a different scale of rates, which they did in Arkansas, presumably, from their testimony, allowing the Missouri merchants to get that business, their rates from Missouri and Ft.

Smith were not both built on cost of service, or else Missouri merchants would not have the advantage.

Q. You are speaking about voluntary rates?

A. Yes, sir.

Q. That brings up two conditions: one is the Interstate Commerce Commission holds as to voluntary rates, that an interstate rate which exceeds a combination of locals is prima facie unreasonable?

A. Yes, sir.

Q. That is voluntary?

A. Yes, sir.

Q. The record in this case shows that the instances about which we have been talking and the commercial conditions you speak of—but let that be what it may—are such that a commission rate will have the same effect upon the policy of the railroad independent of the ruling of the Interstate Commerce Commission, and they work out the same result?

A. There is no cost of service in that whatever——

Q. You are talking about the relation?

3057 A. I said that there was no relation from the cost of service standpoint. I have admitted that there was from a commercial standpoint and I still insist that there is.

3058 Cross-examination of Mr. BEE resumed.

By Mr. MOORE:

Q. Mr. Bee, you were speaking in your examination in chief in regard to freights transported from St. Louis to Oklahoma points:

You say this freight comes in competition with Atlantic Sea Board freight handled via Galveston, and in competition with German and English made goods handled via steamers; that there is a very low rate, practically brought over as ballast, and so on:

What class of commodities did you have in mind in your reference to competition with German and English made goods brought over in those steamers?

A. Dry-goods and boots and shoes—not German made boots and shoes—dry goods, silk goods and general ladies dry goods department notions; crockery, hardware and stuff of that kind.

Q. Do you mean to say that that sort of goods is brought over practically as ballast?

A. I say it is brought on low rates at times, which would be virtually ballast. Boats coming over for cotton, they will take any commodity then can get at most any rate.

3059 I saw a figure the other day where a boat had brought crockery from Liverpool to Galveston; unloaded it, reloaded it and shipped it to San Antonio cheaper at the through rate than crockery could be moved from east Liverpool, Ohio—I think that is the crockery point—to Kansas City..

Q. Is there any large movement of commodities of that kind from European ports to Texas?

A. I understand there are large movements of hardware and heavy shelf goods from European ports to Galveston.

Q. There certainly is not much general merchandise?

A. Some general merchandise comes through there, the kind I do not know.

Q. Do you mean to say that that is of sufficient volume to influence the railroad rate from St. Louis into Oklahoma?

A. I think to a certain extent. They meet the Galveston rates. The rates are practically the same from St. Louis to Galveston, but I think the Atlantic Seaboard is the principal factor. I don't think the European itself is much of a factor. Merely the last drop in the bucket. I merely mention all the factors as I saw them; not any specific factors.

Q. You attempted to compare a movement of lumber from mills in Southern Arkansas, from the forest to the mills, and from the mills to Little Rock, with shipments to interstate points:

Your attention has been called to the reciprocal tonnage that the railroad companies involved in this litigation get in con-
3060 nection with that business:

Is there any tonnage going south from Little Rock that would balance the lumber hauled to that place, from that section of the state?

A. I imagine there is grain, cotton and some commodities moving from Little Rock south.

Q. Have you any information upon that subject?

A. No, I have no information on the subject that they have any reciprocal tonnage from interstate, either.

Q. I believe you say that ten cents a mile is the ordinary charge for moving new empty cars?

A. No, that was the Missouri Pacific charge.

Q. The Missouri Pacific?

A. Yes, sir. I do think it is the ordinary charge but I did not say it was. I said the Missouri Pacific charge.

Q. So that the distance is not a distinction of the reciprocal tonnage, would be a matter of considerable importance in determining the relative expense of moving freights of the character we are speak ing of?

A. In moving any freight it would be a factor, Judge.

Q. I believe I called your attention once before to the conditions under which lumber is shipped from the points you refer to to Little Rock. That is to say, the rates to which your attention was called by Judge Hill, 22 cents to Little Rock, I believe it was, apply only to lumber that is shipped to that section from lines other than
3061 those that reach Little Rock?

Now, in view of that fact, do you know whether it is or is not a fact that there is no lumber moving into Little Rock on that 22c. rate—that is practically?

A. I don't know whether any moves in there or not, Judge. I am not familiar with the specific conditions over there and can only testify generally.

Q. The rate on lumber from points in northern Louisiana on the Iron Mountain to Little Rock, is 14 cents on yellow pine and on the

Cotton Belt it is 16 cents, and that rate of 22 cents which Judge Hill called your attention to, applies only from points in Louisiana on lines other than those reaching Little Rock:

It would hardly be reasonable to assume that a Little Rock man who wanted lumber, would seek the higher rate, would it?

A. Yes, I should imagine that man would seek the higher rate or else the rate would probably not be in. There must have been some movement to cause the rate to go into effect. The man at the mill may be able to manufacture his lumber at the 22c. point cheaper than the man at the 14c. point——

Q. Do you think that the dealer at Little Rock would prefer to pay the 22c. rate rather than the 14 or 16 cent rate?

3062 A. Not the dealer at Little Rock, but I think the mill man would probably absorb it and thereby puts the lumber to the dealer——

Q. I am speaking about the man at Little Rock, who has occasion to purchase lumber from that section.

A. If you will allow me to explain that. We have just been through a severe lumber case. We had lumber men from everywhere testifying before our Commission and they invariably testified that lumber was sold f. o. b. cars at the lumber yards. So the difference in freight is not a matter that the dealer in Little Rock would take into consideration, if the conditions that the Louisiana and Texas mills testified to are correct:

Q. It would be rather a novel exhibition, would it not, to see a man, whether he is a lumber man or whether he is a purchaser, without regard to whether there was any excess that might be absorbed by somebody, as in the case you are putting—leave the relations and the dealings between the lumber purchaser and the lumber buyer out of the case: the question I ask you is, if it would not be a peculiar condition to find that the man would pay a 22c. rate when he could get a 16 and 14c. rate?

A. No, I see that in Oklahoma every day, where they are paying 23, 24 and 25½ cents—I think that is the maximum rate—when they can get an egiht, ten, 12, and fourteen cent rate, as the maximum. Those are commercial conditions, Judge, which equalize themselves.

3063 Q. So there are commercial conditions applicable to other conditions than railroads, then?

A. There are, where railroad freight is concerned.

Q. Can you recall and tell me what the rate on first class commodities is, in your state?

A. From where?

Q. Different points in your state?

A. I will read it if you will permit me to do so and not trust to my memory.

| | |
|---|---|
| 5 miles | 13 cents. |
| 10 miles | 15 cents. |
| 15 miles | 17 cents. |

20 miles.....19 cents.
25 miles.....20 cents.
30 miles.....22 cents.
35 miles.....24 cents.
40 miles.....25 cents.
45 miles.....26 cents.
50 miles.....27 cents.
55 miles.....29 cents.
60 miles.....30 cents.
65 miles.....31 cents.

Q. What does that yield per ton per mile?
A. At what point?
Q. Say 50 miles?
A. I want to say that these are the jobbers' rates, I am quoting, which move about 93% of our business.

Mr. HILL:

Q. Are they the voluntary rates of the railroad?
A. Yes, sir.
A little over a cent per ton per mile, for 50 miles.

Mr. MOORE:

Q. I ask you that in connection with a statement you made yesterday, regarding the rates from St. Louis to Mulhall: you
3064 stated that the distance to Mulhall was 590 miles?
A. Approximately.
Q. And the distance to Oklahoma City was 640 miles; I want to ask you if the distance to Mulhall via Kansas City and thence on the Santa Fe route beyond Kansas City, is not 625 miles?
A. I would not be surprised.
Q. That makes quite a difference, does it not?
A. Yes, sir.
Q. Instead of a difference of 50 miles it makes a difference of 15 miles?
A. But the distance via Omaha, Nebraska, is much greater.
Q. Does that not make a difference in the application of the rates?
A. What is that?
Q. The difference of 15 miles in that distance of 640 miles?
A. It would not make much difference. If you figure right on to Oklahoma City—you should figure right onto Oklahoma City via Mulhall if you are going to figure via Kansas City. I was taking what I presumed was the shortest mileage between the two points and was trying to give you the advantage of the short line.
Q. Is not the Kansas City line the natural line for shipment from St. Louis to that district to take——
A. No, sir, I think the Katy is the short line to Oklahoma
3065 City by probably 50 miles.
Q. That is to Oklahoma City?
A. Yes, sir.

Q. How is it to Mulhall?

A. I think the route to Guthrie and back haul would be shorter than via Kansas City.

Q. What would that be?

A. I think about 590 miles, it is my recollection. I may be slightly off in those distances. I never figured them before I came here.

Q. What is the revenue per ton per mile on each one of those routings?

A. If you call those figures again, I will gladly give it to you.

Q. The distance you assumed was 640 miles to Oklahoma City and 625 miles to Mulhall.

A. There would not be enough difference between those two rates to find it.

Q. Well, say 590 and 640, put it on your figures.

A. One approximately 40, and the other 44 mills.

Q. You were mistaken then when you said the haul from St. Louis to Oklahoma would be 20 mills, and from St. Louis to Mulhall would be 22?

A. Yes, I see where I made my mistake. I forgot to reduce it to tons. I divided the rate on a hundred pound basis instead of taking it to tons.

Q. Since you have corrected that, do you not find that
3066 one rate is less than six mills and the other is 40.6?

A. One will be 40 mills, plus and the other 44 mills, plus.

Q. Now, take it on the Santa Fe road, assuming one is 625 miles and the other 640 miles.

A. If you take straight Santa Fe the one 625 and the other 640. Oklahoma City on the Santa Fe is about 40 odd miles—between forty and fifty miles—south of Mulhall.

Q. I said assume that the route to Mulhall routed via Kansas City on the Santa Fe—I understand that makes a routing of 625 miles. Figure it on the basis of 625 and then on the basis of 640.

A. The one would be 40 mills, plus, and the other 41 mills, plus. Is that close enough?

Q. Those differences are not very striking, are they?

A. No, they are not striking differences.

Q. The reason I called your attention to this is that you brought that in voluntarily as an illustration of the proposition in which you said positively and absolutely that there is no relation between state and interstate rates:

What light does that throw on that question?

A. I figured four mills difference which there is between the Santa Fe handling both of those shipments and if there is four mills difference, there is certainly a difference in the cost of service, and both of those figures cannot represent the cost of service. If there is only one-tenth of a mill difference both figures cannot represent the cost of service. And that is certainly true when
3067 railroads handle lumber at six mills per ton per mile and the difference in handling this merchandise from St. Louis

is four mills per ton per mile. There certainly is an element of cost in there that is not taken into consideration.

Q. In order to get that difference you have to select a particular routing?

A. The Santa Fe would have to——

Q. If you route it in the way I indicate it, it is about one mill difference.

A. But the Santa Fe could not handle it that way.

Q. Assuming that it could handle it that way?

A. It is a physical impossibility for the Santa Fe to handle it at a distance of 640 if the mileage to Mulhall is 625. If you are going to figure the Santa Fe you must figure that straight through.

Q. What I asked you to do was to figure it on the basis of a routing via Kansas City and beyond there——

A. For the Mulhall——

Q. On that route that you speak of as 640 miles?

A. I was figuring them both being approximately short routes, what I consider short routes.

Q. In your examination in chief you undertook to show the relative rates per ton per mile, the relative amount of revenue per ton as between state and interstate less than carload business:

3068 I believed you worked out that the railroad company secured on interstate business $1.90 per ton and that from state business they received $4.84:

Please tell me how you worked out those results?

A. I explained at the time, Judge, that if the rate shown in this exhibit No. 26—which I understand is a railroad exhibit— shows that the average rate per ton per mile on interstate business destined to Arkansas, is 33. mills per ton per mile; the average rate on state business in Arkansas for the same period was 67. mills per ton per mile. The average haul on state business was 57. miles and I multiplied the rate per ton per mile on interstate business by that 57.18 and the rate on state business per ton per mile by 57.18 and it gave me the figure that was received by the road on each class of business per ton; subtracting one from the other it gives a difference of $2.94.

Q. The rate per ton per mile on interstate business is 33.?

A. Yes, sir.

Q. In order to get the amount realized the revenue yield per ton on that business, you multiplied that by the average haul of state business?

A. Yes, sir.

Q. Do you not know that you cannot get that result in that way?

3069 Do you not know that if you want to get the yield on interstate business that it is necessary in order to do it to multiply the rate received per ton per mile by the average haul of interstate business and not state business?

A. If you want to get the total revenue.

Q. We are talking about the revenue per ton.

A. No, sir, you don't have to do that.

Q. On what ground are you justified in multiplying that rate

received per ton per mile on interstate business by the length of the state haul? That is absolutely impracticable.

A. No, sir, it is not absolutely impracticable.

Take a point on the Missouri Pacific starting at the state line—I believe the average interstate haul was 100 miles, I am not sure of that figure, we will take that line from the state line to a point 109 miles in Arkansas, calling that station X, regardless of its name, that being the average haul on interstate business within the state.

Now, we take a point 57.18 miles between that point X and the state line and we call that station Y, calling the state line W:

The haul from W to X represents the average interstate haul on less than carload business on 109 miles.

The haul from Y to X represents the average state haul, or 57.18 miles:

My proposition was to see the amount of revenue secured by the Iron Mountain Railroad on interstate business moving the exact same distance that state business did.

3070 In other words, between X and Y, and the only way to do that is to multiply the average revenue received by it by the haul that was performed on state business, multiplying 33. by 57.18. That gave us the figure of $1.90 per ton. And upon the same business, state, moving between identically the same points, it received a revenue of $4.84.

It is feasible at straight mathematics.

Q. Does not that exhibit itself show the revenue on state business per ton and also on the interstate business?

A. Yes, sir.

Q. Is it all figured out there?

A. Yes, sir.

Q. What is it on interstate business?

A. The total revenue?

Q. Revenue per ton.

A. 33.

Q. That is per mile. Look at the exhibit and tell me what it is?

A. Oh, yes, $3.63.

Q. What is it on state business?

A. $3.84. But you must take into consideration in considering these figures that one moved double the distance——

Q. If they moved the same distance the rate and yield would have been the same?

A. I don't know.

3071 Q. Would it not, mathematically?

A. No, sir.

Q. Is it not the difference growing out of the fact and does not that make the ratio of about two to one growing out of the fact that it costs practically the same to move the interstate, 109, as the state, 57.18 miles?

A. No, it costs considerably more, in my opinion, from what I know of handling the freight.

Q. What did you say was the yield per ton on the state?

A. $3.84.

Q. You have it here $4.84: in your testimony you say that from state business moving the same distance the railroad receives 67. mills or $4.84 per ton.

A. I never took that factor at all. I never took those figures at all excepting the total, and I worked that out hurriedly on the morning before I came on the stand. Those figures (indicating exhibit) have been worked out on an adding machine and I prefer to take them, anyway.

Q. What is that?

A. Those figures have been worked on an adding machine and mine have not. I prefer to take them. I have the same figures, exactly, $3.84, and 67. My figures must be an error to the extent of carrying one figure.

Q. In speaking of the revenue of the Cotton Belt road you were asked by counsel what would be the fairness of dividing expenses between state and interstate traffic on the basis of the reve-
3072 nue received from each class and in answer to that question you denied that it could be done and then you gave the reason.

A. Yes.

Q. You say that because in the example that you worked out (referring to the example to which I have just now called your attention) the railroads get $2.94 a ton more revenue——

A. That should be $1.94.

Q. —from state than from interstate, and while their entire revenue from interstate terminating in Arkansas is $1.90 they receive an additional $1.04 for the extra terminal than they get for the entire handling of the other shipments:

Now, that was a mistake, was it not?

A. To the extent of one dollar.

Q. Mr. Bee, all the statistics in this case from the beginning to this time have shown that the average returns or revenue on state business per ton per mile is about double that on interstate.

A. So I understand.

Q. A little less than double. The statistics from the beginning show a relation of about 6½ to 13, somewhere about that, with an average haul of one-third the length of the interstate haul:

Does not this example you brought out come back to that
3073 old proposition that has been conceded by all parties in this case?

A. The facts have been conceded. That brings it back that the revenue is two to one for a haul of three to one.

Q. This average amount of revenue received per ton per mile on the interstate freight of 33 and a fraction simply shows how much it costs to haul those one hundred and nine miles—that is, how much is received—the yield on the haul of a ton of that class of freight 109 miles as against a yield on the haul of the same kind of freight 57.18 miles, does it not?

A. That does show that, yes. It shows that the railroad companies receive more than double for less than one-half the haul.

Q. Is it not also based upon the proposition that the average interstate haul is really greater than 109 miles?

A. You mean the double haul?

Q. Of the interstate haul? While the average has 109 miles, in most cases the interstate exceeds 109——

A. I think that interstate hauls as a whole exceed 109 miles.

Q. I mean the interstate haul in the statistics that have been used in this case, that represent that part of the interstate haul located in the state of Arkansas?

A. That is true.

3074 Q. And it results necessarily that in many instances it involves a much larger haul than that shown in the state of Arkansas?

A. It indicates a longer haul.

Q. Does it not follow that this cardinal rule of cost of transporting freight, that as the distance increases the rate diminishes? Does not that come into play and produce that result?

A. Only to a certain extent.

Q. That is one of the factors——

A. But the state of Arkansas cannot take into consideration the fact of what it costs to haul in some other state or how far it moved in some other state. It is entitled to revenue from interstate business moving within the state.

Q. Applied to the 109 in the state of Arkansas as against 57.18 miles and you have there practically three hauls to one——

A. No, two to—a little less than two—114 as to 109, dropping fractions.

Q. It is analogous and pretty close to the difference in the revenue per ton per mile, 33 and 67?

A. That is true.

Q. And does it not grow out of that rule which applies to all transportation problems, that is, as you increase the length of haul you diminish the rate?

A. It grows out of that and I think it can be abused. I think it has been abused with these figures if you compare the two.

3075 Q. You lost sight of that, did you not, when you worked out that? As an example as bad conduct on the part of the railroad?

A. No, sir, not as an example of bad conduct on the part of the railroad. I worked that out to show that the state rates as they are built and as they are charged and as they show in this exhibit, pay whatever extra cost there is of doing state business and they pay double the rate for moving over each mile than an interstate shipment does. The only idea that we ever have in saying, the longer the haul the cheaper it becomes to haul it, is because the terminal expenses must be taken of- at both ends of the line. If the haul is ten miles then that ten miles rate must take care of those terminal expenses. If the haul is 1,000 miles, then the one thousand mile rate will take care of those terminal expenses.

It means a smaller unit to apply on that terminal expense, but it does not mean two to one on a haul of this kind, in my opinion.

Q. We will come to that in a moment, but I want to ask you now, are there not other factors and factors of importance than the mere length of the haul itself affecting the rates that should be charged, and the cost of the service, and what it means to the railroad to handle freight a long distance and a short distance.

A. Not after it moves over one division, passes one di-
3076 vision.

Q. You repeat now what you stated in your examination in chief, that it is only one additional terminal expense that creates the difference?

A. No, I say there is no difference in the cost of the haul after it passes over one division.

Q. What do you mean by that?

A. If a shipment originates at a small point, the cost of haul is probably more expensive to the next terminal than it is anywhere else.

Q. Please explain that.

A. It is handled on the local train and would probably be handled up to that terminal point. Then the cost of service will be just the same from that terminal to the next terminal and as to each succeeding terminal, if the road condition grades and everything of that kind are the same.

Rates are not made upon a difference of one terminal as against another terminal——

Q. Now, let us see: there has been some testimony in this case about over-head expenses, general expenses: would that have any influence upon that proposition?

A. Not any whatever. The over-head expenses apply just the same on one division as another division.

Q. Take two hauls, one of 50 and the other of 150 miles in length:

In considering the expense involved in those two
3077 hauls you say that after you pass one division the expense is the same, and in your examination in chief you said there was a difference of more than one terminal expense.

A. The additional haul takes care of that and I explained that just now.

Q. I know, but I want to call your attention, first, to the effect of these fixed expenses:

If there is a fixed charge in any business, railroad or any other, that must be met, that is applied to all the business, is it not, in proportion that the business will yield a revenue?

A. That is true.

Q. Well, if you apply that in this case would there not have to be a——

A. I see what you are getting out: if there are 100 cars moving over a division you would apportion a less figure than if 50 moved over the division. There is something to that——

Q. Then, Mr. Bee——

A. —but it would cost just as much to haul over the next division

and the next division, because those over-head expenses would again go down on the card.

Q. I believe it was stated by you or some other witnesses, that the length of a division is usually 100 miles.

A. The present divisions are around 100 miles, I understand.

3078 Q. Take what we have here: we have a state haul of 57.18 miles in average length and an interstate haul average length of 109 miles: what effect would that have upon your application?

A. The length of haul would exact the decrease expense.

Q. You have two division points there, to go from one division to another in the interstate haul, while you are within one division in the state haul——

A. If you pick your haul right.

Q. You have to average it?

A. I don't think you can average it; if they stay in one division.

Q. The statistics in this case show that the average haul of interstate freights is 224 miles and the state freights 70 miles in the state of Arkansas:

The evidence of Mr. McPherson, the Assistant General Manager of the Iron Mountain, and Mr. Ward, General Manager of the Burlington, show that in handling a given tonnage of state freight a distance equal to the average haul of state, in Arkansas, that the service involved would be at least eight times as much as it would in moving the interstate freight.

I will ask you if the statements of those witnesses are correct. I suppose you have read the testimony in the case and know what it is?

3079 A. I have not read the testimony in the case on these particular points, but I have seen similar statements from other general freight agents.

As to whether they are correct from their view or not, I don't know, but it certainly is not my opinion. I don't wish to say their statements are not correct, because from their view they probably are, but I fail to find any man who can substantiate the fact that it costs eight times — to do state business than it does to do interstate business. I fail to have the elements pointed out to me that shows that it costs eight times as much.

Q. Assuming for the purpose of my question that their statements are correct:

In that event, ought there not to be a very much larger yield derived from the transportation of state freghts than from interstate?

A. I should say an exceedingly much larger revenue from state than interstate if their statements are correct.

Q. In that connection, I want to ask you if you considered that the experience that you have had in connection with the operation of railroads, is such as to qualify you equally with these operating men who are perhaps twice as old as you are, some of them, and who have devoted nearly all their lives to the study of the problems involved in regard to the matter about which they are testifying?

A. I don't want to have to answer that question because
3080 I hate to put my answer in the record.

Mr. HILL: I do not think it is a fair question.

The MASTER: That question is simply asking the witness to put an estimate on the skill and ability of other witnesses who have testified in the case and I do not think it is an admissible question.

Mr. MOORE: I am asking him if he considers himself as well qualified as others who have shown what their qualifications are. I think I have a right to do that.

Mr. HILL: I do not think so. The witness has shown at great length his qualifications and they must speak for themselves. The other witnesses have shown their qualifications and they must speak for themselves.

Mr. MOORE:

Q. Have you had any experience in operating a railroad, as an operating official of the road?

A. Not as an official of the railroad, no, sir, other than the experience I gained directly under officials who had charge of that part of the work.

Q. And that experience that you have related in answer to questions asked you by me?

A. I have, with the exception of the experience I have gained since I have been with the Commission in Oklahoma, where I have had the same advantages, if not more, than an operating official, to go deeper into their affairs than probably some of them can go into them.

Q. Mr. Bee, do you know where the interstate less than carload freight that is moved in Arkansas over these two lines we
3081 are discussing now, principally originate?

A. I have an idea; I don't know.

Q. Memphis and St. Louis, is it not?

A. Yes, sir, and Kansas City, I should judge.

Q. Is it not principaly outside of grain, Memphis and St. Louis?

A. From my knowledge of these Kansas City merchants, I imagine they go over there and get a lot of business. That would be my idea and knowing these Kansas City merchants as I do and having a direct line into Arkansas.

Q. You just stated a while ago that the average length of haul, if you take the haul of that class of less than carload interstate, out of the state it would be longer than shown on these statistics, 109 miles?

A. There is no doubt about that.

Q. In addition to that there is one terminal expense, is there not, connected with interstate business as against the state?

A. Yes, sir, and that is the only additional expense I think of state business.

Q. Narrowing it down to that point, does not that difference justify a greater revenue from the state business than from the interstate?

A. Doubtless.

Q. Right along that line, I want to call your attention to another statement you made in the same connection as the
3082 testimony to which I have called your attention already. You said it must be remembered and taken into consideration that every time a pound of state less than carload business is delivered there are two pounds of interstate less than carload business handled: what follows is what I want to call your attention to. Along with what and on the same conditions——

A. I think so.

Q. If the conditions to which I have called your attention as to the interstate business, it is originating in another state and it is having a longer haul, are true, can it be said of the class of that business that it is handled along with and under the same conditions as state business?

3083 A. This is what I mean by that,—I cannot answer you yes or no, I have to make an explanation of my answer; I mean you take the business originating Little Rock in the state, just as an example, and being handled in the local train to points between Little Rock and the next terminal either way, I mean that in my opinion for every pound of Little Rock business that is delivered, there will be two pounds of interstate freight, destined to that same destination; that has been my experience in the southwestern country, that Memphis, St. Louis and Kansas City in your state, would so handle that traffic that they would deliver more than the Little Rock jobber, as to these little towns, and there is an expense that is incurred on interstate business where they would have virtually three terminals instead of one; it would have a terminal when it come into Little Rock to be taken out of the car, a terminal to be put back in the car, and a terminal when it was unloaded again; Now, the proportion of that business in Arkansas, of course I cannot speak definitely.

Q. Are you referring to statements which you have heretofore made, that a shipment of L. C. L. freight from St. Louis to a point north of Little Rock, say thirty or forty miles, will be carried to Little Rock on the Iron Mountain Railroad, and there unloaded into a local car and hauled back to the point of destination?

A. It might not be hauled back; it might be hauled forwards; it might be hauled back; I believe they do haul some freight back.

3084 Q. Is that the practice in Arkansas?

A. I don't know whether it is the practice in Arkansas, but it is the practice in other places, and I know some of the roads in Arkansas do follow that practice. I know the Frisco does follow that practice in Arkansas or in Kansas or Texas or Oklahoma.

Q. You made this statement in that connection, you say:

"I have checked these things time and time again—not in the state of Arkansas, of course, but in other states; in Oklahoma, Missouri and some in Kansas, but most of my investigations have been in Oklahoma, and I have found that trains proceeding northward from the heart of Oklahoma carry more freight in their local

peddling trains, which originated at points north of Oklahoma, than they do of freight that originated in Oklahoma. It has simply been brought there in a solid car, split up and then going back for distribution, making a back-haul and receiving exactly the same service that the state less-than-carload is receiving, with the exception of making out the way-bill at the original Oklahoma point, but to counteract that they have unloaded that freight and checked it at that station."

That is the condition you refer to when you speak of the state and interstate being carried along under the same conditions?

A. Yes, sir.

Q. Does that condition exist in Arkansas?

A. I can't say positively that it does.

Q. Yet you assume it does?

A. Naturally a man has a right to assume experience and knows the condition of other roads, and the general practices of
3085 railroads in Oklahoma, Kansas and Texas, he has a right to assume in his opinions that the same practices follow.

Q. I don't question the propriety of it.

A. I said I had never checked in Arkansas; I don't say that the same condition prevails.

Q. Have you sought any information about that? Have you had any conversation with persons who know and who have looked into that?

A. I have, and I have understood—I don't know about the back freight, I don't remember the statement on that, but that freight going into Little Rock and breaking bulk and being distributed in the opposite direction which would be the same service, and that is a practice and that freight has been found in cars of that kind.

Q. It simply operates to bring that class of freight to the division point in the direction it is going, in handling it from there from the car that brought it there, isn't that a very different proposition from the other?

A. Yes, sir, the Frisco has issued orders—I am very familiar with their rules because I have worked with Mr. Levy, whom I knew as a boy, worked with him on the formation of his rules; their rule is to bulk everything to the first big town and from there distribute, and I think it is the best policy, and cheapest method that can be adopted.

Q. There is another fact involved in your assumption
3086 that for every pound of state freight that is carried, that every pound of state freight is accompanied by two pounds of interstate freight; that means that the people of Arkansas in their package purchases, buy double as much outside of the state as in it?

A. Not necessarily; it means that Little Rock merchants located a few miles from said Little Rock, Fort Smith and Pine Bluff and Memphis, are buying their stuff just as much outside of the state as they are in.

Q. Doesn't mean buying twice as much?

A. Yes, sir, and I think you will find that is true; that is the effect I have generally found, and I have simply used that; your

facts in this case will bear out this statement on that, I think; if I am incorrect, it is only my opinion taken from my own state.

Q. If you have had anything at all to do with the conditions in Arkansas, don't you know that the larger part of the interstate L. C. L. freight is shipped to a few jobbing points from which it is shipped to final destination?

A. I wouldn't think the L. C. L. was, because as a rule, jobbing points can afford to buy in carloads.

Q. My attention is called by the auditor in the Cotton Belt road, to the division in the haul shown by the statistics in this case on that line; it is 307 miles trans-state less than carloads, 132 interstate, and the state is 36, less than 1/8th of the trans-state, and about ¼th of the interstate. Under your view as to the effect
3087 of passing terminal divisions upon the expense of handling these two classes of L. C. L. freights, wouldn't there be quite a large scope for a difference in the revenue that should be derived—I mean for the service rendered and revenue derived.

A. There might be a difference.

Q. Wouldn't that indicate quite a difference?

A. It would be 132 against 36.

Q. And it would be 36 against 307, which is 64% of the ton mileage on all business.

A. That is trans-state business?

Q. Yes.

A. Trans-state business should carry a much less rate because each mile is bearing its unit of the terminal cost.

Q. You described in your testimony in chief the manner in which cotton is picked up; you say it is picked up and carried to division points and local trains set the empties for grain also, speaking of that; you have no knowledge of how that sort of thing is handled in Arkansas, and on these lines involved in this controversy?

A. No, sir, it is general experience.

Q. Do you know how much cotton is handled by the Iron Mountain Railroad and Cotton Belt Railroad, respectively, from October to January of each year?

A. I haven't the least idea.

Q. You know it is a very large tonnage, don't you; you
3088 have stated that you had a general knowledge of the conditions?

A. I know they handle considerable cotton. I understand there was 50,000 bales of cotton compressed at Fort Smith, and I presume the Missouri Pacific gets their fair share of that cotton.

Q. Would one local train a day be able to handle the volume of that traffic moving in the way you described?

A. Yes, sir.

Q. One local train a day would do it?

A. I think the outbound local setting the empties, and inbound picking the loads up and bringing them in, I think she could possibly handle it; you might have to put on an extra train for that service; I don't know the volume of business over there; I

have known times where pick-ups had to go out and relieve division points time and again.

Q. What are "pick-ups"?

A. Trains that run out from terminals and pick up loads and carry to the next terminal.

Q. Is that kind of train used a good deal for handling that kind of freight?

A. They are not run every day, no, sir; sometimes a month goes by without a pick-up train, and sometimes they run a pick-up every other day.

Q. What is that condition that causes that?

A. The heavy movement of grain or any other commodity; solid trains come out and pick up live stock and come in with
3089 them; I have known as high as six pick-ups to go out and pick up cotton.

Q. Because there was more than the regular schedule train could handle on that particular day?

A. Yes, sir; perhaps on that particular day the market was going up, and they will dump in a load of cotton at that time, or for different reasons.

Q. You have said you didn't know the local conditions in the state?

A. No, sir.

Q. How many bales of cotton can a local freight train haul, as they are equipped in Arkansas?

A. Give me the rating of your engine and the division, and I can probably answer your question.

Q. You haven't the information yourself?

A. No, sir.

Q. I am told that 800 gross tons would be an average rating of engines?

A. In how many cars? I can tell the rating given in engine rating books.

Q. Is the rate of power of the engine dependent upon the number of cars it has to move?

A. At times it is; an engine might handle eight hundred tons weight of loaded cars, and could not handle eight hundred tons of empty cars; the draw bar pull would be excessive.

Q. You are acquainted with the kind of cars that cotton
3090 is usually hauled in?

A. It is handled in any kind of car, just so it is a good car; it might be a furniture car, or a common box car.

Q. Your general information is such that you would have some knowledge, I suppose, of the character of cars usually used in that traffic?

A. Yes, sir.

Q. Just assume such cars as you have been accustomed to?

A. I would say that a train could handle at least forty cars, and probably more; figuring 20 bales to the car, that would make 800 bales; it could probably handle more than that, picking up and everything; an engine of that rating, the cars weighing 16½ tons,

figuring 20 bales of cotton to the car, could probably drag in sixty cars; I don't know how many cars they run in Arkansas on their track; I would like to know that before I answer that question; and that would make it vary between 800 and 1200 bales; sixty cars would be a very heavy train I imagine.

Q. What would a train of sixty cars weigh, as you described?

A. It would weigh over that; my first figure was nearer right; I figured the car and its contents weighing 35 tons, the first time, and forty cars would be 1400 tons.

Q. Is that over the capacity of 800?

A. No, sir; those must be light engines; our engines come
3091 in on our divisions with thirty and forty and fifty cars.

Q. I am asking of the capacity of an 800-ton engine; I mean the weight of the cars and contents?

A. I understand that; exclusive of the caboose, that would figure a fraction over 23 cars, and 20 bales to the car would be 460 bales; I imagine that would be a very light train.

Q. Those trains are rated lighter because they have to make a good many stops, aren't they?

A. On account of her pick-ups and stops, yes, sir. I understand that a local train between stations makes better time than a fast train.

Q. You say trans-state trains are seldom run; you are not undertaking to speak for the practice on the roads that are parties to this litigation?

A. No, sir, speaking from my experience and the evidence that I have understood has gone in in this case, that is the only evidence I have got for the Missouri Pacific.

Q. If the capacity of a local train is 460 bales, as you figured out in your last answer, how many bales would it move in the course of a month, 26 working days?

A. 11,960.

Q. That would be about 33 or 34 or 35 thousand bales for the season that I called your attention to awhile ago?

A. The season extends for practically three months and a half, 41,860 bales.

3092 Q. Do you know how many bales were received in Ft. Smith annually?

A. I understood 50,000.

Q. Do you know how many in Little Rock?

A. I haven't the least idea.

Q. You have already testified you had no knowledge of Little Rock terminals; you don't know how they handle Red Ball trains and Green Ball trains?

A. Nothing except the rules.

Q. You have no knowledge of the arrangement of the tracks there, the sidings?

A. None whatever.

Q. You have already testified that you only spent a day or a day and a half there, and you didn't go to the yards?

A. No, sir.

Q. You had no opportunity of seeing what conditions at the yards were?

A. I did not.

Q. I want to call your attention to some statements which you made in that connection, when you made the statement that a Red Ball train could go into Little Rock with fifty or sixty tons of its tonnage for Texas, and the rest was divided up to go somewhere else, with the result that other cars would be put into that train. What do you base such a statement as that on, with regard to that class of traffic, without knowledge of the conditions at Little Rock?

A. From these rules right here.

3093 Q. You say even if the trans-state trains were run right through, it would have to stand upon the main line for twenty or thirty minutes at each division?

A. It would require the main line to be left open at least ten or twenty or thirty minutes before its arrival.

Q. Of course, whenever a train has to be let past, it is necessary for a passage to be left open; you know nothing about the length of time required; it is a mere estimate of yours?

A. No, sir, I know that no train can get through a terminal where she has got to get her boxes examined, under twenty or thirty minutes, with the switching of her engine and caboose.

Q. The point I want to call your attention to, the manner in which that inspection is made depends upon the arrangement of the classification terminals through which these trains are carried, doesn't it?

A. To a certain extent it does.

Q. And you could not determine, or could not undertake to say with any degree of accuracy, could you, as to what the practice would be at a given place and given terminal, without knowing something about the arrangement of the yards?

A. I wouldn't know that positively, but I would to a more or less extent; I have taken this here (book governing movement of red ball and green ball trains) and found that at some of the

3094 terminals, I find a train going into De Soto is delayed thirty minutes; a train going into Piedmont is delayed thirty minutes; a train coming into Knobel is delayed thirty minutes; into Wynne, it is delayed there thirty minutes, and it is natural to presume those are conditions that exist elsewhere.

Q. You are reading that from the book of instructions?

A. Yes, sir, I find that Red Ball trains passing from Texarkana to St. Louis, passing through Little Rock at 2:50 in the morning, are delayed there until 3:45, or 55 minutes it is delayed there, under its own schedule; at Hoxie, it is delayed thirty minutes; Piedmont 30 minutes; De Soto 30 minutes.

Q. Does that involve an obstruction of the main track at those places for that length of time?

A. I said main or passing track; I think you will find that in my testimony; if a train is going right through, the better policy is to stand it right on the main track while the change is made; it may be put in the passing track; there may be a block of passing track.

Q. Those places that you enumerated are division terminals are they not?

A. Yes, sir.

Q. And are you aware that each of them has receiving tracks, and that the stopping of these does not affect the passing tracks at all?

A. I am not aware of that fact.

3095 Q. That is a fact, I am told; now, that would provide a convenient method of handling those trains, without disturbing the main line track?

A. Yes, sir, and it would incur a very great expense in providing a receiving track for these trains to pass on, the building and maintaining.

Q. Wouldn't these receiving tracks accommodate other trains besides trains carrying trans-state traffic,—state and interstate trains?

A. I don't understand that state traffic passes through in trains of that kind, but I understand that state trains are taken in and broken up and made up again at the terminal, and therefore, a receiving track would not be used for that purpose.

Q. What is the purpose of a receiving track?

A. To hold a train on until it is broken up.

Q. Couldn't it be used for any other purpose?

A. Yes, they could store cars on it if they wanted to.

Q. It could be utilized in any way?

A. Yes, sir, but they would have to clean it out every time a trans-state train came along, if they were running them.

Q. You made the statement that the local train when it gets into the station has already done the switching?

A. If it has followed its instructions.

Q. That the cars are all made up in order, and when the switching engine in a yard gets hold of the local, all it has to do is set out the cars.

3096 A. I don't think that there is; these are strictly Red Ball rules I am going by; if I had the general rules, the transportation rules, I could probably find that for you.

Q. Just a moment ago, in speaking about these receiving tracks, I understand you to state that the trans-state trains were not broken up like the local trains were, and for that reason the receiving tracks were provided for use of trans-state trains, because it would not be useful for other trains?

A. I did not say it would not be useful for other trains; I stated it would incur extra expense, if the receiving track was built.

Q. What I want to call your attention to is this. What is the occasion of breaking up these local trains if the switching has already been done before they come into the station; what occasion would there be for breaking them up?

A. Probably six were to go south, and six to go east, depending on the location of the terminal, and some were for the house track, and some were for private industries; they certainly are not going to let the train stay together.

Q. Then you must be mistaken in saying that the switching has been done when the train comes into the station?

A. I mean just in line with the Red Ball switching, as it has all been done, that they must carry them in station order, all
3097 house track cars must be together; all south bound and all east bound, if they have a south and east branch there, and all private industry cars must be together.

Q. What you should have said was, that when the local train comes into the station, it has already done its switching; then you say further, its cars are all made up in order, and when the switching engine in the yard gets hold of the local, all it has to do is to get the cars out?

A. That is it exactly.

Q. What you mean is that the cars are set in station order?

A. Yes, sir, the same as Red Ball trains.

Q. The Red Ball train being largely trans-state train, will come on the track at the terminal with the cars arranged in that order that the minimum amount of service will be required—I mean the condition the train is in will entail only the minimum amount of service that would be necessary to make the changes that are required?

A. That is true, if the train comes in according to rules.

Q. What changes that are necessary to be made in Red Ball trains would be less than in local trains?

A. You mean train for train? The work, car for car, would be the same, but as to train for train, work on the Red Ball would be considerably less than on local trains.

3098 Q. I mean train for train, and also with reference to tonnage they carry?

A. That would be train for train; that would be less on them, because all local cars would have to be handled and all of the trans-state cars, if it was a trans-state train, would not have to be.

Q. Now, in that connection then, I call your attention to a statement you made, in which you must be mistaken; you say that a through train going into a town like Little Rock,—that means I suppose on the Iron Mountain Railroad—and the local train going in with the through train would have three times as much work to do as the local train?

A. That is a stenographic error, I have not made a statement of that kind.

Q. You didn't intend to make that statement?

A. No, sir, not that there would be three times as much work to do on a local train.

JUDGE HILL: Read that please.

Mr. MOORE: "Why, the difference is simply this: that the local train when it comes in it has already done its switching; its cars are all made up in order, and when the switching engine in the yard gets hold of a local, all it has to do is to cut the cars out. They are already in order—the red ball in one place, the green ball and

other freight all broken up. That is the requirement that
3099 the local train shall bring its cars in in that way; while a through car comes in in the condition as it leaves the previous point. It is generally made up at the previous divisions or terminal point—and as near that condition as possible, but the services are virtually the same. They have the distributing of these cars around the different tracks, set them out and fill them to make a new train; set them away for the next morning; take them around to the different industry tracks.

"I should say that a through train going into a town like Little Rock, setting out its entire train, and a local train going into a town of that size, the through train would have three times as much work on it as a local train would, because more cars would be destined to Little Rock and more to be delivered."

A. That is a different proposition; you said a train going through; the balance of the answer shows something different; it indicates there are more cars destined to Little Rock, on that train, than there was on the local train; naturally, the trans-state train or train moving in more cars for Little Rock, would necessitate more work at Little Rock; I answered right upon that; really, car for car, it would be the same.

Q. The local trains will carry more cars that are destined to Little Rock than the other, and for that reason there would be more to do in breaking up that train than there would in the through train?

3100 A. I think that would be true; this is a different proposition; your question was that a trans-state train coming in would have three times as much work as the local; my answer is that a through train, I should say that a through train coming into a town like Little Rock, setting out its entire train, and a local train coming into a town of this size, the through train would have three times as much work on it as a local train would; that is a different proposition; that is correct, but the way you gave it to me at first, it was a stenographic error if it read that way.

Mr. HILL:

Q. You find it doesn't read that way?

A. No, sir, not as I understood from the Judge's question; that is, setting out its whole train in there, is the essence of the entire statement.

Mr. MOORE:

Q. What is the rule you have in mind in making that statement, that would govern the local train?

A. I mean if the Red Ball train comes in entire.

Q. I am speaking about the local; what is the rule for a local train that you have in mind in making that statement?

A. I mean that a local will have part of its cars which are through cars, going on to some other point, and all that will be necessary is to set the cars on another track, and that only a small portion
3101 of these cars on the local would be destined Little Rock, whereas in the Red Ball train, its entire tonnage would be for Little Rock.

Q. Not if it was a trans-state train?

A. Your question is, if it sets out its entire train; my answer was if it set out its entire train,—that is the whole thing in the answer.

Q. Let me call your attention now—I must confess I don't see the distinction you draw there; what you say is this, I should say, that the through train coming to a town like Little Rock, setting out its entire train, and a local train coming into a town of that size, the through train would have three times as much work on it as the local train because more cars would be destined to Little Rock and more be delivered there. Do you intend to distinguish between the through train and the local train in your reference to them there? Do you mean to indicate that all the cars in the through train are destined to Little Rock, and in the local train, all the cars are not destined to Little Rock?

A. Exactly.

Q. You didn't make that clear in your answer.

A. When I say "setting out its entire train" that means that its whole train is destined to Little Rock.

Q. You are speaking of a through train now?

A. Yes, sir.

Q. And immediately following, you spoke of the local
3102 train and you didn't qualify it.

A. Yes, sir, because the local train seldom has all its tonnage for the terminal it is going to; if I hadn't qualified the through train, it would not have had its entire tonnage for Little Rock, but I did qualify it.

Q. Have you ever known of a through train going to a station like Little Rock, with all its tonnage destined to that station?

A. Yes, sir; you put a question to me yesterday, if there was sufficient cars in a yard, you mentioned a yard somewhere, to make a solid train for Little Rock, would they put Texas cars in that train. and my answer was they would not, predicated upon the same question as my answer is here.

Q. I understand that these Red Ball trains are made of a large number of cars; let me ask you what Red Ball train consisting of fifty or sixty cars all destined to Little Rock, coming in either direction, from the Ft. Smith division or from St. Louis, wouldn't it be rather difficult to imagine a train of that many cars coming into a station like Little Rock with cars all destined to that station?

A. I wouldn't imagine they would handle fifty cars; I see their average is 33 cars.

Q. And perhaps there are twenty or fifty; I think the testimony in this case is some of them handle sixty cars?

3103 A. Possibly that is true, as it was with cotton; they handle from 23 to sixty.

Q. It would be a very remarkable condition for such a train as that to come into a station with its cars all destined to that station?

A. I would imagine it would.

Q. Where have you seen such a thing as that?

A. I saw a solid train come into Oklahoma City one time.

Q. All the cars destined to Oklahoma City?

A. Yes, sir.

Q. How many cars were there?

A. 30, 31 or 32; is was broken up there, unloaded and shipped out piece by piece; it was a train load of machinery.

Q. Is that a common occurrence out there?

A. No, sir, I don't think it is a common occurrence in any of our western states. I could tell you a condition that could easily bring that about; take a blockade, which very often exists on a railroad; take 1907, we had plenty of them where terminals would be absolutely blocked; say Guthrie was blocked, there was a blockade, and a Red Ball train would come in there; they might run a solid train clear down to Oklahoma City. Arkansas City, say, was blocked, and it would be thoroughly blocked up; they might make up a solid train and get those cars out of there; they might make up a solid train and send those cars to Oklahoma City.

3104 Q. Why do you attribute it to 1907?

A. Because there was more blockades then?

Q. Why was that?

A. Because of the panic, on account of the increase in the business; it was considered the banner year of railroads in our country.

Q. What time do those blockades accur?

A. They were blocked up as late as November; I was in Mexico at that time; I know our freight was blockaded in the United States as late as November; after I came home, for two or three months, I never thought of blockades or anything else; I was working too hard and had my mind on other things.

Q. Was the condition exceptional that fall?

A. It was considered so; I have seen solid carloads of merchandise sit on side tracks, which railroads would not do under ordinary circumstances.

Q. That was a very abnormal condition?

A. Yes, sir, I said it was. I will say it was as abnormal as you want me to.

Q. Referring now to the question as to the relation between state and interstate traffic, and assuming that the rates from Memphis to points in Arkansas are based on Arkansas state rates, and that rates from St. Louis are based on the fixed differential over the rate from Memphis, and say that the rates from Pittsburg are based upon a fixed differential over the rate from St. Louis, I want to ask

3105 you what you would say, if you wouldn't say that the state rate did affect the interstate rates to the extent that these several rates are based in the manner which I have mentioned?

A. I am sorry I cannot agree with you Judge, but I find that the Memphis-Little Rock rate is 86% of the first class rate; the St. Louis-Little Rock rate is 85%, that is the second class; the third class, Memphis-Little Rock rate is 64; the St. Louis rate is 65; the fourth class Memphis-Little Rock rate is 51.4; the St. Louis is 49; the fifth class Memphis-Little Rock rate is 38.6, St. Louis-Little Rock, 37.

Class "A" is 41.4 against 39.

Class "B" 31.4 against 32.

Class "C" 25.7 against 27.
Class "D" 21.4 against 23.
Class "E" 17 against 18.

Now, those certainly show that they are not applied one with relation to the other; there is only about 3.4% variation in the scale.

Q. Referring to the Little Rock rates which you have just recited out, and applying it to the State of Arkansas generally, I ask you if the rates from Memphis into that state are the Commission rates plus the bridge arbitrary, and then the rates from St. Louis and Pittsburg and these other places I mentioned are applied in the way I have stated, wouldn't that indicate there was a relation be-

3106 tween state and interstate rates?

A. If there was a certain arbitrary added to the state rate to make the St. Louis rate, and a certain arbitrary added to the state rate to make the Pittsburg rate, I would say that there was a relation between them, but the percentages in existence from the actual rates, show that there is a difference of only 3.4%.

I have thought of a further proposition in answer to the last question; the differentials that would be added to your state rate as from class to class, would necessarily be the same percentages as between class to class as the rates were; in order to hold the relationship.

Q. Assuming that the differentials are fixed?

A. Unless they are fixed with some relation to classes as the rates are built——

Q. They are fixed.

A. Then that condition in the state would exist.

3107 Redirect examination.

By Mr. HILL:

Q. Mr. Moore has put to you some rates on lumber, 22 cents from Louisiana to Little Rock and 14 cents from points in Arkansas to Little Rock. I will ask you if that necessarily would mean that the lumber could not move from Louisiana points into Little Rock on a 22 cent rate, and if not, why?

A. I wouldn't think it would prevent the movement, Judge. It has been my experience with the manufacture of lumber in the Western part of Arkansas, and the Eastern part of Oklahoma, those being the two fields I am familiar with, and the Southern part of Oklahoma, it costs more per thousand feet to manufacture that lumber—at least that is the testimony of the mill men, their figure being approximately $3. and $3.50 per thousand to manufacture that lumber; and it was further testified, that lumber was sold F.O.B. destination, and that a difference in the rate was absorbed by the lumber mills.

Q. There would be another factor entering into that; suppose a man could buy stumpage in Louisiana much cheaper than he could in Arkansas?

A. That would be included in that $3.50, I suppose; I don't know anything about the price of logs, etc.

Q. In other words, the lumber dealer, if he has sufficient
3108 margin of profit, can absorb the difference in rate?

A. The lumber mill man absorbs it; it was testified there before our Commission, by all the lumber dealers from our state—I mean a large part of them; I suppose there was forty present, and they testified that they were quoted the same price on Oklahoma lumber as they were on Louisiana or Texas lumber. There seems to be a margin of 50 cents or a dollar a thousand, and sometimes it would vary one way and sometimes another, it appearing that some of them wouldn't get figures in line quite quick enough, but freight rates seem to make no difference in the price of lumber, and I should judge the same condition exists in Arkansas.

Q. Mr. Moore detected a mistake you had made in your calculations in illustrating L. C. L. interstate and intrastate; you have, haven't you corrected that mistake?

A. I called the calculation this morning, but I would like to correct it; now, I say that the figure on interstate traffic would be $1.90 per ton. The figure on state traffic would be $3.84 per ton, a difference of $1.94 per ton, or an excess of 4 cents per ton over double the revenue received from the interstate traffic.

Q. Does that correction of your calculation change the proposition that you were illustrating with it?

A. It don't change the proposition in the least, except that I made the statement that there was a dollar and four cents more
3109 revenue to the railroad companies on state traffic than double what they received on interstate traffic, whereas it should have been four cents, but they receive, not only the same $1.90 from state traffic as they receive from interstate traffic, but they receive another $1.90, and then four cents additional, to take care of one additional terminal and other slight expenses chargeable to state traffic.

Q. A good many times, in his questions to you, Mr. Moore put assumptions to you on the theory that all interstate business had one handling, except trans-state and it had no handling in the state, and that all intra-state business had two handlings; is that theory true in fact?

A. I don't think it is judge; it has not been true in freight that I came in contact with, but as I explained thoroughly in my direct-examination, and I think in answer to Judge Moore's questions, this morning, that traffic from St. Louis destined to stations around Little Rock, would be handled to Little Rock, possibly they are unloaded, reloaded into peddler cars, and then handled to destination.

Q. I call your further attention to the fact that both Memphis and Fort Smith have an L. C. L. traffic that goes into the exhibits in this case as interstate business, as well as carload traffic; I presume you are sufficiently familiar with the local conditions to know the kind of handling that traffic would get?

A. It would get two within the state, considering that for
3110 the purpose of this case Memphis is considered within Arkansas.

Q. And the same is true of Ft. Smith?

A. Fort Smith is in Arkansas.

Q. It is an interstate point on account of the freight having to go out of the state?

A. Yes, sir and come back into the state.

Q. And so treated in the exhibits in this case?

A. Yes, sir, Memphis is an interstate point but for the purposes of this case, it is treated as an Arkansas point; all that traffic would have at least two handlings.

Q. You have already, in your direct examination, given the various handlings of grain and cotton and other interstate commodities?

A. I have.

Q. Mr. Moore referred to the Arkansas Commission making a 13 cent rate on sugar applicable from Helena to Texarkana, which reduced the New Orleans to Texarkana rate from something like 27 or 28 cents, I think it was, down to 23. I will ask you if those are good illustrations of the cost of service?

A. No, I didn't see where the cost of service would figure in this at all.

Q. It was a commercial condition that the railroad Commission—upon which the Commission forced a lower rate to Texarkana on sugar?

A. That is what it occurred to me to be; not knowing of any movement from Helena to Texarkana other than inter-
3111 state sugar, and it would appear to me to be made for the purpose in some way of reducing the interstate rates.

Q. I suppose your Commission where it finds there is some unjust rate, would put in some rate that would bring about what they deemed a reasonabler ate?

A. We only had one time that the Commission did that, as I testified yesterday.

Q. I think this is the only occasion it is shown that the Arkansas Commission did that; I think they ought to have done it oftener than they did. Mr. Moore had you make several comparisons of the rate per ton per mile on grain, stone, coal and cotton, and after getting the figures, he carried you into a rather extended comparison between cotton and stone; he didn't carry the comparison into grain and stone; does that run?

A. The rates on stone and grain in our state, stone is just little lower than grain.

Q. How does the cost of service on stone and grain compare?

A. I imagine that there is a much heavier cost on grain than on stone.

Q. How about the casualty risk on grain?

A. That is an item I am figuring on; the handling of grain, starting with its first loading is more expensive; the railroads must furnish what is known as grain doors, and must see that the cars are properly prepared for the handling of grain. They must pick good cars that have no leaks in their roof, and the cars must be swept and properly prepared for grain handling, and the
3112 grain then moves into the milling point—at least a large part of it does, where it is unloaded and the car sent back,

or held or used for other purposes, and when the milled product is ready to be used, another car is sent forward, loaded again, the same care being used to pick a good car.

Stone will move in a flat car, cattle car, any car they can get hold of, with sufficient foundation to hold the weight, and carried to its destination. If a car of grain should be wrecked, there would be a very heavy loss; if a car of stone should be wrecked, the loss would be the cost of re-loading.

Q. Is there not very large claims against grain shipments, not on account of wrecks, but on account of leakage and such things?

A. Yes, sir, that is a very heavy element of claim.

Q. These are voluntary rates you are referring to?

A. They were voluntary rates, yes, sir.

Q. Interstate or state?

A. Both state and interstate; the grain, of course, is interstate.

Q. What is your opinion of the representation of the cost of service as reflected in those two respective rates?

A. There is no representation of the cost of service between the two rates.

Q. Here is what I wanted Mr. Moore to call your attention to in Mr. Becker's testimony, that he did not see proper to do

3113 (Page 475, vol. 2).

"Q. There are you know, published exceptions in Texas to the Western classification?

A. Yes, sir.

Q. Why is it that Texas has worked out so many exceptions?

A. They have a commission who makes its own ratings and exceptions; what governs them I don't know.

Q. I refer to the interstate tariff where there are exceptions?

A. Those are in the nature of commodity ratings?

Q. They amount to exceptions, don't they?

A. Yes, sir; and you ask what makes that necessary?

Q. Yes.

A. I presume commercial and competitive conditions.

Q. Those Texas exceptions to the western classification apply on the traffic moving from St. Louis to Texas, do they not?

A. Yes, sir.

Q. All the trans-state traffic that moves through Arkansas or St. Louis to Texas, would be governed by the exceptions to the western classification, made to fit Texas conditions, wouldn't it?

A. That would be my understanding.

Q. Does your committee give consideration to commercial and competitive conditions also in making the classifications?

A. More or less, not to the same extent, of course, "that

3114 governs in commodity rating. You know our classification covers over quite an extensive territory, and there might be local conditions that would make it necessary to except to that classification."

I will ask you if your experience agrees with that of Mr. Becker on that line? Your observation of the classification?

A. Yes, sir, there are numerous exceptions, and they are brought

about, I wouldn't say entirely that commercial conditions bring them about; the railroads are often desirous of making exceptions.

Q. I think the testimony would indicate that the Western classification committee even considers competitive conditions?

A. It does, there is no doubt about that.

Q. You and Mr. Moore have discussed at great length the trans-state trains—supposedly trans-state trains—as a matter of fact, I believe you have explained that there were very few of these. I want to know what difference there would be in handling or switching one trans-state car say from one line of the Iron Moun tain to another, at the terminals, and picking up and placing a car from a local, at an industry track; to illustrate, suppose, they have got a trans-state car coming down the White River Branch that would strike the main line at Diaz and be switched on to some other train to be carried to New Orleans or Texas as the case might be, and at Newport, right below there, there would be a car picked up from an industry track; what would be the difference
3115 in the handling of those two cars so far as the switching movement is concerned?

A. There would be a little difference; the engine switching from the White River train would probably handle more than one car, and I imagine that the service would be performed about as follows: The White River train would come in, and the engine would take the cars off that were going to be put in other trains, or destined through going in other directions; those cars would be set out first on one track, to let that car go on if it was going on; otherwise the train would be broken up and the cars placed on the particular tracks relative to the other trains; if it was a classification yard, then when it came in, to make up this other train, they would go and pick this car up and switch it around until it got in its proper place.

Now, picking up the car from the industry track, the difference is that the engine would have to go to the industry track; it might, in that journey, pick up six, seven, eight or ten cars, and if the industry track was located in a reasonable distance, I should say less than a mile from the yard proper, the switch track the train is to be made up on, and there are six or seven cars taken out of that industry track, there would be very little difference in the expense? As soon as that came back in the yards, it would have to go through the same operation as the trans-state car would, and if they simply picked up one car, they would have the expense of that
3116 switch engine going out there to that industry track and taking off one car, as compared with the work of the switch engine in taking the trans-state car off the White River Branch train, with six or seven other cars, and that pro rata part would be its only expense.

Q. This morning Mr. Moore was asking you some questions about the carrying capacity of trains, and gave you an illustration of the rating of locomotives; I hand you a list showing the capacity of different classes of engines, used there on the Arkansas Division, and here is the capacity of different classes on the White River

Division. I wish you would look over those, I don't suppose you have had an opportunity to see them.

A. These seem to vary from 350 tons to 2400 tons per engine on different divisions and different engines.

Q. Take a movement through from Hoxie to Texarkana, one of those bridge movements, where the cars go through on a bridge, show the ratings of the engines here, and what effect that would have on your train?

A. These districts read straight down, do they? Hoxie is first, Little Rock second, and Pine Bluff third?

Q. Pine Bluff would be on a branch; Hoxie, Little Rock and then Texarkana would be on the main line?

A. Hoxie, Argenta, and Argenta to Texarkana, that would be the main line would it?

Q. Yes, Argenta is the yards across the river from Little Rock.

A. If a Red Ball train came out of Hoxie or otherwise, if
3117 it has its full tonnage, it would have to set part of those cars out when it got to Argenta.

Q. Why?

A. Because it carries 1500 tons up to Argenta and from there south, it could only carry 1200, so it would have to set out 300 tons and if you figure the average cars at 33 1/3 tons—that is a little light, but it will make the figures even,—to handle three cars would be 100 tons; that would mean setting out six cars off the train.

Q. Take the White River right before you; you see one represents the haul north and the other south?

A. Take a train starting out of Carthage, Mo., moving to Crane, any engine between 851 and 893 would carry 975 tons to Crane; between Crane and Cotton, it would reduce its tonnage 375 tons, and then from Cotter to Batesville, it would reduce its tonnage 800 tons. From Batesville, if it was going back in the back direction from Batesville to Cotter, it would carry 1200 tons, but going on south, the shipment has been raised from Cotter to Batesville to 800 tons; then from Batesville to Newport, the train would have to reduce 700 tons.

Q. Then from Newport to Argenta, is that shown on that, or would that be on the other sheet?

A. Yes, sir.

Q. There wouldn't be very much bridge movement on transstate freight with that kind of capacity of the engine?

A. Not unless they started with an under-tonnage train; a very light train; an engine would be losing the value of its
3118 capacity if it was making a bridge movement.

Q. I am just using the expression of Mr. Doddridge which was emphasized by Mr. McPherson?

A. I simply meant, going through that picking up or setting out, it would lose its character.

Q. Mr. McPherson told us about a lot of grain going over that White River Division, passing over a bridge from Carthage to Diaz, and then I suppose it would go down the river line from Bald

Knob; what do you think of that kind of a bridge which it would be on?

A. There couldn't be any bridge service except from division to division, because the same engine would carry different tonnage on each division, and it would be necessary to set out and pick up all the time to keep that engine at its maximum capacity, and unless it was so kept, the railroad would lose money by running it.

Q. If they didn't get it up to its rating, it would be very poor railroad operation?

A. They will get it to the rating if they have the rating to give it; an engine will not go out light unless it is a peculiar condition.

Q. They keep it at its rating by picking up and setting out, don't they?

A. Yes, sir.

Q. Whether it is a bridge or not, that is a pretty good railroad movement?

A. It is the only feasible practical movement in my opinion.

3119 A man would be foolish to run an engine across a division with only 700 tons, if it would carry 1200 tons.

Q. It might be pretty good railroading, but it would knock the theory of trans-state trains?

A. The through trans-state trains, it would knock it entirely.

Q. Here is a statement that you made in your testimony, I don't know whether it is sufficiently explicit to carry out your meaning. Mr. Moore is assuming some facts to you: "Assuming those two facts, that it costs more and the rate was higher, which would represent the cost of service better, the revenue or the ton miles?"

Your answer was: "The revenue would nearer represent the figure that would represent the cost of service; wouldn't any figure represent the cost of service, but the revenue would be nearer than the ton miles would; that would be presuming they both moved the same distance under the same conditions."

I wish you would explain that a little more?

A. I meant that if a shipment originating at Little Rock and moving to Gurdon—I see that is a point on the Iron Mountain in Arkansas; now, if there was a shipment of baskets and a shipment of bar iron, both moving from Little Rock to Gurdon, both weighing the same amount, I mean to say that the cost of that service could nearer be estimated by the revenue received, if the revenue was in the proper ratio.

3120 Q. It was not any assumption that the revenue was in the proper ratio?

A. No, sir, I say if the revenue was in proper ratio, then it could be estimated by taking the ton miles. If the revenue was in the proper ratio to the liability and space consumed and all the factors which enter into the making of the rate, it would be a better factor in making the per cent.

Q. Suppose baskets were classified at less than wire rope was classified, how would the revenue then represent the cost of service?

A. It would be a very poor representation of the cost of service,

because a railroad could well afford to handle four or five hundred pounds of wire rope where they could afford to handle 100 pounds of baskets.

Q. Mr. Moore questioned you somewhat about this Cotton Belt exhibit, showing their increased earnings in January, 1909, and you stated that on the face of it, it did not necessarily mean an increase in the rates, as I remember your testimony.

A. You misunderstood me; I said that upon the figures given me by Judge Moore, that the ton miles had been increased, that it meant nothing upon its face.

Q. Have you looked into that any further, and found out whether those figures compared with the six months' period involved in this case, mean anything?

A. I have.

3121 Q. Give us the result?

A. I find that in the six months' period in the Cotton Belt exhibit, and I don't remember the dates,—that the total ton miles was 8,512,807, producing a revenue of $163,064.45; I have divided both of these factors by six, as I understand this is a six months' period, and it gives me a figure of 1,418,968 ton miles, with a revenue of $28,844. plus. In the month that is spoken of, there was 775,493 ton miles, with a revenue of $30,916.20. In other words, for 1/6th of the six months, they handled nearly 700 tons more for practically $2,000 less.

Q. What would that naturally indicate?

A. An increase in the rates.

Q. Probably some prohibition on the high rates moving the stuff too?

A. It decreased the traffic, there is no doubt about that, and increased the gross revenue, and I should judge from it, it decreased the movement of low commodities; not being able to go into the matter any more than I have, I should judge it would decrease the low commodities.

Q. You know Mr. B. M. Flippin of the Iron Mountain Railroad?

A. Very well.

Q. I want to read you from page 252, vol. 1, of his testimony in this case:

"Q. I stated that it is claimed by your side, that the rates
3122 of November 2nd, 1908, are about 42% higher than the Commission rates, but I will ask you if in readjusting the interstate rates, you raised them 42% higher than the pre-existing rates?

A. I don't think the measure of difference in interstate rates was the same percentage, because of the fact that the adjustment relatively was already very much higher. The rates within the state of Arkansas, under the Commission's tariff, were inordinately low, and therefore, when we came to the point of advancing the interstate rates with relation to the state rates, we didn't have to observe the same comparison.

Q. About what percentage of increase did you put upon the interstate rates?

A. It varied according to the commodity involved.

Q. Of course, it always does that, but I am speaking generally of about what would be the average increase?

A. I should say from ten to fifteen per cent."

Take that testimony in connection with an increase of nine and a fraction per cent in the interstate revenue shown in the January exhibit, and the 96% shown there as against the admitted increase of 42% in the state revenue, what conclusions would you naturally draw from it?

A. That they had increased the state rates more than the interstate.

Q. Very considerably too?

A. Yes, the figures show that.

3123 Q. In referring to this cotton movement, Mr. Watson and Mr. Moore gave you some figures yesterday on the rate per ton per mile on the cotton movement; did that take into consideration the amount the railroad paid to the cotton compresses?

A. I didn't understand that it did; I don't know whether that was deducted first or not. I don't presume it was, because he quoted me rates.

Q. What is the custom about who pays the compress charges—the railroad or the shipper?

A. The railroad; it is always taken at the railroad's option of compressing.

Q. Take the illustration of oranges, and other citrus fruits, from Los Angeles to Little Rock and New York. On cross-examination you were cross-examined at great length on that. I brought out that the rate from Los Angeles to Little Rock was the same as the rate from Los Angeles to New York. I would like for you to estimate if you could, the difference per ton per mile on that car that would go from Los Angeles to Little Rock and one that would go from Los Angeles through Little Rock to New York?

A. You will have to pass that question for the present until I can get the distances.

Q. Coming back to cotton for a moment, I believe you stated that cotton was moved from compress points and other

3124 points in the nearby territory on the same rate; is that true?

A. Yes, sir, as a general proposition, it is true.

Q. Take as an illustration of that, a matter that I happen to know of that has been recently developed in the case. The rate from Paris, Arkansas, on the Arkansas Central, which is 42 miles from Fort Smith, is the same as from Ft. Smith, and that cotton is shipped in there, compressed there and shipped out on the same rate as another bale that was raised near Ft. Smith and was carried in there and compressed and shipped out. I will ask you if that is a fairly illustrative example of the cotton movement from small towns into the compress points?

A. It is. I have known of distances being twice that though.

Q. Then that movement from Paris to Fort Smith would represent the local haul?

A. Yes, sir.
Q. And there would be two handlings?
A. Yes.
Q. Before it took up with the other bale that had no other handling, until they both started out of the compress?
A. That is true.
Q. And it would be the same rate?
A. Yes, sir.
Q. There would be some little difference in the cost of service, I should infer?
3125 A. I should imagine there would be considerable difference in the cost of service, because that would be handled on that very expensive local train and handled as L. C. L. freight, loaded and unloaded by the railroad company.
Q. You stated to Mr. Moore yesterday that you didn't know the exact divisions made on this cotton, citrous fruits and other things, but do you know that some division is made with the other lines?
A. From my general knowledge of rates, knowing various through rates, I know there is a basis of division.
Q. What are the usual bases of division?
A. Either an arbitrary which one line demands; a constructive mileage basis, which is allowed one line and that generally is where a line performs a very short haul, or a mileage pro rate. Those are the three general divisions used.
Q. Where these different ones are used, it would affect the amount of revenue that is being credited to the State, and this trans-state and other interstate business, wouldn't it?
A. Naturally.
Q. I want to submit to you an affidavit made by Mr. C. K. Vorhees, which was filed in this suit on motion to dissolve injunction, before the Circuit Court of the United States at Little Rock, in the spring of 1909. I presume you know Mr. Vorhees?
A. Very well, he is general freight agent of the St. Louis & San Francisco Railroad.
3126 Q. On page three, he states:
"Affiant states that the representatives of the several lines discussed and considered the relations which should exist between the several class rates, and after much study and comparison with the rates in other states and with the class rates applied on interstate traffic in various portions of the territory west of the Mississippi River and other elements affecting the fixing of class rates, it was decided to recommend that the various classes should bear the following relation each to the other:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E Classes. |
|---|---|---|---|---|---|---|---|---|---|
| 100 | 83⅓ | 66⅔ | 50 | 40 | 45 | 30 | 30 | 25 | 20 Percentages." |

Are you familiar with that which I presume is put forward by Mr. Vorhees as the ideal relation of one class to another?
A. That scale looks very much to me like what is known as the Minnesota scale, and which has stood the test of the Supreme Court

of that State; I would not be absolutely positive, but it appears to me as very close to the Minnesota scale.

Q. That is presumably considered by those who made it, the ideal scale?

A. It is so considered at present, but I am sorry to say it is not in use anywhere except up there, that I know of.

3127 Q. From page 4 of Mr. Vorhee's affidavit, I want to take what he gives as the rates that were applicable; these are all interstate rates applicable at the time of the injunction in this case; he first gives those from Memphis to Little Rock:

| "1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 70 | 60 | 45 | 36 | 27 | 29 | 22 | 18 | 15 | 12" |

Then the rates from Memphis to Fort Smith, distance of 302 miles:

| "1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 102 | 87 | 67 | 49 | 40 | 42 | 35 | 30 | 28 | 23" |

Then the rates from St. Louis to Little Rock, a distance of 345 miles was:

| "1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 100 | 85 | 65 | 49 | 37 | 39 | 32 | 27 | 23 | 18" |

Now, with those before you, I will ask you if they illustrate the point that you were making in your cross-examination, that there was no proper relation between the classes in the interstate tariffs with which you could compare or establish a relation with the state tariffs?

A. They are. I had all those percentages figured out, but they seem to have disappeared; I read them into the record this morning; I read all the interstate rates in, and I had the state rates figured out as to the percentages of those. I believe forty miles is supposed to be the average haul in Arkansas.

3128 Q. 42, I think it is?

A. I have taken 40 miles; now, I will call four columns, the first column will be the Memphis to Little Rock rate, the second column will be the Memphis to Ft. Smith rate, the third column will be the St. Louis to Little Rock rate, and the fourth column will be the Arkansas Standard Distance Tariff #3, for forty miles:

| | M.-L. R. | M.-F. S. | St. L.-L. R. | ASDT. #3. |
|---|---|---|---|---|
| 2nd | 86 | 85.3 | 85 | 90 |
| 3rd | 64 | 65.7 | 65 | 80 |
| 4th | 51.4 | 48 | 49 | 66.6 |
| 5th | 38.6 | 39.2 | 37 | 50 |
| "A" | 41.4 | 41.1 | 39 | 53.3 |
| "B" | 31.4 | 34.3 | 32 | 40 |
| "C" | 25.7 | 29.4 | 27 | 30 |
| "D" | 21.4 | 27.4 | 23 | 26.6 |
| "E" | 17 | 22.5 | 18 | 23.3 |

Those are the percentages of first class rate in each class. Now, that shows that the relation of the interstate rates to the state rates for the average haul in Arkansas, is not relative at all.

Q. There is not one of those interstate rates where you could make the relation so it would fit in with another?

A. No, sir.

Mr. MOORE:

3129 Q. Are those the rates in force now?

A. No, sir, the ones in 1907, I understand.

Mr. HILL:

Q. Were those rates Mr. Vorhees has been testifying about, the interstate rates in force at the time of the injunction?

A. Yes, sir, these are the rates I took from that affidavit, and 40 miles distance rate in Arkansas.

Q. If anybody wants the job of figuring out which one of the interstate schedule of rates you would have to figure on, he would have a pretty difficult job?

A. I wouldn't like to have to take it up.

Q. Here is a scale of miles that Mr. Hamilton has gathered up, illustrating the proposition I asked you about, that you can use in answering the question I propounded awhile ago on orange shipments to Little Rock and New York from Los Angeles.

A. This table appears to show that the distance from Los Angeles to Little Rock, via El Paso and Texarkana is 1815 miles, and the distance, Los Angeles to New York, via El Paso, Texarkana, St. Louis and New York, via Pennsylvania Lines, 3219 miles, the distance to Little Rock being 56 decimal per cent of the through distance, and if the same rate applied from Los Angeles to New York, it would mean that the revenue per ton per mile would be cut down in just those relations.

3130 Recross-examination.

By Mr. MOORE:

Q. Why do you use forty miles as the average length of the haul in the table you have just prepared?

A. I understand about forty miles was the average length of the haul in Arkansas.

Q. The figures furnished you in the affidavit of Mr. Vorhees were the voluntary rates put in by the railroads after the injunction was granted in this case?

A. No, sir, I understood they were in prior to that.

Q. You stated that the railroad companies paid the compress companies?

A. I said that was the general practice.

Q. For what service is that paid?

A. Compressing, marking and patching.

Q. Does it not also include on the lines in this litigation, the loading and unloading of cotton at compress points?

A. That I don't know. I don't understand that it covers loading and unloading; in our state, it includes, compressing, patching and handling in the way of putting new ties on it, making it in such condition that it can be shipped.

Q. If it is true that ten cents a hundred is paid by the railroad company to the compress company for all services connected with cotton, including loading and unloading at compress points, that would cover the service which you have stated on this examination, was rendered by the railroads wouldn't it?

3131 A. It would partially cover the services.

Mr. HILL:

Q. Who pays that, the railroad or the compress?

A. The railroads.

Q. Pays it to the compress for the services?

A. Yes, sir.

Mr. MOORE:

Q. As I am informed, the railroad companies pay the compress 10 cents per hundred pounds, and that includes loading and unloading. Your attention was called a moment ago to the increase in revenues shown on the exhibits of the Cotton Belt Railroad in January, 1909. In order to know to what that is due, what brought that about, you would have to know something in regard to the shipping of commodities during the two periods?

A. To know the exact reason for that, yes.

Q. Suppose that in one period the tonnage was composed of lower grade commodities than it did in another, that would change the revenue derived from it?

A. It appears that it does.

Q. For that reason, it would be necessary to have a knowledge of the extent to which the character of commodities, whether low or high grade shifted, in order to know what caused the increase?

A. To perfectly analyze the statement, yes, sir; I stated that in my answer.

Q. You were asked and you made a statement in regard to the effect of the engine capacity on the White River Branch,

3132 upon the handling of trans-state freights; I believe you stated you knew the top geography of the country pretty well and of the railroad lines; is there any trans-state freights handled on the White River Branch of the Iron Mountain Railroad?

A. I understood Kansas City grain goes down that branch.

Q. Where does it connect?

A. I don't know exactly; I only asked a few general questions, and did not go into detail.

Q. I think there is a connection there at Carthage, but you don't know the amount of trans-state tonnage that passes through there?

A. I do not.

Q. Do you know anything about the physical condition of that road as to the grades?

A. No, sir, nothing except the knowledge I get from the rating of the engine sheet; I get a pretty good knowledge from that.

Q. What do they indicate in regard to grades?

A. They vary considerably; some places they must have the minimum and some places the maximum; that indicates over there that the cost of service on one division would not be the cost of service on another division.

Mr. HILL:

Q. The revenue would be the same, wouldn't it?

A. Absolutely.

Q. I see in this statement of the capacity of the different classes of engines, taking the Hoxie district, numbers 438 to 457
3133 and 501 to 545 are rated at 1500 tons?

A. I presume so, you have the paper; the variation appears on the engine rating, regardless of the engine number.

Q. I notice certain other numbers are rated at different rates, say 1250 and so on; the object of that is to show the classification of these engines?

A. Yes, sir, show what every engine run on the road can pull over a given division.

Q. That means 438 to 457 can pull 1500 tons in the Hoxie District?

A. Yes, sir, over the division stated.

Q. And then it means that engines 2302 to 2347 can pull 1250 over that district?

A. Yes, sir, it means they are poorer grade engines than the others.

Q. In other words, it is to show the grading of the different groups of engines?

A. Each engine specifically.

Q. Of each of the engines that is embraced within the numbers that is contained here in this tabulation?

A. Yes, sir, and supposed to contain every engine on the road.

Q. We have about 60 engines with a capacity of 1500 tons?

A. Yes, sir.

Q. Then we have forty or more of 1250 tons?

A. Yes, sir, some number of engines.

Q. Now, I see the Little Rock District runs the same way, as to the capacity of the engines, except that the capacities are
3134 different.

A. Yes, sir, it is lighter, I believe.

Q. But the purpose of this is to give information as to the capacity of these engines on that route?

A. The purpose of that statement in that official time card is to advise employees as to what tonnage they must load on the engines in pulling them from division to division; I think there is something else that goes with that that is not there, and that is a statement of the penalties that are added for the number of cars; it would be a peculiar rating if it didn't carry that with it; they probably carry it with the book of rules; an engine couldn't carry 1500 tons of empty cars.

Q. Now, one of these sheets to which your attention was called, gives the capacity of engines on the main line, doesn't it?

A. Yes, sir, that is what I understand.

Q. And another one gives the capacity of engines on the White River Branch?

A. Yes, sir.

Q. Those engines on the White River Division are an entirely different class of engines adapted to grade and conditions?

A. I don't know about that.

Q. From your general knowledge, wouldn't you know about that?

A. They might run another engine on that division; they
3135 would rate it accordingly when they got it over there; I suppose some engines are shown on different divisions.

Q. Look at the list and see if they are the same or different engines?

A. They seem to have different engines on different divisions.

Q. Isn't the class of traffic different on the White River Division from that on the main line, and on the Pine Bluff and Fort Smith Branches?

A. Generally speaking, I should say the traffic was heavier on the main line; I wouldn't imagine the character of traffic was any different.

Q. I mean the density of the traffic?

A. I should imagine the main line traffic was more dense than on the branch line; if you would want my opinion, I would say the best engines are on the main line.

Q. You undertook to describe the switching process at Newport; have you any knowledge acquired from observation, as to the manner of switching cars at Newport?

A. I have not. I described the general switching arrangements for conditions as I described them.

Q. Referring to your statement in regard to making a comparison of rates between grain and stone, wouldn't the value of the comparison be entirely influenced by the amount of grain moving and the amount of stone?

A. There is not a balanced reciprocal movement of grain,
3136 and there is of stone.

Q. There is on grain on Arkansas lines?

A. I was testifying as to the rates in Oklahoma.

Q. The question I asked you is whether there is not a reciprocal tonnage in very much larger volume on one than on the other, that would influence the comparsion?

A. It would have an effect upon it.

Q. The testimony in this case shows that those cars that haul grain south go back loaded with other tonnage in our state, on these lines involved, both of them.

A. We contend in our state that the empty movement is northbound; the stone movement is northbound, and the grain moves south.

Q. You have revised your figures on the revenue per ton on interstate traffic as shown on Exhibit 26?

A. I did that this morning.

Q. I see that you have still used the average haul of state L. C. L. freight for the purpose of ascertaining the average revenue per ton on interstate freight?

A. Yes, sir, the only thing I did was to revise the error I made in carrying one figure.

Q. In other words, to ascertain the revenue per ton on interstate freight, you multiply the revenue per ton per mile by the average length of the haul of state instead of interstate?

A. Yes, sir, in order to show the revenue accruing to the railroad from the identical movement in the state, and the interstate over that very piece of track.

3137 Q. And in doing that, you utterly disregard the difference produced by the difference in the long and short hauls, do you not?

A. I do, because it doesn't figure in the proposition that I used; I was trying to show that the state freight did pay an extra premium on account of its short haul, and it was the very reason I used those figures to show that it is based on the same figures that the long haul is based on, and in addition to the same figure again, four cents additional.

Q. In comparing the terminal handlings of state and interstate L. C. L. freight, you attribute two terminal handlings to state freight, and what number to interstate?

A. Some of it will have one, some will have three; I went into that largely this morning.

Q. You base your assumption of three handlings upon the proposition that you described here this morning, it was loaded, came in, unloaded, and perhaps back-hauled?

A. Yes, sir, and the further condition of traffic from Fort Smith and Memphis which I did not take into consideration this morning.

Q. Do you know the relative volume of Ft. Smith traffic as between state and trans-state?

A. No, sir, I haven't the least idea.

Q. I believe you stated the action of the Arkansas Commission in rating sugar in the connection to which I called it to your attention on cross-examination, was a commercial condition

3138 forced by the Commission; wasn't it rather a rate making condition forced by that commission?

A. It was a commercial rate condition; it was certainly a commercial condition, if they reduced the price of sugar.

Q. Why did you regard that as a commercial condition?

A. They reduced the price in sugar as they reduced the rate on it; it was a commercial condition governing the rates, was what I intended to convey.

Q. Isn't it a rate condition governing the commercial condition?

A. Either way you want to put it; what I want to draw is the idea that it was not a proposition of cost.

Q. What you meant was that the action of the commission had resulted by reducing the rate on sugar and consequently reducing the price of sugar?

A. I presume it did.

Redirect examination.

By Mr. HILL:

Q. In speaking of this Cotton Belt statement of January, 1909, Mr. Moore asked you about the fluctuations in the commodities; judging from your knowledge of the situation generally, would there be any fluctuation as between state and interstate that would be material in any one month?

3139 A. Not unless some unusual condition brought it about, I don't think there would.

Q. You would look for information to the relative tonnage of each commodity in any given month of the year?

A. Relatively there might be a condition that something would move heavier in one month than in another.

Q. That would be an exceptional condition?

A. Yes, sir, ordinarily a man would look, month in and month out for the same.

Q. In using that word exceptional, Mr. Moore put a good many questions about exceptional rates, competitive rates and commercial conditions, which governed in making of rates, and things of that kind; I believe you and he fell into the habit of calling them exceptional rates; where does the volume of traffic move, is it under those kinds of rates?

A. It moves under those exceptional rates; I specified this morning it was exceptional but a general condition; I think the larger part of the traffic moves under commodity rates; they might be called exceptional rates; they are exceptions to the classifications found necessary from commercial and other conditions.

Q. By speaking of them as exceptional, you don't mean by that, it is a rate of insignificance?

A. Not by any means; there might have been some specified condition where I used the term exceptional.

Q. The commodity rate is usually regarded as an exceptional rate?

3140 A. Yes, sir.

Q. There are more movements under commodity rates than under the classes, I suppose?

A. Much larger.

Q. Speaking of those class rates, just one further idea about that; how do Arkansas class rates in Standard Distance Tariff compare with the voluntary class rates in force in Oklahoma?

A. They are much higher than the voluntary class rates in Oklahoma which move the volume of the business.

Q You mean the jobbers' rates?

A. Yes, sir, we have two standards, jobbers' rates and common class rates; the jobbers' rates move a very large part of the traffic.

Mr. Koonce admitted on the stand that 85% moved under them, and I figured that 93% moved.

Q. We had in evidence two of those kinds of tariffs; we designated one that the very little movement is under, as the "Ruebens tariff"?

A. Yes, sir; that is emigrants' movables, fellows moving their household goods, or fellows bring- a bag of flour into town.

3141 Cross-examination.

By Mr. MOORE:

Q. Is there not a difference in the character of tonnage during the different seasons?

A. Year in and year out it would be practically the same unless there was some exceptional condition.

Q. You say, there is no material difference or fluctuation in the character of tonage that is moved in July as compared with January?

A. Oh, no——

Q. I want to know if you say that——

A. —because in December cotton is moving and in July no cotton is moving. But I say, the conditions, between state and interstate, unless there is some exceptional condition that they are the same year in and year out. Month in and Month out I think the average volume of traffic is about the same. I think you will find it about the same, because when cotton is not moving something else is moving, such as grain.

Q. The question I ask you is, if it is a fact in your opinion, that there is no material fluctuation in the character of articles handled and hauled in July or August, and January.

A. No, sir, it would show ignorance to make a statement of that kind.

Q. You would say, then, that there are fluctuations?

A. Between July and August?

Q. In order to understand and know why the revenue yield—the yield of revenue had increased in January, we will say,

3142 over July or August, you will have to know what those fluctuations consisted of in tonnage, would you not?

A. In order to perfectly analyze the statement, as I told you before it would be necessary to know, but as a general proposition to look at a statement and you see that the factors, the tons, the miles, the rate or the revenue—those are the three factors—when you find those, you can tell whether a railroad has profited or whether it has lost.

Q. But you omit from your calculation of factors the character of the tonnage?

A. Well, the character of the tonnage makes little difference.

Q. Is it not the most important of all the elements that would be considered in determining what produced an increase of freight as between July and January?

A. As to what produced it, yes if you have that factor alone and no reason behind it, but if you knew there had been a general advance in rates and had this other, the tonnage, the miles, the average

distance, the revenue—you could very easily tell whether there had been an increase in favor of the railway or a decrease as against them, but to analyze it and say that the raise on grain had caused the increase or the lowering on stone had caused the decrease, it would be impossible for any man.

3143 Q. Let us assume that you did not know anything at all about what the rates are at the two periods and that you do not know anything about what the character of the commodities carried in the two periods is:

You are simply confronted with the fact that in January the revenue per ton per mile was larger than it was in July; someone asked you to account for that: would you not say, I cannot account for it unless I know the character of the tonnage and also the rates in those two periods?

A. No, sir, I would ask him to let me see the statement showing the number of tons and average distance.

Q. You would not care anything about the kind of tons?

A. If I had the time to analyze it and wanted to get to the bottom of it I might, if I wanted to find the reason, but if I was simply trying to see if the roads had lost or made money, I would simply ask him to let me see the total tons handled and the average distance hauled.

Q. You are trying to find out what increased the revenue per ton per mile; that is the only proposition. You do not know anything about the condition except that there is an increase in January over July:

You do know that there is a large fluctuation in the character of tonnage hauled in those two months:

Having that information, how would you undertake to
3144 account for the increase, not to say whether the road has made or lost, but to account for the increase.

A. I would ask one of two questions, either for the statement of the number of tons of each commodity handled and the average distance hauled, or I would ask if that was impossible and would require considerable work, I would then ask if there had been a general or specific increase in rates on any commodity.

Q. Suppose the rates had been wholly unchanged: suppose that in the month of July the commodities hauled were low grade, all of them, and in the month of January the commodities hauled were all high grade: what effect would that have upon the revenue per ton per mile?

A. It would result in increasing it.

Redirect examination.

Mr. HILL:

Q. After the railroads got the state enjoined from making their own rates and you found an increase of 96% in the state rates, you could make a pretty good guess where it would come in?

A. I said, the first question I would ask was for a list of the com-

modities covered and the tonnage; or, if that was hard to get, I would ask if there had been a general increase in rates and if there had I would not have much further to go to get the reason for it.

3145 CHARLES S. LUDLAM, a witness of lawful age, being duly produced, sworn and examined testified on behalf of the defendant as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, age, residence and occupation, Mr. Ludlam.

A. Charles S. Ludlam; age 43; residence New York City.

I am a certified public accountant under the laws of the States of New York, Illinois, Ohio, Pennsylvania and Missouri. I am a member of the firm of Haskins & Sells, Certified Public Accountants, whose main office is at #30 Broad Street, New York City, and who have branches in Chicago, St. Louis, Pittsburg, Cleveland, and London, England.

Q. Mr. Ludlam, please state somewhat the nature of the business of Haskins & Sells, giving a little history of the firm and its work generally.

A. The firm of Haskins & Sells was organized by Mr. C. W. Haskins and Mr. E. W. Sells in the year 1893.

Mr. Sells, for several years prior to the organization of the firm, had been the Auditor of the Colorado Midland Railroad Co.

Mr. Haskins had been the Auditor of the disbursements
3146 of the West Shore Railroad Company.

Mr. Sells and Mr. Haskins, were selected by the Government of the United States to make an investigation and reorganization of the accounts of the Treasury Department of the Government. They were brought together in this work, which continued for a period of two years, and upon its completion they organized the firm of Haskins & Sells to conduct accounting work.

My assocation with the firm began about three or four months after it was organized.

Q. You have been with the firm continuously since then?

A. Ever since.

Q. Without going into detail, state somewhat the nature of the work done by Haskins & Sells as public accountants.

A. We do auditing work for individuals, firms, and corporations. We devise and install systems of accounting, and make special examinations to determine the value and earning capacity of various properties and investigations for bankers and other financial interests.

A considerable portion of our work embraces the devising and installation of cost—accounting systems for various enterprises, principally of manufacturing companies.

3147 Q. From the various offices that you have, I infer that your firm does business in various parts of the United States and in England?

A. Yes, sir.

Q. Is that same character of service done in the various offices of your firm?

A. Yes, we have a large accounting practice throughout this country and Europe.

Q. What connection does your firm have with railroad work? Give what you may do along that line.

A. Our relations with our clients are naturally of a confidential and professional nature, but there are a great many of the railroads that we audit that publish our certificate and consequently make the fact known publicly that we are their auditors, and I would feel at liberty to give their names.

Among others, I might mention the Lehigh Valley, Louisville & Nashville, the Atlantic Coast Line, the Philadelphia & Reading, the Erie, the Mobile & Ohio and the Carolina and Northwestern. That is all that I recall at this moment, that publish our certificates.

In addition to that, we make a great many special examinations for railroads. Frequently we are called in to improve the systems of accounting in various of their departments.

Q. What is the general nature of that work that you do
3148 for the clients whose names you felt at liberty to mention, and others whose names you have not mentioned? What is the general nature of that work, and what does it require of you to do in the performance of your duty to these railroad clients?

A. Largely the verification of their financial results and the improvement of their accounting methods and systems.

Q. Does your firm do considerable work for railroads along the lines you have indicated?

A. Yes, sir.

Q. Do you keep employed forces of men who are familiar with railroad accounting and railroad work?

A. Yes, sir, we have quite a large number of men in our employ who have been railroad auditors and employed in accounting departments of railroads.

Q. I wish you would state your personal experience before you became connected with the Haskins & Sells Co., what work you have done.

A. I started with the Pullman Co. in Chicago when I was fourteen years of age, as office boy in the Secretary's office.

I remained with the Pullman Co. for 16 months, having been advanced before I left there to the position of bookkeeper of the books relating to the capital stock accounts of the Company. I might say incidentally that during the sixteen months I was with
3149 the Pullman Company, my salary was raised eleven times.

My health broke down then and I went out West, and in about two months I went to work with the Atlantic & Pacific at Albuquerque, N. M., now part of the Santa Fe System. I worked there about two and one half years.

I then went to Colorado as Assistant General Bookkeeper in the

Auditor's office of the Colorado Midland, a few months later becoming General Bookkeeper in the Treasurer's office.

I left that position to accept a position with Mr. J. J. Hagerman, capitalist in Colorado Springs, and was with him in Colorado Springs for several years; during that period being the Auditor and Accounting Officer of some seventeen—as I recall it, railroads, land, water and mining companies.

I then went down to New Mexico as Auditor of the Pecos Valley Railroad Co., and the Pecos River Railroad Co., and to represent Mr. Hagerman in various other interests which he had in the Pecos Valley. He had invested a very large amount of money in that part of the country.

I remained there about two years, as I recall it, and then went to New York at the request of Mr. Sells, whom I had known in Colorado Springs, to become associated with Mr. Sells.

Q. You have been either an employee or a member of that firm ever since, have you?

3150 A. Yes, sir.

Q. Were you a member of the firm from the beginning, or an employee?

A. No, sir, I went to them to take a position as accountant and I became a member of the firm in about 1900.

Q. What personal experience have you had in the way of investigating railroad accounts since you have been connected with Haskins & Sells? I mean, whether you have personally given study, thought and investigation to these railroad accounting systems, or have you left it to others.

A. I have had direct personal charge of many of our most important railroad engagements, and I have kept in touch, in a supervisory capacity, with practically all of our railroad engagements.

Q. I believe you are practically the head of the railroad accounting department of your firm, are you not?

A. I don't know as I want to say that. Mr. Sells——

Q. I mean, that work falls to you.

A. Mr. Sells is an ex-railroad auditor and he gives those matters considerable attention. Mr. Dunn, one of our partners, is also an ex-railroad auditor.

Q. But your work is largely along the line of railroad auditing and investigation?

A. Yes, sir, a considerable part of it is. I have given a great deal of attention to railroad work.

3151 Q. Since you have had actual experience, have you kept up in that way with the systems of railroad accounting and book-keeping, the division of expenses and the bases of dividing those expenses, as practiced by the railroads of the United States and other countries?

A. I think so, yes, sir.

Q. I wish you would explain, from an accounting standpoint, the method of installing a cost accounting system: if you were called upon by a railroad, or by an industrial or manufacturing plant or business house, to put in a cost accounting system—devise

it and install it—what method would you pursue in performing those duties for your clients?

A. My first attention would be directed to a study of the operating conditions; the product of the factory and the condition under which that product was produced. After I had studied the situation carefully I would proceed then to design a system that would determine accurately, or as nearly accurately as possible—of course, in all accounting systems there are certain items that you have to apportion—to determine on that basis the actual cost of the different products, or the various kinds of products that the factory might produce. That would embrace, first, the necessary accounting forms including labor reports, material requisitions, and all the different elements that would enter into the question of cost.

3152 Q. You would learn this from actual investigation of the particular business to which your attention was invited?

A. Yes, sir.

Q. Some questions have been asked from other witness, indicating that an accountant would have to be an operating man in a particular business, before he could install a cost accounting system for that particular business:

What is your view about that? What has your experience taught you in regard to that matter?

A. My judgment is that the operating man, as a general proposition, is the last man who is able to figure out his own cost; that is done by the accounting department and by the various cost departments of the different manufacturing concerns.

Naturally, in installing a system of cost, we would confer with the operating man and familiarize ourselves with the operating transactions sufficiently to be able to devise forms and install systems that would take care of all the operating transactions, but we would never depend upon the operating man's opinion of what it cost him.

Q. If an operating man installed the system, the accountants would go out of business?

A. I think also the operating men would go out of business.

There is nothing that is more generally recognized, I think, and coming to be recognized more and more every day, than
3153 the absolute importance of separating the operating and the accounting departments, particularly in railroads.

I can remember back in my day when the General Manager would instruct the Auditor how to charge certain expenses, but the financial interests, in so far as they control railroad accounting and railroad investments, have learned that it is imperative that the accounting officer should act exclusively on his own responsibility and be accountable only to the Board of Directors of the corporation, if you want to know the actual facts as to the result of operating the property.

Any operating man could make a very fine showing for his property if he was allowed to direct how the different items should be charged.

Q. Explain why that is, particularly in railroad operation.

A. In order to ascertain the true results, the further you can separate the ascertaining of those results from the man who would be interested in the results shown, the more accurate your results will be, naturally.

Q. Then your object is to get actual conditions and apply your accounting knowledge to those conditions to properly apportion your expense?

A. Yes, sir.

Q. You had some connection, did you not, Mr. Ludlam,
3154 with the Missouri rate litigation?

A. Yes, sir.

Q. Just what was your connection with that and how deeply did you go into that case?

A. Our firm was employed by the State of Missouri, by Governor Hadley, to determine as far as possible the cost of conducting the state business within the state of Missouri on certain of the railroads that enjoined certain rates that were prescribed by the Legislature of the State of Missouri. We were engaged on that work for nearly three years—I think two and one half years, or three years. We went into it, I think, very exhaustively.

Q. Just what was the general character of the work you did for the State of Missouri in those cases?

A. Very similar to the work we have done for the State of Arkansas. We made a study of the earnings and expenses of the road, and the division which was made between the state and interstate expenses.

Q. Have you gone about this just as you would go about the installation of a cost accounting system for an industrial concern, as near as the conditions would permit?

A. As near as the conditions would permit. Of course you cannot obtain the same results from a system that has been in use, that you might be able to obtain from the system that you your-
3155 self installed. In other words, you cannot determine certain elements of cost in studying past records that you might be able to provide for in designing future records.

Q. It would be more nearly analagous if I were to put my question that, if you were called upon by an industrial concern to examine their then existing accounting system and to improve it or change it, that would be more nearly the point of view in which you have gone into these cases, would it not?

A. Yes, sir, that would express it better.

Q. I do not believe I asked you how much personal connection you had with the Missouri case.

A. I kept in touch with the work and took personal charge of it for a considerable portion of the time. During the course of our examination, including the time in Court, I think I gave probably four or five months of my personal time to that engagement.

Q. Who had the more direct personal charge of it?

A. Mr. Taliaferro.

Q. Have you in that case and in this case made a study of the

accounting systems presented by the railroads and presented by the states, respectively, in these cases?

A. Yes, sir.

Q. I want to call your attention, in the first place, to the accounting system of dividing expense between state and interstate, offered by the railroad company, known as the revenue basis, with which you are doubtless very familiar:

3156 Mr. Frank Nay, Comptroller of the Rock Island Road, a witness on behalf of the plaintiff, after giving his reasons that the revenue basis was preferable to a ton mile basis, as he saw it, said (page 301, volume 2 printed record): "after making the basic approximation of the operating expenses for intrastate freight or passenger traffic, the figures thus arrived at may be increased in the proper proportion to represent the excess of the cost of transporting intrastate traffic over the cost of transporting interstate traffic."

And Mr. McPherson, along the same line, after defining the revenue basis, said (pages 350 and 351, volume 1): "To this basis as a fundamental one, should be added such additional cost as may attach to the handling of intrastate business, over that of the interstate."

I will ask you to explain the force, if there is force, to the suggestions which I have read to you from these two witnesses of the plaintiff in explanation of the revenue theory as they advocate it.

A. I think that the revenue theory as used by the railroads in this case, and as used by the railways in the Missouri case, is unsound, illogical and contrary to all accounting principles, and I think those conclusions are testified to by the remark of Mr. Nay and Mr. McPherson which you have read to me; because, if the revenue theory was the basis—an accounting basis I might say—

3157 for determining the cost, then there certainly would be no reason for adding anything to the cost after you had thus ascertained it.

Q. Why is that, Mr. Ludlam?

A. Because, after you have determined a cost, that is the cost, and when you attempt to determine your cost on your revenue basis, and then say that you must add, or that you must deduct, or that you must do anything else to that cost so obtained, you show you have not the cost to start with.

I read that whole treatise of Mr. Nay's and I must say that it was a surprise to me that a man of Mr. Nay's ability would build up so elaborate an argument covering several pages, and then, as I see it, absolutely dispose of it in the last paragraph of his essay.

Q. That is the paragraph I read to you?

A. Yes. After having explained very elaborately how he would determine the cost, he goes on to say that having thus determined your cost, your cost is of no use unless you go to work and multiply it by two, three or four, or whatever you think fit.

Q. As I remember his testimony, he had prior to that explained that the revenue was proper, or it was the best measure, because it reflected the cost of the service; it reflected the cost of the service—

that is between state and interstate—how could you add something to it then if that relation already existed?

3158 A. That is exactly the point I make. That must necessarily be illogical in its basis, if after you have reached that basis you have got to add something and that addition must depend, not upon any established fact, but upon the opinion of different people, and you cannot find any two people—I make this statement as evidenced by the testimony taken in this case—you can hardly find any two people who agree as to what amount should be added, and Mr. Nay leaves that open.

Q. I believe, in the Missouri case, there was greater variation as to that added amount than there was in this case?

A. Yes, sir. As I recall it, Mr. Sturgis started out with the proposition that you should add from seven to fifteen times. But I think after he was requested to figure out how much he would have to raise the state rates in order to make a profit on the state business if it cost fifteen times as much in proportion to the revenue to do state business as interstate, his views were modified. Or, at least, he did not advance the "fifteen times" in the latter part of his testimony, as I recall it.

Q. Passing from the question of the extra costs, and going back to the primary proposition of ascertaining your cost by the revenue derived from state and interstate traffic: how does that compare with the general accounting that prevails in business concerns generally and with railroads themselves in handling their own force?

3159 A. It is absolutely contrary to all accounting principles and practices. I have never heard the revenue theory advanced for a basis of determining the expense, except in the Missouri case and in the State of Arkansas case.

Q. In what way does it run counter to accepted accounting principles?

A. I would say both in the manufacturing, wholesaling and retailing and railroad business, on the ground that the ratio of profit is not the same on all transactions and necessarily cannot be.

Q. When you go to ascertain the value of the property, what significance do you attach to the gross earnings of the property?

A. Given the gross earnings by themselves they would mean nothing. I might illustrate that by saying that if an investor was thinking of buying a factory it would mean nothing at all to him to know that the gross earnings of that factory were a million dollars a year. He would have to know what the expenses and net earnings were. He would probably base his ideas of value upon the net earning capacity of the property.

If a man was going to buy a sugar factory, we will say, and an automobile factory, and he knew that the gross earnings of each was one million dollars, and that the combined operating expenses of the two, we will say, 75 percent of the earnings, it would never

3160 occur to him to buy the sugar factory or the automobile plant on the basis of the expenses being the same as the ratio of expenses of the two together. He would find out as positively and definitely as it could be ascertained on the actual facts, what the

actual expenses and the gross earnings of the particular factory he was thinking of buying were.

You asked me about the relation of gross earnings. A plant might be earning a million dollars gross, and still be losing money; whereas another plant might be earning a million dollars and earning a large percent of profit. Consequently, unless you considered the expense and the resulting net earnings, the gross earnings mean nothing in themselves.

Q. Yet the railroads have used gross earnings in this case to determine the relative profit of state and interstate business?

A. Yes, and I think it is illogical, unsound and contrary to all accounting principles, and I think Mr. Nay, in his last paragraph illustrates that more forcibly than anything I could say. It looks to me as though he had built up in several pages of essay an elaborate—you might call it a snow-man—only to knock it down in the last three or four lines; because he proceeds to say after you have thus determined your costs, they are not your costs, but you must find out what they are.

3161 Q. I believe he also stated, if I remember it correctly, that unless there was a proper relation between the state and interstate rates—and by relation he meant relation of cost one to the other—that the revenue theory of dividing expenses would have no value:

I think that is the substance of his statement on that.

Assuming that to be correct, what are you going to do with the extra cost that you have to put on it after you get it bottomed on the theory that there is a cost relation between the two to start with?

A. You will have to ask somebody besides an accountant, I think, to find that out.

Q. Have you given study and investigation to the subject of whether there is a relation, cost relation I mean, between the revenue derived from state traffic and the revenue derived from interstate traffic?

A. Yes, sir.

Q. What have you found in that regard?

A. As a result of my study, I am of the opinion that there is no relation; not only between state and interstate, but between the different rates in interstate and state.

Q. What do you base that in, Mr. Ludlam?

A. The examination I have made of the rates in the State of Missouri and the State of Arkansas, in a general way, and also

3162 the exhibits which have been filed in this case.

Q. Do you understand from your investigations, the system upon which interstate rates are built?

A. In the sense that they are made largely on competitive and commercial conditions: I would not say as to any individual rate.

Q. I am not speaking of individual rates.

A. I know in a general sense, for instance, that rates from St. Louis to New Orleans are cheaper than from St. Louis to Little Rock, which illustrates the point I am trying to make.

Q. Are you also familiar with the varying distances on which

large movements are carried on the same rate? You have looked into those propositions, I presume.

A. Yes, sir, in a general sense. Divisions that are made on tap line connections, things of that kind.

Q. Mr. McPherson says in his testimony (Volume 1, page 351): "My reasons for this opinion are that the revenues of the railway are derived from different sources; the transportation of passengers and freight, and from miscellaneous services rendered; rentals, etc.

A division of these earnings can be exactly ascertained and, naturally, they reflect the value to the railway of each class of the service it performs."

Then he follows:

3163 "The passenger and freight revenue consist of both intrastate and interstate traffic; the revenue from each of which can also be exactly ascertained. Moreover, the "revenue basis" is reflective of the efforts of the traffic men who make the rates, to consider, in a measure, the value and character of commodities, and the risk and distance attached to their transportation. This is apparent in the classification of commodities into classes and the different rates established for their carriage.

The revenue derived represents the well-established and generally recognized elements considered in fixing rates of the railway for the service it performs."

Then he takes up some illustrations. Now, I ask you to state what is your view of that analysis of the situation by Mr. McPherson.

A. Assuming that Mr. McPherson refers to the gross earnings, I disagree with him, because the value to the railroad of the business which it does is the net earnings which it derives therefrom, and not the gross earnings which it receives therefor.

Q. That is true whether you take it as referring to passenger and freight; state or interstate; miscellaneous, or what not?

A. Yes, sir. Naturally the value of the business is what it will earn, not what it will earn gross, but what it will earn net. It would not profit a railroad to take a million dollars' worth of business if it cost them a million and a half dollars to execute it.

3164 Q. I call your attention also to the fact that in this case the railroads divide their property which is in the State of Arkansas, between state traffic and interstate traffic, in proportion to the gross earnings of each, after setting aside the miscellaneous: I will ask you what your view is of that division?

A. I think that division is wrong, on account of the fact that the gross earnings, which fluctuate with every change in rate, are not, in my opinion, a fair basis to divide the property. I think you have a more equitable division if you will apportion your property on the basis of the cost.

In my judgment, the cost would represent more correctly the use made of the property by the different classes of business.

Q. Suppose there was an increase in state rates, without any exact proportional increase in the interstate rates:

What effect would that have on a division of the property or a division of the expenses?

A. The amount which the state rates were increased in excess of the interstate rates, would on the basis of apportioning property on the gross earnings, naturally increase the property assignable to the state business.

Q. Have you seen the exhibits out here by which it is shown that there was an increase of nine and a fraction per cent of interstate rates, and an increase of ninety-six and a fraction per cent on state rates, put in by Mr. Kimbell?

3165 A. Yes, sir; that increase appearing during the month of January.

Q. Yes. These figures as I understand it, represent the increase of tons per mile.

That is necessary, is it not, a result of fluctuation in gross revenue, that every time there is a change of rate, either state or interstate, as the case may be, producing a change of revenue, that there will be a change in the amount of property apportioned to the respective class and a change in the amount of expense apportioned to the respective class, when in fact there is no change?

A. Yes, sir. Apportioning the property, expenses or anything else on the revenue basis would naturally mean that if you carried a piano one day at one price, over a certain part of the road, and a month afterwards you carried another piano of the same kind, over the same piece of property and charged twice as much for carrying it; that your cost was twice as much and the proportional use of your property was twice as much in the latter case as in the former.

Q. If that piano happened to move in state business and the rate was double, it would to that extent increase the state property and state expenses?

A. Yes, sir, when figured on the gross revenue basis.

Q. If it happened to move across a state line and the rate was doubled or trebled, it would to that extent decrease the amount

3166 of interstate property and interstate expenses, and as a matter of fact there is no increase or decrease, as the case may be, in either, by reason of the change of the rate on that piano?

A. There would be no change in the cost or use of the property on account of the rate changing.

Q. Suppose they increased the piano rate 9 per cent in interstate traffic and 96 per cent in state traffic: where would you be then?

A. I think you would be just where you started, on a false premise, on the revenue basis.

Q. Mr. McPherson says at page 351:

"The revenue, therefore, expresses value, character, risk and distance, rather than quantity; and likewise considers to no little extent, the question of cost, as it is obvious that it costs more to transport some commodities, and commodities in small quantities, than it does other commodities, and commodities in larger quantities.

A consideration, therefore, of cost on the mere basis of quantity, would mean the blending of all classes of freight; a reduction of all classes of freight to a common unit, and the assumption that the cost of their transportation was equal. Also, that the length of haul and other conditions affecting the cost were equal or the same.

For these reasons, in my opinion, the revenue basis is a proper basis on which to apportion the cost, or to divide the cost of operation as between intrastate and interstate traffic."

I wish you would state wherein you think that is based on a wrong premise, if you do think so?

A. He says, if I understand your reading correctly that they consider——

Q. Look over it if you did not catch it.

3167 A. (After examining statement:) —many other elements rather than quantity. I never heard of a railroad rate that did not consider quantity.

I disagree with Mr. McPherson in this, because I think railroad rates do consider quantity equally with value, risk and distance, and I disagree with him in his premise that the revenue—by "revenue" meaning gross earnings—considers to no little extent the question of cost.

He goes on and it seems to me he contradicts himself, because he says:

"It is obvious that it costs more to transport some commodities, and commodities in small quantities, than it does other commodities, and commodities in larger quantities."

I am unable to understand what he means when he says that they don't consider quantity, and then says that it costs more to transport commodities in small quantities and others in larger quantities.

Q. Does the revenue derived from the rates represent the cost of the service, as you find it in your investigations in your railroad experience?

A. No, sir.

Q. Is there any system to your knowledge, by which a rate maker can ascertain the cost of service?

A. I don't think the rate maker, as a rule, has any specific data as to the cost of the service.

He knows in a general way how much it costs per ton per

3168 mile, to move freight on his railroad—as a general rule he does not have that information by divisions—and he knows in a general way—to use the illustration that has been referred to here frequently, that a carload of baskets won't weigh as much as a car of pig lead, and therefore has some idea of equalizing, that they should charge more per pound for a carload of baskets than they should for a carload of pig lead.

Q. Well, there is a vast difference of expense upon one division of the road than another, I should take it.

A. Yes, sir.

Q. We had evidence here this morning that the difference in the ratings of locomotives on the White River branch of the Iron Mountain and locomotives that were run on the main line of the Iron Mountain:

Q. What effect would that have on the cost of the service?

A. There would be a great difference in the cost of service on different divisions of the line, according to the grades and curvatures.

Q. And the ability of the engine to handle larger or smaller trains, I suppose?

A. Yes, sir.

Q. Suppose there was a lime kiln on the White River branch on the Iron Mountain road and they wanted a lime rate: that lime would move on every other line of the road:

How would the rate man know the cost of the service when
3169 he started in to fix that rate?

A. I have never seen any statistics of any railroad company that would show the specific cost by divisions, of handling lime or any other specific commodity.

Q. Have you seen the statistics of any of the railroads in operation in this southwestern country, that show the cost per ton per mile in the handling of the various commodities?

A. No, sir.

Q. Has any system been worked up so that a rate man can have the cost per ton per mile on coal, lumber or merchandise, as the case may be.

A. No, sir, not that I know of.

Q. Have you gone pretty fully into railroad accounts in this country and investigated that, so if there were such systems you would have some familiarity with them?

A. Yes, sir.

Q. Then when these gentlemen speak about the cost of service being reflected in the revenue, I would like to know if you can explain to me what basis they had in mind when they made these statements, if you are able to do it?

A. I think their basis is theories, the same as the revenue basis, and not facts.

Q. I presume the rate maker has before him, or should have before him the cost per ton per mile of handling freight upon
3170 his entire road, for the preceding year:

What value would that be to him in making specific rates?

A. In my judgment, I should say only in a general way. It would give him an idea, roughly, of the average cost of moving freight on his line, and in a general sense, a figure below which he would try not to go.

Q. That is about as far as they have gone in the statistical work of the railroads in the southwest, is it not?

A. As far as I know, yes, sir.

Q. Mr. Ludlam, have you spent any time and investigation in trying to work out any division between state and interstate, which was nearer the actual facts than the revenue theory?

A. Yes, sir. My firm has prepared a statement in this case, that we think reflects pretty closely the cost of the two classes of business in the state of Arkansas.

Q. Have you devised and assisted in the preparation of that method of accounting?

A. Yes, sir.

Q. I believe you begin this division by first taking a division between freight and passenger?

A. We accept the companies' figures on the freight and passenger. We have not gone back of the statement submitted by them in this case.

Q. Upon what basis did they divide that?

A. I understand they divide that upon the revenue train mileage basis.

3171 Q. You began, then, where they left off?

A. Yes, sir.

Q. Taking up the freight side of the matter, take the first account, "Maintenance of Way and Structures":

I wish you would state, without going into detail, the basis used and why you adopted that basis?

A. I might say that to start with we have attempted to allocate, as far as possible, the freight expenses to the local and through trains. It having been testified to in this case and it being a well known fact that there is a considerable difference between the cost of operating local and through trains, we have attempted to allocate the expenses, as I say.

Q. That was the beginning point of your work?

A. Yes, sir.

Q. Owing to the difference in the cost of local and through trains, in trying to ascertain what that was?

A. Yes, sir.

Q. Is there a difference between the cost, state and interstate, strictly speaking, or is it a difference that grows out of the use of one kind of service more than the other kind of service?

A. Out of the use of one kind of service more than another kind of service, and also in my opinion, on account of the increased use of station facilities in the state service.

3172 Q. The mere fact that the traffic passed a state line has no effect upon it?

A. No, sir.

Q. Have your investigations led you to form an opinion as to whether there is a difference in the character of the traffic carried by the trains in Arkansas, as between state and interstate, carried by the trains through Arkansas or in this southwest country?

A. No, sir, we find no difference in the general character of freight carried by the two classes of trains.

Q. I believe some of the witnesses testified they moved inseparably is that your view of it?

A Yes, sir.

Q. Take up that first division: you are seeking to work out the cost between local and through trains:

How would you take care of the first item of expense, "Maintenance of Way and structures"?

A. The maintenance of way and structures "expense" freight have been divided between local and through train service on the basis of the total engine and car miles of each class during the month of October, 1908.

Q. 1907?

A. 1907 in the Iron Mountain and 1908 in the Cotton Belt, that month being considered representative of the business for the six months ending December 31, 1907.

Q. Why did you use a car mile as the basis for that division, or engine mile, as the case may be?

3173 A. We considered that the engine and car miles represent more correctly than any other ascertainable quantity, the use which was made of the track; the use which was made of the property that these expenses represent the cost of maintaining.

Q. There has been evidence in this case to the effect that a large part of that item of expense is due to the elements, wind and water; matters with which the actual operation of the road is not concerned—the actual running of trains is not concerned in the operation of the road, I mean.

What do you say to the justice of dividing those expenses that are not caused by the running of trains, on a car mile basis?

A. I think it is entirely equitable and proper. The question of whether the actual running of trains wears the tracks out, or whether the elements wear the tracks out, and the other property that is put there for the operation of trains, is immaterial. You have to charge the expense which is incurred for the use for which it is incurred. They maintain the track and maintain the property in order that trains may be operated over the property, not on account of the weather or elements wearing the property out. They don't repair it merely to replace the wear and tear of time or the elements, but they do it in order that they may operate trains.

3174 Q. That road-bed is not there for ornamental purposes?

A. No, sir. It is exactly the same as in a case, for instance of a chair factory: when you would have to repair the roof on a chair factory it is an expense incurred which you would apportion to the cost of the chairs manufactured in that building, although, as a matter of fact, the actual making of a chair in that building has nothing to do with the wearing out of the roof. But it is a part of the cost of maintaining the property and you charge that cost to the use which is made of the property. That is an ordinary accounting principle.

Q. Is that a principle that is recognized by accountants generally and railroad accountants in the working out of accounting systems and properly distributing costs?

A. Yes, sir.

Q. I see you have added in this paper, fifty percent to the engine mileage of local trains for station switching, and have assumed that each engine mile was equivalent to two and one half car miles:

What is the reason for that, Mr. Ludlam?

A. Well, the local train does a large amount of switching at stations and there is some element of increased cost in connection with that work. We felt that fifty percent was probably the maximum amount that would possibly be claimed for that service, and therefore allowed fifty percent to be added to the engine mileage of local trains.

3175 Q. That was an item of extra expense which should be borne by the local train and you were trying to take care of in this, all items of extra cost of one train over the other?

A. Yes, sir.

Q. The next item I see added—some of the witnesses called these "arbitraries"—was counting a locomotive equivalent to two and one half car miles:

Q. How did you reach that conclusion, and why did you reach it?

A. That is a basis frequently used by railroads, based somewhat because the average locomotive has twenty wheels and a freight car has eight wheels. It is usually roughly figured about two and one half car miles to an engine mile, on a wheelage basis.

Q. That is another effort to get as near the actual value as you might put it of the property, between the engine and the car?

A. Yes, sir, it is an attempt to apportion as nearly equitable as possible these expenses.

Q. The next item is "Maintenance of Equipment":

The first sub-head is (*a*) Locomotives:

I wish you would state generally how you have apportioned those expenses and why you have done so.

A. The expense of maintenance of locomotives, freight, has been divided between yard, and local and through road locomo-
3176 tives, on the basis of the locomotive mileage of each class during the month of October, 1907, in the case of the Iron Mountain, and October, 1908, in the case of the Southwestern.

We have added to the mileage of the yard locomotive fifty percent to provide for the possible extra maintenance due to yard service, and have added fifty percent to the mileage of the road locomotive in local service to provide for the possible extra switching mileage, and again, we have added fifty percent to the switching mileage of the local train engines thus ascertained, to provide for the possible extra maintenance due to switching services, making a total of seventy five percent added to the local engine mileage.

Q. Explain just why that is done, Mr. Ludlam.

A. Well, we thought that there was an extra maintenance expense in connection with yard locomotives, as compared with road locomotives, on account of the switching they did, and we thought that fifty percent was a maximum for any such expense.

In the case of the locomotives in local service, we also added fifty percent to the mileage to provide for the switching which they did at local stations, and then added fifty percent again to that figure to provide for the possible extra maintenance, as we felt there was some extra cost incurred by those locomotives in connection
3177 with the switching that they did.

Q. You think these items cover that extra cost?

A. I am inclined to think they are excessive.

Q. That they more than cover it?

A. Yes, sir.

Q. Now, the next item under that expense of "Maintenance and Yard Locomotives" is divided between local and through service on the basis of the number of cars of each class of service handled by

yard engines during the given month, and the total number of cars handled at terminals:

What do you say to that method of apportioning the expense? What is your reason for using that basis?

A. We think that the number of cars which the locomotives handle is the most correct basis possible for apportioning the expenses.

Q. Should there be any difference in the character of cars that are handled by locomotives in that item of expense?

A. No, sir, not in our judgment.

Q. Take the next item of "Freight Cars":

A. We think that the cars in and out of terminals is the most equitable method to apportion the expenses of yard engines.

Q. The next one I call your attention to, Mr. Ludlam, is (*b*).

A. Freight cars?

3178 Q. Yes, what is the principle upon which that apportionment is made?

A. Principally on the car mileage basis, but before applying the car mileage basis we have taken into consideration the element of repairs due to the stopping and starting of trains at way stations and the repairs due to extra terminal handling of cars in the local service.

We have accepted the figures given on this expense by Mr. A. M. Wellington.

Q. I believe it is already in evidence that that is considered a standard work on this subject?

A. I so understand.

Q. Your effort there is to take care of these elements of extra cost chargeable to freight cars in the local service, according to the best standard you can find?

A. Yes, sir.

Q. What do you say to the use of the car mile as a division of that expense, primarily?

A. After making the allowances stated, I think the division of the balance of the expense on a car mileage basis is equitable and proper, and I think the fact that expenses of this nature apportioned to Arkansas by the railroad company *is* made on a car mileage basis is a verification of that basis.

Q. That is a fact, I believe, in testimony already by Mr. Johnson?

3179 A. I so understand.

Q. The railroads having made the apportionment of expenses included in their exhibits, on that basis, you could not very well take any other, could you?

A. Well, I would not say that. If we thought there was any more equitable way, we would have taken it, but we thought that was the most equitable and therefore we took it.

Q. Here is an allowance for a stop every five miles on the local trains and twenty miles on the through trains, as affecting the expense of repairing cars:

I wish you would state the object of making that allowance.

A. The local train does stop oftener than the through train, and there is an element of expense that is due to the stopping and starting of freight trains.

It is, therefore, assumed that the local train makes a stop every five miles and the through train every twenty miles. I think it is rather overcharging the local train.

Q. You had some information on that subject, did you, that made you believe that you were putting the maximum on that?

A. We believe we are charging the local train the maximum on that account.

Q. I wish you would explain item (c) "Supervision and General":

3180 Why has that system been adopted? It runs all through this exhibit, not only as to this item but as to general expenses.

A. It is a well recognized accounting principle that you arrive at the most correct results that are obtainable, by apportioning the indirect expenses which cannot be specifically allocated in the ratio of the direct expenses which can be specifically allocated.

That is to say, if your direct expenses are one hundred dollars, and your indirect expenses ten dollars, or ten percent thereof, that you would apportion the ten percent on the basis on which you were specifically able to locate the elements composing the one hundred dollar item.

Q. Is that recognized in all accounting systems, Mr. Ludlam?

A. Yes, sir, that is the generally adopted method of distributing indirect expenses.

Q. I wish you would define just what you mean by "indirect expenses."

A. Expenses that cannot be specifically charged to—in the railroad business—to the different classes of service; or, in the manufacturing business, to the specific article of manufacture, such as salaries of superintendents, stationery and printing, heating and lighting, and things of that nature. When I say heating and lighting, I am referring to the manufacturing business.

3181 Q. What would you class in the railroad business as "supervision and general"? I don't mean each detail of it, but just give us a general description of it.

A. The supervision of the maintenance of equipment and the general expense in connection therewith which could not be specifically located as applicable to the various classes of cars.

Q. You take this under this general sub-head formulated by the Interstate Commerce Commission, of "maintenance of equipment" and take all items that you regard as belonging to the class called "supervision and general" and apportion those due to that particular service on a basis of a direct charge? Is that the plan?

A. Yes, sir.

Q. When you take the road as a whole—to save repetition I will take up the next sub-division—I believe in this exhibit it is "general expenses" the fifth sub-division in this exhibit, seems to have the same principle as a method of dividing——

A. Yes, it is impossible to say how much of the President's salary attaches to a local train or to a through train.

Q. Or to state or interstate?

A. Or to state or interstate. The same is true of the salary of the clerks in the auditor's office or any of the items entering into "general expenses."

Q. How does that result as a general accounting proposi-
3182 tion, taking the salary of the President, how is that distributed under this system?

A. Having specifically apportioned all of the expenses that you can, then you apportion the indirect expenses which would include the salary of the President, on the basis of the direct expense.

Q. And that is the system which you have followed throughout here, in all your general expenses and all overhead expenses, I believe?

A. Yes, sir, in all of the general or overhead or indirect expenses.

Q. The third sub-division in this exhibit is the "Traffic expenses": I wish you would state what basis you took there and why you took it?

A. We accepted the company's basis there and apportioned traffic expenses on the revenue or gross earnings.

Q. What do you say about that being a proper basis?

A. I don't think that is a proper basis and I think it overcharges the state business.

Q. Is there any way that you can find a proper basis of that and the way the railroad accounts are now kept; or is there any basis that would be better than that?

A. Well, I think almost any basis would be better than the revenue basis.

Personally I am inclined to favor the ton mile basis because
3183 the larger part of those expenses *are* incurred in obtaining competitive or long haul business, and your interstate freight on the average moves so much further than your state business that I think if you apportion that on a straight ton mile basis it would not vary very much from the actual fact.

Q. It would be a more favorable basis for the state to use in this case than the revenue, would it not?

A. Yes, sir.

Q. But even on that basis, Mr. Ludlam, does that reach the proper apportionment of business between state and interstate?

A. No, sir, not in my judgment, because that would be charging proportionately each ton mile of state freight with the same amount of those expenses that you would apportion each ton mile of interstate freight, and I am of the opinion that a larger proportion of the expenses should attach to each ton mile of interstate freight, to the ton mile, than to any ton mile of state freight.

Q. I do not suppose we need to dwell on that very much as our friends on the other side——

The next item is "Transportation expenses": The first sub-heading under that is "Station expenses":

I wish you would explain the basis used there and why that basis was used?

A. We have divided the station expenses between the state and interstate business on the basis of the number of tons of
3184 each class of traffic, assuming, however, that each state ton was handled twice and that each interstate ton was handled once.

Station expenses apply to the handling of the freight at the stations very largely, and we thought that it was fair to apportion those expenses on the basis of the tons handled, rather than on any other basis.

In making that division we assumed that each ton of state freight was handled twice, because naturally there would be an originating and a terminating terminal on each ton of state freight, and we assumed that each ton of interstate freight was handled once.

Some of the interstate freight is handled twice in the state—when I say handled twice in the state, I mean so far as the apportionment of expenses go—notably the interstate freight into and out of Memphis and Ft. Smith.

It is also shown in the testimony given in this case that there is a considerable handling of cotton, grain and lumber, interstate commodities of that nature, and we thought that on the whole it would be a fair average to assume the interstate was handled once, that each ton of interstate was handled once and each ton of state freight was handled twice.

Q. Is there not interstate less than carload that has more than one handling in the state?

A. Yes; the interstate less than carload, in my judgment, would be handled at least twice and in many cases four and five
3185 times in the state.

Q. It seems that you and Mr. McPherson are somewhat in accord on the use of tons for this purpose. I will read you his testimony from page 325:

"A third measure of which the railway company keeps a record is 'tons'. But this measure is useful only for minor services. Unless tons are combined with some other factors they do not represent transportation. The minor uses for which tons are employed may be the quantity handled by the men employed, and for some other purposes of statistics generally interesting to the railway company."

Is this such a use of it as he indicates there that the railroads make of it?

A. Yes, sir.

Q. The next item under "transportation expenses" is "yard and terminal expenses":

They are divided between local and through on the basis of the number of cars handled at terminals:

I wish you would explain that method of division of expense at terminals and why you used the method?

A. Well, because we thought the cars handled—the terminal is

the best basis of apportioning the yard and terminal expenses, the yard and terminal expenses being incurred for that purpose.

Q. That is another adaptation of the expense according to the use, is it not?

A. Yes, sir.

Q. The next sub-head is "Engine house expenses":

3186 You make an assumption that the local engines require 12% more engine house service per engine mile than the through engines, and that is based on the average engine run in the two classes of service. Would that take care of the extra expense?

A. We think so, yes, sir.

Q. The next sub-head is "other train expenses":

Is that again the proposition of the indirect?

A. No, sir, that is divided between local and through service in proportion to the train miles of each class of service during the month in question.

Q. Would that be a proper division?

A. In my judgment it would.

such movement: that is a summary of that, is it not?

A. Based on the claims actually paid during the month of October.

Q. The "total operating expenses" are divided between local and through train service, and intrastate and interstate business, and the costs are intended to include everything relating to the direct cost of the movement of freight trains with all expenses incident to such movement: that is a summary of that, is it not?

A. Yes, sir.

3187 Mr. HILL:

Q. Mr. Ludlam, I believe we got down to the 7th subdivision of this exhibit?

A. Yes, sir.

Q. I wish you would please explain that.

A. The 7th subdivision is an explanation of the method of dividing the train costs; that is, of apportioning the expense of the local freight trains and the expense of the through freight trains, after the same have been determined, as heretofore explained.

Q. Why is that the basis?

A. That basis of division is made on the business done by the two trains, as determined by the statistics, for the month of October, 1907.

That is to say, we found that 39.10 per cent of all the state tonnage miles and 8.70 per cent of all the interstate ton miles of freight were handled on the local train.

Q. Which exhibit have you?

A. The Iron Mountain. And that 60.90 per cent of all the state business and 91.30 per cent of all the interstate ton miles were handled on the through trains.

We assumed that the same relative conditions would exist during

the six months ended December 31, 1907, and apportioned
3188 the expense of the local trains and of the through trains on that basis. That is to say, the expense of the two classes of trains as determined, was distributed over the business which the examination showed that the two trains did.

Q. Having ascertained the relative expense of the two trains, how did you reach the intrastate and interstate division?

A. On the basis of the intrastate and interstate business done by the two classes of trains.

Q. Taking the actual ton miles of each?

A. Taking the actual ton miles of each as shown by the October statistics.

Q. In closing that freight side of the case, I see that you take the miscellaneous revenue; taxes, rentals and value of the property, and divide them on the straight revenue basis:

Why do you do that, Mr. Ludlam?

A. We accepted the railroad apportionment of those items, not having any specific information or data on which to apportion them.

Q. The result of that is that you have taken their apportionment to start with and worked out and analyzed the details of it?

A. Yes, sir.

Q. And brought the results as shown?

A. Yes, sir.

3189 Q. I wish you would take up the passenger side of the proposition and explain your method of proceeding under that: how did you proceed to work out as between state and interstate, on the passenger side of the proposition?

A. We divided the passenger expenses between the coach and the Pullman service, and the intrastate and interstate, mail and express business, practically on a car mileage basis. The mileage used in that was the month of October, 1907.

The passenger train mileage fluctuates very little from month to month.

We included in the car mileage the mileage of baggage, dining and parlor cars, and we show in this exhibit the percentage which the car miles of each class of the different kind- of cars bore to the total car mileage of the passenger cars.

Q. That is coach, Pullman, mail and express, are separated?

A. Yes, sir.

Q. And the cost of each ascertained on the basis shown?

A. Yes, sir.

Q. You followed the same general plan, I believe, as you did in the freight, as far as it was applicable?

A. As far as we considered it applicable to the passenger business.

Q. I will call your attention to the sixth sub-division
3190 "total operating expenses":

I wish you would explain briefly the meaning of that statement.

A. The total passenger operating expenses have been apportioned, as we explain in the exhibit, between coach and Pullman, intrastate and interstate, mail and express business. Such items as were not

chargeable to the cost of the train service we apportioned direct to the state business and the interstate business.

The expenses applicable to the mail and express business were assigned to those two classes of business.

Q. What did you do with the Pullmans?

A. In what way?

Q. Explain how you divided them between interstate and intrastate.

A. We apportioned that arbitrarily, twenty five percent to the state business and seventy five percent to the interstate business.

Q. Was that on the theory that twenty five percent of the use of the Pullmans was by intrastate passengers?

A. It was on the theory that not to exceed twenty five percent of the Pullmans would be by state passengers.

We thought twenty five percent was a liberal estimate.

Q. I think likely it is an over-estimate.

A. We thought it would fully cover any use of the Pullmans by state passengers.

3191 Q. I see the cost of mail and express business was ascertained before making the division of coach and Pullman expense: how did you reach that? That is in the eighth subdivision that I am referring to.

A. Well, that is explained in this exhibit; principally on the car mileage basis, or where the same cars were used for mail and express, by an apportionment on the space actually used by the two classes of business.

Q. Which page is that apportioned?

A. Under the various heads. It enters into all, practically all the different items of express.

Q. I was looking for the head where you made a charge of ten cents on that mail business; that was on station service?

A. Yes, sir.

Q. That is (*a*) under 4?

A. Yes, sir. We made an allowance of ten cents per day for handling of mail at certain stations.

Q. What was the reason for that?

A. That is an estimate of the amount it would cost them to deliver the mail where the contract required that the railroad deliver the mail to the post office.

Q. That is an item of expense to the railroad, is it not?

A. Oh, yes, sir.

Q. I believe you had some eminent railroad mail expert

3192 testifying to that did you not?

A. Yes, sir, we had the testimony of some railroad official given in conection with mail service. I think it was Mr. Peabody of the Santa Fe.

Q. I believe Mr. Wharton said it was Mr. Teachout.

Mr. Ludlam, in your opinion what do you think of these bases of expense between state and interstate, which these exhibits which we have gone over have worked out, as comparable with other methods of dividing state and interstate business and expenses?

A. I think they are as nearly correct as it is possible to make them.

Q. How do you think it compares with the ton mile division; or bases of division of expense which have been used in the Missouri cases and probably in other cases?

A. I think it is an improvement over the division on a flat ton mile basis.

Q. In the Missouri case, I believe, after making a division on the flat ton mile, there were additions made to cover extra cost, based upon opinion: is that correct?

A. Yes, sir.

Q. What do you think of this as compared to the flat ton mile where part of the results were dependent upon opinion evidence, without data?

A. I think we get nearer to the actual facts in this division than in an allowance made largely upon a basis of judgment.

3193 Q. Here is the statement of Mr. McPherson giving his reasons why the ton mile basis is not a true basis (Volume 1, page 327):

"The 'ton mile' basis has been considered academically and discussed as available for the purposes of determining cost, but it will not bear the application of practical facts, nor stand an analysis from an operating standpoint.

It must assume, if it is to truthfully reflect the cost of operation, that all commodities can be reduced to a common basis of transportation cost."

That is the first proposition: Now, Mr. Ludlam, is that statement true? How, whatever may be its truth applied to the ton mileage, is that true, and can this criticism be justly directed towards the method of apportionment of cost which you have worked out in this exhibit?

A. We think not.

Q. Why?

A. Because we have determined the cost of the local trains and the cost of the through trains, and then apportioned those costs between the state and the interstate business, on the basis of the tonnage of each class of business handled by the two classes of train.

3194 Q. That obviates the reduction of all commodities "To a common basis of transportation cost," to use Mr. McPherson's language?

A. Yes, sir.

Q. When you came to the passenger side of the question have you obviated that——

A. Yes, sir, we think so.

Q. —by separating it?

A. By determining the cost of the different classes of service and apportioning that on the basis of the service rendered.

Q. The next objection he has is this:

"Further, it must assume that all conditions on railway com-

panies are alike, and that the conditions on each railway are alike in all of its parts, divisions, and districts."

Is this division subject to that criticism?

A. No, sir, we think not, because we have again, as I say, apportioned the train cost and the cost of the train are apportioned upon the business handled by the train.

Q. Next he says:

"It must assume also, that a short haul and a long haul of traffic may be made at pro rata cost."

Q. Have you taken care of that?

A. We think so, because we determined the cost of the local trains and the cost of the through trains. The local trains
3195 would naturally handle the short haul and the through trains the long haul business.

Q. Next he says:

"It must likewise assume that the efficiency of the cars in intrastate and interstate traffic is equal."

What do you say to that criticism?

A. We have distributed the expense of the car according to the train under which it was handled.

Q. So there is no assumption in this case at all, then?

A. No, sir.

Q. He says:

"It must also assume that every ton mile moved over the railway uses all facilities that every other ton mile moved over the railway uses, and that every ton mile moved over the railway uses all the facilities provided by the railway company for its operation:" what do you say to that?

A. Having made specific allowance for the increased cost of switching and repairs incident to the local service—that is, the service of local trains, and distributed the station expense on the basis of the tonnage handled at the station, we think this method takes care of that.

Q. And removes the objections which he and others have indicated toward that ton mile theory?

A. Yes, sir, it seems so to us.

Q. Let us analyze again these objections and see how
3196 nearly applicable they are to the revenue theory, Mr. Ludlam:

He says, referring to the ton mile basis:

"It must assume, if it is to truthfully reflect the cost of operation, that all commodities can be reduced to a common basis of transportation:"

What does the revenue theory assume on that subject?

A. I think that it would assume that far more than the flat ton mile theory on account of the large fluctuations in the revenue on the different lengths of haul, and without any regard whatever to the actual cost of earning that revenue.

Q. Taking all these divergent revenues and reducing them to a common level as representative of the cost?

A. Yes, sir.

Q. The flat ton mile, would, in a measure, do that same thing, if you did not make allowance for these extra costs?

A. Yes, if you did not make allowances.

Q. Next he says:

"Further, it must assume that all conditions on railway companies are alike, and that the conditions on each railway are alike in all of its parts, divisions and districts:"

How does that fit the revenue theory?

3197 A. That would apply specifically to the revenue theory in so far as the trans-state business is concerned, where the revenue is apportioned on a track mileage basis without regard to the expense of operating, or the difference in expense of operating different divisions, and the question of the engine capacity on different portions of the road. That is, where the revenue is pro-rated on a mileage basis it necessarily is exactly the same for each mile in the State of Arkansas. Whereas, according to the testimony that has been given, and also, it is a well-known fact, that the actual cost of operating varies not only on different railroads but on each division of a railroad.

Q. In the exhibits in this case, as I understand it, the trans-state revenue is arrived at by taking a mileage division based on the main line of the road, is it not?

A. Yes, on the line of railroad over which the traffic moved.

Q. I should not have said the main line; I meant the single track mileage over which it moves. I meant it does not take into consideration the sidetracks, or anything of that kind in making the apportionment.

A. No, sir.

Q. Now, if there was a division of the rate in Missouri that owing to grades it would be very much more expensive to operate than a division in Arkansas, to use Mr. McPherson's language, that revenue basis would make the condition on each railroad alike

3198 in all of its parts, divisions and districts?

A. Absolutely, where you distribute your gross earnings on a mileage basis you apportion to each mile of track over which that freight moves, exactly the same amount of revenue, and then when you take your expenses as a per cent of that revenue, you necessarily assume that the cost is identical on each mile of road. Nothing could be more level than that.

Q. He next says:

"It must assume also, that a short haul and a long haul of traffic may be made at pro-rata cost":

What assumptions of that kind do you find in the revenue basis, if any?

A. As a general average, the revenue is greater per ton per mile on the short haul than it is on the long haul, but there are constant exceptions to that, as can be shown by the rate.

For instance, the revenue theory would assume that it cost far more to move a car of sugar, we will say—assuming that the rate on sugar and salt varies as much in Arkansas as it does in some

cases—than it would a car of salt of the same weight, the same distance.

That is to say, it would level the expense of moving the car of salt and the car of sugar to an average of the two. It would overcharge on one car and undercharge on the other, according as the revenue fluctuated.

Q. He next says:

"It must likewise assume that the efficiency of cars in inter-
3199 state and intrastate traffic is equal":

What will the revenue theory do with that?

A. Well, the revenue theory will assume, for instance, that the efficiency of the car, we will say delivering less than car load freight, was only one half as great in the case of the interstate as it would be in the case of the state freight, because they would be receiving only one half as much per ton per mile on the movement of that freight.

Q. I believe it is in evidence here that as a matter of fact they are handled about the same.

A. They are both handled in the same car, right beside each other. The same car; the same crew, and the same station force.

Q. Now, he says next:

"It must also assume that every ton mile moved over the railway uses all facilities that every other ton mile moved over the railway uses, and that every ton mile moved over the railway uses all the facilities provided by the railway company for its operation":

What assumption, if any, does the revenue basis take in regard to the use of the facilities of a railroad?

A. Well, if the revenue basis is used to apportion the expenses, you take the per cent which all the expenses bore to all the reve-
3200 nue, and necessarily all the expenses include all those items of expense.

Q. Spread it out to every class of traffic, whether used or not.

A. Yes, sir.

Q. And make no allowance, as you have made here, for extra cost of any particular kind, not extra cost, but as near as possible the exact cost of each line of traffic?

A. No allowance whatever.

Q. Mr. Ludlam, should there be any depreciation charged in these accounts when you are seeking to divide state and interstate business?

A. No, sir, I think not.

Q. Why not, I wish you would explain your views about that?

A. Because the charges made by the railroad for maintenance of its way and structures and its maintenance of equipment, provides for the depreciation of property. It is a well known fact that taking the railroads as a whole, throughout the country, that during the last fifteen or twenty years, the properties have been vastly improved. That the cost of operation, that is, that the charges made to operating expenses for maintenance both of roadway and track and of equipment, have resulted in actually improving the road-
3201 way and largely increasing the efficiency of the equipment of railroad property.

When a rail wears out, for instance, and a new rail is put in to take its place, the expense of that replacement is charged to the operating expenses. That same plan is followed and has been followed out by the railroads generally throughout the country.

Q. Take a new tie: how is that taken care of?

A. The same practice prevails, an old worn tie is taken out of the track and a new tie is placed in the track to take its place. All the expense in connection with that transaction is charged to the operating expenses of the company.

I should say, speaking generally, and I have no doubt that would apply to the Iron Mountain in the state of Arkansas—it certainly would to all of the large railroads throughout the country,—that during the last ten years there has been a large appreciation in the property rather than any depreciation through the charges which have been made to the operating expenses of the different companies.

In fact, I think it is believed by a great many people, that an actual appraisal of the railroads made today would show a valuation far in excess of the original cost of the property.

Q. That is on account of this process that you are speaking of?

A. Yes; constant improvement going on in the railroads and has been for the last twenty years and it has been the practice
3202 in this country to charge a large proportion of those improvements and betterments against the operating expenses of the property.

Q. The Interstate Commerce Commission has made some rule on that subject, has it not?

A. Yes. They have recently required the railroad companies to charge specifically against their operating expenses for the depreciation on their equipment and that has been done in my judgment, to a very large extent, to prevent the overcharging to operating expenses of new equipment.

Q. Do you know when that rule went into effect?

A. I think it was July 1, 1907. It was two or three years ago.

Q. Now, Mr. Ludlam, on this division of mail and express, miscellaneous expenses growing out of the mail and express and other miscellaneous sources, the railroads in this case have begun by setting apart the proportion of expenses on the revenue basis and leaving the freight and passenger business to be taken care of on another basis:

I wish you would express your views about the soundness of that method of division?

A. I think that method of attempting to determine the expenses applicable to the mail and express business is erroneous, as is
3203 any other based on the revenue basis. It is assumed to start with, that the proportion of cost of doing the mail business is the same as the proportion of cost of all of the other business done by the company. It has not relation to the actual facts in the matter.

Q. Is there any reason why the proportion of that cannot be ascertained on a very definite basis instead of adopting this revenue theory?

A. We think that in our statement we have determined the approximate cost of doing that business, certainly far more accurate than any apportionment on a revenue basis could be.

Q. To illustrate your point: It is in evidence here that some twenty years ago the Missouri Pacific Railroad Company made a contract with the Pacific Express Company by which the railroad company was to receive 50% of the gross earnings of the express company and have the exclusive privilege of doing express business on the Missouri Pacific line then owned and after acquired and controlled by it.

In consideration of that contract it also gave the Missouri Pacific Railroad Company 40% of the capital stock of the express company, amounting to $2,400,000.

It is also in evidence that that capital stock has been for many years paying the Missouri Pacific Railroad Company 6% actual dividends. It is not in evidence how much service they have performed, but they are paying those dividends and paying them with great regularity and precision.

3204 Now, assume as a legal proposition that the Iron Mountain is entitled to a part of the stock as a part of the price for carrying the express: what effect would that have on this division of property and division of expenses on the revenue basis?

A. Any dividends received on that stock which would apply to the Iron Mountain Railroad Company or any earnings of the express company over and above the dividends which it actually paid which would be applicable to the Iron Mountain Railroad Company, if considered in the light of additional remuneration for carrying express business, would immediately increase the express earnings of the railroad company and attempting to determine their expenses on a revenue basis, the expense of conducting the express business would be correspondingly increased immediately.

Q. And would leave a smaller percentage to be worked out between state and interstate?

A. Freight and passenger.

Q. I meant to say freight and passenger, and following that between state and interstate?

A. Yes, and an illustration there of the fallacy of the revenue basis is accorded by the face of this contract.

If the express company—disregarding for a moment the dividends and surplus earnings of the express company—sees fit to raise or lower its rates for carrying express matter, the expenses of the

3205 railroad are immediately increased or decreased accordingly, inasmuch as the railroad company receives 50% of the gross earnings of the express company as their proportion of the express earnings. And if you distributed the expenses on a revenue basis, the expenses would fluctuate every time the express company raised or lowered their rates.

Q. There has been quite an agitation going on about the price of carrying mails: suppose Uncle Sam would think the railroads are badly oppressed and did not get enough money for it and increased their mail rates: what effect would that have on the division of the expenses?

A. Apportioned on a revenue basis, if the company received more money for carrying mail, the expense of carrying the mail would immediately increase correspondingly.

Q. Without any change in the service?

A. Without any change in the service.

Q. And if it was lowered it would work the other way?

A. If they reduced the amount paid the railroad company for carrying the mail, the expense, if apportioned on a revenue basis, would immediately decrease.

Q. And you would have a bigger problem to work out between your freight and passenger?

A. The expenses assigned to the freight and passenger business would be correspondingly increased.

Q. Mr. Ludlam, there has been a great deal said in this case about the trans-state business and the cheapness of trans-
3206 portation of freight on trans-state trains:

I want to read you a statement of Mr. McPherson (Vol. 1, page 326):

"The railway company establishes by accurate test, the hauling capacity of each locomotive, over a particular district or division to which it is assigned, and this establishes a measure that we designate as the 'potential capacity' of the locomotive, and the number of tons the locomotive draws from day to day is recorded, to determine whether the operating officers in charge of the various divisions or districts, are securing the full measure of the efficiency of the power."

3207 Q. In handling trans-state freight through Arkansas, say into Moselle, it would have about these routes to follow:

The main line from St. Louis to Texarkana, what you might call the eastern Illinois line down the east side of the river, over this Paragould leased track that has been referred to, of the Cotton Belt; or, from the northwest over the White River branch down to the connection of the main line at Diaz, close to New Port—just north of Newport; and west over the Little Rock & Fort Smith line; starting in at the state line at Van Buren and then going from Little Rock towards Louisiana, it would go to Alexandria, passing through Pine Bluff; then from Memphis, coming in from the east via Bald Knob and then south to Little Rock. Then, of course, the reverse movement, taking in those routes from the north, east or west, as the case may be:

Now, if you have any data to show the potential capacity of the locomotives on those routes I wish you would put it in evidence.

A. We have prepared an exhibit showing the tonnage capacity of engines on the St. Louis, Iron Mountain & Southern Railway Company in freight service, as shown by official timecards, issued for the government of employés only, effective during the last half of 1909, compared on the various operating districts over which so-called "trans-state" trains would pass through the state of Arkansas.

3208 As various classes of engines with varying tonnage ratings are in service on the different districts, the maximum rating on each district has been used below as the basis of comparison.

The paper last referred to is marked "Defendant's Exhibit W, Chas. S. Ludlam, 6/1/1910, M. J. C." and is in the words and figures as follows, to wit:

For Exhibit "W", see Volume 9, page 5833.

3209 Q. What would be the direct effect of this upon these so-called "trans-state" trains moving through the state like they are on a bridge, Mr. Ludlam?

A. It shows that such a train would be an impossibility.

Q. Suppose there was a train of trans-state freight made up at St. Louis, going south; that would have one of two routes to take: one on the main line via Poplar Bluff and those hills north of that—I have forgotten the name—and the other using this leased line that they lease from the Cotton Belt track:

What would be the effect of the operation of a train of that kind?

A. The official time-table, number 16, of the St. Louis, Iron Mountain & Southern, taking effect July 4, 1909, shows that any one of the engines, from number 1 to number 100, could haul 1900 tons from St. Louis to De Soto, but that any one of those same engines could only haul 900 tons from De Soto to Piedmont. That is, the train would have to be more than divided in two when it got to De Soto.

When it got to Piedmont it could haul from Piedmont to Hoxie 2300 tons. In order to run through from St. Louis to Hoxie the train would have to have 1,000 tons less than the capacity of the engine between St. Louis and De Soto, and it would have to have 1400 tons less than the capacity of the engine between Piedmont and Hoxie. That is, the engine would be working about one-half its capacity a large part of the distance—one-half or less than one-half of its capacity.

3210 Q. Of course that would necessarily mean the breaking up of the train?

A. Yes, sir.

Q. Now, supposing instead of taking that route they took this other low grade route: I don't care about going into ratings on that, but just call attention to this, that it is a low grade line:

That would be more economical to operate, I presume, than this other?

A. If it is a low grade line it undoubtedly would be.

Q. And this trans-state matter either must take the expensive operation on the main line, or else go to the expense of hiring another track on another railroad, to take care of it?

A. In order to operate more economically—in order to handle it cheaper, yes, sir.

Q. Where does the benefit to the state of Arkansas come in on that sort of economical management of these trans-state trains through Missouri and over these leased lines, or out here in Missouri and eastern Arkansas?

A. Arkansas would not be interested in the economical operation of trans-state freight.

Q. Here is a statement of Mr. McPherson's on page 357:

"Exhibit 5 shows that for the six months ending December 31,

1907, the average length of haul of all intrastate freight was 70 miles, while the average length of haul of all interstate freight in Arkansas was 224 miles.

3211 This means that each shipment of interstate freight moves on an average of 224 miles with but one terminal expense, either that of forwarding or delivering. Each intrastate shipment moves on an average of but 70 miles and incurs two terminal costs for that distance."

He goes into that at considerable length and makes a calculation of eight times the expenses of the intrastate, for one of the interstate.

He does that on the use of equipment, the station handlings, and I have forgotten how many other things he runs that proposition into:

In your exhibits, have you take- care of the division of cost of those station handlings, and if so, how have you done so?

A. I presume in his testimony, Mr. McPherson uses the word "terminal" in the sense of the station expense, as I am sure neither Mr. McPherson nor any other railroad man, would state that each shipment of interstate freight moves on an average of 224 miles, with but one terminal; because it is well known that each shipment of interstate has a terminal expense at each division terminal, which, as I understand it, in the state of Arkansas is approximately 100 miles.

Therefore, if he uses the word "terminal" in the sense I assume he does, as meaning the station expense, we have provided for that by apportioning the station expenses actually incurred in the state of Arkansas upon the basis of the tons of freight handled in the state of Arkansas.

3212 Q. So the ton miles that he used to illustrate it, would have no bearing if you have taken care of it in the actual tonnage?

A. It would not apply in any sense.

Q. You have taken care of it directly between state and interstate?

A. Yes, sir.

Q. So his eight times one, if that be correct on a ton mile division, has been taken care of absolutely?

A. Yes, in my judgment it has.

Q. Then he uses that in regard to the equipment, maintenance of equipment, too, I think?

A Yes, sir.

Q. Have you taken care of the eight times one, as he puts it there, in connection with that?

A. Having made provision for the increased expense of maintenance of freight cars on account of the more frequent starting and stopping of local trains, on account of the terminal handlings, we think we have fully covered that feature of the question.

Q. You have done that between the local and through, of course?

A. Yes, sir.

Q. Separating each one and taking care of all the extra expense

growing out of the point he raises there, wherever it is applicable?

A. Yes, sir; we think so.

3213 Q. There is some criticism made of your station handlings, allowing two for intrastate and one for interstate when there is some part of the business trans-state which does not have as much station handling as the other:

I wish you would explain why you adopted the plan stated in your exhibit.

A. We have charged the state tonnage with two station handlings, assuming that each ton of state freight would be handled twice, at its originating and terminating points.

We have charged each ton of interstate freight with one handling, assuming that each ton of interstate freight would be handled once.

While we recognize the fact that there is certain of the interstate freight that is trans-state and therefore would not have specific station handlings within the state, we think that there is a large part of the interstate business that would have two handlings.

That would apply specifically in cases of freight into and out of Memphis, the expenses of the Memphis station being included as an expense of the state of Arkansas.

It would also include the handling of interstate freight into and out of Fort Smith.

It would also include the interchange made within the state of Arkansas of trans-state freight with other roads, which would constitute a large proportion of the trans-state business of the Iron Mountain road in the state of Arkansas.

3214 Q. Taking all those elements into consideration, you felt like you had made sufficient allowance for that?

A. Yes, taking all those elements into consideration we thought that a very fair apportionment would be to charge the interstate freight with one handling on the average within the state of Arkansas, and the state freight with two handlings.

Q. Mr. McPherson has also run his eight to one proposition into what you might designate as the "lost car movement": Have you taken care of that in your apportionment of expenses?

A. Not altogether, no sir. We have apportioned the maintenance of freight cars between the through trains and the local trains, and then apportioned that expense on the basis of the business done by the two classes of trains. But there is an element of fact in the statement that there would be more lost time of equipment on the short haul business than there would be on the long haul business, but in my judgment, not to anything like the extent that Mr. McPherson states. Furthermore, I think it would be largely offset by the tremendous amount of empty car mileage made for the purpose of handling interstate business, which appertains in a far greater measure to interstate or long haul business, than it would to the short haul or state business.

3215 Q. So you do not think there is an element there that needs to be taken care of as an item of extra expense charged to the state?

A. No, I think it would be so small as to be—to use a word I have seen used in this case a good many times—negligible.

3216 Cross-examination of Mr. CHAS. S. LUDLAM.

By Mr. MOORE:

Q. Have you examined the books and accounts of the railroads engaged in this litigation?

A. No, sir. I have examined some of the accounts, but not the books.

Q. What was the character of your employment with the Atlantic & Pacific Railroad at Albuquerque, New Mexico?

A. I was employed in the Auditor's office in the bookkeeping department.

Q. You were very young then, of course?

A. Yes, sir.

Q. What was the length of that Pecos Valley Railroad at the time you were employed down there?

A. When I first went to Eddy, New Mexico, it was ninety miles, and during my connection with the road, it was extended to a distance of 175 miles.

Q. How long were you engaged in connection with that road?

A. About two years and a half.

Q. Then you went to New York?

3217 A. Yes, sir.

Q. Have you adopted and put into force the methods taken in Exhibit 5 in this case by Mr. Wharton, in connection with railroads whose accounts you have revised at any time?

A. No, sir.

Q. Do you think it would be practicable to keep the accounts of a railroad in that manner?

A. If that information was desired, I think it would be practicable to devise a system of accounting that would give practically the same information.

Q. How about the expense of it?

A. It would increase the expense of the accounting department.

Q. Quite considerably wouldn't it?

A. Somewhat, I don't think very materially.

Q. The state has found it very expensive to make the investigation that has been made in these cases, for the purpose of preparing the exhibits referred to?

A. Yes, sir.

Q. It required a long time?

A. Yes, sir.

Q. And a great deal of clerical labor?

A. Yes, sir, but of course, if the books were laid out to segregate the information in this order, at the time it was compiled, it would be less expensive than to attempt to go back and segregate it after the records had been completed.

3218 Q. You have spoken, in saying that it was possible to keep the books in this way by a railroad and arrange the ac-

counts in that way, you have spoken now with reference to the expense that could be allocated, but there is a part of the expense you have got to assume in this case as you have done in making the exhibits. You know what I refer to. You could not devise a practical system of bookkeeping for a railroad, based upon assumptions that way, that you would regard as a proper method of keeping accounts?

A. Yes, I think that an equitable division or apportionment of those expenses that could not be specifically allocated, could be worked out that would be reliable for all practical purposes.

Q. For instance, the allowance of extra expense on account of two terminal handlings against one, and that sort of thing, involving an assumption of what the increase would be on that account, would have to be treated and carried in the books as an assumption, wouldn't it?

A. That could be pretty accurately located.

Q. Is it practical, do you think, to adopt the cost system of accounting for railroads, such as is used in ordinary industries?

A. It is entirely possible; whether it is practical or not would depend upon the necessity for such action.

Q. Referring to your statement that the operating man is in a general way the last man who is able to figure out what his costs
3219 are, isn't it a fact that the economies of operation are more closely under the observation of operating men, and that they have better opportunities of studying and determining what they are, than men in other departments?

A. Information as to the results of the operating department are constantly furnished by the operating department to the accounting department, and the operating man keeps in touch, through the accounting department, with his costs.

Q. That is all very true, but as I refer now to the cost of a given operation, the cost of switching an engine, the cost of switching service say, the man on the ground, whose time and experience is devoted to the conduct of the affairs of that account, would be in a better position to determine what the cost in detail was, than the accounting official at headquarters, wouldn't he?

A. No, sir.

Q. You think not?

A. No, sir, I think if the president of a railroad wanted to know what his switching cost him during the previous year, he would make inquiry of the accounting department, not of the operating department.

Q. Of course, he will do that, because there is a record in which and by which it is kept, but doesn't the accounting department base its records upon information obtained from the operating department?

A. No, sir, they base their records upon the records of the
3220 work which is actually done; of course, to the extent that the operating man reports his transactions, the accounting department is dependent upon his statements. I mean by that, regarding the conductors and operating men; the accounting department depends upon his statements as to how far he runs, what cars he

picks up, and what cars he sets out, but the details of those items as applied to cost and expenses are worked out by the accounting department.

Q. Has the accounting department any information about the movement of trains, handling of cars, cars picked up, cars set out, and cars that are carried to the machine shops for repairs, has it any information at all in regard to that, except as it is obtained from the operating department?

A. Only as reported by the operating department.

Q. Is that reported to the accounting department?

A. That depends upon the system in vogue at the different companies' offices.

Q. There is necessarily involved in the handling of trains, a great multitude of small details, perhaps the greater part of the expense is made up of matters that in themselves taken separately, would be minor expenses, and it is the aggregate of them that creates a large outlay. Now, it would be impracticable for a mass of details like that to be reported to the auditing department as the basis of accounts, would it not?

A. There is not a dollar received by a railroad or a dollar
3221 paid out by a railroad, that does not pass through the accounting department's records.

Q. I thoroughly understand that; that is bound to be the case, but a dollar or five dollars may be paid out at the yard or in the machine shop at Little Rock, to operatives who may be engaged during the time these repairs are made, in various and different employments. Now, he is paid in gross. Does the accounting department know in detail the various and different kinds of work, for which the payment is made?

A. Yes, sir, the distribution of the pay roll would show that.

Q. Who makes that distribution of the pay roll?

A. That varies on different roads; the system varies; on some roads it is made in the accounting department; in other roads, it is made in the operating department, subject to the verification of the accounting department, under the direction of the accounting department.

Q. How can the accounting department make a distribution of matters of that sort, which are carried on at a distance usually from where the accounts are kept?

A. The time book shows the class of work on which the employee was engaged, and the accounting department distributes the charge accordingly.

Q. Doesn't the operating man control the pay roll for the various kinds of service that is performed?

A. As to the employment of the individual, absolutely.

Q. Doesn't he know the conditions under which the work
3222 in his department is done, better than another man who is not on the ground and without the same means of observation?

A. He knows naturally what his men are doing, and what they

should do, but after that has been determined, the accounting department decides how the expenses incurred as found by such observation, shall be charged.

Q. You stated yesterday, that you could remember when the general manager would instruct the auditor how to charge certain expenses; now, isn't that controlled by the rules fixed by the Interstate Commerce Commission, as far as interstate roads are concerned?

A. Very largely. The Interstate Commerce Commission holds the accounting department responsible for distributing the charges.

Q. It has come about now that the operating man cannot doctor his reports as you suggested had been done formerly?

A. No, sir, he cannot.

Q. You were engaged for nearly three years in the Missouri case?

A. Off and on.

Q. You said also you made a study of the unusual expense of the road under the division made between state and interstate expense in that case?

A. Yes, sir.

Q. Were the Iron Mountain and the Cotton Belt roads parties to that proceeding, do you remember?

3223 A. I do not remember.

Q. The Missouri Pacific was, wasn't it?

A. Yes, sir.

Q. Did you go into that case on the same lines as you have in this case?

A. Our employment was the same.

Q. Did you divide the cost of operation as between state and interstate business there in the same way that you have in this case?

A. No, sir.

Q. Why not?

A. We think we have gone further in this case than we did in the Missouri case.

Q. What was your method of division in that case?

A. The ton mile basis with certain additions for extra cost of handling state business.

Q. You testified in that case, didn t you?

A. Yes, sir.

Q. Did you not testify in that case that in the judgment of the accountants engaged in the case, the ton mile basis was the only way in which the difference in cost could be ascertained?

A. Can you tell me what page of the record that is?

Q. It is page- 1189-90; did you not state that the only way to ascertain the actual cost was the ton mile basis; I will read you the question:

3224 "Q. The ton mile is not the question, the revenue is not the question; the thing to be desired would be to ascertain the actual cost if you could ascertain it in any way."

And your answer was:

"A. In our judgment, the ton mile basis is the only way it could be ascertained.

A. Yes, sir, I so testified. It should be understood in that connection, that in that case we did not have the division of expense between local and through trains; that testimony was applicable to the facts in that case.

Q. You had two or three years to get that information, more time than you did in this work?

A. We were engaged on that case approximately for two and a half or three years, but we didn't have those statistics. I might say in that connection, we have gone, we think, further than we did in the Missouri case.

Q. You stated, I believe, that you did not have the information in that case. How did you compile, obtain the data upon which you base the exhibits that you filed in this case by Mr. Wharton?

A. What data do you refer to?

Q. I mean all the data which is the foundation of Exhibit "I."

A. Well, the statistics were worked up from the records in the various departments of the two railroads.

3225 Q. What statistics is that Exhibit "I" based on?

A. The statistics shown. The statistics shown on Exhibit "I," are the ton miles of freight intrastate, divided between carload and less than carload, and the ton miles of freight interstate, divided between carload and less than carload.

Q. What I meant to ask you was, what records you got the statistical information from, as contained in the Exhibit?

A. Various records; it was not all obtained from one record.

Q. Take on the St. Louis, Iron Mountain & Southern Railway, what record is the principal foundation of that exhibit, and the division which you have attempted to make between local and through train costs, in the exhibits that accompany that statement?

A. I presume you refer to the car miles by local and through trains, and if that is the case, we took the car miles, total car miles in the State of Arkansas, as shown by the Company.

Q. Where did you obtain that? Do the wheel reports enter into it?

A. I couldn't tell you where we got the total figures. Mr. Hamilton obtained those, he can explain that; I know we worked up the mileage of local trains from wheel reports and deducted that from the total mileage.

Q. You got one of your factors from the wheel reports?

A. Yes, sir.

3226 Q. Then where did you get the information upon which you base your comparison between the month of October and the six months, the last six months in 1907?

A. I don't think we have made any comparison; we have taken the month of October——

Q. Did you not obtain your percentages for the purpose of dividing state and interstate business from the record of the operations of the Iron Mountain road for October, 1907, and the wheel reports covering that period?

A. Yes, sir.

Q. And you make that the basis of the division, the apportionment for the six months business, do you not?

A. Yes, sir. I started to explain that in answer to the second question back, to state that we did not make a comparison between October and the six months period, but we used the figures for the month of October to apportion the six months figures on.

Q. When did you work up the October statistics?

A. Since we have been working on this case. I couldn't tell you the exact date.

Q. Was it from the summer of 1909 until winter of 1909 and 1910?

A. I think probably it was.

Q. Some year and a half or two years after the period covered by those records, was it?

A. Yes, sir.

Q. The same was true on the Cotton Belt also?

A. A year and a half or two years, yes, sir.

3227 Q. You were asked this question at page 2015-6, in the Missouri case:

"Certain exhibits have been offered here by the railway company as Exhibits 14-A and Exhibit 15, which show the tonnage of both state and interstate freight carried by certain through trains on certain dates in December, and also certain local trains on certain dates in December, 1906; now this information, I understand that testimony was obtained from the testimony of men who went along with those trains and set out with the train. Was that your understanding?"

You say "Yes."

"Q. Is there any other practicable way of getting that information accurately as to what makes up the tonnage of particular trains, whether they be local trains or through trains?"

To which you answer: "No, sir, there is no other method that is practicable."

"Q. Is it practicable to ascertain that information from the books and records of the company subsequent to the operation of the trains and the handling of them?

"A. No, sir, in my opinion it is not practical."

Now, I want to ask you if those statements are not equally applicable to the same kind of information on the Iron Mountain Railroad?

A. No, sir.

Q. What is the difference?

A. That was my testimony in the Chicago, Burlington &
3228 Quincy Railroad Co. case, and all the waybills prior to September of our examination had been destroyed.

Q. This testimony was in the Missouri Pacific case?

A. No, sir, this was in the Chicago, Burlington & Quincy Railroad case.

Q. Wasn't the exhibit furnished by the Missouri Pacific, the one you were talking about?

A. No, sir, it says the Chicago, Burlington & Quincy Railroad case.

Q. I will ask you if you are mistaken about its being another road, and if those exhibits did relate to the Missouri Pacific?

A. Exhibit 14 relates to the Missouri Pacific, and I presume 14-A does.

Q. Why was that statement that I have just read from your testimony in that case, not equally applicable to the statement upon which these exhibits are based?

A. I should assume that I was referring to the less than carload business.

Q. What difference would that make; you say, it is not practical to get information of that kind except by having a man go along to make observations. That was your testimony.

A. It was my testimony that it would not be practical.

Q. And in this case you are attempting to obtain the tonnage by a wholly different manner, by records two or three years
3229 after the business was done, in the case now in hand?

A. Yes, sir we have traced out the train; we handled the carload business by going back to the wheel reports; in the Missouri Pacific case which you referred to, we did not think that was practical on account of the immense amount of labor involved in the operation; here, however, we have performed that labor.

Q. You didn't make that qualification in your testimony then, you just simply said:

"It is not practicable to ascertain that information from the books and records of the trains," and that the only way you could get the information was to put a man on the trains?

A. I was referring there probably to all the business, carload and less than carload, both.

Q. Are you not referring here in these exhibits to all business?

A. No, sir, we have only specifically allocated the carload business, and we have assumed, we think, very much more of the expense of state business than it should bear, as we assumed that all state less than carload business was moved by local trains.

Q. What do you base that assumption on?

A. On the assumption that a large part of the state less than carload business would be moved on local trains?

Q. Did you have any evidence of that fact?

A. General knowledge.

3230 Q. So to get right at the root of the whole thing, you have acted, not on knowledge, not on actual known conditions, but upon assumptions of facts?

A. We have actual knowledge of known conditions, that a large part of the state less than carload business moves on local trains, but I am willing to admit that we think we have burdened the state business by assuming that all of it moved on local trains.

Q. I am speaking about the claim that has been made for these exhibits, that they represent actual facts, but right in the inception, it is based largely on assumption, isn't it?

A. It is based on an assumption to a certain extent. I would not

say largely, because to start with, the less than carload business represents only a small proportion of the total business.

Q. You have criticized rather severely, the testimony of Mr. Frank Nay of the Rock Island Road, referring to the statement made toward the conclusion of Mr. Nay's testimony, that "after making the basic approximation of the operating expenses for intrastate freight or passenger traffic, the figures thus arrived at may be increased in the proper proportion to represent the excess of the cost of transporting intrastate traffic over the cost of transporting interstate traffic."

3231 *You* also quoted a similar statement from Mr. McPherson's testimony, and in presenting your views which you say those conclusions to which I have just called your attention, as testified by Mr. Nay and Mr. McPherson, demonstrated the fallacy of their position, you say Mr. Nay has built up a snow man, and in the body of his testimony, and in the conclusion he destroys it.

Now, did you not do the same thing in the theory propounded by you and your associates, Haskins & Sells, in the Missouri case, in which you and Mr. Taliaferro testified, that the ton mile was a proper unit to divide the expenses in apportioning the expense of operation between state and interstate, and that any extra cost could be added after that division had been made as between the two; didn't you make the assumption there that you criticised so severely in this case?

A. No, sir, I don't think so.

Q. How did you arrive at the extra expense? You and Mr. Taliaferro both testified there would be an extra expense in the conduct of state traffic over interstate traffic in that case? How did you propose to give the state business credit for that on that division, in your testimony in that case?

A. A specific allowance for those items where we knew the specific cost was greater in the case of one business than in the case of another business, was made.

3232 Q. What is the difference between making an allowance of 50% on account of some extra expense in dividing the expense of maintenance of way on a car mile basis between local and through trains, for the purpose of taking care of the extra expense growing out of the supposed extra service for which allowance is made, and the increase of the amount that may be apportioned on the ton mile basis or the revenue basis, as a unit, after you have made the apportionment?

Tell me what the difference is. You have done that all through this case.

A. In the case of the addition made by us to the proportion of the expense of maintenance of way applicable to the local trains, we have made additions to the local car mileage on account of the increased switching and the more frequent stops of local trains, which we think is perfectly consistent with the statement of facts as developed in this case by the testimony, and is well known from railroad practice in general, whereas in the revenue theory, Mr. Nay says that all those things are taken into consideration in fixing the rates,

Assuming his premise is well founded, then there is no excuse, after you reach a conclusion on that basis which is done by taking elements of increased cost into consideration, in adding to the result thus obtained.

3233 One of two things must be wrong, either the rates do not take those elements into consideration or else you cannot add anything.

We say specifically that the car mile does not take those elements into consideration, and, therefore, there are certain conditions you must make allowance for, but Mr. Nay says all those things, on the revenue basis, are taken into consideration; and then, after having explained very elaborately, that they are taken into consideration and the rates are based upon that premise, then he says, when you get them proportioned, having gotten it, you must add something to it, because it is not correct.

Q. You refer now to the assumption that has been made in this case that a division of expense between state and interstate business on a straight revenue basis, would involve an extra allowance to state business because of the adjustment of the rates as between those two classes of service?

A. No, sir, I do not assume that, but Mr. Nay does in his essay.

Q. Mr. Nay's testimony, if it touched upon that, you say must have been made with reference to the feature which was developed in the record?

A. I don't say that it must, but he states that it is.

Q. Assuming that he does state that, Mr. Nay's statement

3234 that any extra expense involved in the conduct of local business could be added to the amount ascertained after the division or apportionment had been made, was based was it not, upon the testimony that had been introduced and which indicated that a larger difference existed than would be accounted for by a division on the basis of straight revenue?

A. I can't tell you what it was based upon. In my judgment, it was not based on accounting principles.

Q. The statistics filed in this case by the Iron Mountain and the Cotton Belt is practically the same for the purpose of my question—show that the revenue per ton per mile on state freight was about 13 mills, and on interstate, about half of that.

If we should assume a difference in the rate which would in itself involve an allowance for extra expense in the conduct of the state over the interstate business, and assume further that the testimony in the case showed that the expense of conducting state business was four times as great, instead of double as great, would there have been any thing strange, unusual or illogical, in Mr. Nay's saying, after you had apportioned the expense on a straight revenue basis, if there was still an additional extra amount of expense incident to the conducting of the state business, that that could be provided for by an allowance of whatever the evidence showed would account for the extra expense?

3235 A. The assumption would be founded upon the premise that you suggest. If you assume to start with, that Mr.

Nay knew nothing about the railroad business, and second, that he knew nothing about the rates, and that he did not know that the state rates had no such relation to the interstate rates as you suggest, or that the interstate rates had no such relation to the intra-state rates, if Mr. Nay was writing purely as an essayist who knew nothing whatever about his facts,—knew nothing whatever about the variation in the rates or variation in the costs, that premise would be alright, but Mr. Nay is not writing that way.

Q. There is nothing illogical in the assumption within itself, which differs from your understanding of the facts in the case?

A. As an ethical question; if the state rates were exactly double the interstate rates, and the cost of doing state business was exactly four times the cost of doing interstate business, then there would be nothing objectionable in determining the expenses on the percentage which they bore to the revenue, and in the case of state expenses, doubling them when so ascertained.

Q. In giving your views as to the demerits of the revenue unit of dividing expenses referred to between state and interstate traffic, you say you never heard of the revenue theory being ad-
3236 vanced as a basis of determining expenses except in the Missouri case and Arkansas case.

Haven't you made a study and given investigation to these methods of dividing expenses for sometime back?

A. Dividing what expenses?

Q. Dividing the expenses of operation as between state and interstate business?

A. Not except in the case of the Missouri rate case and the Arkansas rate case.

Q. You were engaged in the Missouri case from 1906 to the conclusion of that case?

A. Yes, sir.

Q. During that period didn't you give it investigation?

A. Yes, sir.

Q. Did you never hear of the case of Ames v. Missouri Pacific Railroad, 169 U. S., Chicago, Milwaukee & St. Paul v. Tompkins, 176 U. S.; same road v. Keys, 91 Fed. The Buel case before the Wisconsin Commission, and the Oklahoma case pending at St. Paul in which your firm is interested, haven't you heard of those cases?

A. Incidentally, but not as an accounting proposition. We were not identified with any of those cases, and I made no study of the question, nor did I go into the bases of divisions in those cases. The Oklahoma case which you refer to, my firm has had no connection with, except to make a certain affidavit as to the State of Arkansas.

3237 Q. You say you think the division of the value of the property in proportion to the gross earnings is wrong. Haven't you made the division upon that basis in your figures in this case?

A. I wouldn't say we have made the division—we have used the companies' bases in apportioning the property.

Q. That is the basis you have been acting upon?

A. That is the basis we have used in our exhibit.

Q. In that connection, you say the cost would more accurately represent the value of the property. Isn't it a fact that the cost of everything that enters into the expense of operation of a railroad is fluctuating constantly?

A. Not as between state and interstate, there is no fluctuation in my judgment; whatever affected the cost of one would affect the cost of the other.

Q. That is the point I want to call your attention to. You say the revenue is not a good unit because of fluctuations of the rates. Is there such an abnormal fluctuation in the rates as would destroy the adjustment between state and interstate rates, unless it may be a condition growing out of such a thing as occurred in this suit, the enjoining of a body of rates put in by an official commission or something like that, but in the ordinary and orderly conduct of the business of a railroad, do such constant fluctuations occur
3238 as would render rates an unstable and fluctuating quantity, to such an extent as to destroy it as a factor?

A. Yes, sir, I think they would.

Q. Your attention was called, and you referred yourself in your testimony, to a difference connected with the changes that grew out of the order made by Judge Vandeventer granting the injunction in this case. Soon after that order was made different rates were put in voluntarily by the railroads—we call them voluntary rates—from those that had been in force under direction of the Commission previously on state business.

Now, there was a period during the change, when the interstate rates were not and could not be readjusted so as to correspond with the new voluntary rates put in by the railroad companies.

Would any sane man take such a period as that as a representative period, for the purpose of ascertaining the relation of cost on the revenue theory between state and interstate business? Has that been done in this case, or would any sane man do it?

A. I think the distribution on the revenue basis must take into consideration all those fluctuations, whether violent, unusual or abnormal.

Q. If you apply that under normal conditions and to a state of affairs normal and yet out of the ordinary, would it be true?
3239 A. My experience is that the rates are constantly fluctuating and changing, particularly the interstate rates of a railroad,—the interstate freight rates—not to the same degree probably as in the case you mentioned, but that is merely a forceful illustration of the disparity which exists.

Q. Can you give me any illustration that will sustain that impression, that the situation is anything like that, that occurred during the year 1907? Can you point out any instances?

A. I would have to make a study of the business of the road for the year 1907, to point out any specific instances.

Q. Isn't it a fact that commercial conditions and necessity throughout the country, requires a larger degree of stability in

railroad rates than your answer would indicate, when you say that interstate rates fluctuate to the extent that would interfere with the application of the revenue as a unit of division?

A. No, sir, I don't think that is the cause—it is not only the fluctuation of the rates, but it is the fluctuation of the movement. Many interstate rates are made to govern large zones and the fluctuation in the movement would affect the revenue materially, whereas it would not affect the expense in any sense.

Q. Let me call your attention to the zone adjustment of the lumber rates, which Mr. Perkins testified was brought about
3240 some years ago by conditions which have abated very much, and Mr. Bee testified that those conditions which caused the adjustment referred to both by him and Mr. Perkins, did not any longer exist, and yet the rate existed?

Is not that a pretty good illustration that the rates are not in the habit of fluctuating and jumping about to any great degree?

A. I don't think it is, because on the basis of the testimony as to that lumber zone, the curtailment of business in the northern end and the increaseed movement from the southern end, would cause a change in the revenue derived by the Iron Mountain on its haul through the State of Arkansas, just the same as a coal strike in one locality might cause a tremendous fluctuation in the revenue on coal, although there would be no specific change in the rate.

Q. If it is true as Judge Wallace testified in this case, and as Mr. Hampton, who until recently was chairman of the State Railroad Commission of Arkansas, and as many other men connected with the traffic and freight departments of the railroads connected with this case have testified, that there is a relation between state and interstate rates and that the interstate rates are influenced by the state rates, would your assumption as to the extent of the fluctuations, if there are fluctuations — to such an extent as would destroy the revenue as a proper factor of division?

3241 A. Yes, sir, I think there are constant fluctuations.

Q. You think those gentlemen are mistaken then?

A. Absolutely. I would like to state——

Q. You base your testimony upon a view which differs from the testimony of those gentlemen to whom I called your attention?

A. Yes, sir.

Q. Now, make any statement you wish to make.

Mr. HILL: You did not state in there what their testimony referred to. It did not refer to the cost of service, it referred to the way one state rate affected the interstate rate.

Mr. MOORE: I am applying it to that,—the way the state rate affects the interstate rate; I did not say anything about the cost.

Mr. HILL: The way you have put that question, it would be assumed that there was a relation of cost.

WITNESS: I think that many individual cases could be picked out to support that testimony; but I think, taking the railroad movement as a whole, it would not hold good.

Mr. MOORE:

Q. What do you base that view on?

A. Those same gentlemen, for instance, testified that in
3242 fixing the rates, the casualty risk was considered, and lost space was considered, and that all of the elements that would enter into the increased cost were considered, and yet I find in the actual movement of railroad traffic, that that situation is not true. While it is true to a certain extent, in the great bulk of railroad movements, the actual conditions do not accord with their theories.

For instance, taking the St. Louis, Iron Mountain & Southern tariff #70, Texas Tariff #1 DD, which was issued by Mr. Cale, Agent, in effect during the last six months of 1907, from St. Louis to Texas common points, a map of which is already in evidence in this case:

The Texas common points cover some 2600 stations, I think, in Texas, and represent a movement that may vary as much as 400 miles in the length of the haul, and I find that that tariff shows that from St. Louis to Texas common points, the rate on beer in glass is 48 cents per hundred pounds, with a minimum weight of 30,000 pounds, and that the same tariff gives the rate on bar iron of 55 cents, with a minimum weight of 36,000 lbs. Now, the casualty risk on beer in glass would certainly be very much higher than it would on bar iron, and yet beer in glass is hauled cheaper under that tariff, from St. Louis to Texas common points, than bar iron is hauled.

In addition to that, the beer rate provides for six thousand pounds
of free carriage of ice, sawdust, straw, etc., during the months
3243 of June, July, August and September, and in the other months, three thousand pounds. In making that rate where they carry beer in glass for less than they do bar iron, they did not consider either the lost space nor the casualty risk.

The same tariff quotes excelsior from St. Louis to Texas common points at 43 cents, with a minimum weight of 20,000 lbs., as compared with the rate already quoted of 55 cents for bar iron. They certainly did not consider the space required in the car, nor the casualty risk; excelsior would burn up very easily; bar iron, if you had a fire or wreck, would not be an entire loss at least.

The same tariff quotes potatoes. This is from St. Louis to Texas common points. The difference in every one of these hauls may exist of over four hundred miles; the tariff quotes potatoes at 54c., with minimum of 30,000 lbs. It quotes horse and mule shoes at 62c., with a minimum of 36,000 lbs. When I see tariffs actually made out on that basis, where the rate is actually less on potatoes than it is on horse and mule shoes, I know that consideration was not given to the casualty risk or the space required.

The same tariff shows poultry netting, 48c., with minimum weight of 30,000 lbs., and iron and steel chains at 70c., with minimum weight of 36,000 lbs., and when a traffic man testifies
3244 that they consider the space and the casualty risk, he is certainly not considering such items as these, and the tariffs upon which the great bulk of the business moves. Certainly no man

would claim that poultry netting required less space or that it had a less casualty risk, than iron and steel chains.

The same tariff shows hollow building tile at 25¢, minimum 40,000 lbs.: also, pig iron at 33¢ with minimum of 50,000, and the tariff itself shows that they expect to load more pig iron in the car than they do hollow building tile, and yet the rate on hollow building tile is less than it is on pig iron.

The same tariff shows iron pipe coils for refrigerating machines at 42½¢, as compared with bar iron already quoted at 55¢. The lesser rate is on the hollow and bulky stuff, and the higher rate is for the more compact stuff.

These rates apply to 2600 points in Texas from St. Louis, with a difference of over 400 miles in the possible length of the haul.

Here is sheet iron pipe up to 30 inches in diameter, quoted at 55¢, as compared with sheet iron flat at 62¢. When a tariff man testifies that they consider the weight and bulk and those things, does he imagine for a moment that they can put more sheet iron into a car when it is rolled into pipe thirty inches in diameter than they do when it is lies flat?

Here is another one: Matches, from anywhere in St. Louis
3245 to any Texas common point at 71½¢; the rate on wooden tooth picks on the same tariff is 80¢; the casualty risk on matches, it seems to me, would be higher than it would on wooden tooth picks, notwithstanding what the learned gentlemen say, who have made these rates and studied these elements and say they consider them when they can, but on the great bulk of railroad movement they don't apply them.

Here is wooden kegs, 80¢, with a minimum of 14,000 lbs., as compared with saddlery and hardware in packages, 90¢, with minimum of 30,000 lbs. The light and very bulky stuff, that is wooden kegs, is quoted lower than the heavier and compact stuff.

Here is pickles and preserves in glass 58¢ minimum of 30,000 lbs., as compared again with saddlery and hardware at 90¢. Anybody, I imagine, to use the term you used a few minutes ago, that was sane, would not imagine that pickles and preserves in glass, would take less space or be less liable to damage than hardware. And that rate is from St. Louis to 2600 points in Texas.

Here again, comparing pickles and preserves in glass at 58¢ with iron and steel chain at 70¢, with a minimum of 30,000 lbs. for pickles and preserves in glass, and 36,000 lbs. for iron and steel chain; anybody knows that pickles and preserves in glasses are fragile and the casualty risk is greater and that they do not weigh
3246 as much, and yet the rate is lower. Mr. Nay knows that, when he says that the expenses bear a direct relation to the revenue. What relation has the expense to the revenue when they haul pickles and preserves in glass at a lower rate than they haul iron and steel chain, when they may have to haul pickles and preserves in glass for 58¢ 400 miles further than they haul iron and steel chain for 70¢, I might add some questions about sanity.

Another rate on baskets, talked about a great deal in this case, the rate from St. Louis to Texas common points, is 80¢; on pig lead

it is 75¢; they may haul pig lead 400 miles less than they haul the baskets, and yet the variation in rate is 5 cents; there has been a lot of talk about baskets, and the rate taking those things into consideration; what is the consideration of a man worth that says the variation between baskets and pig lead should be only five cents, and in the tariff, the minimum on baskets is 14,000 lbs., and the minimum on pig lead is 36,000 lbs., and furthermore, under this tariff, baskets may be hauled four hundred miles further than pig lead.

Q. On the contrary, pig lead may be hauled four hundred miles further than baskets?

A. Yes, sir, in either case the revenue has no relation to the expense; here are a few samples; from St. Louis to Atlanta,
3247 Texas, those are flat rates; apples 41¢ per cwt.; this is the same tariff, No. 70, effective during the last six months of 1907—apples 41 cents, with minimum of 24,000 lbs., as compared with wire rope, 60¢ with minimum of 36,000 lbs. That is, the rate on apples is only about ⅔rds what it is on wire rope; surely, nobody would say that the casualty risk would be greater on wire rope than it would on apples, and the minimum fixed by the railroad itself shows that the density of wire rope is greater, because the minimum on apples is 24,000 lbs. and the minimum on wire rope is 36,000.

Again, beer in glass, from St. Louis to Atlanta, Texas, is 42 cents, with a minimum of 30,000 lbs. The rate on crow bars is 62 cents, with a minimum of 36,000 lbs. Certainly beer in glass has a greater casualty risk than crow bars, and it would seem to me that the density might enter into that question; they could hardly put as much weight into beer in glass as they could into crow bars, and the minimum shows they don't expect to.

Again, lamp chimneys are quoted at 61 cents, as campared with crow bars at 62; whoever made that rate certainly did not give consideration to the casualty risk; any man must know that crow bars would not be more likely to get broken than lamp chimneys.

Here are a few more rates, St. Louis to Alamo, Texas, common brick is 17½ cents, and pig iron 32½; the common brick rate carries the valuation of five dollars per thousand brick, which would indicate that the railroads themselves anticipate such a hazard
3248 of breakage and hazard of carrying brick, but they do not expect any on pig iron which is practically indestructible.

Pickles in glass, 39¢, and shot in double sacks 52¢, with minimum on pickles and glass of 24,000 and shot of 36,000 lbs.

Here is a flat rate from St. Louis to Marshall, Texas, quite a long haul. Everything the Iron Mountain hauled would come through Arkansas as I understand it; there is a flat rate of 80¢, with minimum of 14,000 lbs. on any one of the following articles, either in straight carload or in mixed carload lots: Baskets, shot, paper bags, blacking, blueing, bottles, brushes, lamp chimneys, coffee mills, crayons, galvanized iron tubs and galvanized iron pails; ink, lamps, lead, cotton mops, oil cans, oil tanks, paper, pipes—smoking pipes—ropes and twine.

Now, these are just a few samples: you can take almost any waybills of a railroad, take one waybill after another and compare it

and you will find the same conditions existing, and when gentlemen sit on the stand and say they consider casualty risk, and bulk, and all those items, I know they do theoretically, but they don't in the practical application of their rates, and it is in the face of those violent fluctuations, in one case they carry baskets and shot at the same price, and in another case, they carry lamp chimneys at less than crow bars—and that traffic fluctuates and necessarily fluctuates; when I give these examples, I am not criticizing the rates, I
3249 do not mean they are not practical and possibly the best rates possible, and that they are not compelled by competitive conditions and proper conditions too, but I do say, there can be no relation between cost and revenue when those rates exist, and it seems to me it must be apparent to anybody, and when Mr. Nay, knowing that, and being familiar with those rates, and it being his duty to check them and keep in touch with them, says you must determine your cost or how much more it costs to move state business than interstate business on the total revenue, I say he builds up a snow man which I think he knows is a snow man, and in the last few lines of his essay, he proceeds to knock him down.

This follows Mr. Bourland, Thursday morning:

3250 Q. Are those carload or less than carload?

A. Those are all carload rates, on which, of course, the bulk of the company's business is handled. That is, I mean to say that the bulk of the company's business is handled in carload lots.

Q. You have been talking about Texas common point rates?

A. I first used the Texas common points and then I have given some specific illustrations of special points in Texas, illustrating in a general sense the trans-state movements in the state of Arkansas.

Q. What is the tariff that you have been reading from, Mr. Ludlam?

A. The St. Louis Iron Mountain & Southern, No. 70, issued by G. W. Cole, Agent; in effect during the last six months of 1907. It is known as "Texas Tariff 1-D. D."

Q. Does the ton mile theory of division of expense take into consideration the density, value, weight, liability to injuries—that is, casualty risk, and those elements mentioned in the statement you have just made?

A. In my judgment, to a far greater extent than the revenue, because the basis of the ton mile consists of two factors, first, the weight of the freight, and second, the distance which it is hauled; and the revenue as shown by this one tariff, if you want only one illustration, does not take into consideration at all the distance which the
3251 freight is carried, because, under this tariff, freight can move distances varying over 400 miles in the aggregate.

Q. If that is correct, that those rates apply to distances of 400 miles, it would follow, would it not, that those rates might be higher on the side of the zone that was nearest the point at which the shipment originated, than on the farther side, more remote, and also that the reasonableness of the rate with reference to the length of the haul might be more at the intermediate points with reference to dis-

tance, more closely adapted to the length of haul than at the extreme points that I have referred to.

A. The shorter the haul the greater the revenue would be per ton per mile. I do not question in any sense the reasonableness of the rate. I am simply stating that there is a variation.

Q. Now, referring to the ton mile as a unit, assume that you have a revenue divided between the total tons hauled, of five mills per mile. The length of haul of some of the commodities may be 25 miles and the length of haul of others may be 1000 miles:

In what way can you say that the ton mile theory has any reference to the length of the haul in that case?

A. Because the ton mile is predicated absolutely on the
3252 weight of the shipment and the length of the haul. Whether it be baskests or crow bars or lamp chimneys or beer in glass,it actually costs more to haul it 1100 miles than it does to haul it 700 miles. The ton mile basis takes that feature into consideration. The revenue basis as shown very forcibly by this one tariff I have referred to, does not take that into consideration.

Q. Does the ton mile basis take the casualty risk of the commodities into consideration?

A. No, sir, and the casualty risk on the St. Louis, Iron Mountain and Southern amounts to about three per cent of the total freight operating expenses.

I might say in that connection—referring back to some of the testimony that has been given by traffic men in this case—that they have nearly all stated that the casualty risk is considered—in fact, one gentleman stated that the casualty risk was the most important element considered in rate making—it must be apparent on its face to a person who stops and gives the matter consideration, that any man who understood his business, would not make an item which only represented three per cent of the total freight expenses of a company, the prime factor in fixing the revenue to be derived by that company. It cannot be so. It is illogical.

Q. What percentage of the business of the Iron Mountain road moved under that tariff that you have been reading from?

A. I have not figured that out, Mr. Moore. I cannot tell you, but certainly a very large volume of it.

3253 Q. You simply assume that as an inference, rather than state it as the result of any information or knowledge you have?

A. No, sir, I said that from general knowledge that there would be a large amount of freight moving from St. Louis to Texas common points.

Q. Would you say 15%, 50%, 10% or 75%?

A. Of what?

Q. Of the business of the Iron Mountain that moves under that tariff.

A. I would not want to make an estimate. I would not attempt to do it.

Q. It would be impossible for you to make an estimate that you

could rely upon, without any more information than you have, would it not, Mr. Ludlam?

A. It would be only an opinion.

Q. If coal and lumber is 50% of the total business of that road, the items that you refer to would be rather a small per cent, would they not?

A. Yes, sir, but if relatively the same difference existed in the coal and lumber rate, that exists in the commodities shown by this tariff, it would not in any way affect the illustration?

Q. You assume, then, that the ton mile theory upon whicth you have proceeded, does take into consideration those elements which you say are not considered in fixing the rates that you have called attention to in the tariff which you have read?

3254 A. I say the ton mile theory takes into consideration the two most essential elements, the weight of the commodity moving and the distance that it moved.

Q. Now, tell me how can you state that an average ton mile rate applied to the total volume—not to those items alone to which you refer, but to the total volume of the business of the railroad—can take into consideration the difference in the weight of a carload of feathers or a carload of lead or iron?

You put it all at five mills, we will say, per ton per mile: how does that involve in any way or give any consideration whatever to the difference in weight in those commodities to which I have called your attention?

A. As between state and interstate it makes no difference because the carload of feathers is as apt to move as frequently in state business as in interstate business; or a carload of coal is as apt to move in state business as frequently as in interstate business.

So far as taking the ton mile as a whole and considering it in that connection, I would say that it does not make specific allowance for the difference between the carload of feathers and the carload of iron. But on the average those things equalize themselves.

Q. How does it do that in specific cases? You say it does not do it generally, how does it do it in specific cases?

3255 A. I said it did not do it in specific cases, but it did do it generally.

Q. How can it do that? Generalities are made up of details.

A. Yes, sir, because on the average they will move so much light freight and so much heavy freight.

Q. The total movement represents varying lengths of haul, from the shortest to the longest haul that is carried by a railroad?

A. That is absolutely accounted for in the ton mile.

Q. Explain to me how you account for it in the ton mile when you get the aggregate of the miles and multiply it by the tons?

I believe that is the way you arrive at the ton mile basis. How can it take into consideration the length of the haul?

A. Because the ton mile is made up of the weight of the shipment and the miles that that shipment moves. It takes into consideration absolutely the miles made.

Q. On the Cotton Belt road, it takes five states shipments to make

the average haul of an interstate shipment as shown by the statistics in this case:

How is it possible to say that the ton mile theory takes into consideration that difference as between the state and interstate average haul?

3256 A. The flat ton mile would not take that into consideration and I have never prepared any figures, either in this case or in the Missouri case, that did not make allowance for that difference. Necessarily those allowances are shown by——

Q. Tell me where you have made allowances in the exhibit you have filed in this case for the difference in the state haul and the interstate haul as shown in these statistics?

A. In our apportionment of the expenses to the local and through trains and also in our apportionment of the station expenses.

Q. Point out an instance now, please?

A. In our apportionment of the "Maintenance of way and structure expenses" we have added 50% to engine miles made by trains, attaching to local trains for station switching; and that same principle of attempting to allocate special expenses applicable to the local trains, where there is such special expense, is carried throughout our exhibits.

Q. You have covered the difference in the average length of haul where the interstate is five times as great as the state, by an allowance of 50%?

A. The allowance of 50% in this particular case to the local train and then the apportionment to the local train of the state business handled by the local train would fully take care of it, in our judgment.

3257 Q. Where did you get that factor of 50%?

A. That is purely arbitrary. We think that it is excessive.

Q. Why did you adopt it if you think it is excessive?

A. We wanted to be fair in stating the maximum cost of the state business.

Q. Fair rather than accurate, do you mean?

A. Where we could not be exactly accurate, where the exact amount could not be definitely determined, we tried to be liberal.

Q. How many movements of state freight in view of the difference of the length of haul between state and interstate, would it require to make the equivalent of an interstate haul, with reference to the handling of the commodities moved on the state and interstate haul?

A. It would take about three movements of state freight on the St. Louis Iron Mountain & Southern to equal in distance the ton mile of the interstate.

Q. How would it be on the Cotton Belt?

A. It would take about five on the Cotton Belt.

Q. You applied the 50% allowance to both roads alike, did you not?

A. To determine the cost of the local trains we have applied the same percentages. Of course, the use of the local trains is predicated on the actual service they have performed.

3258 Q. After you ascertained the difference in the expense of operating local and through trains and obtained the tonnage, etc., you applied then the ton mile theory for the purpose of dividing the cost as between state and interstate freight?

A. We divided the expenses of the local trains on the volume of business handled by the local trains, which was determined by the ton miles, and the expense of the through trains were apportioned on the same basis. In other words, the expense of the two classes of trains were divided on the basis of the business which they did.

Q. And the basis of the entire division, when you get it down to its ultimate result, as between state and interstate, is that 50% allowance you made on the basis of extra switching?

A. No, that is only one element.

Q. What other allowance did you make there, speaking of maintenance of way and structures?

A. Maintenance of way and structures——

Q. That is what we are speaking about.

A. I assumed you were speaking of the total expenses of the local train.

So far as the apportionment of the "Maintenance of way and structure expense" is concerned, between the local and through trains, the only actual allowance made was to add 50% to the local engine miles for station switching.

3259 Q. Mr. Ludlam, if that is fair to the Iron Mountain, would you say that is also fair to the Cotton Belt, in view of the difference of length of haul on those two lines?

A. In our judgment, it is entirely fair to determine the cost of the two classes of trains, and in the apportionment of expense of those two trains, subsequently made, we take care of the question of whether the haul of state business was greater or less on the Cotton Belt as compared with the Iron Mountain.

Q. The object was to ultimately ascertain the difference of expense of moving state and interstate traffic?

A. Yes, sir.

Q. So the division you made on the ton mile basis, between state and interstate traffic, is based upon the differences that enter into the cost of operating local and through trains: that is true, is it not?

A. No, sir, not the expense of the state and interstate. That is the result, not the distribution.

Q. Well, we will speak of it as the result if you prefer that term: the method that you have adopted for distributing the expenses between those two classes of traffic, is it not all based, and is not the foundation of it, the differences you make between the expense of operating local and through trains?

A. The foundation of it is the basis of the cost of the two classes of service.

3260 Q. You disregarded in that one instance—using that to illustrate, I shall not go more into detail—any respect of the length of haul that is shown in the evidence in this case to exist between the Iron Mountain and Cotton Belt, did you not?

A. No, sir, that is one of the especial elements taken into con-

sideration of distributing the two elements of cost and of the two classes of trains, after they are determined.

Q. Now, to go back to the cost of operation, as a stable factor, which you say is the case——

A. May I say there, that I said stable as between state and interstate; a fluctuation in the cost of material or a fluctuation in the wages of employés would apply equally to state or interstate.

Q. Will not a fluctuation in the rates apply to state and interstate if it is true, as stated by many witnesses on the stand, that there is a relation between state and interstate rates?

I am not asking you now what you think about relation, but if it is true, would not the same statement apply to that also?

A. If there was a constant and stable relation between the state and interstate rates that would be true. I mean true as to some basis of apportionment, not necessarily an apportionment on the revenue basis, because even if the rates and the relation were
3261 stable, the relation of expense to revenue might still be entirely out of proportion between the state and the interstate.

Q. You criticize a statement made by Mr. McPherson on the stand (Page 351, Vol. 1), where he said:

"The revenue, therefore, expresses volume, character, risk and distance, rather than quantity."

Is it not true that Mr. McPherson in making that statement was comparing the fact that revenue as a unit of division expresses those matters that he enumerated—value, character, risk and distance, rather than quantity; in comparing it with that unit with the ton mile as a unit and for the purpose of distinguishing between a unit which would take all those matters into consideration, and one which considered alone the matter of quantity, as he assumed the ton mile theory?

Don't you know that it was in that sense that he made that comparison?

A. I think he made that comparison in relation to the ton mile, but I think that the statement that quantity was not considered in making rates to the same extent that those other items are, is entirely misleading, and particularly when he stated that the "revenue, therefore, expresses value, character, risk and distance;" how does the revenue in this tariff I have referred to, as an illustration, represent the risk when it quotes beer in glass at 48¢ and bar iron at 55¢, and how does it consider distance when one of those shipments may move 400 miles further than another shipment of the
3262 same commodity and same weight and same class.

Q. That is not answering the question I asked you, Mr. Ludlam.

I asked you in connection with your statement by way of criticism of that statement of Mr. McPherson, that you never heard of a railroad rate that did not consider quantity, if upon examining that you would not find that when Mr. McPherson made that statement he did not mean to say that the revenue did not consider quantity, but did not confine it to that to the exclusion of those other elements as in his view the ton mile theory did.

A. I would not attempt to say what Mr. McPherson meant to say.

Q. To his statement that it costs more to transport commodities in small quantities than in large quantities, you said that you were unable to understand what he meant in making that statement:

Is it not obvious that what he meant was that it cost less, if you want to put it that way, per ton or per mile, or any other way you might measure the relation of cost—it costs less to transport commodities in large volume than it would in small volume?

Was not that what he meant and is not that obvious from his statement, and is it not true?

A. It was not obvious to me and that was the attention I attemped to call in my answer to his testimony; first, that he
3263 considered a great many other elements before he did quantity, and yet, not considering quantity, he goes on to state that it costs more to transport commodities in small quantities than it does in larger quantities.

It seemed to me his testimony was contradictory.

Q. Is not that true and is it not in accordance with the universal rule, that a large volume of business transacted on the wholesale system can be conducted more cheaply with reference to the unit than a small retail business?

A. I think it is, yes, sir.

Q. Do you not understand that that is the sense in which Mr. McPherson in using his statement was speaking——

A. I think it might be interpreted that way, but that was not the way I read it.

Q. Without meaning that there is any intentional unfairness, is it not a fact that your criticism was rather unfair to his testimony?

A. I did not mean to have it so. I meant to draw attention to the fact that in my judgment, he attempted to belittle the relative importance of the quantity in supporting the revenue theory and then he immediately contradicted himself.

I agree with Mr. McPherson entirely, if it was his intention to state that commodities can be handled in large quantities at less expense per unit than they can in small quantities, but I
3264 don't agree with him that the revenue therefore, expresses value, character, risk and distance, rather than quantity.

Q. Referring to a statement you made that in a general way the records kept by the railroads of the average cost of moving tonnage, would give an idea roughly of the average cost of moving freight on the line of the road:

I want to ask you if similar records to those that are kept with reference to the ton per mile on freight on commodities are also kept with reference to the character of the passenger?

A. The railroad companies keep records as to the revenue per ton per mile and as to the revenue per passenger per mile.

Q. In making up the exhibits filed by Mr. Wharton in this case, have you taken into account or made any allowance for the difference in the loading of cars?

A. In what way, Mr. Moore?

Q. The statistics in this case show that on one of these roads the

average loading of loaded cars in local trains is 14.7 tons and on through trains it is 19.2 tons; that is on the Iron Mountain.

On the Cotton Belt it is 12.43 on the local trains and 17.29 on the through trains:

Have you made any allowance in your division of train expenses for that difference?

A. Yes, sir.

3265 Q. In what way?

A. In having determined as accurately as possible the cost of the two classes of trains and then apportion that cost between the business that they actually handle.

Q. How did you determine that cost as between trains?

A. That is explained fully in our exhibit——

Q. It is on the car mile basis, is it not?

A. No, sir.

Q. Take "Maintenance of equipment" or "Maintenance of Way:" is it not on the car mile or engine reduced to car mileage?

A. Certain items are on the car mile basis.

Q. Take "Maintenance of way and structures"?

A. That is on the car mile basis with the allowance as stated.

Q. Take "Maintenance of locomotives"?

A. That is on the car mile basis.

Q. How about freight cars?

A. That is on the car mile basis with certain allowances.

Q. Have you made any allowance there for this difference in loading between local and through trains, the cars in local and through trains?

A. Yes, sir, because we have apportioned the expense of the local trains to the cars that the local trains actually handled.

3266 Q. I understand that, but you seem to have apportioned it on a basis of the car miles, and the car miles, as I understand it, do not involve the contents of the car and the weight of the load carried by the car; where is that taken into consideration in your division?

A. In the distribution of the expenses of the local train and the through train as actually determined over the contents of the cars the train carried.

Q. Have you determined it as between the local and through trains; have you considered the difference in your division of train expenses as between the local and through trains?

A. Yes, having ascertained the cost of the local train we think that takes in all the elements entering into the local train.

Q. How does it take in the element of weight when you determine it on the car miles, without regard to the contents of the car?

A. The statistics that we gave at the start showing that the average loading of revenue freight was different in the local trains from the loading of the through trains show that that was taken into consideration.

Q. I understand it is shown in your statistics, and that is where I got the figures: but what I am asking you is to point out to me where you take into consideration in dividing the train expense be-

tween local and through trains—I mean the contents, I am
3267 not talking of the car or car miles—where did you give consideration in your formulas to the weight of the contents of the cars that make up the two classes of trains?

If it is there I want you to point it out; that is what I have been trying to ascertain.

A. Division No. 7 of Exhibit K, page 7, explains how the division was made between the two classes of trains, after the expense of the two classes of trains had been determined, as previously explained in this exhibit. That division was made on the basis of the freight actually handled by the two classes of trains during the month of October, 1907, in the case of the Iron Mountain.

Q. Now, Mr. Ludlam, you have divided the train expense—except two or three items, such as traffic expenses, station expenses, and perhaps one other—on the basis of car miles:

In this method of dividing train costs as between state and interstate ton miles, you simply ascertained what per cent of the total ton mileage of intrastate business is carried on local trains and what per cent of the total interstate business is carried on local trains.

Then you determine what per cent of the intrastate and interstate business, respectively, is carried on the through trains.

Tell me, do you make any distinction in that apportionment or in arriving at the per cents of state and interstate business
3268 carried on those trains? Do you do it in any way with reference to the loading of the cars that make up those two classes of trains?

A. Necessarily the ton miles include that element.

Q. I want to ask you if the 39.10 per cent of intrastate business carried on local trains is not a statement in the aggregate and without any reference whatever to the loading or contents of the cars in which this traffic is carried.

A. 39.10 per cent relates to the proportion of the total freight handled by local trains which are state business and it assumes—and I think this is what you mean to ask—that the cars handled by the local trains, whether they be state or interstate, were equally loaded.

That is to say, if the local train carried, we will say two car loads of stone, one going across the borders of the State and the other stopping within the State, that they were both loaded to the same capacity.

Q. It assumes that?

A. Yes, sir.

Q. Whether on local or through trains?

A. It assumes that on each class of train.

Q. Whether through train or local train.

Now, if it is a fact that the cars in the through train are loaded more heavily than the cars in the local train, do you not in
3269 that apportionment disregard that distinction?

A. No, sir, it does not affect the difference between the loading of the cars in the through train and the loading of the cars in the local train, but if there was a distinction between the loading

of the state cars in the local train and the interstate cars in the local train, and a difference between the loading of the state cars in the through train, and the interstate cars in the through train, it would ignore that difference, but it would not ignore the difference between the loading of the cars in the local train and the loading of the cars in the through train.

Q. Can you give me, when we assemble after recess, the cost per ton per mile of state and interstate freight as shown by the exhibits filed in this case by Mr. Wharton?

A. I will look and see if we have that worked up, Mr.
3270 Moore.

Q. If there are ten cars in a local train and ten cars in a through train, under your method of division—car mileage—the total expense would be divided equally without regard to the contents of these cars, between the local and through trains, would they not?

A. The ten cars carried on the through train would be applied to the through train, and the ten cars carried on the local train would be applied to the local train, our division of expense being made between the cost of the local train and the cost of the through train. That would not be applied to the whole factor, as your question would imply.

Q. But the total expense of those two trains, in your method of division, would be divided equally between the two, would they not?

A. No, sir. The total expense of each class of trains is divided over the business handled by each class of train.

Q. I am not speaking about the business, but the division of train expense to local and through trains:

If you have two trains and one of them is a local train and one of them is a through train, each one containing ten cars, would not the total train expense as between those cars, under your
3271 method of division, be divided between them on the basis of the number of cars in each train?

A. Certainly, the expenses are apportioned on car mileage basis.

Q. I mean those expenses that are apportioned on a car mile basis: would that not be the case?

A. No, sir, because we make certain allowances for the car mileage made on local trains.

Q. I understand that, but after you have made your allowance and in that way obtained the number of car miles then you would divide the expense in proportion to the number of car miles in each train, would you not?

A. With what we allow to equalize.

Q. On the first sheet of Exhibit K, the total number of car miles is 8,470,636; of that 1,438,038 car miles is for the local and 7,032,-598 car miles for the through trains:

You have obtained the per cents of the car mileage on each class of trains with reference to the total car mileage and apportioned the expense on that basis, have you not?

A. After adding 50 per cent to the engine mileage of local trains to provide for the switching.

Q. Does that not apply to both state and interstate freight on the local train?

3272 A. Oh, yes, the local train carries both state and interstate.

Q. Now, for the present purpose we will eliminate that and we will assume that you make the allowance; what I want to get at is, after making that allowance that you spoke of, how have you divided the total mileage between local and through trains, as you have stated?

A. On a car mileage basis.

Q. Then you divide the expense of maintenance of way and structures on the ratio of the car mileage in each class of train to the total car mileage: is that correct?

A. Yes, after making specific allowance for station switching of local trains.

Q. And that is done, is it not, without regard to what the contents of the car may be, or whether some of them or all of them are empty, or some empty and some loaded?

A. Yes, sir.

Q. We will say then that on one of those trains—to illustrate I will take a local train—five of the cars contain ten tons each of state freight and five of them contain twenty tons each of interstate freight:

That is one hundred and fifty tons, of which fifty tons are state freight carried on five of the cars, and one hundred tons are interstate freight carried on five cars:

When you come to apply your ton mile theory of division

3273 to that, how do you apportion that expense?

A. The ton mile theory of division to the total expense of the local——

Q. Of that train, yes. I have described the train: now apply your division of the expense on the ton mile basis, telling what per cent you would apply to the state business and what proportion you would apply to the interstate business.

A. Assuming that the local train had fifty ton miles of state freight, and one hundred ton miles of interstate freight, we would apportion one third of the cost of the local train to the state business and two thirds of the cost to the interstate business.

Q. You would do it on the ratio that each ton of freight on the train bore to the total tonnage of the train, would you not?

A. Total ton miles, yes, sir.

Q. Mr. Ludlam, in that case now you are charging to the interstate freight on the five cars two thirds of the train expenses, are you not?

A. On the basis of the case that you mentioned.

Q. In other words, you depart from your car mile theory there—you have ascertained the train expense on the basis of the car miles—you depart from that and you distribute that expense

3274 as between state and interstate business on the ton mile basis, thereby charging the greater part of the expense to the interstate freights carried on that train: that is the case, is it not?

A. We do not depart from it in our exhibit. We depart from it in the hypothesis which you suggested.

Q. Do you not do it in your exhibit?

A. No, sir. Our exhibit does not show anywhere that on the——

Q. If that should happen to be the relation of the loading as between the state and the interstate tonnage carried on the local trains, it would result in that in your exhibit, would it not?

A. If that should happen to be, yes sir.

Q. Does it not follow, Mr. Ludlam, that these train expenses are divided, the state and interstate business, without regard to the loading of the cars?

A. No, sir, because it is divided on the actual ton mileage of the two classes of freight. If you assume that it takes two cars to carry the same ton miles of state freight that one car can carry of interstate freight, then that would be the case, but we make no such assumption.

Q. Does your exhibit in division 7, your method of dividing train expenses, assume that each car carries the same load?

A. That each car on the local train carries the same load and that each car on the through train carries the same
3275 load.

Q. You say in explanation of your method of dividing train costs, that during the month of October, 1907, 39.10 percent of all the intrastate ton miles, and 8.70 percent of all interstate ton miles of freight were handled on local trains—that is shown on page 7 of Exhibit K:

When you get down to the division you charge to the intrastate business 39.10 percent of the ton miles, do you not, of all local business?

A. Yes, of the business handled by local train.

Q. That is what I mean. And you charge to interstate business the corresponding percent that I mentioned above, 8.70 percent?

A. Yes, 8.70 percent.

Q. You assume in that that the cars in the local train all have the same loading, do you?

A. We assume in that that the cars of state freight and the cars of interstate freight handled by the local train are equally loaded.

Q. Is it not a fact that the interstate loading is heavier than the state loading?

A. I should say that the loading of the cars on the local train would be the same whether the freight was state or interstate.

In the case in Missouri, in a test that we made extending
3276 over quite a period of time, Missouri Pacific, we found that the state freight cars were considerably more heavily loaded than the interstate cars.

Q. I know you did, but didn't that grow out of the fact that there was a very large movement of stone in local trains from nearby points into the City of St. Louis?

A. My recollection is that it grew out of that.

Q. Didn't that cover a short period?

A. That does cover a short period.

Q. I wish you would think a moment, because I am informed that that is the case; refresh your memory and see if it did not grow out of the circumstances to which I have called your attention, that is, that there was a heavy shipment of stone from nearby points into this City.

A. No, sir, I do not recall that it did. In fact, I do not recall that we analyzed freight to see what it did grow out of.

We simply took the freight as shown by the way bills and found that over a certain period of loading the cars used for state business was considerably heavier, as I recall it, about 20 percent heavier, than the cars handling interstate.

Q. The same basis of distribution is adopted as between state and interstate business, that is carried on through trains, is it not, Mr. Ludlam?

3277 A. Yes, the same basis.

Q. Is it not true that these railroads run package cars at stated times, two or three times, or once a week, from St. Louis to points in Texas, and that those cars go out loaded to their capacity?

A. I cannot say in this case, but our examination of the through cars on the Missouri Pacific of package freight, showed that they went out loaded very lightly; an average examination covering several days showed that those through cars of package freight carried on an average of six tons, very light, as I recall it.

Q. I am speaking, of course, in my reference to package, to less than car load freight.

A. Oh, yes.

Q. Did you answer with reference to that, Mr. Ludlam?

A. Yes, sir.

Q. Is not six tons heavy load for less than car load, is it not above the average that you have used?

A. Exhibit "I" shows that the average loading of revenue freight, considering all cars during the month of October, 1907, on the St. Louis, Iron Mountain & Southern Railway, in Arkansas, amounted to 16.1 tons on the through trains which carried these through cars of package freight.

Q. Is that car load or less than car load?

A. That is everything carried on the through train. That

3278 would include these package cars that you speak of, which would tend to reduce the average. The average would naturally be higher if those lighter cars were not included.

Q. What percent of it is less than car load, four percent is it not, four or four and one half percent?

A. 3.81 percent of the total ton miles handled by through trains is less than car load.

Q. How is it on the Cotton Belt? Have you that before you?

A. Yes, the less than car load ton miles handled by the through train amounted to 7.55 percent of the total ton miles handled by through trains.

Q. What is the average loading of through trains?

A. The average loading of revenue freight, considering all cars

on the St. Louis Southwestern Railway in the month of October, 1908 was 12.33 tons.

Q. Mr. Ludlam, are you familiar with the manner of distributing local or intrastate freight in the State of Arkansas, that which is carried on these through trains?

A. Not specifically in the State of Arkansas, and I should say only in a general way, as that class of freight is generally handled by railroads.

Q. Is not that class of freight carried on local trains distributed in a different manner from interstate freight carried on
3279 them?

In other words, a local train will start out on a run of seventy five miles, we will say, and maybe there are eight stations: Will not the state freight under the conditions which generally exist, begin to be distributed and peddled and loaded out of that train earlier?

In other words, is not that likely to be delivered at more stations and to be distributed in a way that will cause a greater reduction of the weight of the state freight than in the interstate freight, as the train moves along?

A. No, sir, I think not. The less than car load freight, both state and interstate, is handled by the same train and frequently in the same car. It is distributed along from station to station according to the points to which it is consigned, and I think that many of those less than car load lots are distributed equally with the state less than car load lots.

What I mean to say is, people buying at a distance are more apt to buy in small quantities than when they are buying at nearby places. A man living in Arkansas will send to New York for some specific commodity he may happen to want, and have it shipped to him by freight to some point in Arkansas; whereas, when he buys at a home market he is apt to buy in larger quantities.

3280 Q. Is there not more local retail purchasing in the country done at nearby, small trade centers like we have in Arkansas, than there is at farther off, large distributing centers, like St. Louis and New York?

A. Yes, I think there is.

Q. Would not that have a tendency to cause a more even distribution of local freights between all stations on the run of the local trains than there would be of interstate freight?

A. No, because in my judgment the amount of less than car load freight purchased at all the outside points would be far greater than that purchased at the distributing points within Arkansas. What I mean to say is, when you not only consider New York, but Chicago and St. Louis, and all the other points—for instance, the statistics show that (Exhibit 26) of all the freight handled by the St. Louis, Iron Mountain & Southern Railway in October, 1907, the trans-state less than car load amounted to 2.04 percent of the total ton miles and that the interstate less than car load amounted to 1.87 percent of the total ton miles; where as the state less than car load amounted to .38 percent of the total ton miles.

Q. Did not those percents very largely grow out of the relative volume of business between state and interstate?

3281 A. Somewhat; but if you reduce it to the actual number of tons, it shows that during the month of October there were 8,482 tons of trans-state, less-than-carload freight; that there were 20,573 tons of interstate, less-than-carload freight, and that there were only 8,031 tons of state, less-than-carload freight; that is to say, if you apply it only to the number of tons.

Q. Have you there what proportion of that interstate less-than-carload freight moved on through trains and what on local trains?

A. No, sir. In our statistics we assumed that all of the state less-than-carload freight moved on local trains.

Q. Have you any information as to the interstate, what proportion of that moved on local trains?

A. No, sir.

Q. Now, if your assumption that the loading of the cars is different, if the same should be correct, then would your basis of distribution on the ton mile be proper?

A. Our basis of distribution is not on the ton mile; it is based on the local and through trains.

If your assumption that the loading of the state freight carried on the local train was different from the loading of the interstate freight carried on the local train, and your further assumption that

3282 the loading of the state freight carried on through trains and the loading of the interstate freight carried on the through trains, was not the same, was correct, our figures would be changed to that extent.

Q. Are those assumptions or have you facts upon which you acted? Have you knowledge and information that your assumption is correct, or is it merely an assumption?

A. I don't think we worked out any statistics to prove that, but there is no doubt in my mind but what that is the fact.

Q. It is in evidence in this case that there is a pretty heavy loss of time of the cars by the difference of the methods of operating local trains in the transportation of the business that is handled on them: Did you take that into consideration in making your division between through and local trains, the loss of time by the cars in the local trains?

A. Yes, we made specific allowance for switching and the other elements that go to make up that loss of time.

Q. Did you make any other allowances than those that you referred to, switching and things of that kind?

A. Nothing other than that which is shown in our report.

Q. Mr. McPherson states in his testimony in this case, at page 353, volume 1, as follows:

"The railway secures less efficiency from its cars used in

3283 intrastate freight traffic, in proportion to the relative tonnage, than in the interstate freight traffic; a greater investment in cars is necessary, and there is a larger cost for maintenance of cars in intrastate traffic than in interstate traffic, in proportion to the respective tonnage."

Was that element of difference between the two kinds of traffic taken into consideration in the preparation of your exhibits?

A. Yes, in the proportion to which those elements to which he refers would refer to the local trains and to the through trains.

Q. You made no other provision for it except that that is referred to as the allowance of which you spoke, switching allowance?

A. Switching and other allowances.

Q. What other allowances have you made?

A. They are shown in our report; allowances for extra stops of cars in local trains. On page 1, under (*a*) "Locomotives" we make an allowance for the extra maintenance expense of locomotives due to the service in the yard.

We also make an allowance for the switching done by road locomotives on local trains ,and also an allowance for extra maintenance on account of the switching which they do.

Under (*b*) repairs of freight cars, we make an extra allowance for the maintenance of freight cars, due to more stopping and starting of cars of local trains than cars of through trains, and also an extra allowance for the terminal handling.

3284 Those allowances having been made and apportioned to the local trains, all items of a supervisory and general character which are apportioned on the basis of the direct expenses, are similarly affected.

Reverting to Mr. McPherson's testimony: he says that the railway secures less efficiency from its cars used in intrastate freight traffic in proportion to the relative tonnage, than in the interstate freight traffic:

Inasmuch as we have apportioned the state traffic and the interstate traffic to the local and through trains in the proportion in which it was handled, that extra expense, if there is one, is provided for.

Q. Now, Mr. Ludlam, referring to your detail statement: does not the first item you mention "locomotives" apply to the use of locomotives and not to cars; and the second, under the item of "Freight Cars" does not that apply rather to the wear and tear caused by stopping and starting at stations, rather than the loss to the use of the cars

A. But the loss of the use of the cars, as I understand it, comes from the fact that the cars are in the local trains rather than in the through trains.

Q. What I have in mind and what was in Mr. McPherson's mind in the statement he made, as shown by the evidence of himself and others, is that owing to the schedules on which local trains are

3285 running and the fact that they only work in daylight, and considerations of that sort, there is a much greater loss in the efficiency and use of the cars than there is in the cars used in the through trains.

It is that kind of loss that I have in mind and what I referred to when I asked you if you made any allowance in these formulas on that account?

A. We have made allowance for the maintenance of the equip-

ment. If there is a loss in the time of the equipment that should be apportioned on the investment, or the proportion of the property of the company that is represented by its equipment, there would not be any allowance made for that unless you apportioned the property on the cost basis instead of the revenue basis; unless it is conceded that the revenue basis makes an allowance for the extra investment required in local equipment or in equipment for the short haul business, as pointed out by Mr. McPherson.

The question of interest on the investment would not enter into the operating expenses, but into the distribution of the property, and if you distributed the property, as I told Judge Hill yesterday, on a cost basis, that would be provided for. On a revenue basis it is not provided for unless the revenue provides for that lost motion.

Q. Is it provided for in your formula? It is not provided for in any specific way in your formulas?

3286 A. No, it is not an operating expense; it is an interest on the investment.

Q. I am speaking now of the efficiency of the cars: I do not mean the loss and wearing out, but the efficiency of the cars in use?

A. The efficiency of the cars is represented by the maintenance and operating expense, and in my judgment, is fully provided for by our formula as worked out in our exhibits. The investment loss is not provided for unless the distribution of property on a revenue basis takes care of that, and that is a matter of opinion; but if the property was distributed on a cost basis, then it would be provided for, in my judgment.

Q. You have stated since you have been on the stand, that it is a well recognized accounting principle that you arrive at the most correct results obtainable by apportioning indirect expenses which cannot be specifically allocated in the ratio of direct expenses which can be specifically allocated:

Now, if that proposition is correct, and I do not doubt it, why does it not apply to the 90 per cent of expense of "Maintenance of Way and Structures" which is attributable to the elements and not to any use made of the tracks, buildings, fences, etc., by the engines and cars?

A. I don't think that is relative at all. I think that is an

3287 expense the total of which can be specifically apportioned to the operation of the trains. I would not call that an indirect expense in any sense. I think that is a direct expense absolutely applicable to the operation of the train.

Q. Is not the damage by the elements an indirect expense, as much so as "supervision and general expense"?

A. No, sir; I don't think so.

Q. Are they not all pretty largely the same character, not attributable to any particular part of operation, but to other causes?

A. No, sir; I don't think so.

If a tie rots from the weather and has to be taken out and a new tie put in the track, it is put in the track for the specific use of that track. But you cannot apportion the superintendent's salary, if you please, or the president's salary, to any specific ties, because it

applies to all ties and all items of expense. The tie I referred to applies specifically to the running of trains.

Q. Superintendents and their assistants are just as essential to the operation of a railroad as any other element connected with it, are they not?

A. Yes, sir.

Q. Why is the expense charged on that account any more an indirect charge than that expense growing out of depreciation that is not produced by the running of trains, but is produced by natural causes from the elements?

3288 A. So far as the superintendence of maintenance of way and structures applies, that is all apportioned to the "Maintenance of Way and Structures" because the time of the superintendent is entirely given to them, but in the case, for instance, of the "Supervision and General" expense of the maintenance of equipment, you cannot say whether his expense is applicable to repairs of locomotives; repairs of freight cars; renewals of freight cars; or repairs of work equipment or renewal of work equipment. Items of that nature you cannot specifically locate as applicable to the specific items, and therefore it is distributed over all of the items in proportion that the items that you can locate, amount to.

Q. You cannot say that the deterioration resulting to structures, fences, telegraph poles and to the roadbed itself, from the elements, is chargeable to either state or interstate freight, can you: To the movement of interstate freight, I mean, or to the movement of intrastate freight?

A. No, sir; we don't attempt to.

Q. I know you do not.

Is it not an expense brought about by unavoidable causes, which ought to be met by the general revenues rather than by charging it to any feature or branch of operation, unless it was brought about or charged by that branch of operation?

A. No, sir; I would not say so. I would say that your total maintenance of way and structures should be charged to the

3289 purpose for which your way and structures are maintained.

It is not the question of what causes the expense that determines whether it is direct or indirect. It is a question of whether you can allocate that expense to a specific purpose.

To revert to the tie again, it is not a question of whether a tie is worn out by the trains running over it or by the elements. It is there for a specific purpose and therefore it should be charged to the specific purpose to which its use applies.

However, in the case of the salary of the superintendent of maintenance of equipment, he is there to give his attention, as stated, either to repairs of locomotives, repairs of freight cars, or repairs of work equipment.

Q. Is not a station just as essential to the transportation of freights and their handling and distribution, as the right of way is to the movement of the train?

A. Are you referring to the station building or station expenses?

Q. Station expenses.

A. Station expenses are applicable to the movement of freight, yes, sir.

Q. You do not apply that on the same basis that you do other transportation expenses, do you?

A. No, sir; because we think that the station expense
3290 is more specifically applicable to the freight originating and terminating at the station to which the expense applies.

Q. Speaking of "station expenses," Mr. Ludlam, you have charged that to all classes of freight without any regard to the service that may be rendered to that part of the traffic which we denominated as "trans-state:"

That consists of the services of agents, clerks, cashiers, stenographers, and employés for handling freight about the station house, as I undertand:

Why should any part of that be charged to trans-state traffic?

A. Why should any part of the station expenses——

Q. Which consist of such services as I have enumerated, as I understand it: why should any part of that be charged to the trans-state business?

I am distinguishing that from "terminal" expense. I am speaking of "station" expenses, as distinguished from "terminal" expenses.

A. We have assumed in that division that all of the interstate freight, both trans-state and what might be designated as second-class interstate, on the average uses one terminal in the state of Arkansas, as compared with the state freight using two terminals.

Of course there is some trans-state freight—since you refer specifically to that—into and out of Memphis, that would really have a terminal expense.

3291 There is also a large amount of interstate—what you might call second-class interstate—in and out of Memphis and Fort Smith, that would have two terminal expenses in the state.

There is also, as I understand the testimony in this case, a large amount of grain, lumber and cotton, that would have two or more terminal handlings in the state.

And there is a large amount of the straight trans-state freight that would be received from and delivered to connections in the state, to which there would attach a considerable expense.

So we think, that taking all those things into consideration, a fair apportionment would be to assume that all interstate traffic, on the average, *have* one terminal, that is, one station expense, and that all state traffic has two station expenses. That is an assumption.

Q. Now, there is a very large volume—and that is recognized in the statistics in this case—of the business of these roads, that consists of trans-state traffic, and on the basis that you have mentioned you propose to charge, and you have charged all of that traffic with an equal proportion of station services, as you have the interstate traffic which begins or ends in the state of Arkansas?

A. I would hardly say an equal proportion, but on the average we have charged all interstate tonnage with one station handling,

recognizing that the so-called second-class of interstate would
3292 have more handlings than the trans-state, but that on the average it would all have one handling.

Q. What have you done in regard to terminal expenses, in regard to that class of traffic, both the interstate and trans-state—all interstate traffic? What allowance have you made for that?

A. What terminal expense do you refer to? "Terminal" expenses have been used in so many connections in this case that I am a little mixed up.

Q. What I had in mind was "yard" expense, Mr. Ludlam?

A. Those have been divided between local and through trains on the basis of the number of cars handled at terminals.

Q. Do you think that is a fair method of dividing that expense, as to the freight that was passing through those yards or division points?

A. Yes, sir.

Q. If a car of trans-state freight is set out at Hoxie or Traskwood, you would attach just as much terminal expense to that as you do to any other car?

A. Yes, sir.

Q. Do you believe that is a fair apportionment?

A. On the average I think it would even up.

Q. Do you believe it is proper to impose the same charge, terminal charge, at intermediate stations, as you do at terminal stations that the movement originates at or——

A. After you have provided for the so-called station expense, I believe that is proper.

Q. What has station expense to do with trans-state move-
3293 ment?

A. The station expense would have a good deal to do with a trans-state movement originating or terminating in Memphis.

Q. That is a very small amount compared with the entire movement in Arkansas?

A. Station expenses would have a great deal to do with trans-state freight delivered to or received from a connecting line in the state of Arkansas, of which there is a large volume of business.

Q. What is the comparative expense at intermediate terminals and at originating terminals?

A. Why, if you separated the so-called "station" expense part of it, I should not say there was any.

Q. Not any difference?

A. No, sir; on the average.

Q. I want to call your attention to your testimony in the Missouri Rate Cases, at pages 1889 and 1890:

Your attention was called on that occasion to the statement you had made that there were two terminals in the case of purely state freight, and you thought in the haul of 222 miles or the haul of 237 miles, as the case might be, there would be more than two terminals; you explained that by saying that there would be a division point in the course of that haul, where there would have to be some attention paid to the freight:

3294 And then you were asked:

"Do you mean to say that at each of those division points it would be equivalent to a full terminal expense at the point of origin or the point of destination?"

And your answer was:

"A. No, sir, the intermediate terminal expense would be much less than the terminal expense at the point of origin or at the point of destination."

Mr. Taliaferro, the representative of Haskins & Sells, in the conducting of the state case in that litigation, at page 2212, testified:

"Q. What I want to know is, whether it is a fair result of your testimony to say this: that so far as the Missouri Pacific Railway is concerned, the terminal expense is three times as great where it is an originating or terminal expense, as it is where it is a mere passing through expense?

A. If you confine that to the business that the Company itself is taking through that terminal, I think that might be a fair relation between the two.

Q. That is the proportion you assume, that it costs three times as much to do that one-third of the business that you estimate terminated or originated at Kansas City?

A. Yes, sir."

Q. Now, in view of those statements in that case, can you maintain now that the intermediate terminal expense is about equal?

A. There would be two answers to that question: It would require two facts to reply to the question:

In the first place, the expenses of the Kansas City Terminal were very much larger, probably, than the expenses at any terminal in Arkansas.

3295 Furthermore, the terminal expense in the Missouri Case includes the station force. Here the station force is separated.

The "station expenses" on the Iron Mountain in the state of Arkansas are shown to amount to $233,626.94 as compared with "Yard and terminal" expenses of $236,262.07.

That is to say, that in this instance in the Arkansas Case, we have specifically apportioned one-half of the expenses that were considered as a whole in Kansas City.

Q. But are not the number of tons handled there a matter to be considered and would the unit of expense be such as you applied when you come to consider the volume of business and number of tons handled at those large stations?

A. From my study of the situation at Kansas City—and we made rather an exhaustive study of that terminal expense—we reached the opinion that it would cost about three times as much per ton for a shipment originating or terminating at Kansas City as it would cost for a shipment passing through, but that included not only what is known in this case as the "Yard and terminal expense" but also what is known in this case as "station expenses."

In this case we have separated the "Station expense" from the

other expenses and apportioned the "Station expenses" specifically to the tonnage handled.

Q. But in view of the fact that the character of the service that is embraced in the "Station expenses" is not applied or ren-
3296 dered to trans-state business, how can you bring that into it as an element?

A. I have already attempted to explain that we apportioned one station handling to all of the interstate freight on the assumption that while there was some trans-state freight that might not have the use of the station expenses, other than the telegraph and items of that nature, that there was so much of it that had not only one terminal handling but two terminal handlings, or more, that we thought that would be relatively a fair apportionment and it is an apportionment, an arbitrary apportionment, and we believe, approximately correct.

Q. Now, assuming, Mr. Ludlam, for the purpose of the question, that as a foundation for the basis which you say you acted upon in regard to station expense—that is to say, you assume that there was some interstate service there that was a little extra: would that justify you in charging a ton of trans-state freight the same amount of terminal service that you do a ton of other freight, when the terminal cost at intermediate stations is only ¼—and that embraces all trans-state business in Arkansas—of what it is at the originating stations? Do you not lose sight of the difference and do you not do an injustice to the trans-state when you make a division on such a basis as that?

A. Where do you get the figures?

Q. From your testimony in the Missouri Case.

A. That the intermediate expense is only ¼ of the
3297 originating terminal expense?

Q. From the testimony I have just read to you?

A. But I told you the situation and figures are entirely different. One has no relation to the other.

The President of the Pennsylvania Railroad Company stated some years ago in one of his reports in 1894, that on all freight that the Pennsylvania Railroad Company hauled from New York to Pittsburg and west of Pittsburg, they had on the average to haul it, I think, 90 miles west of Pittsburg, from Jersey City, to earn enough to pay the expense of getting it across the Hudson River, but the cost of getting it across the Hudson River would have no relation to the terminal expense in the state of Arkansas, and the expense of the road at Kansas City has no relation, particularly so as the items entering into what was known as "Terminal expenses" in Kansas City is separated here between "station expenses" and "Yard expenses".

I might say incidentally, Mr. Moore, that as I recall it the railroads in the Missouri Case attempted to apportion all the expense of the Kansas City terminal to the business originating and terminating at Kansas City and assumed that none of it appertained to the through business, their contention in that case being somewhat as it is in the state of Arkansas, that the through business had practically no expense connected with it. They did not apportion any of the Kansas City terminal expense to it.

3298 Q. Are you not mistaken in your statement that in the Missouri Case you did not separate "Yard service" and "Station service" and in that connection I will call your attention to Exhibit 35, which I understand is one prepared by Haskins & Sells and used in that case:

Please look at that and then state.

A. We did in this exhibit, but we did not——

Q. What is that exhibit?

A. Exhibit No. 35.

Q. Was that an exhibit in the Missouri Case?

A. I think so, it is marked "Exhibit 35". I couldn't tell whether it was the Missouri Pacific or the C. B. & Q.

Q. Was it filed in that case, or the original of it? This is the exhibit that was filed by you in that case, is it not?

A. I presume it is; I don't know.

Q. It was prepared by Haskins & Sells?

A. That exhibit was, undoubtedly.

Q. Mr. Ludlam, in the exhibit prepared by your firm, you have charged 19.33% of "Traffic expenses" to mail and express:

What connection is there between mail and express and traffic expenses that would justify that charge?

A. We have apportioned the traffic expenses on the revenue basis.

3299 Q. Why should any part of traffic expenses be charged to mail and express in a division that you attempted to make in detail?

A. Because we have not attempted to apportion the traffic expenses, but have accepted the railroad company's apportionment of those expenses.

Q. I know that was based on a general division on the basis of the revenue, but now you are attempting to dissect it and deal with it in detail:

Doing that do you believe it is proper to charge any part of the traffic expenses to mail and express?

A. We have not attempted to dissect or apportion the traffic expenses.

Q. In other words, you apply the revenue theory when it is profit.

A. No, we applied the revenue theory when we had no other basis that we thought was equitable or that we could give a correct result from an approximately correct result.

I said we applied the revenue theory. I meant we accepted the railroad's distribution when we had no basis that we thought would give an approximately correct result.

I might say that the classification of operating evpenses as prescribed by the Interstate Commerce Commission, includes under its instructions as to what shall be charged to traffic expenses, the provision for the salary of the general express agent.

3300 Q. Is not that on railroads where the railroads maintain their own express and the express is not operated by a separate company.

A. It would depend on whether a railroad had such an officer.

Q. Has the Iron Mountain or the Cotton Belt such an officer?

A. I don't know.

Q. Was not that a pertinent subject of inquiry before making a charge for any part of that expense?

A. If we had made the charge we would have looked up the basis, but not having a basis to go on, we accepted the company's distribution.

In my judgment, traffic expenses are pretty hard to apportion. I should not think though, that the same per cent would apply to mail and express business as would apply to the freight business.

The salary of the general mail agent would also be charged to the traffic expenses if there was one, I think.

Q. How is that divided in your accounts, Mr. Ludlam, the salary of the general mail agent?

A. If it is charged to the "Traffic expenses" I think it is—all the traffic expenses are divided by the railway on a revenue basis, and we have accepted their distribution.

Q. Do you know where that mail agent's salary is charged in the accounts of the Iron Mountain?

3301 A. No, sir, I do not.

Q. In the accounts filed in this case by the Iron Mountain?

A. I do not.

Q. I think, it is charged to the "General expenses"?

A. (After examining document) Yes, sir.

Q. Among the objections urged by you to the revenue as a proper basis of dividing expenses, I notice you state here it assumes that the efficiency of the car, we will say, delivering less than a carload of freight, was only one-half as great in the case of the interstate as in the case of the state because they would receive only one-half as much per ton per mile on the movement of the freight.

Q. Now, it is a fact that the statistics in this case show a difference in the length of haul, in one case the ratio being one to five and in the other one to three.

Does not that difference in length of haul have a very material effect on the matter to which you were referring in that testimony?

A. In my opinion it has a far more material effect on the revenue per ton per mile than it has on the cost per ton per mile.

Q. One of your objections as I understand your testimony, is that it shows that only one-half of the effeciency of the car delivering one kind was only one-half as great in the interstate as it would be in the case of the state freight:

3302 Is that not a very mild assumption? Is there not more than that difference, really?

A. It is approximately one-half. That is a broad assertion to say a thing is worth what it will earn—that 15 tons of state freight will earn the same as 30 tons of interstate freight; it is apparent that a car carrying 30 tons of state freight is earning——

Q. What becomes of that objection to the revenue theory?

A. Because the rates are not universally uniform.

Q. What does the statement that you prepared for me at the noon

recess show to be the average cost per ton per mile, between state and interstate?

A. The average cost per ton per mile on the figures shown on our exhibits, for the six months ended December 31, 1907, amounted in the case of state freight on the Iron Mountain road, to 8.22 mills.

In the case of interstate freight on the Iron Mountain road, it amounted to 4.38 mills.

In connection with state freight on the St. Louis Southwestern road, it amounted to 11.78 mills and in the case of the interstate freight on the St. Louis Southwestern road it amounted to 4.47 mills.

3303 Q. You testified you spent much time in the investigation of the questions that arose in the Missouri case in which your firm was engaged for about three years; didn't you testify in that case that the difference in the cost in the handling of state and interstate freight, would or might run from ten to twenty-five per cent?

A. I think so.

Q. You have found from investigation in this case, that your impression from which you testified in that case was mistaken?

A. No, sir, not at all; I have found that he cost was not the same in the State of Arkansas as I thought it was in the State of Missouri.

Q. Do you account for that difference in the two statements, one made here now as a result of these formulas, and the statement contained in your testimony in the Missouri case, on the difference in the conditions in Arkansas and Missouri?

A. I should estimate, if I was making an estimate now in the State of Missouri, that the state freight would cost about 30% more than the interstate, rather than 25. My testimony in the Missouri case, as I recall it, was that it would not exceed 25%; I should raise it now to make it about 30%, and the difference between than 30% increased cost in the State of Missouri and the increased cost in the State of Arkansas, as shown by these exhibits, reduced to a ton mile basis, in compliance with your request, would

3304 be accounted for in the difference in the traffic; you must remember that the Missouri Pacific has an immense state traffic through the State of Missouri, between St. Louis and Kansas City and Kansas City and Joplin, and St. Louis and Joplin.

Q. Were you testifying in making that statement, with reference to any particular road engaged in the litigation or with regard to the conditions generally with reference to all parties engaged in it, in the testimony which I have just read. I understand there were 18 different roads engaged in that litigation; upon the face of it, this testimony is general and is not confined to any particular line of railroad.

A. My recollection is that was testified as to the Missouri Pacific or the C. B. & Q., that they were the figures I had before me at the time.

Q. Let me call your attention to the question:

"From your knowledge of the general situation of railroads"—

evidently referring, I imagine to the railroads engaged in the litigation—

"both as an operative and expert, what would you say was the increased expense if any, in handling the average ton of state freight as compared to the average ton of interstate freight?"

And your answer was what I called your attention to awhile ago; that seems to have been general in relation to the subject generally.

3305

A. What page is that?

Q. Page 924.

A. I was referring specifically to the handling of freight in the State of Missouri because that was the only state I had ever gone into that question *in*.

Q. But you were not referring to any specific railroad?

A. I am inclined to think I was referring to the three roads that were specifically examined in the State of Missouri, The Chicago, Burlington & Quincy, Missouri Pacific and Wabash, but I notice a little farther on, I stated that in many instances of short hauls, the two terminal expenses might exceed 25%; I say, "it is very hard to form a definite opinion for the reason that there are many conditions where there would be no increase in expense where the revenue would be greatly increased, and in many cases of short hauls, two terminal expenses might exceed 25%."

Q. What is the average haul in the State of Missouri, compared with Arkansas on these two lines?

A. The average haul of state freight on the Missouri Pacific Railroad in the Missouri case, was 52 miles, and the average length of haul of interstate was 105 miles, making the haul of state freight about 1½ that of the interstate. On the Chicago, Burlington & Quincy, the total haul of state business is 81 miles, and of all interstate business, 135 miles in the State of Missouri.

3306

Q. Speaking of a charge for depreciation, to which you referred in your examination in chief, where you stated that the railroad companies are required by the Interstate Commerce Commission to charge specifically against their operating expenses for depreciation on their equipment, I want to ask you if the order of the Interstate Commerce Commission does not relate alone to rolling stock?

A. Yes, sir.

Q. And do the regulations of the Interstate Commerce Commission not require that expense incurred for renewals shall not be charged to operating expenses—that is, shall not be charged to repair accounts?

A. You mean the replacements?

Q. Yes?

A. Yes, sir.

Q. So your statement would only be applicable to repairs on rolling stock, your statement about the depreciation under those rules?

A. Yes, during the period covered by our report.

Q. Mr. Talliaferro, the representative of Haskins & Sells, in the Missouri cases, testified did he not, that you cannot sep-
3307 arate the cost of running a passenger train between the cost of carrying the passengers and the cost of carrying mail, express, etc.—page 457 of the printed record?

A. I haven't that testimony here; will you read it to me in full?

Q. I will show it to you.

A. I believe he so testified.

Q. And yet that is what you have done in the formulas filed by Haskins & Sells in these cases, isn't it?

A. Yes, sir, we have records and data here that we did not have in that case.

Q. That data was as easily accessible in that case as it was in this?

A. I presume it could have been worked out.

Q. You were engaged longer in that case than you were in this?

A. Yes, sir, but we profited in this case by our experience in the other case.

Q. You read the rates from St. Louis to points in Texas from a tariff sheet to which you referred this forenoon. I want to ask you if you are acquainted with the relative values of the several commodities between which you made your comparison as to rates?

A. Only in a general way.

Q. For instance, you compared the rate of 43 cents on
3308 excelsior with the rate of 55 cents on bar iron, do you know the relative value of those articles?

A. Not the relative value of the two articles, but I know their relative casualty risk in transporting them on a railroad.

Q. But does not the value enter very largely as a controlling factor in the rate?

A. It has been testified to here that it is an element, but in the case quoted there, it is an element where the value would conflict somewhat with the density.

Q. But is not bar iron of far greater value than excelsior?

A. I should assume so. I do not know in that case, which the traffic man was considering, whether the density or the value or casualty risk.

Q. Take beer in glass and bar iron, how would they compare in value. You quoted those rates at 48¢ for beer and glass, and bar iron 55.

A. The casualty risk on the beer would, in my judgment, be much greater; the lost space on beer would also be greater. As to the actual commercial value of the two articles, I would not care to express an opinion.

Q. Take potatoes and horse shoes, there is a relation of value there that might account for the rates you mentioned?

A. I think it would take a very good traffic man to explain just what would account for the difference.

Q. I am not going any further into this, but I want to call your attention to that for the purpose—I am questioning you about these

matters for the purpose of calling your attention to the rela-
3309 tive values; is there not a difference there which is recognized as a difference in rate making?

A. I do not think that had anything whatever to do with the making of that rate. I do not think it was considered. The traffic men have told us that casualty risk was considered; it was one of the first things; that the density was considered; that the value was considered; I would say, speaking generally, from the little knowledge I have of rates, that the main consideration in making rates, was the basis of what the traffic could pay.

Q. Yes, we understand that, but isn't the value the most important thing to be considered by a traffic man in making rates?

A. No, sir, the value would have no relation to the traffic man, except as to the casualty attached thereto might control.

Q. How about that element you have just mentioned?

A. That would have a great deal to do with it; the more valuable the article, the more freight it can afford to pay.

Q. Now, there are some of these that are necessities of civilized life, preserves in glasses and things like that, what influence would the fact that those are necessaries have with the rate making man in fixing his rates?

A. I don't think I am qualified to state.

3310 MAURICE WRIGHT, being first duly produced, sworn and examined, deposed as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, age, residence and occupation?

A. 35 years, occupation, accountant, Webster Grove, Mo.

Q. What is your present occupation or employment?

A. I am employed as an accountant by the firm of Hamilton Brown Shoe Co.

Q. Before you were employed by Hamilton Brown Shoe Co. were you employed by the Arkansas Railroad Commission working on the accounts in this case?

A. Yes.

Q. Prior to that what were you engaged in?

A. I was engaged in the railway service?

Q. For what road?

A. For the Missouri Pacific System.

Q. What was your service?

A. That of Travelling accountant.

Q. Commonly called travelling auditor?

A. Yes, sir.

Q. What was your territory as travelling auditor?

A. Just at the time I discontinued my service with the
3311 Iron Mountain Railway Co., my territory was from Hoxie to Texarkana and the Camden Branch.

Q. State generally how much experience you have had as travelling auditor on the Iron Mountain in Arkansas?

A. I was employed seven years, and I interchanged territories so that, in that time, I travelled over the entire mileage of the Iron Mountain Railway Co. in Arkansas frequently.

Q. In the discharge of your duties?

A. Yes, sir.

Q. How long were you travelling accountant for the Iron Mountain — Arkansas?

A. Seven years.

Q. What familiarity did that work give you with the movement of trains in Arkansas?

A. My work as travelling accountant required that I use both freight and passenger trains in going from station to station. I frequently used freight trains both local and through, so that I gained considerable familiarity with the movement of freight trains.

Q. Are you familiar with the tracks, and side-tracks, and generally, the line of the Iron Mountain in Arkansas?

A. Yes, sir.

Q. Are you familiar with the method in which they handle through and local freight trains?

A. Yes.

Q. Pretty near lived on them for about seven years, didn't you?

3312 A. Yes.

Q. In the exhibits that have been filed by Mr. Wharton in this case, he has divided the maintenance of way and structures expense on freight traffic between local and through train service on the basis of the engine and car miles of each class during a given period, and in arriving at the number of engine and car miles, he has added 50% to the engine mileage for station switching.

I want to call your attention to that proposition, after he has added 50% to the engine mileage for local switching,—I will ask you if you are familiar with the station switching done by local trains in Arkansas, and were you familiar with that condition in 1907?

A. Yes, sir, I was familiar with that condition.

Q. I will ask your opinion, from your familiarity with it, as to the correctness of the 50% being added to the engine mileage on this account?

A. I know of no method of determining accurately what mileage the local engine makes in station switching, but it is my opinion that is can be determined with reasonable accuracy and that 50% is high. I think that 40% would be more nearly correct.

Q. Have you made any calculations to verify your opinion on that subject?

A. Yes, sir.

Q. I wish you would state the methods you have used in

3313 arriving at that and illustrate it with the different freight divisions with which you are familiar.

A. In my work as travelling accountant, it was necessary that I check all the records of stations where we had agents. It was necessary in checking to check each waybill covering freight consigned

from that station; also, to check each waybill covering freight consigned to that station. In doing that for a number of years, I became familiar with the average business handled at those stations. I also am familiar with the length of the side-tracks as they are known—passing tracks and unloading tracks. Also, the greater number of industries located on those tracks. Being thus familiar, I have worked out, taking as an average all the cars set out and picked up, or that there is a possibility of being set out and picked up, in the movement of the local freight each day. One division is that from Newport to Little Rock.

Q. Just take that in detail, and explain how you worked that out and the result of it?

A. I will state, if there was more than one car to be set out on a siding, and they occupied positions in the train intermediate with cars destined to other stations, as many additional trips of the engine would be necessary as there were cars to be set out, although it would not be necessary that the engine trips be the entire length of the siding; that is, it would not be necessary that the
3314 engine trips should be more than 75 feet long;—what is known in railroading as "making a kick" of the car to be set out, and replacing the intermediate car going to another station, back on the main line by another kick, and by a short movement, kick in the other car on the side-track, and then he might make the entire run of the siding, placing the car where it was desired to be placed.

Take the town of Olyphant, the average receipts and shipments from that station would not be more than one car per day, that is for one train; in setting out and picking up that load, the engine might make four trips the entire length of that siding, which is 2400 feet, which would be 9600 feet.

Grand Glaize is the next station; one car set out and one picked up, four engine trips the entire length of the siding, would be 4800 feet; that is, 4 times 1200.

Bradford, two cars set out and two picked up, eight trips of the engine, or 3,000 feet would be 24,000 feet.

Russell, the next station, one set out and one picked up, would be four trips the length of the siding; 1500 feet would be 6,000 feet.

Bald Knob, set out five and pick up five, ten trips of 2100 feet, would be 21,000 feet.

Judsonia, two set out and two picked up, eight engine trips, 21,600 feet.

3315 Kensett, 4 set out and 4 picked up, ten engine trips, 27,000 feet.

Higginson, one set out and one picked up, 4 engine trips, 10,800 feet.

Garner, 1 set out and one picked up, 4 engine trips, 10,800 feet.

McRae has no passing or side-trick, but they have a spur about 150 feet long; if necessary to set out or pick up a load there, it would not be necessary for the engine to move more than 300 feet.

Beebe, 3 set out and 3 picked up, 12 engine trips, 28,000 feet.

Ward, none set out and one picked up, 2 engine trips. In my

familiarity there with Ward, I have only allowed one pick up; there are no cars unloaded there, not more than two or three a year; I have allowed two engine trips, 6,000 feet.

Austin, one set out, one picked up, 4 engine trips, 10,800.

Cabot, 3 set out, 3 picked up, 12 engine trips, 28,800 feet.

Holland, one set out, one picked up, four trips, 11,800 feet.

Jacksonville, 1 set out, 1 picked up, four trips 12,000 feet.

McAlmont 1 set out; there is nothing picked up there hardly; two trops 2100 feet, would be 4200 feet.

3316 That makes a total of about 40 miles.

Q. That is the mileage on that division made in station switching? What is the total mileage?

A. It is 84 miles from Newport to Little Rock. On that basis, which is high for this reason, in setting out four cars as I have stated before, it would not be necessary to make the entire run of the sidetrack; it would be a series of short forward and backward movements of the engine, although I have allowed for the entire run of the sidetrack.

Q. You have made the allowance there for the maximum switching that would be done for that service?

A. I have endeavored to do so.

Q. And have taken the average service performed at each one of those stations, based upon your experience in checking at those stations?

A. Yes, sir.

Q. That would give what per cent?

A. About 50%.

Q. Now, take some of the other divisions, without going into the details; you have them here if Mr. Moore wants to question you about them; I will save time by having you give the results of your figures, unless Mr. Moore wants them detailed as you did that one; you have two or three others there, representative ones?

A. Yes, sir.

3317 Q. You have it in tabulated form?

A. I have the main line from Little Rock to Texarkana, and the Arkansas Division from Pine Bluff to McGehee, and Central Division from Van Buren to Little Rock.

Mr. MOORE: If you will let us have that memorandum, it will not be necessary to go into the details of it.

Mr. HILL: Al- right.

Q. Just state generally what the percentages are on each one of those divisions?

A. On the local run from Argenta to Malvern, I have figured 45%; from Malvern to Texarkana, 35%, from Van Buren to Russellville, 32%; from Russellville to Little Rock, 50%; from Pine Bluff to McGehee, 40%.

Q. Are those divisions you have given, in your opinion the heaviest divisions of the road?

A. Yes, in my opinion they are the heaviest local divisions of the

Iron Mountain—the heaviest is between Russellville and Little Rock.

Q. That is the one that runs 50%?

A. Yes, sir. The others are as heavy as there are in the state, the ones that I have used; the White River Division is very light, and the Valley, between Little Rock and Pine Bluff, is very light.

Q. How about the Memphis Division?

A. The Memphis division is about the same as the Arkan-
3318 sas Division from Newport to Little Rock.

Q. About the same as the main line?

A. Yes, sir.

Q. Did you check that in any other way than what you have given?

A. I have made a comparison according to the Missouri Pacific time tables of the time required or rather the time allotted to trains 96 and 98, local trains, running between Texarkana and Little Rock, and the schedule time of that train is 13 hours and 45 minutes. #56, which is one of the Red Ball freight trains running between Texarkana and Little Rock is scheduled at ten hours and 30 minutes.

There you will see there is about 40% more time allowed the local train than there is the through train to make the same distance; that would tend to support the statement.

Q. It would look like the man that made the time card figured about like you did?

A. It would tend to support that belief, yes, sir.

Q. Have you any familiarity with the Cotton Belt road Mr. Wright?

A. I have some, but not very much.

Q. You wouldn't know the stations on that line as you would know the stations on the Iron Mountain I presume, and the handling of freight at each station?

A. No, I have never had occasion to know the amount of
3319 business done at Cotton Belt stations, except at Little Rock.

Q. Do you think the average that you have allowed for these stations in making these calculations fairly represent the business done at those stations, during representative periods of the year?

A. I think it is high; this table I have worked out would only represent one train; the other train moving in the opposite direction under that same service would not double the number of cars, and I think I have given the maximum amount of business that is handled at these stations.

Q. I don't understand your reference to double the number of cars?

A. In working by this schedule, I have only taken the train going in one direction; if the train moving in the opposite direction performed the same service, for instance, at Homan, that would represent four set outs and four pick ups for that day.

Q. It would represent double the movement of just what one car would represent?

A. Yes, sir.

Q. You think taking one car and estimating that the other train would do the same work coming back, would represent the business of the local both ways?

A. I think it would be a very high average, yes, sir.

Q. You have attempted to make an average that would be liberal, and so there could not be any just criticism
3320 of it?

A. I have attempted to do that.

Q. In this exhibit, under maintenance of freight cars, there is an assumption that a local train makes a stop every five miles, and each through train makes a stop every twenty miles, and it is assumed on the testimony of expert witnesses that the stopping and starting of trains is a cause of injury to the car equipment, and in order to get at the relative stopping and starting of the two kinds of traffic, some inquiry has been made upon that subject.

I wish you would state what would be your opinion of the relative stops of the two trains from your observation of those trains?

A. Taking the Iron Mountain system in Arkansas, I think that five miles average stops for local trains is very nearly accurate, and that twenty miles for through trains is a very fair average; that is my opinion, based on having frequently ridden on through freight trains and very frequently on local freight trains.

Q. There is another item in here somewhere of an assumption, I don't remember the head, but I can state it, that the interstate passengers make use of the Pullmans, compared with the interstate passengers in the proportion of 25% to 75%. In other words, one-fourth of the passengers that ride in the Pullmans are state, and three-fourths of them are interstate passengers. That is made on the passenger mileage basis.

3321 What is your opinion from your riding on trains through the state, as to that division, from your observation?

A. It varies on different divisions; what is known as the Valley Division from Little Rock to the State line——

Q. Going south?

A. Yes, going toward Louisiana—Alexandria—or going in the opposite direction, those day trains known as 105 and 106, the state travel—each train carries one Pullman car—the state traffic on those cars is known as intrastate traffic, is probably 50%, I would guess; from frequent riding on that car and observation of passengers getting on and off.

On the main line, known as the Arkansas Division, I have ridden frequently on all the trains except one, that was running during October, 1907, and my opinion is that on those trains, 85% at least, is interstate business.

That is based on both having ridden the trains and by having been with the agent when he was selling tickets, and by getting on the train at Texarkana and finding the Pullmans already occupied by passengers coming from the south and southwest.

Q. How about the Memphis Division?

A. Practically all of the Memphis Division is interstate business;

the passengers between Memphis and Bald Knob, the way the trains would run—I never observed that they used the Pullman
3322 car, but all the business between Memphis and Little Rock is interstate; I would say that at least 85% of that business is interstate.

Q. From where?

A. On the Memphis Division trains, running between Memphis and Little Rock.

Q. Nearly all those are either going to Memphis or coming from Memphis?

A. Yes, sir.

Q. How about the Ft. Smith division?

A. The day trains do not carry Pullmans, and the night train, one of them as I remember, is an interstate train, that is, running between Little Rock and Fort Smith, and one of those trains, one running interstate to Ft. Smith, I would say that 85% of that business was interstate, but on the other train running between Ft. Smith and Little Rock, I believe runs over the Frisco Bridge, probably would be 75% of those passengers would be interstate passengers; that many ride between Ft. Smith and Little Rock.

Q. What about the White River Division, they carry Pullmans on them, don't they?

A. They operate a Pullman intermittently there; I don't know whether they operate it regularly at all; it was taken off for a great many months.

Q. That was for through service?

A. Yes, sir.

Q. Was there any state traffic to amount to anything on
3323 that train?

A. No, sir, very little state business on that train.

Q. Taking it as a whole, what is your opinion of what percentage of state passengers would ride in Pullmans, and what percentage of interstate?

A. Between 80 and 85%.

Q. You mean are interstate?

A. Yes.

Q. You think this estimate here of 75% is very liberal to the interstate traffic?

A. I think it is.

Cross-examination.

By Mr. MOORE:

Q. When did you quit the employment of railroads?

A. August, 1909.

Q. What have you been doing since then?

A. I was employed by the Arkansas Railway Commission from about August 1st to March 1st. Since that time, I have been employed by Hamilton-Brown Shoe Co.

Q. In what capacity were you employed by the Arkansas Railroad Commission?

A. As investigator of the records and accounts of the Railway Company in the Arkansas rate litigation.

Q. What were your duties during the time you were working for the Railroad Co.?

3324 A. My duties were that of travelling accountant, or travelling auditor, as they are commonly called.

Q. Were you engaged as travelling accountant all the time you were employed by the Railroad Company?

A. No, sir, I was employed by the Railway Company from December, 1895, to August, 1909. In the greater part of the time, I was employed as an accountant; I was station accountant at Little Rock part of the time, and was travelling auditor; prior to that time, I was station accountant and cashier at Little Rock.

Q. What were your duties then during the time you were travelling auditor?

A. The duties of travelling accountant on the Iron Mountain are very numerous. The principal duty is to check accounts of station agents, and to make transfer of station accounts from one agent to another.

Q. You were going, in the discharge of your duties, to the various stations on the railroad?

A. Yes.

Q. And you were checking up the accounts?

A. Yes.

Q. What part of the accounts was it that you checked up?

A. We ascertained that the revenue, as far as it could be ascertained, had all been accounted for, and to ascertain as far as possible that all the cars that had been set out or picked up at that station, had been properly waybilled, and to check the warehouse to

3325 see that freight was on hand for all the bills that the agent was claiming credit for as being on hand freight, and dispose of over and short freight that might be at the station at the time, and a great many other things.

Q. The first one you enumerated was to check up the receipts and see that all the revenue that came into the hands of the agent was accounted for?

A. Yes.

Q. I suppose you would take his books or different records he kept, showing the receipts, and compare that with either the disbursements he had made and the cash he had on hand—I don't mean the disbursements—the remittances he may have made. That was the way you did that?

A. Yes.

Q. You say you also checked the waybills. Tell me just what you would do in connection with that?

A. That was necessary to check them?

Q. That was necessary, in looking over the accounts of the agent with reference to his receipts, was it? That is to say, the waybills were the foundation of the freight station agent's receipts; it was from that receipt you had to check them up?

A. Part of his receipts.

Q. In other words, your purpose was to verify the accounts and keep track of the cash that had come into the hands of the agent, wasn't it?

A. Yes.

Q. And in verifying the accounts, you checked up the
3326 waybills?

A. Yes.

Q. Your duties in regard to keeping accounts of cars that were set out and waybills, was also for the purpose of making a check on the revenues handled by the agent, wasn't it?

A. Yes.

Q. And also the check on the freight that was handled in and out that you spoke of a moment ago, you kept a check on the freight on hand, that is, I suppose you mean by that, you would determine from the waybill what had come into the station and by looking over what was on hand, you verified the showing made on his books as to what had been delivered and paid for. That is what you mean?

A. Yes, sir, if it wasn't in the cash books, it was supposed to be on hand, either carload or less carloads.

Q. The over and short freight was on hand?

A. The freight over at the station that the agent didn't know was in his warehouse, which was commonly the case, that you would find freight in the warehouse the agent didn't know was in there; that was part of the duties of the travelling accountant, to see that freight was properly taken care of, and forwarded to destination, or reported to the freight claim agent.

3327 Q. All those duties and various acts performed by you in the discharge of your duties, were for the purpose of checking up the accounts and moneys handled by the station agent?

A. That was the purpose, yes, sir.

Q. Did you have anything to do at all with the operations of trains or cars or engines on the road?

A. No.

Q. You had no duties to discharge in connection with them?

A. No, the only duty that the travelling accountant ordinarily has with a freight train, is, frequently to check the conductor's waybills to see that he has waybills for every car he has in the train.

Q. Where do you make that check at?

A. Make it on the train.

Q. You meet the conductor on the train and while you are on the train you make that check?

A. Take the number of his cars, and then check his waybills.

Q. That is clerical work of course? Have you any other duty to perform on the train, or of that character, in connection with the contents of the trains?

A. I frequently accompanied the local freight train to see that agents were careful about checking the freight unloaded at their station with the conductor, to see if any discrepancy existed between the agents' and conductors' figures, that they were properly noted.

3328 Q. Your duties were all clerical and none of them had anything at all to do with the operation of the trains or anything of that sort?

A. No, sir.

Q. And what you learned about the movements there at the stations or anywhere else, you gathered from observation like anyone else that happened to be along could make?

A. I acquired that information for a purpose though. I wanted to inform myself as much as possible of the operation of freight trains.

Q. You acquired what information for a purpose?

A. As to how the conductors did their switching, and how the agents gave their orders to conductors to do switching, to see that it was done to make the least possible delay in movement of local freight trains.

Q. What was your purpose?

A. That was my purpose in observing how the switching was done, it was not merely casual observation, it was observing with a purpose.

Q. Was it your duty to do that?

A. Yes, sir.

Q. Was it your instructions to do that?

A. Yes, sir, to do anything you could to see that the business of the company was properly handled.

Q. Did you make any reports as to the manner in which switching was done and engines were handled by the engineers?

3329 A. Yes, I have made verbal reports to the superintendents of the divisions on those matters; I did not make any written reports.

Q. Who was the superintendent of the division during the time you were discharging those duties?

A. Among them was——

Q. Who did you confer with or report to?

A. I was reporting to the general auditor.

Q. Who is the General Auditor?

A. S. B. Schuyler; I was a subordinate reporting to the General Auditor, but at the same time, I conferred with the superintendents.

Q. Were your reports to the general auditor made in writing?

A. Yes.

Q. Whom did you confer with? What superintendent?

A. There were a great many at that time; among them was John Cannon, Mr. M. M. Ritchie, Mr. J. A. Swagart—there have been a great many; I don't know that I can recall them all.

Q. What was the nature of your conferences with those gentlemen, tell me what they related to?

A. They related to the stations, as to the station agents, the performance of their duties, and also any other things that might be of interest to the superintendent, anything relative to the operation of freight trains, that would be necessary or was of advantage to him to know, and I knew it, I would tell him about it.

Q. Tell me just how you made your estimate that there was 4500 feet of switching at Grand Glaize station?

3330 A. As I stated before, my duties in checking those stations gave me a knowledge of about how many cars it might be possible that they would have set out at their station or loaded ready to be picked up at their station by the local freight train. It is a siding at Grand Glaize or passing track or unloading track, as it was commonly called; the length of it is 1200 feet; that is the entire length. If the local train had a load to set out at Grand Glaize, if he was going south for example, he would pull down to the station, uncouple his train, or cut it next to the load that he had to set out, he would open the switch and back that car onto the switch; it might be necessary for him to place that car back to the opposite end of the switch, or make a movement of 1200 feet with that load, although it would be very improbable that it would be done; it was more than likely to move 600 feet or half way into the switch, but it is possible that it might move 1200 feet. It would be necessary then for him to move his engine back from the north end of the switch or south end or 1200 feet again; that would be 2400 feet, and if he had a load to pick up—I should probably have stated that clearer—if he had a load to pick up, he would have taken out the load first; he would have uncoupled his train and gotten the load that he had to take from the station, and kick the load he had to sit out, kicking it back there; there would be four trips, four trips at 1200 feet would be 4800 feet. That is the movement I
3331 have referred to and the method I have used in all these illustrations.

Q. Suppose he had two cars to set out?

A. If he had two cars to set out, and they occupied consecutive positions in his train, the same movement I have described would set out those two cars, but if they occupied positions in the train intermediate with the loads that were going to other stations, it would be necessary for him to make a short movement in addition to the four movements or two movements I have just stated, and I have allowed for that; I have even allowed for him moving the entire length of the switch.

Q. Suppose he had two cars to set out from different parts of the train and both of them at intermediate points in the train, how many movements would he have to make then?

A. If he had the two loads only to set out, it would be necessary for him to make—if those two loads were to be set at the opposite end of the unloading track in the direction in which the train was going, it would be three short movements of the engine, and two long ones; it would be two entire lengths of the siding and three, not necessarily more than 75 or 100 feet.

Q. Work of that kind to be done at stations varies constantly on different trains and at different times, according to the character of the season and character of the business?

A. Yes, it varies, sometimes there would not be anything
3332 and sometimes there would be more.

Q. It varies as the train varies and sometimes varies on different trips?

A. Yes.

Q. You made a general statement as to the average percent of switching between Argenta and Malvern, and between Malvern and Texarkana, between Van Buren and Russellville, and between Russellville and Little Rock and Pine Bluff and McGehee, have you worked that out as you did between Newport and Little Rock?

A. Yes, I have worked it out on the same formula.

Q. You said that you made these comparisons according to the Missouri Pacific time tables of trains 96 and 98, what are those trains?

A. They are local trains.

Q. Where do they run?

A. 96 runs between Texarkana and Malvern and 98 between Malvern and Little Rock.

Q. What is the time of 96 between Texarkana and Malvern?

A. 9 hours and 30 minutes.

Q. What is it between Malvern and Little Rock?

A. 4 hours and 15 minutes.

Q. You also made your comparison on train #56, what is that?

A. That is a Red Ball train, running between Texarkana and Little Rock.

Q. What is the time of that?

3333 A. 10 hours and 30 minutes.

Q. How many people do you find travelling on the Pullman car on the Valley Division between Little Rock and McGehee usually?

A. I have ridden on that car when every seat was full, and also when it was not so crowded; it varies.

Q. Conditions vary?

A. Yes.

Q. Your estimates are of the percent of state passengers that ride on these Pullman cars, that is just based on the same kind of observation, from riding back and forth on them?

A. Yes, it is partly a matter of observation.

Q. You have never counted them for the purpose of making a correct apportionment of them?

A. No, sir, I never counted them for the purpose of making any such division as that.

Mr. HILL:

Q. Have you ever counted them at all?

A. I have no recollection of ever having counted them.

Mr. MOORE:

Q. Did you have the same means of observation as to the passengers who were state passengers on Pullmans and those who were interstate that the superintendents or officials of the road who were making a study of that subject would have had?

Question objected to and sustained.

3334 Q. What opportunities did you have of knowing about the destination of passengers who were on the Pullman cars?

A. It was necessary that I check the accounts of the agent at Little Rock, which is the heaviest Pullman office in the State, and I know that the greater part of the Pullman tickets sold are interstate.

Another source of information I had, as I very frequently came from Texarkana on all the fast trains of the Missouri Pacific, I would find those cars pretty well filled up with passengers coming out of Texarkana.

Q. What means of knowledge did you have from riding on the trains as to the destination of the passengers on the Pullmans, whether they were state or interstate passengers?

A. In riding on trains, I would see—if I was riding on the Valley Division, I would see passengers get on and get off.

Q. Do you mean to tell me that you made it a rule to make observations of that sort for the purpose of measuring up in your mind, the number of men that were state passengers and the number that were interstate; do you mean to tell me you did such a thing as that?

A. I have discussed it many times with——

Q. You can answer my question, can't you. Just answer my question, do you mean to say you were in the habit of making an estimate of how many men in the Pullman car were state passengers and how many interstate?

A. No.

3335 Q. What means did you have of knowing, what interest did you have in it?

A. I had the interest of an employé of the railway company, in knowing what the condition of their business is.

Q. Was it your business to keep account of the state and interstate passengers that travelled on a Pullman car?

A. No, sir, but it was interesting to me.

Q. What reason was there for your concerning yourself with that subject then?

A. It is of interest in this way, that an employee is interested in the revenue of the railway company he is working for, and when he is checking tickets, he will observe what number of tickets have been sold at long distances, and what have been sold to short distances.

Q. I am not asking you what you did or observed when you were checking tickets. I am asking you your interest in the observation of passengers between state and interstate trips—I am not asking your motive in checking tickets, I am asking you what interest you had in making observations when you were travelling on these cars as to how many were state and how many interstate, you say you had no duties to discharge in connection with it. What interest was it to you?

A. It was the interest, as I have just stated, of an employee being interested in the longer route the passenger travels, because

3336 the railway company is paid more revenue then. It was interesting to me to know that.

Q. You were not charged with the duty of making any estimates based upon that knowledge were you?

A. No.

Q. It was not in the line of your duty?

A. No.

Q. Did you obtain any information upon which to base your calculations from checking the tickets you spoke of, checking the tickets—you spoke awhile ago about information upon this point obtained by you in checking the tickets for the passengers, didn't you?

A. The ticket cases, the sales of the ticket agents.

Q. Tell me just what duty you performed in that respect that would give you means of making this apportionment of passengers on the Pullman between state and interstate?

A. It was necessary to make up the report both to the Pullman Co. and to the Railway Co., of the price of tickets sold and the revenue derived therefrom, with the destinations of the tickets, and in making up that statement, I would naturally observe how many were sold to points within the state and how many were sold interstate.

Q. Where did you get the information from, in making that checking?

3337 A. The information is in the office of the ticket agent; the tickets are printed, a great many of them, with their destinations.

Q. Did the ticket agent keep an account of the state and interstate tickets he sold?

A. He kept an account of the destinations.

Q. What I want to get at is this, did he keep such accounts and records as would enable you to tell whether a man that bought a ticket from Malvern to Little Rock, passenger ticket, railroad ticket, also bought a Pullman ticket and whether a man who bought a railroad ticket from Malvern to Poplar Bluff, Mo., bought a Pullman ticket?

A. No.

Q. How could you tell anything about it then from the tickets?

A. I would tell from the Pullman ticket; they were not permitted to sell a man a Pullman ticket who has not proper railroad transportation to the same destination, or at least, as far as the destination of the Pullman ticket.

Q. Do local passengers on Pullman trains buy tickets from the station agent?

A. No, sir, not many of them.

Q. They pay their fare to the conductor?

A. There is a Pullman office at Pine Bluff which sells tickets and at Little Rock——

Q. Don't you know that the great mass of local passengers

3338 going short distances in the daytime, who occupy simply a seat in the Pullman car pay the conductor?

A. Yes.

Q. How could you make any comparison between state and interstate passengers—the station agents reports wouldn't show that?

A. I know that is a very small portion of the business, compared with those who buy tickets and go long distances.

Q. It is a fact that nearly all of the local intrastate passengers, nearly all of the state passengers, who ride on Pullman cars, pay on the Pullman cars and do not buy tickets at local stations?

A. If they are going short distances, yes.

Q. Don't you know you can't go to the records kept by the station agents and make a comparison between passengers who travel in the state and those who travel interstate, from that record, don't you know that?

A. I know you couldn't go to the records of the station agents and determine that.

Q. How do you mean that you had means of information from checking the station agent's accounts?

A. I said that was part of the sources of my information.

Q. Could it be any part that could be relied upon if a large per cent of one class of tickets was not sold there or in there—could any sensible man act upon the per cent made from the information obtained at the station, wouldn't it be misleading if he attempted to do it, don't you know that?

3339

A. I don't know that it would, not in connection with all the other information that I possess.

Q. Now, tell me again just what your duties as traveling auditor were. I want to get you to state them all—all your duties as traveling auditor; all the duties you perform and especially your duties with regard to the checking of the accounts of all those employés whose accounts you had to check?

3340

A. The duties of a traveling accountant of the Iron Mountain are primarily, to check accounts of station agents.

In making that statement "the accounts of station agents" that covers a very broad ground of duties. Among those duties is to count the cash of a station agent; to check his way-bills inbound; to check all of his outbound way-bills and his dray tickets to see that his prepay and advance charges are properly accounted for; to check his ticket cash to see that all of the tickets he is charged for have been accounted for, both Pullman and passenger tickets; to make an accurate check of the warehouse and of his yard; in fact, all the accounts of the station agent should be gone over by the traveling accountant.

In addition to that, he is supposed to keep a general lookout for the performance of the duties of other employés. That is, the traveling accountant is rather considered a moral influence in the service of the railway company and if he sees anything that he thinks is contrary to the best interests of the company he is working for, he should note it and report it to the proper official.

His duties are also to occasionally check the way-bills of local and through freight trains to see that all the cars that are carried in that train have way-bills, which are the instructions of the general officers.

3341

Q. Did you have anything to do with the checking of the expense account?

A. To what expense account do you refer?

Q. Any expense account?

A. If you will tell me what you mean by any "expense account" in that case, I will try to answer your question.

Q. Did you have anything to do with checking the expense of operating trains?

A. Why, I have done such a thing, yes.

Q. I did not ask you if you had done that: I asked you if that was within the line of your duty as traveling auditor at the time you speak of?

A. No, it is not a part of a traveling auditor's duty.

Q. Was there another auditor who did that?

A. There might be. I might be called upon to do so but it was not a part of my duty; I might be specially delegated to do so.

Q. I asked you if there was a traveling auditor who checked operating expenses during the time you were acting in that capacity for the purpose of checking revenues?

A. I don't know.

3342 Q. Would it not be a little remarkable if there should have been a man engaged in that character of service along with you and you would not know about it?

A. I don't know. There might be.

Q. Do you mean that there was not, or do you mean that if there was you did not know it?

A. If there was, I did not know it.

Q. Did you check the operating expenses?

A. I did not.

Q. You had nothing to do with that, did you?

A. Nothing at all.

Q. Your duties were wholly in connection with revenue?

A. As I stated, I might have been called upon to do it, but it was not a part of my understood duties to do that.

Q. Your duties were connected with the revenue, were they not?

A. I have stated what my duties were.

Q. Was that connected with the revenue or not?

A. It all might be connected with revenue. You might speak of it in that way.

Q. You spoke of relative time of through and local trains: did those local trains as a rule keep on that time and make that run within the scheduled time, or were there a good many delays?

A. They were supposed to make it on schedule time.

3343 Q. I am not asking you what they were supposed to do; you have testified here as to having a great deal of knowledge based on information: now I ask you if from your observation——

A. I have ridden on them——

Q. Let me finish my question: If from your observation did the local trains lose a good deal of time from their scheduled time in making their runs?

A. My observation is that about one-half the time, probably, they are on time, and probably one-half the time they may be late.

Q. How does the loss of time on local trains compare with the loss of time of through trains, speaking with reference to the schedule time of each class of trains?

A. They are just about the same.

Q. You think there is as much loss of time from the schedule time on the through as on the local trains?

A. That is my observation.

Redirect examination.

By Mr. HILL:

Q. Mr. Wright, as I understood your answer on cross examination about the percentage of state passengers on the Pullman, you base that upon the various matters that you mention, examining the Pullman tickets in the ticket office and also your riding on trains, your general knowledge of trains?

A. Yes, sir, that statement was made from accumulated knowledge from various sources.

Q. No one of which you answer from, but from all of them?

3344 A. All of them combined.

Q. You spoke of reporting to the auditor in writing and that answer was in connection with some other question that Mr. Moore asked you about writing to the superintendent the various things:

Did you report in writing to the Auditor anythng except in regard to your check of the accounts of the station?

A. Yes, sir, there might be matters of a private nature that were interesting to the superintendent, that I would also report to the general auditor.

Q. That would go to the auditor as well as the superintendent?

A. Yes, I would make him a copy of it.

Q. I don't know how you got the length of those side tracks: did you explain that?

A. I believe I did.

Q. I believe I will ask you to state it again.

A. It is based on the information given in the railway company's time cards. They give the capacity of the passing track as so many cars based on an average of the length of 30 feet to the car: that was the way I arrived at the length of the side track.

Q. You have taken the average length of the car and used that as a factor with the number of cars to be handled on given tracks?

A. Yes, sir.

3345 T. F. WHARTON, recalled, testified as follows:

Redirect examination.

By Mr. HILL:

Q. Mr. Moore called for a statement from you the other day, Mr. Wharton: have you it prepared?

A. Yes, sir.

Q. Mr. Wharton, Mr. Moore called your attention to a statement you had made in an affidavit before Judge Van Deventer, a statement of your firm as to the ton mile being the best basis to use in dividing expenses between state and interstate traffic:

Have you had occasion to study that question more thoroughly since you made those statements?

A. Yes, sir.

Q. What is your view about it?

A. At the time the affidavits were made that was the best basis we had been able to work up to that time; but the whole difference in the cost between state and interstate business being based almost entirely on the cost of local and through service, we thought it advisable to get at the cost of local and through service and make our apportionment of expenses on that basis instead of the ton mile basis.

Q. Believing it was more nearly accurate than the ton
3346 mile basis?

A. Yes, sir.

Q. You had no such statistics as are in this case before you in the Missouri Case, had you?

A. No, sir, not as to the relative handling of freight on local and through trains, car miles, etc.

Q. Mr. Wharton, Mr. Moore questioned you as he did other witnesses, as to the justice of charging the trans-state freight with terminal expense:

You have given your reasons why you thought it was right, I will not go into that again, but I will ask you if you made a calculation showing the difference in cost if you would charge it as his questions indicated it should be, that is, not to allow any station handling for trans-state business.

A. Yes, sir.

Q. Then the question was asked about the terminal handling of trans-state cars: have you made an exhibit showing the difference it would be if you would concede the point and reduce that 25%?

A. Yes, sir.

Q. Mr. Moore questioned you and Mr. Ludlam about the basis of traffic expenses which you put upon a revenue basis, and I want to ask you if you have made a calculation to show if you would use a ton mile basis what effect that would have upon these sta-
3347 tistics?

A. Yes, sir.

Q. I believe you stated in your testimony that you thought the gross ton mile basis instead of the car mile basis would be the

nearest accurate for "maintenance of way," and that you did not make the calculation upon that basis because you had no statistics of the Iron Mountain and you preferred to make both roads upon the same basis:

Attention was called to the fact that there were Cotton Belt statistics: have you worked up what difference that would make if you used the gross ton mile, so far as the Cotton Belt is concerned?

A. Yes, sir.

Q. I will ask you to attach to your testimony the statistics showing these various matters concerning which I have inquired?

A. Yes, sir.

The paper referred to last is marked "Defendant's Exhibit "X," T. F. Wharton, June 3, 1910, M. J. C." and is in the words and figures as follows to-wit:

For Exhibit "X," see Volume 9, page 5840.

3348 Q. I will ask you if you have made similar statistics except as to the gross ton mile, as to the Iron Mountain road?

A. Yes, sir.

Q. I will ask you to attach those calculations to your testimony as "Exhibit Y."

A. Yes, sir.

The paper last referred to is marked "Defendant's Exhibit Y, T. F. Wharton, June 3, 1910, M. J. C." and is in the words and figures as follows to-wit:

For Exhibit "Y," see Volume 9, page 5843.

3349 Q. Mr. Wharton, there was some question yesterday asked as to whether in your exhibits apportioning the expenses between state and interstate on freight business you had taken care of the extra expense for the difference in the length of haul of the two classes of traffic:

I wish you would explain how you have taken care of that extra expense, if you have taken care of it?

A. The station expense constitutes a considerable portion of the extra expense due to the short haul of state business as compared with interstate business, and that is taken care of by apportioning it upon a tonnage basis without regard to the length of haul.

Q. There would be no question of length of haul on that station expense, would there?

A. No, sir.

Q. That is actual handling of the tonnage itself?

A. That is it at the stations. The terminal handling of cars is charged up respectively to the local and through trains in proportion to the cars handled, which takes care of that expense so far as it is local and through; that could not be separated between state and interstate business for the reason that it would be very difficult to tell how the cars were loaded, or whether they were loaded or empty, or whether they were handling state or interstate, or a mixture of both; so that is divided between local and through upon the basis of the number of cars handled for each service.

3350 Q. That is an actual account of the cars?
A. Yes, sir.
Q. And the proportion finally taken care of in the ton mile?
A. Yes, sir.
Q. In what other respect have you looked after that phase of it?
A. Well, all expenses that we have divided between local and through have been divided, aside from those, practically on a car mile or train mile basis, which takes into consideration the length of whatever haul there is in each class of service.
Q. Now, there is shown to be a difference in the length of haul on the Iron Mountain and Cotton Belt: has that been taken into consideration?
A. The statistics show that on the Cotton Belt the local trains are run about one-half the distance, on an average, that the through trains run; while on the Iron Mountain the local trains run almost the same average that the through trains run. That is taken into consideration in the division of the maintenance of cars' expense and the proportion of that expense due to the terminal handling, where on the Cotton Belt we have allowed four handlings for cars in local service and one handling in through service; and on the Iron Mountain for two handlings of cars in local service and one handling for cars in through service.
3351 Q. In that way you think that every element of difference in the length of haul where there is material difference, has been taken care of?
A. Yes, sir.
Q. Mr. Wharton, have you prepared a table of comparison of revenue and expense per train mile for years ended June 30, 1897 and 1907, as shown by the Interstate Commerce Commission reports for those years?
A. Yes, sir.
Q. Will you file that table as Exhibit "Z?"
A. Yes, sir.

The paper last referred to is marked "Defendant's Exhibit Z, T. F. Wharton, June 3, 1910, M. J. C." and is in the words and figures as follows to-wit:
For Exhibit "Z," see Volume 9, page 5846.

3352 ST. LOUIS, *June* 16, 1910.

T. A. HAMILTON, a witness of lawful age, being duly produced, sworn and examined on the part of the defendant, testified as follows:

Direct examination.

By Mr. HILL:

Q. State your name; age, residence and occupation?
A. T. A. Hamilton; 36 years; Webster Groves, Mo., I am an accountant in the employ of Haskins & Sells, Certified Public Accountants, of New York.
Q. How long have you been connected with Haskins & Sells?

A. Since June, 1906.

Q. In what capacity have you been connected with that firm?

A. As an accountant.

Q. Your work has been entirely that of an accountant?

A. Yes, sir.

Q. Prior to your connection with Haskins & Sells, in what line of work were you engaged?

A. For seventeen years in railroad work.

Q. I wish you would state your experience in railroad work, beginning at the first railroad work that you did and state consecutively the various railroad positions you have held and the
3353 nature of your duties in each?

A. I began in 1889, at the age of 15 years, as a messenger boy in the office of the District Passenger Agent of the Canadian Pacific Railroad, at Toronto, Canada.

My duties were such as ordinarily falls to the lot of a messenger boy in an office of that kind. I stayed in that position several months, and in 1890, the Fall of the year, I went to Detroit as a junior clerk in the office of the Assistant General Manager of what was then known as the Chicago & Grand Trunk Railway, part of the Grand Trunk system. I was employed in minor clerical capacities around that office for seven or eight months.

In April, 1891, I came down to St. Louis and went to work for the Missouri Pacific road in the office of the General Auditor.

Q. What was your position there?

A. First I was employed in assorting and filing, in station order, the impression copies of way-bills furnished the Auditor by the Freight Agents on the road, so that they might form the bases of his freight accounting checks of various kinds.

In the spring of 1892 I left the employ of the Missouri Pacific and went to the Southern Pacific at Houston, Texas. I spent three months there in the local freight office, assisting the car accountant, keeping record of the cars in and out of the yard, and on
3354 hand, and the various duties that fall to the lot of a car accountant in a local freight station.

I came back after three months to the Missouri Pacific at St. Louis, going back into the office where I had formerly been employed, and I was employed for sometime thereafter, compiling the auditor's abstracts of freight way-bills in what are known as the "freight journals" of the Company, for the purpose of affording a basis against which to check agents' freight, received reports and other similar reports.

I do not recall exactly how long I was employed in that character of work, but it was not a great while, and after that I was a general utility man—if I may use the term—for the Chief Clerk of freight accounts, a position that now carries the title of auditor of freight receipts of the road.

Q. Is that still with the Missouri Pacific?

A. Yes, sir; and my duties there were practically every line of work in the department, excepting the revising of way-bills. I took the place of men who were sick, men who were over-burdened with

work, and served in various capacities in practically all the work of the department.

One of the duties regularly assigned to me was the handling of the freight auditor's end of freight claims giving the freight
3355 claim agent the settlement as shown by our records that he might know how to properly dispose of the claim.

I stayed with the Missouri Pacific until July 1900, and at that time left the service of the Company and went to the Illinois Central Railroad at East St. Louis, serving that Company as bill clerk for approximately a year—I do not carry those exact dates in my head. My duties with the Illinois Central Railroad were the making of way-bills for transportation of freight over the Company's line and over the roads with which they had connections; the rating of the freight, applying to it the proper rate for its transportation as indicated in the tariffs which were furnished us for that purpose; the classifying of the freight and the making of the way-bill which was to carry it over the road.

After about a year with the Illinois Central, I went to the Louisville and Nashville at East St. Louis, and for about three months, or thereabouts, served in the capacity of bill clerk, performing practically the same duties as I had performed for the Illinois Central road.

At the end of that period I was appointed Chief Bill Clerk for the Company—for the Louisville & Nashville—having charge of the entire outbound freight movement from East St. Louis.

We had a peculiar organization there for a local freight station—at least it appeals to me as such. The chief clerk divided his
3356 organization up into four parts, inbound; outbound; claim and miscellaneous; and accounting, which included the cashier.

He turned over to the man in charge of "outbound" (who, at this time, was myself,) the entire supervision of the moving of freight from the Company's terminals in East St. Louis, making it a charge upon me as soon as it hit the company's track connection or was unloaded on the company's platform. While I did not personally supervise the platform, the platform foreman consulted with me as to the loading of his merchandise cars and was governed by me, largely, in that matter.

The yard-master consulted with me in the moving of freight when there was a question of giving preference to one car over another.

It was also my duty, and the chief part of my duty, to see that way-bills were properly made to cover the freight forwarded from East St. Louis by the Louisville & Nashville. In doing that it was necessary for me to keep up the entire tariff file at the station. We handled freight and had through billing to practically all the points East of the Mississippi and South of the Ohio and Potomac rivers. We operated two "fast freight lines" into Eastern seaboard territory, one all rail and one a rail and water route, which necessitated the keeping of a large tariff file.

3357 It was also my duty to assist in general work of the desk; educate new men as to the handling of the Company's tariffs, and the making of way-bills.

After serving in that capacity from early in 1901, until the Fall of 1903 or 1904—I am a little mixed on that year, I am not quite sure whether it was 1903 or 1904—I was loaned by the Louisville & Nashville to Mr. Peyinghaus, who was at that time the agent of the St. Louis Iron Mountain & Southern Railway at East St. Louis. The Iron Mountain had just secured possession of what was known as the "St. Louis Valley" a line running from Valey Junction, just outside of East St. Louis at that time, to Gale, a connection with the Cotton Belt transfer service to the Missouri side of the Mississippi River. The road now runs to the east end of Thebes Bridge.

Mr. Peyinghaus was about to take charge of the station at Bixby, which was then intended to be the north terminal of what is now known as the Illinois Division of the Iron Mountain road, and inasmuch as the Iron Mountain was reaching practically all its connections at East St. Louis through the medium of the L. & N.—they had leased trackage rights from the L. & N. from Illinois Transfer Junction to East St. Louis—he wanted somebody who knew the east side terminal situation from an L. & N. standpoint, to help him organize his office, the terminal end of it and possibly the yard end of it, and as a matter of personal accommodation to him, the L. & N. loaned me to him for a stipulated time, which was to be two

3358 months.

I went out to Bixby. The yard was not quite completed, but they were about ready to turn it over for transportation purposes and operate it. I spent two months out there as chief clerk to Mr. Peyinghaus, and subsequently to Mr. Kell, who succeeded him, assisting in the organization of that terminal, and handling of freight in and out, and endeavoring to get things in working order.

I went back to the L. & N. at the expiration of that time and resumed my duties as chief bill clerk, continuing in that capacity until the spring of 1905, when I was appointed chief clerk to the general agent at the traffic department of the L. & N., at St. Louis.

My duties as chief clerk to the general agent at St. Louis were practically the conduct of the entire business of the office, aside from the solicitation of freight. I handled the general agent's correspondence; kept up the company's tariff file in that office; quoted rates—I had a bill of lading clerk, but I quoted rates in his absence. It was also my duty to investigate such claims as were filed with our office by patrons of the road. The L. & N. traffic department handles its own claims. That is, the freight claim agent—at least in those days—reported to the General Freight Agent.

A great many claims were filed with us, which made it necessary for me to investigate the loss and damage of freight on the

3359 L. & N. rails, and in the case of stuff going to or received from connecting lines, to make an investigation up to a junctoion point on the L. & N. rails.

I was empowered, over the signature of the General Agent, to

voucher loss and damage claims up to a certain maximum figure, after having satisfied myself of their justice and reasonableness.

I was empowered to pay overcharge claims in any amount, provided I could verify the through rate claimed by the shipper or the consignee, as the case might be. I used to handle some 600 claims per month in that manner. In doing that I became fairly familiar with the workings of the railroad, in addition to the knowledge that I had gained in my local freight office service and my transaction of business with freight agents of the road, in that capacity.

I left the L. & N. in June of 1906, to enter the employ of Haskins & Sells, by whom I am still employed.

Q. Since you have been employed by Haskins & Sells have you had railroad work to do with? If so, what has been the character of that work that you have done?

A. I assisted Mr. Taliaferro, then of our staff, in the Missouri Rate Case, gathering statistics of various kinds; making various investigations in the offices of the Missouri Pacific, Burlington, Wabash, Santa Fe, Kansas City Southern and other roads; compiling various statistics and doing various work outlined by Mr. Taliaferro;
3360 and prepared data necessary to compile our exhibits in that case.

The largest single piece of work that I undertook, was the preparation of a statement of the tons, ton mileage, and revenue on the Burlington road, for the month of September, 1906, the object being to classify the traffic of the road in Missouri, between state and interstate.

The preparation of that statement took about four and one-half months, as I recall it, from early in November, 1906, to about the middle of March, 1907, or the early part of March, 1907.

Q. Where was that statement prepared? I mean, in what office?

A. In the office of the General Auditor of the Chicago, Burlington & Quincy Railroad, at Chicago. The work was done by Burlington clerks, the actual detail. The number of men employed on the work varied from 10 to 30, all that could be spared for that work, but the entire conduct of the work was turned over to me by Mr. Sturgis, General Auditor of the Company and was left solely in my charge, his men doing the work under my instructions. In fact, I had to take the force of green men he had available for the work and educate them as to how it should be done, in the first instance.

Q. I did not quite catch the nature of the statistics.

A. It was a classification of the Company's freight traffic in Missouri, tons, ton mileage, and revenue, as between state and interstate business, for the month of September, 1906.

3361 Q. As shown by the General Auditor's books?

A. The statement was made from the original records of the Company. The Burlington's general auditor has on file the original way-bills covering the traffic on his line, where the way-bill rests on his line.

That was the largest single piece of work I undertook.

Q. What was the other kind of work that you did in connection with the Missouri Rate Case?

A. I assisted in doing some similar work in the General auditor's office of the Missouri Pacific. The period covered in that statement was the month of October, 1905. I assisted in checking the various figures submitted by the various railroads in the litigation and spent a great deal of time compiling such a variety of statistics that it would be almost impossible to tell you in detail now what they were.

Q. Outside of your work in railroad offices and the Missouri Rate case, have you done any other railroad work as an accountant, and if so, what has been the character of the work.

A. Yes, sir. I have assisted on the audit of some of the largest railroads in the southeast, who are clients of our firm. The nature of the work done by me in those audits was largely the verification of revenue accounts, having to do with the agents' accounts,
3362 largely. That was in the summer and fall of 1907, during a hiatus in the Missouri Case.

I have done other railroad work for clients of ours here in St. Louis, in the preparation of statistics from books and records of the companies and assisted our Chicago office on railroad work where the question of taxes was in controversy between the Government and the railroad, based on the gross earnings of the railroad.

I think that is about the scope of my railroad work for Haskins & Sells.

Q. What other character of work have you done for Haskins & Sells since you have been employed by that firm?

A. I have assisted in the audits and have conducted audits myself of various manufacturing concerns; steel plants; boot and shoe manufacturing concerns; concerns manufacturing clay products; banks; brokerage houses; trust companies; coal mines, concerns manufacturing electrical apparatus; public service corporations, and a good deal of miscellaneous work that usually comes in our year's business.

Q. Have you established or assisted in the establishment of cost accounting systems for various mercantile and manufacturing industries?

A. I have assisted senior accountants who were preparing systems, preparing the ground for them and working with them. I have given quite a little thought to the matter, but have never as
3363 yet been in charge of an engagement where we were called on to put in a cost system.

Q. Are you familiar with the cost accounting systems that are installed by your accounting firms and other accounting firms, and the principles involved in them?

A. I have made some study of the matter and have had considerable discussion on subjects of that kind.

Our organization carries on a campaign of education for its staff pretty near all of the time. We get the best thought of the entire organization along these lines, and we think we keep fairly well up to date in that way.

Q. I wish you would state what relation you occupy to the present litigation?

A. When our firm was retained by the Railroad Commission of

the State of Arkansas to assist in investigating the statement submitted by the railroads in this matter, and to prepare figures to support the state's side of the case and secure the necessary data for that purpose, I was assigned to take charge of the field work in the matter for our firm. That is, I was placed in direct charge of the work in the railroad office.

Q. About when did you begin that work?

A. July of last year; I think about the 11th of the month, if I remember correctly.

Q. You have been a guest of the railroad offices, I believe, pretty continuously from that time down to the present time, have you not, Mr. Hamilton, and practically lived in their accounts?

3364 A. Yes, with one or two short intervals, that is true.

Q. Are you familiar with Exhibit 26, filed by the Iron Mountain Railroad, showing a statement of trans-state interstate and state freight handled within the month of October, 1907, and the statement in Exhibits 19 and 20, filed by the St. Louis Southwestern Railroad, showing ton miles of commercial freight handled on through and local trains in the state of Arkansas, and the revenue, divided between state and interstate, during the month of October, 1908, and the miscellaneous train statistics shown in Exhibit 20, for the month of October, 1908, on the Cotton Belt road?

A. Yes, sir.

Q. Are you familiar with the method of compilation and the results shown therein?

A. In the case of Exhibit 26, I have pretty largely verified the method which Mr. Roth stated he employed, and in the case of Mr. Kimbell's Exhibits, I am familiar with the way in which those figures were obtained, from hearing Mr. Kimbell state it. That was a train test made on the trains.

Q. I call your attention to Exhibit No. "I" filed by Mr. Wharton, being the freight statistics of October, 1907, on the St. Louis, Iron Mountain and Southern Railroad Company, and ask you if you are familiar with the same?

3365 A. I am.

Q. Did you compile this or was it done under your direction?

A. The exhibit itself was compiled under Mr. Wharton's direction, with my assistance, largely. That is, the making of the various calculations and the framing of the exhibit, but most of the basic data contained in the exhibit was compiled either by me or under my direction.

3366 Q. Now, Mr. Hamilton, take up that exhibit and give thoroughly and in detail, a history of the compilation and the methods pursued by you in reaching the results that are shown therein.

A. The first item on the exhibit is "Ton miles of freight carried" subdivided between local trains and through trains. We worked up the figures shown in the local train column.

Before explaining the method, I will say that that work was done by myself, jointly with the employés of the Arkansas Railroad Com-

mission, and at times some small assistance from members of the staff of Haskins & Sells, where we needed a man and could use one to advantage temporarily.

The bulk of the work, however, was done by Messrs. Wright and Dutlinger, and myself. We had some assistance from other employés of the Commission, but the major portion of the work was done by us.

Q. While you are on that and before you go into it further, Mr. Hamilton, I wish you would state, generally, the ability of these various men who assisted you in this work, and their experience and training to fit them for the work done.

A. Mr. Wright, who has been on the stand in this case, and who, I think, has given his railroad experience rather fully, I do
3367 not think needs much comment from me, except to say that in my judgment he is a very capable railroad accountant and a very thorough worker.

Q. He has had such experience as would enable him to do the class of work he did in this case?

A. Yes, sir. We found his local knowledge of the situation on the Iron Mountain in Arkansas was invaluable to us in getting these figures together, he having been close to the ground down there, as Traveling Auditor—I think for seven years—and knowing, as I recall he put it "all the landmarks along the road", was of great help to us.

I understand Mr. Dutlinger had some years' local freight office experience with the Iron Mountain road. I know this, of course, only as he tells me, but I think that the character of the work he did bears out his statement that he was well qualified for that class of work.

I understand that he was for some time located in the local freight office of the Iron Mountain, in Little Rock, and after that time was employed by Mr. T. H. Bunch as his traffic man, handling the railroad end of his grain business in Little Rock, and getting pretty closely in touch with the railroads of the state in that way.

We also had with us a Mr. Reichardt, whose services were largely in a minor clerical capacity. He copied figures, assisted in footing figures tabulated by us and did work of that character, for a short time.

3368 The real work of compiling these statistics, however, was done by Mr. Wright, Mr. Dutlinger and myself, with the occasional assistance of some of the Haskins & Sells men.

Q. Was Mr. Wright competent to do the work you imposed upon him?

A. I think very thoroughly so, yes, sir.

Q. And the men from Haskins & Sells' who worked upon this matter, were they competent to do the work imposed upon them?

A. Yes, sir.

Q. In other words, you regarded the staff that worked under you as competent to do the work that was done by them?

A. I think so, yes, sir.

Q. Now, Mr. Hamilton, detail how that was compiled, stating it in your own way and giving a connected and detailed history of it.

A. The first item on Exhibit "I" is "Ton miles of freight carried."

The first column on the exhibit gives the statistics for local trains. We worked up the figures that are shown in that first column all the way down the exhibit.

Q. How did you work them up?

A. Beginning with the ton miles of local and mixed freight trains operating on the Iron Mountain in Arkansas during October 1907——

3369 Q. How did you get them?

A. Why, it is quite a long story, how we got the ton mileage. That is the gist of the whole thing.

Q. I thought you were referring to taking exhibit 26?

A. No, sir. We classified between state and interstate in a manner that I will describe, for your information.

We first made an examination of the railroads' official timecards, which are issued solely for the government of employés, to ascertain what local trains and mixed trains were scheduled to run in the month we had under review, and between what points they were scheduled to run.

We next examined the dispatcher's train sheets. The dispatcher's train sheet is the report he makes daily to the Transportation Department, of all trains of all classes, moving over the piece of road within his jurisdiction; the dispatcher, of course, having sole charge of the movement of trains while they are on the road.

An examination was made to see what local freight and mixed trains had been annul-ed or canceled.

We first had the schedule showing what should have been run and then we examined the dispatcher's sheets to see what, according to his record, had not been run.

We did not finally accept the dispatcher's sheet as evidence that any local train or mixed train which did not appear on it,

3370 had not run, but we went further than that. Where a train was missing that was scheduled to run and the dispatcher did not show it had been run, and did not make the plain statement that it had been annul-ed or canceled, we had recourse to the wheel reports for that date, on that division.

Q. I wish you would explain the wheel report, if you have one here.

A. I think I can explain it better later on.

We went to the wheel reports made by the conductors on that division and examined them to see if, perchance, some train had been run to do local work, but not run under the local's regular scheduled number. Oft-times they run a train as an extra, under the engine number; for reasons known to the dispatcher he does not run it under the regular number. If we found such an extra train which, in our judgment supplanted the local, we took it as the local train serving that piece of road that day.

In determining that we ascertained first whether that local freight train had handled less-than-carload peddling merchandise, neces-

sitating stops from station to station, and whether it had made an extraordinary number of pick-ups and set-outs for carload business, more so than a through train would normally make. Finding a train of that character, we went still further to the pay-roll and time books (that was done later on, but was done eventually) to
3371 find that the crew had been paid the rate of wages which under the Company's contract should be paid a local train crew——

Q. You mean the Company's contract with its employés?

A. Yes, sir. We then determined that was a local train.

Now, to go back to your question about wheel reports:

The wheel report is the report which the conductor in charge—I speak now of freight wheel reports—in charge of the freight train, renders to the transportation officials of the road, as to what the train under his charge had done. In other words, it is a train performance sheet.

Q. That is the physical performance?

A. The actual performance of the train as reported by the conductor.

Q. That does not include the business, the freight that is hauled on it——

A. It includes some tonnage figures. Perhaps I can really tell you better by describing what it does include. It does not take in any revenue figures.

Q. That is what I had in mind: it takes in none of the revenue?

A. No, sir. It shows first the points between which the train runs and the district and division over which it ran; the name of the conductor in charge of the train; the number of the train; the engine number or engine numbers, if two engines pull the train or if they change engines en route; the names of the engineer
3372 in charge of those engines; the time of departure from and arrival at the termini of its run; also some information as to tonnage rating, estimated for the use of the operating department. I think that figure is used to estimate the percentage of its rating which the engine is hauling. It also gives the number and initial of each car in the train at any time during its journey, or during a train's journey; the kind of car—meaning by that whether it be a box car, a flat car, a furniture or stock car, etc.; the marked capacity of the car in tons, that is, its loading capacity; the station at which the car was taken by that particular train and the station at which it was left. (I am giving the basic information that the report affords). The conductor also inserts the car mileage between the points at which the car was taken and left and to amplify that he divides his car miles between loaded and empty cars—divides his car mileage between loaded, empty and work car miles. If he obeys instructions, he should give on his wheel report the weight of the contents of each car in net pounds, as shown by the way-bill. I believe that applies to carload business and that certain estimates are given him on the back of the wheel reports for merchandise, less-than-carload, he should show the tons gross—that is, the weight of the car and the load, supposedly the tare weight taken from the

side of the car and the billed weight of the car's contents, or,
3373 if the way-bill shows that the car has been sealed, the gross weight obtained on the scale, which includes the car and the load; he should show the contents of the car as indicated by the way-bill; the final destination as indicated by the way-bill (although in my experience, that class of information from a conductor does not amount to much); he should show the seals on the car, both sides and ends; that is, the seal protection applied by the agent loading the car or at some intermediate station as it became necessary.

Having that information, the wheel report gives the entire performance of the train.

Q. Have you a blank form of a wheel report before you?

A. I have one handed me by Mr. Johnson this morning.

Q. I wish you would file that as an exhibit.

A. This is a new form and is slightly different from that which was in use in 1907, but in no vital particular.

Q. If you can get one of the others later, I would prefer it: However, you may file this now.

The wheel report last referred to is marked, "Defendant's Exhibit A-1, T. A. Hamilton, 6/16/10, M. J. C." and is in the words and figures as follows:

For Exhibit "A-1", see Volume 9, page 5848.

3374 The WITNESS: I had explained how we had determined what trains were local trains before we began to analyze their performances in ton miles, and I digressed to explain what a wheel report was, as that was one of the bases on which we worked.

Having located the trains performing local freight service—and in fact, I included the mixed trains for freight service in the matter I have outlined—we took off an abstract of the conductor's wheel reports for those trains for the entire month. Our abstract included the number and initial of all full carloads, the stations at which each car was picked up and set out by the train; the ultimate destination of the car's contents as shown by the wheel report. We took that information, not because we believed it was absolutely accurate, but because we thought it would be of material assistance to us in running down the way-bills to cover the cars later on, and it proved to be so——

Q. You say they were not used for any other purpose: Did you not get some of your ton mile statistics and car miles from the wheel reports?

A. I did not refer to the wheel report. I said we abstracted from the wheel report what the conductors said was the ultimate destination of the freight; that information appears on our sheets and I just included it for that reason. We figured the car miles
3375 made by less-than-carload or package freight cars, direct from the wheel reports, taking the point at which the car was shown to have been picked up and the point at which it was set out by that train, and figuring the difference between based on the mileage shown in the Company's official station list, which I am informed is the basis of all their mileage statistics.

We figured the mileage of the empty cars in the same manner. The mileage figures for the less-than-carload and empty cars were entered by us on our abstract sheets in totals, for each train, each day. What I am getting at is this: we set up each individual full carload. We made no attempt to set up each individual less-than-carload or each empty car, and for the reason that we were not going to attempt to classify the less-than-carload freight between state and interstate. I will explain in a few minutes why that was. One empty car was the same to us as another. Therefore, we got the mileage of the less-than-carload and empty cars, and entered them in separate totals for each class on our sheets, for each day.

3376 After we had our sheets abstracted in that way, we started out to locate the waybills to cover the freight in full carloads; I have a copy of an Iron Mountain blank waybill.

Q. I wish you would explain fully what a waybill contains, what it is, and what its office is in handling freight?

A. This form I have here is the form for the billing of ordinary freight. There are other forms, cotton waybills, forms for red ball freight, live stock, and waybills of various sorts, and sizes, but vitally, this is the standard form of waybill used now by practically all railroads in the United States, so this will serve as a type of all the others, although there are some differences.

A waybill serves both the Transportation Department and the Accounting Department of a railroad. Its functions in the Transportation Department are to cover the transportation of freight on the company's trains. In other words, it is the conductor's authority, issued to him by the Company's agent, for the transportation of freight in his train. It is a rule on most railroads, that no freight shall be transported without a waybill, there are some variations of that to expedite traffic, but that is the general rule. The waybill, from the transportation point of view, shows where the shipment was billed from, and where it was billed to, how it is to be routed, to its destination, the car number, the number and initial of

3377 the car into which the freight is loaded, the name of the shipper or consignor, and other originating references, the marks of shipment, consignee, its final destination, description of the articles covered by the waybill, and any necessary classification conditions, or rules under which they are shipped. The weight of the shipment is also given on the waybill.

Q. Who makes out the waybill, and where does it finally go?

A. That comes in on the accounting side of the proposition. That is practically all of the data that is of interest to the Transportation Department; it fully describes the shipment to them, informs them what is to be done with it, its nature and weight, and gives them all the information necessary to have in its transportation or movement; that is the idea of the waybill. It is just like a ticket for a passenger, only the passenger is able to talk and take care of himself, and you have to make a waybill to take care of the freight.

As an accounting vehicle, it affords the general auditor of the company, his basis for ascertaining that the company is receiving

its proper freight revenue for shipments transported over its rails; all of the information which I have outlined as being useful to the Transportation Department is of interest to the auditor, necessarily so. He goes further, however, and interests himself in the rate charged for transportation of freight, as shown by the way-
3378 bill, sees that the proper rate is assessed which entails the proper classification of freight—that proper freight charges are collected by the company's agents, and that all accounting regulations for the transportation of freight and its accounting, are taken care of.

The waybill also furnishes the basis for practically all of the company's freight statistics; it is a history of the company's freight movement in detail. It is made out by the station agent, or his force at the station where the freight is received by the Company from the shippers or turned over, that is from the shipper or turned over by a connecting line or perhaps on the company's rails intermediate, where re-billing is necessary; it is made by the station agent, and in any event, it accompanies the freight to destination, except in a few instances, and becomes a basis upon which the receiving agent delivers the freight and assesses the freight on it.

Those are, in a general way, the functions of a waybill.

Q. Having digressed to get an explanation of waybills, into the record, I wish you would proceed with your method of work?

A. I want to add to that:

The waybill should give, after revision by the auditor, before it is finally taken into the company's revenue accounts, at
3379 headquarters, a pretty complete history of the shipment.

By the way, I omitted another function that the waybill has, while that is an accounting function, it affords the claim agent a basis for his investigation of freight claims.

Q. How does it find its way into the auditor's office?

A. The practice varies on different roads; on the Iron Mountain, the auditor gets an impression copy of the waybill, of all waybills made by his own agents, whether the waybill be headed to a station on his own line or headed under a through billing arrangement, to a station on another line, he gets an impression copy or he takes pains to see that he does if it is not sent in; he gets an impression copy of all waybills in which his line performs the intermediate haul, when the waybill goes over his rails, but originates and *and* terminates on other lines. He has in his possession, the original waybills covering all interline shipments, made on other lines to stations on his road; those waybills resting on his road are in his possession, those originating on his road, destined to his road, and over his road.

Q. The general auditor's office then, should contain waybills showing the movement of freight—every ton of freight—on its line?

A. Yes, sir.

Q. Either the original or an impression copy of the origi-
3380 nal, as the custom might be on different roads?

A. It necessarily must, if the company is to get revenue for the transportation of freight.

Q. Attach that copy as Exhibit B-1.

(Exhibit B-1 is set forth in Volume 9, page 5851.)

A. I will do so; it was those impression copies, or the original waybills, as the case might be, that we started out to locate, covering the cars we had listed in these local trains, and speaking roughly, I think there were approximately 24,000 full carloads on those trains, in the month of October, 1907, making it necessary for us to locate about that many waybills. I have not made any special count of it, except by the size of the abstract sheets, how full they were, and the number of lines, a line being given to a car.

When we set out locating the waybills, these I refer to, we first had recourse to reports of cars weighed on the company's track scales. Those reports are rendered to the general auditor by the weighmaster, in charge of scales. The scale reports on the Iron Mountain road, and the Missouri Pacific too, give the number of the car, the name of the station from which it was waybilled, and number and date of the waybill, and the station to which it was billed.

Now, the station from and to are not in all cases—accurate—I speak now entirely of the heading of the waybill; we proceeded on the theory that in accordance with the usual practice, the
3381 cars received scaling service, if possible, at the first track scale they crossed.

Q. Explain what you mean by "scaling?"

A. The scaling consists of placing a car on the track scale, and ascertaining the weight of the car and load, and then on the scale report, that is shown as the gross weight; the stenciled tare weight, meaning the weight of the car itself, as stenciled on the side of the car; that is deducted from the gross weight, and in that way, the net weight of the contents of the car is arrived at.

A car is usually scaled at the first track scale it passes over—not always, because it is not always practicable to do it. We proceeded on that theory, if we found it, al- right, we had the waybill. If we did not find the car on the first scale record, we followed it on the route that it would possibly traverse; it may have gone more than one way, over Missouri Pacific and Iron Mountain rails, and we examined the reports from every scale that it could have passed and endeavored to find who had made the waybill for it.

Failing to locate the waybill made to cover the cars in that manner, we next had recourse to the waybills made at the station where the conductor said the car was picked up by him, on the chance that the car might have originated there.

Failing to find that the case,—which would indicate that
3382 the car had not originated there, but came from another point, we examined the waybills made at Missouri Pacific and Iron Mountain stations beyond the point where the car was picked up in the direction from which it moved, endeavoring to find the waybill for the car in that way.

We also examined the junction reports made by the Iron Mountain agents, of cars received from or delivered to connecting lines at

junctions which the car could have passed on its journey, should it come from beyond the station where it was picked up.

Those junction reports—passing reports I believe they are called in the Iron Mountain auditor's office—give the car number and initial, number of and date of the waybill covering the car, billing station and station to which billed, also the car's contents, although that was of no moment to us; we were simply looking for the waybill number.

Some cars were found in that way. Failing to locate the cars in that manner, we had recourse to the auditor's abstract of waybills known as freight journals. On these freight journals, the auditor's office force compiles a record of the waybills according to heading; by heading, I mean, say for instance, from St. Louis to Malvern, the shipment might be destined to Hot Springs, but would be headed to Malvern, but the waybills to the stations on the Missouri Pacific and Iron Mountain systems, the waybill headed to those
3383 stations would be charged to the agent at that station, and it is necessary for him to collect the charges there. For that reason, the auditor groups these waybills according to the stations to which they are headed, and again groups them according to the stations at which they are made, in rough geographical order.

We had reference to these journals, which in a great many instances show the number of the car, enabling us to locate the waybills covering some of the cars we had on our sheets.

I might illustrate how we did that; if we had a car on our abstract sheet, which the wheel reports showed had its final destination at Little Rock, we might or might not find it on that record—in theory perhaps it was headed there; say a car was picked up at Newport, I would endeavor to find that car weighed on the Newport scale; failing in that, I would try to find it weighed on the Little Rock scale; failing in that, I would look at the billing at Newport station where the conductor got the car. Failing to find it there, I would proceed up the main line of the Iron Mountain towards St. Louis, and over the various branches of the road, looking for waybills; perhaps we went over the Missouri Pacific, if in our judgment we thought the commodity could have come from Missouri Pacific rails. Failing in that, we would go to these journals—I would go to the Little Rock Journal in this instance, and look to the group from Newport and see if we could locate that billing. Fail-
3384 ing in that I would go up north of Newport, looking through the journal for points beyond Newport. You can readily see how the grouping of waybills in that way, in geographical order, made it practical to trace the car back over the road it might have been traversed on its road to Little Rock. Of course, it is not always true, that the information given by the conductor that the car was destined to Little Rock is right; sometimes, that was a mistake, and we had to go to the journal south of Little Rock, all the way to Texarkana and Alexandria, or west to Ft. Smith, to find its destination.

All of these methods were an index to the number of the waybill

covering it, which enabled us to go to the waybill for the tonnage of any car and classify it accordingly.

On inter-line business, that is business which the Iron Mountain and another road handled jointly, we referred to the settlement sheets, settlements of account rendered by the foreign lines to the Iron Mountain; that was on business forwarded by the Iron Mountain to those lines.

If we found a car in a train and the conductor said it was destined to San Francisco, we looked on the Southern Pacific settlement sheet, knowing that was the way it would go, and in that way got the waybill number, and went back to the waybill for our information as to the tonnage, or if we found the conductor said it
3385 was going to New Orleans, the natural inference was it was turned over to the T. & P. at Alexandria—the Texas and Pacific. Failing to locate it on the junction report, we went to the account rendered to the Iron Mountain by the T. & P. That is what we refer to as the settlement sheets, such giving an index sheet to the waybill covering freight that the Iron Mountain has the originating haul on, or where the Iron Mountain had the intermediate haul between two roads.

We found too, in numerous instances, that the seal protection on the car, as shown on the conductor's wheel report, was a direct index to the station which had billed the car, and we were enabled in that case to go direct from the wheel report to the waybill covering. Explaining what I mean by seals on cars, it is customary to protect the doors and all the openings, not only the doors but all openings on all closed cars, with either lead or tin seals; that is, the door is sealed with a lead impression, seal, or tin seal, which locks the door, and in closing the impression seal, the impression on the lead seal, the station agent will impress on that seal, the number of his station, the seal die would have that number on it. For instance, in a local freight train running between Wagoner and Van Buren into Arkansas, we find a car on one side of which was a seal,
#4160, reported by the conductor, that being the number
3386 of Wagoner Station in the Company's official list; that would indicate to us, that perhaps that car had been loaded at Wagoner; we would go right to the Wagoner billing for a few days previous, and locate the car in a great many instances; a car might have been sealed 3930, Van Buren Station; we would go through the same process in the Van Buren billing, to find the waybill that covered the car. Very often, various seals, placed on the cars at different stations, were on various openings of the car, indicating there was only one door opened at the last loading station. When we found that, we went to all stations whose seals were on the car, unless they were so remote it was evidently a very ancient seal.

Having located all the waybills—I say all, there were some few we didn't—having located the waybills to cover the cars in this manner, we classified the tonnage, the weight of the shipment on each waybill, as between state and interstate; we made a sub-division of interstate into trans-state and interstate, but generally speaking,

we classified it between state and interstate. We did that as we located each waybill, so there was nothing to do but to lump it all, at the end of the process.

Q. You say there were some few of the waybills you didn't locate out of the month's business? How many were there?

3387 —. I haven't the exact figures here, and I would like to refresh my memory before I make a positive statement; not a great many though.

Q. Will you give us the exact number?

A. I will, yes, sir.

Q. Go ahead with your explanation.

A. Having classified our tonnage in each car between state and interstate, in the manner I have described, we proceeded to make ton miles out of it. Our abstract sheets show for each car, at that stage of our work, the number of the car, where it was picked up, where it was set out, its weight in pounds, divided between state and interstate. We took the information given, which was derived from the wheel reports as to where the car was picked up and set out, and figured the mileage between those two points: that is the mileage which that car and its contents travelled in that local freight train. We placed that mileage on our sheets, deriving it from the company's official station lists,—that typifies the process. Of course, it was an immense amount of work.

We then, to cut directly to the result, multiplied the weight of the cars' contents by the mileage made in that train, and in that way, got the pound miles *the pound miles* of state and interstate traffic on those trains; I speak now entirely with reference to the carload business.

3388 We reduced that by a single calculation, of course, to ton miles, that being, of course, the accepted unit for statistics of that character, being the easiest way to handle it.

That explains how we got the ton miles, state and interstate of carload business. Those trains also carried less than carload business, and as I stated previously, we made no attempt to classify that between state and interstate, and for a very good reason—at least it appeals to me as such. To begin with, although that had nothing to do with the reason, I think Exhibit 26 shows in the month of October, 1907, the month we were interested in, the total L. C. L. tons, state and interstate, and trans-state, handled in Arkansas by the Iron Mountain was but 5.77% of the total tons, and expressed in ton miles, that traffic was but 4.29%. The last line of Exhibit 26, shows those figures in columns 2 and 7; but the principal reason for which we determined not to analyze the contents of those cars, was this: We could not be at all sure that we had located all the waybills for those cars, and not being able to locate them all—I speak of L. C. L. cars—we did not try to locate any.

The reason it is impossible to locate all of those waybills—perhaps impracticable would be a better word—is this: It is a common occurrence at way stations out on the line, and I think it is a

3389 pretty good plan from the agent's point of view, to make waybills for his freight that is to go forward by local train or

any other train, but in this case, for local L. C. L. freight, before the train arrives; he does that so he may go out on the platform, help load the freight, help unload it, check it in and out, be on the ground to watch for damage to freight, and make the necessary notations on the waybill. He is busy on the platform and should be, unless he has a very large station with assistants to attend to this; he makes his waybill beforehand for that reason, and he takes his impression copy for the auditor's file beforehand for that reason, and having taken the impression, he does so without the car number on the waybill, because he cannot know in advance of the arrival of the local freight train, what car his package freight is going to be put in. Therefore, he omits necessarily, the car number from the waybill and from the impression copy; the alternative is, to make out the waybill, take the impression of it and let the local train stand there while the impression copies are being made, and I know from examining the original waybills in the Burlington statistical matter I spoke of a while ago, that of L. C. L. waybills made at way stations, fully 50% are without car numbers, unless it be a station of sufficient size to originate a carload of local freight, which would be loaded before the local came in. As we went through the im-
3390 pression copies furnished the auditor at the time, naturally the waybill had no car number on it because of that. Therefore, we did not attempt to classify any L. C. L. freight between state and interstate.

Q. How did you classify that?

A. We had worked up, as I explained previously, the car miles made by these package or L. C. L. cars, getting the total of that figure, we multiplied it by four, that being the average loading of merchandise cars in the Cotton Belt test, as on file here as Exhibit for the month of October, 1908.

Q. Multiplied by four—just give the figures to show where you got that four?

A. I would like to amend that statement I got mixed on it; that figure is shown in our Cotton Belt freight statistics, exhibit for October, 1908, and is the result of calculations based on Mr. Kimbell's Exhibit- 19 and 30, simply reducing the figures to the average loading for that class of car.

Q. That is, it is loaded four tons to the car?

A. Yes, sir, we took that figure which represented the average loading of such cars on the Cotton Belt and applied it to L. C. L. freight car miles on the Iron Mountain.

When I say average loading, the assumption there is that that loading was in the car upon an average, every mile that the
3391 car travelled, while it might have had ten tons to start and one at the end, still the average loading was that.

Q. From your examination of the Cotton Belt and Iron Mountain waybills, what is your opinion as to accepting the Cotton Belt figures and applying them to the Iron Mountain? Is there any differences in the conduct of that business between the two roads?

A. That would be a matter of opinion purely, because as I said, we did not analyze these Iron Mountain merchandise cars; we figured

on the Cotton Belt basis, which was the result of an actual test; Mr. Kimbell's men rode the train. It appears to me that with the grater density of traffic on the Iron Mountain, with proper economical management on account of that density, that it would at least load the cars as heavy as the Cotton Belt loaded them.

Q. If there was any error, it would be an error against the State?

A. Yes, sir. I had not quite finished my explanation of what we did. We got a total figure of L. C. L. ton miles on that basis, L. C. L. car miles, compiled by us as I have described, multiplied by this average figure of four, which was deduced from the Cotton Belt figures prepared by Mr. Kimbell, that gave us the total L. C. L. ton miles exclusively for local trains.

3392 We didn't know how much was state and how much interstate; we took Mr. Roth's exhibit 26, which shows that the total L. C. L. ton miles of state traffic was 459,204, that is line 8, column six, Exhibit 26, and we used that in making our Exhibit I. Every ton mile of L. C. L. intrastate freight shown in this exhibit, being placed on the local trains, and deducting that figure from the figure arrived at as I have explained, the car miles multiplied by four, said that the balance then was the interstate L. C. L. ton miles on the local trains.

I think that when we place all of the state L. C. L. ton miles on the local trains, we have worked an injustice to the state business, in compiling our statistics based on Exhibit I.

Q. What information have you on that, which makes you think you do an injustice to the state business?

A. My reason is this, that it is practicable to haul state freight in Arkansas a maximum of 305 miles—I think that is the correct figure, and the average local train run is about 1/5th of that, and I cannot conceive of railroad management that would permit package state freight, moving that distance, to work its way along in five local trains when it could move first in the local and be hauled in a through train between division points and then be peddled out.

3393 Q. You think there was some L. C. L. freight moved in through trains.

A. Yes, sir, supposing we had a shipment say from McGehee, on the Valley Division, 102 miles south of Little Rock, to Van Buren, I don't think it is conceivable under the orderly operation of a railroad, for that freight even if it passed Pine Bluff in the second local train, to pass Little Rock in a local; they would certainly unload it at Little Rock and put it in a Van Buren car and then it would move in a through train. At least, that would be good handling, in my judgment, of the shipment.

Q. What does the Cotton Belt test show on intrastate L. C. L. freight on through trains?

A. Approximately 20%, as I recall it. Exhibit #20 shows commercial ton miles L. C. L., that means revenue freight—I have been talking about revenue freight all morning—on the through trains. —this is all L. C. L.—80%, and on the local trains, 20%.

Q. Ten the Cotton Belt carried 20% of L. C. L.

A. Of all its L. C. L. business.

Q. On the local trains?
A. Yes, sir.
Q. L. C. L. state business?
A. The exhibit says commercial ton miles L. C. L.; the segregation is not made there; ton miles, L. C. L. of revenue freight, state, 17% on through trains and 83% on local trains; those figures are
3394 taken from Mr. Kimbell's Exhibit #20.
Q. Then instead of having 83% of the L. C. L. intrastate on the local train, you have carried 100% in the Iron Mountain exhibit, which you have made?
A. Yes, sir, we have loaded it all on to the local.
Q. And for that reason, you think there is some figure, whether it is 17% or some lesser figure of that freight, which should have been carried and was in fact carried, on through trains?
A. Yes, sir.
Q. But owing to your inability to get at that accurately, you have put the full 100% on local trains?
A. Yes, sir. It resolves itself into this, if that is an error and you take any of that state freight off the local and put it on the through train, and if by our estimate of four tons per car mile you give the local all the L. C. L. it carries, you would have to give the local train interstate ton miles to make up for the state you take off.
Q. Whatever error there is on that, it is against the state business?
A. Yes, sir, because you put more on it than is there, and our figures show that is the most expensive train.
Q. Proceed with the balance of your work there?
A. Having got at the ton mileage of local trains, carload and less than carload, interstate and intrastate, in the manner I have described, we deducted that figure,—that is this first column on
3395 Exhibit I, where it refers to ton miles, from the total figures of exactly similar character shown on Mr. Roth's Exhibit #26, those total figures assuming to show the total traffic on all trains for that period, for the period for which we investigated, deducting our figures from Mr. Roth's total figure, we said that the balance of the ton mileage was on the through trains, and we have shown such figures in the proper column of Exhibit I.
The next item on Exhibit I, that was a matter of investigation by myself and the gentlemen under me, comes under the head of mileage statistics.
The first item is car miles: I explained that at the outset, how we had to list each car—each loaded car— on our abstract sheets, and place the mileage against that, in order to make ton miles of the freight in the cars, and how we had figured the mileage of L. C. L. and empty cars from the wheel reports, the distance between picking up and setting out, as shown by the conductor's reports, reduced to miles by us on the basis of the company's official station list. I used those figures incidentally, in getting our ton miles except as to empties, so it was just a matter of totalling our sheets and taking off those figures and that total is the car mile total. That includes the total carload mileage revenue and Company freight,

total L. C. L. mileage and the total empty car mileage. It
3396 includes the mileage of any work equipment that may have been moving in these local freight trains, although there was very little of it.

Q. Take your next item.

A. The item of engine miles was figured on the basis of actual distance traveled by the engine, pulling the train between the stations, indicated on the wheel report.

When we had the wheel report before us, I stated that it showed the stations from and to which the train ran. That, together with the Company's official station list, gives us the mileage made by engines pulling local freight trains.

The caboose miles, it will be noted on Exhibit I, are less than the engine mileage. As an ordinary proposition, every freight train on the road, every train run, has a caboose as well as an engine, but there is a difference of some ten thousand miles, the caboose being less than the engine mileage; that is the caboose mileage on the mixed freight and passenger trains run by the Company during that month.

We are informed by a gentleman whose duty it is to compile statistics for the transportation department, statistics of that nature, that in their total equipment mileage figure, they include caboose miles in passenger equipment, on the theory that they serve the purpose of a baggage car, and that the mixed train could
3397 very well get along without a caboose, but that it would have to have a baggage car.

Q. You just accept that classification?

A. Yes, sir, for this reason, as you will see, we went later on to apply these local train figures against their total figures, and for that reason, my figures had to comply with the method in which they figured theirs. With that difference, caboose miles are figured on exactly the same basis as engine miles.

Train Miles in the case of the Iron Mountain—Local freights for October 1907—were synonimous with engine miles, for the reason, as we satisfied ourselves by checking of the wheel reports and dispatchers' sheets, that no local trains or mixed trains were double headed during that period,—that is, run with two engines—there were some dead engines, that is, engines not in service or without steam up, hauled in local trains, but that was not actual service movement as far as that train was concerned; it was just like any other Company freight; there was no double headers for that month, and therefore the train miles would be the engine miles.

Having ascertained the train, engine, freight car, and caboose miles of the local and mixed trains in the manner I have described, we deducted that figure or those figures from like totals,—that is from the totals of figures of like character in the company's statistics, covering all the trains, the result necessarily being to
3398 show the balance as the train and equipment mileage of the through train.

I might say in that connection, that those total statistics are compiled by the Transportation Department of the railroads, by

accounting districts, sections of the road, and they so report to the general auditor, and that a given number of those accounting districts make up the mileage in the State of Arkansas, the border districts co-inciding or running with the state line, and we totaled the district figures to get the total for the state, and balanced it in that way. That is the way we got our figures from which we deducted our compilation to get at the through trains, train and equipment mileage.

The number of trains run, as shown on Exhibit I, was arrived at this way; as I said before, we had abstracted the wheel reports for all these trains, all these local and mixed trains, and satisfied ourselves that those we had listed were all trains by reference to the records that I have described. We counted those trains from our sheets, and in that way, got the number of local trains run; then, we took the dispatcher's sheets, on which there is a column headed "through freight trains" and we counted the through freight trains for the month in that column on all dispatchers' sheets.

Now, there were some trains in that classification, which
3399 as I explained before, according to our ideas, were not through trains, but local trains, and we had determined they were local and so classified them, and so counted them with our local trains. Those trains we deducted from the through trains marked on the dispatchers' sheets and got the actual through trains; that is how those two figures were obtained,—the number of trains run.

The number of cars handled in and out of terminals, was ascertained by us——

Q. This says "terminals where yard engines are maintained?"

A. By terminal, I mean a station at which there was a yard engine maintained, the expense of which was charged, of course, to yard expense in the company's accounts.

We were furnished by the Transportation Department of the Iron Mountain, with a list of the stations at which switch engines were maintained during October, 1907, and my reason for selecting those points and no others was this: If a train came along and set out a car the switch engine was there and took the car off, and if a train came along and picked up a car, the switch engine had undoubtedly prepared that car for picking up and delivered it onto the passing track or wherever the proper place was, and those switch engines were there not only to do industrial switching in that particular yard, but to serve passing trains in that way,
3400 and passing trains could only be so served where there was a switch engine kept for that purpose.

Having been informed by the transportation department of the road where these engines were in the service, we took the wheel reports for the entire month, of all through and local trains running into and out of those terminal- or passing them on through, every time we found a car set out at an intermediate terminal by a through train, we charged that as terminal handling of one car by through trains; if we found a car set out by a local at one of these stations, we charged that to the local; we charged that as a

car handled by the yard engines in terminals for local trains, if they picked up a car there, either class of train, through or local, we charged that to them; there was that much service rendered them, expressed in terms of cars handled. Where a train left a division terminal, whatever was the terminus of its run—say a through freight train of forty cars, we charged that through freight train with forty cars out of that terminal; if it took forty cars into the other end of its run, we charged it with forty cars into that terminal. Wherever a through train or local train set out a car at a way station, where there was no switch engine, of course, there was no switch engine expense incurred; that was that much more expnse of that particular train, and we did not take into account such cars, only where engines were kept; that is how those figures were compiled,
3401 covering the entire month and all the trains.

Now, that covers all the basic figures in that Exhibit I; on the Iron Mountain, the percentages and other figures shown are the result of internal calculations based on figures I have explained the compilation of. In the case of the Cotton Belt, still on the freight side of the house, their statistics being for October, 1908, the ton miles, car miles, caboose miles and engine miles shown in our exhibit, were obtained from or based on, Mr. Kimbell's Exhibits 19 and 20.

The number of trains run, both through and local, was furnished me personally by Mr. Kimbell, Assistant General Auditor of the Company, and was obtained by him at my instance, at my request, from their Transportation Department, whose records are kept in Tyler, Texas, and were not accessible here. The figures furnished Mr. Kimbell were turned over to us.

The number of cars handled in and out of terminals, was worked up on the same basis as the Iron Mountain figures, except at the stations at which switch engines were maintained, that was determined from a circular in Mr. Kimbell's possession, which gave that information, and we agreed on that point, I think. And the basis of our figures was not the wheel report, but a copy of it made by Mr. Kimbell's employees, in getting together his Exhibit #19. It served our purpose amply as well; I saw no reason to doubt its accuracy, and so adopted it.

3402 The figures were compiled in the case of the Cotton Belt generally, by Mr. Speed, an employee of the Cotton Belt office whom Mr. Kimbell assigned for the purpose, Mr. Wright and myself, my share of the work being very small. We merely discussed ways and means, and I went back once or twice to see that my instructions were being carried out; the figures made by Mr. Speed and Mr. Wright were agreed upon, I think, and the other figures shown in Exhibit #P, are the result of calculations based on the figures I have referred to.

That takes care of the method of obtaining the figures shown on Exhibits I and P. There are some other figures in these exhibits, which Mr. Wharton referred to in his testimony, as having been gotten by me or under my supervision——

Q. Take those up and explain them.

A. The item of mileage of yard locomotives, which is given on page 2 of Exhibit K is 130,150 miles, was taken direct from the company's statistics; the figures were furnished me by Mr. Aoumock, who is chief statistician in the office of the car accountant of the Iron Mountain road; they were furnished to me as being the mileage of switch engines, compiled on the basis laid down by the Interstate Commerce Commission, and exclude, I am informed and as I believe to be correct, the mileage of entire switching performed by local freight train engines out on the road, at way sta-

3403 tions.

Wages of road enginemen and trainmen, shown on page 5, Exhibit K, amounting to $29,229.30 for local trains, that includes 75% of the pay of mixed train crews, that being the basis adopted by the Company reflected in its figures submitted here for the segregation of mixed train expenses between freight and passenger. This figure, $29,229.30, wages paid local freight train crews, and proportion of wages paid mixed freight train crews, was arrived at by us, by myself personally, in the last analysis, by examining the time books of the railroad company in which an account is kept with each individual employee on each division, showing the service performed by him each day, local freight, through freight, passenger, switching, etc. Those time books were sent in from division headquarters of the road for our convenience, and were examined by us in St. Louis. We had before us copies of the company's contracts with its trainmen, and were thoroughly informed on the subject of trainmen's wages before we began the investigation, and our figures are the result of the compilation of the mileage and time allowed the men in local freight train service, as shown by the time books, applied to the stated rate of pay, which by the way, is also indicated on the face of the time book for each class of service, and the total of the amounts so obtained for each train for the month, gives us the figure for all the trains in

3404 this manner.

I might say that our guide—there is something there that requires explanation—our guide to the employees in the time book was, to begin with, the wheel report; the wheel report showed the engine number; we could locate the engineer on that day by his engine number, the engineer's time being kept in separate books, showing that on that day, he ran on engine so and so; sometimes the train number was given, sometimes not; it should have been given; but in many cases it was not. That located the fireman for us in the same way, in many instances; there were few cases where the engine number did not appear opposite the fireman's name; in those where it did not, we assumed that the fireman made the same time as the engineer; it is true that he might have made more or less, but we assumed that he made the same time, and was paid at the standard rate of pay for the class of engine he was firing.

We located the conductor by name, his name appearing on the wheel report; we located the conductor by name, found what his day's pay was, and charged it to that local train.

The company's contract calls for three brakemen on local freight trains. We located the brakemen in the time books by the conductor's name; as a usual thing, they were shown as running with a certain conductor; where that information was lacking, as it was in some instances, we assumed that there was hardly any-
3405 thing that the brakemen could do on the train that was chargeable to the train service, when the conductor would not be present, so we gave them the conductor's time, with the brakeman's standard rate of pay. I cannot conceive what the brakeman would be doing in the train service except under the supervision of the conductor. In that manner, we came at our local freight train figures.

Those figures were applied against the total wages of enginemen and trainmen, shown by the company's books, speaking of Arkansas figures always, for that month, and the percentage which the local wages was of the total for the six months' period for wages of enginemen and trainmen was obtained, the figures being shown on the company's books; that is, we divided the six months' figures on the basis of the actual location of wages for the month of October, assuming that the service would be relatively the same, and the amount of wages would be relatively the same.

Then we have loss and damage of freight, which I think is the next item. We examined the vouchers, and where necessary, the claim papers on file in the office of the auditor or freight claim agent—on file in the office of the auditor, for all loss and damage freight claims any portion of which was charged to the State of Arkansas by the Railroad Co. during October, 1907.

We examined the voucher for information as to whether the freight lost or damaged and so paid for, was state or inter-
3406 state freight; information as to the movement of the freight and necessary data to so classify it was given in those papers. In fact, we examined the claim papers. The necessary basis for a claim is the paid expense bill or bill of lading, which would still further give it, and copy of the waybill would again give it, and in many cases, the voucher gives it, and in that way we ascertained those figures.

Q. That was the actual amount paid during the month?

A. Yes, sir.

Q. How did that conform to the amount paid during the six months' period?

A. In total, the charge for loss and damaged freight,—I speak now of the total state and interstate together, for the month of October, 1907, shown by the exhibits in this case, was $19,927.58. but $72.42 short of $20,000, and the figures for the six months was $127,000 in round figures. That is just a trifle over a thousand dollars a month more, on the average, than the October figure was. October is pretty nearly one sixth——

Q. It lacks nearly $1,000 in round numbers, of being one-sixth of the total of that item for the six months' period?

A. Yes, sir. On the Cotton Belt, taking up the roads interchangeably, as I strike each class of items—loss and damage to freight

figures were arrived at from the company's records, in practically the same manner as that I have described on the Iron Mountain.

3407 The mileage of yard engines, shown on the Cotton Belt statement, page 2 of the exhibit, namely 7507 miles, was furnished us by Mr. Kimbell, being secured by him at our request from his transportation department at Tyler, Texas, where such records are kept. The road enginemen and trainmen's wages, as is already explained, is an actual division of that expense between local and through trains for the month of October, 1908; it was made by the company, Mr. Kimbell's test, and we used his figures; I just mention that because it has already been explained on the Iron Mountain.

On the passenger side, the only figures there that was compiled by me, that I think need explanation as to the method of their compilation, are the carmile figures.

Car miles passenger—speaking of the Iron Mountain now—used as the basis for division of expenses of passenger service between coach, Pullman, mail and express service, are the result of the analysis of the Company's regular statistics, the mileage of baggage, dining and parlor cars, owned by the Railroad Company, being included by us in the mileage of coaches.

We did that, because we considered that these baggage, dining and parlor cars were either passenger carrying cars or auxiliary to the passenger cars, as they necessarily are.

3408 The wheel reports of the passenger train conductors are considerably different from those of the freight train conductor; as a matter of fact, they only give information in the rough as to the cars they haul. Of course, they give the engine number and so forth, the cars they haul, and where they haul them from and to, the reports of the passenger train conductors showing the equipment of each train and from and to what points it was hauled, were examined by us, for all passenger trains hauled in Arkansas on the Iron Mountain for October, 1907, and the car miles of each class of equipment obtained therefrom. It is the same principle, applying the mileage to the haul between the points indicated on the wheel report, our analysis in detail agreeing in total with the company's statistics; that is, their classification did not have quite the sub-divisions we wanted; we took the wheel reports, showing what class of equipment each car was, and we re-analyzed these figures and balanced it against their totals, in that way; they lump together—I forget the exact classification, but it is not as detailed as ours; it includes in one classification some items we have set out separately.

Q. But your detail corresponds with their general statements?

A. Yes, sir.

3409 In making our analysis, we have divided the combination cars used in two classes of service, on the basis of the lineal feet of floor space ordinarily used in each class of service, namely, mail, baggage, express or passenger car.

The number of lineal feet used in mail service, or which the Government was entitled to use, under its mail contracts, on each

road or train was furnished us by General Mail Agent of the Iron Muntain Railroad, Mr. Mack; the number of lineal feet of lineal space ordinarily used in express service, or which the express company was entitled to use, was furnished us at the request of the railroad company, and along lines laid out by us, by Mr. Guentsch, General Superintendent of the Pacific Express Co., which operates over the Iron Mountain Rails.

The number of lineal feet of space used in baggage and passenger service,—I am excluding now for illustration's sake, mail and express where we had actual figures or approximately so as to the space used, or which could be used,—the number of lineal feet of space used in baggage or passenger service, was estimated by us in the case of combination cars, carrying no mail or express, as 50% to each class of service; that is, in that car, that was half coach and half baggage, or partly coach and partly baggage; it was there for two purposes, to haul baggage and transport passengers; if there was two or three more feet in the baggage space or in the coach space still in our estimation the car ran 50% and 50% for passenger and baggage.

3410 The combination cars carrying baggage, mail and passengers, these we used for the mail, the lineal feet of space in the car which Mr. Mack said would be used for the mail service, and divided the balance baggage and passenger, half and half.

The same was true in the case of baggage, express and passenger; we set out the definitely known express space, and divided the balance half and half.

Cars used exclusively for baggage or exclusively for mail or exclusively for express, were charged direct to each service.

Cars used generally for baggage and express, were charged half to express service or the part to which it was entitled, whatever it might be, as advised by the express company, and the rest was charged to baggage.

Illustrating what I mean by that in this way, take a car running 300 miles, and determining on the basis I have outlined that half of it would be charged to express and half for baggage, that meant in our statistics 150 express car miles, and 150 baggage car miles, half the car the whole distance for each service, or take a car, the combination car, running 300 miles, used generally for baggage, express and passenger service, and determining on the basis I have outlined, that one-third of the space in the car should be assigned to each class, that meant in our statistics, 100 car miles passenger, 100 car miles baggage, and 100 car miles express, one-third

3411 of the car three hundred miles.

On the Cotton Belt passenger statistics, I made figures personally from wheel reports, which were sent in for me from Tyler, Texas, and while I did not have there the information that I had on the Iron Mountain as to the mail routes and express routes, I consulted with the employees of Mr. Kimbell's office, who were familiar with the matter, consulted the equipment guide, saw what were mail and express cars and so designated, saw what the conductor said they were, used for, mail and express or baggage and express, and in

that way, classified them. There were so few combination cars that I contented myself with that method of classifying them, which I believe is very nearly actual.

One other item that I had overlooked in going through this matter, as distinguished between it and the figures in Exhibit K, Mr. Wharton referred to a consultation in which we jointly determined on treating the engine as two and a half cars; I think it is under the head of maintenance of way, and as I recall it, he was asked if he weighed any engines; we didn't as far as I know. The basis for that figure, as I recall our conferences, and he conferred with me in the matter, was this:

A great many Iron Mountain engines are 12 wheelers, by that I mean, the engine would have four drivers on each side, mak-
3412 ing eight; two pony truck wheels, the pony trucks being the small trucks in front of the engine, making four more, which is 12, and the tank, or tender, as it is sometimes called, with eight wheels, making on an engine and its tank, 20 wheels; it is well known that the average box car has eight wheels; therefore, there are 2½ times as many wheels on the engine as on the box cars.

Some engines are ten wheelers—a great many in service in Arkansas are that way, but the relation would not be much disturbed by deducting those two wheels.

That is what guided us in that, with some suggestions that I heard advanced by some very eminent railroad men along that line, in discussing contracts for division of expenses of maintenance of joint track, on the so-called wheelage basis; it was suggested that it was quite the usual thing to treat an engine as 2½ cars, and that is practically the reason for the basis we assumed.

3413 By Mr. HILL:

Q. Are you familiar with the Cotton Belt test of October, 1908?

A. Exhibits 19 and 20, yes, sir.

Q. In what way is that made up, and wherein does it differ in its composition, from the test you made of the Iron Mountain for October, 1907?

A. I understand—I have no personal knowledge on the subject—I understand from what Mr. Kimbell has told us, that the method of securing the information shown on Exhibit 19 was to place men on the local freight trains of his line in Arkansas, for the entire month, whose duty it was to examine all the waybills for all the freight carried on the train.

Q. You mean the local, or all the trains?

A. All the local trains, and make an entire record of the trains' performance as it is detailed in these exhibits, but in the case of the through trains, he posted men at division terminals, I understand, and had them perform that character of work there, obtaining information from the conductor as to any cars that might have been set out in transit.

3414 Q. Wherein would that means of information be different from making those reports from the auditor's office?

T. There is this dierence—in so far as the less than carload busi-

ness was concerned, it was possible by Mr. Kimbell's method to make an analysis of that and divide the ton mileage between the various classes of state and interstate business, but in so far as the carload business is concerned, inasmuch as the men riding the trains and at division terminals, got their information from the way-bills, they were no better situated to obtain the desired information than we were, having access to the impression copies of those waybills in the auditor's office; in fact, it is extremely probable, that in a few instances, the information we got was more nearly actual for—I speak now of local trains—as far as tonnage was concerned, than that that was gotten by riding the trains, and for this reason:

That the men handling the waybills on local train, if the car had not passed over a scale, he would only have the billed or estimated weight, whereas, when we got hold of those things, in the majority of instances, those corrections had been made, and the actual weight applied to the waybill.

Q. That should have been corrected before, it went to the auditor's office?

A. No, corrected in the auditor's office; I a mnot positive about that; Mr. Kimbell's statement may have been adjusted to actual scale weights, but that point occurred to me.

3415 Q. Mr. Kimbell, was that corrected in the Auditor's office, after your men had obtained the information from the trains?

Mr. KIMBELL: It was, yes, sir.

WITNESS: On the item of wages, there would be no difference between the two statements. I am not clear whether Mr. Kimbell's figures are made direct from the time slips or time books, but in either case, the result would be the same.

In the matter of fuel, I understand that Mr. Kimbell's figures were made in this way: That his enginemen took an estimated inventory of how much coal was on the tank at the beginning of the run, kept track of the coal received at coaling stations during the run, and also made an estimate—which I believe they were quite competent to do, knowing the size of the tank—the amount of coal at the end of the run, and in that way got at the consumption for the run.

We endeavored to approximate that on the Missouri Pacific in this way: We took the—we asked the Transportation Department—I made a request in person of Mr. Jewel who was Chief Clerk at that time to the General Manager or Assistant General Manager—I am not quite clear on that point which it was—I asked him to furnish us the fuel tickets; it is the practice on most roads, and I un-

3416 derstand it is on the Iron Mountain, to have the engineer sign a ticket for coal at the coal chutes, for the amount of coal delivered to them, so many tons; we thought those tickets would have given us a very close approximation of the actual fuel consumed, weighing the coal on the tanks at the beginning of the month and the end of the month, but those tickets were destroyed, not available, and we did not pursue that any further.

Q. That is, for your period?

A. Yes, sir.

Q. I believe it is already in evidence, that you accepted the relative proportions between local and through as developed in Mr. Kimbell's test on the Cotton Belt?

A. Yes, sir, I believe so. Mr. Wharton and I, in our consultations about that, construed Mr. Doddridge's testimony to mean that the fuel conditions would be about the same on the two roads, and, therefore, applied Mr. Kimbell's figures, or figures deduced from his, which show that the fuel consumption on the local, per engine mile, was about 3½% in excess of the fuel consumption on through trains.

Q. Then the only practical difference in the method pursued between your test and Mr. Kimbell's, was that he carried forward his test into a separation of the L. C. L.——

A. As between state and interstate.

Q. Which as you explained yesterday you didn't do?

A. Yes, sir. There are a great many other statistics here that we did not attempt to compile—shown on Exhibit 20, such

3417 as the dead weight——

Q. I am speaking of actual figures you reached; each of you went to the way bills, that was the basis for both of you?

A. Yes, sir, in so far as the ton mile figures; the labor figures and fuel figures, that is a comparison between the two methods; there were other statistics which we could not get without riding the trains.

Q. Does Mr. Kimbell's exhibit show that he took the actual figures on loss and damage to freight?

A. Mr. Kimbell's figures simply give you the total loss and damage in Arkansas, for the month.

Q. I mean a separation between state and interstate?

A. No, sir, I understand it was divided on the revenue basis.

Q. You went ahead and made an actual division by investigating the claims actually paid?

A. Yes, sir, and when necessary went to the claim papers.

Q. How many cars were included in his month's test, including interstate, trans-state and intrastate?

A. I don't know how many cars—I can tell you how many trains there were.

Q. I thought his exhibits showed.

A. Not the number of cars; I don't so understand; it gives the car miles.

Q. Have you got the number of trains?

A. Yes, sir.

3418 Q. How many were there?

A. It is not shown in Mr. Kimbell's exhibit, but it was furnished to us by him, having been obtained from his Transportation Department records at Tyler, Texas. The figure was 450 local freight trains, and 639 through freight trains, total of 1089 freight trains.

Q. How many freight trains did you work up in your month's test—local freight trains on the Iron Mountain?

A. On the same basis, 1116.

Q. His included all trains and yours just the locals?

A. Our exhibit shows also the through trains obtained in the man-

ner I described yesterday; our local figure is 1116; the Cotton Belt local figure is 450; the Cotton Belt local and through is 1089.

Q. Mr. McPherson testified in this case, (page- 343-4, vol. 1, printed record.)

"Strictly speaking, no part of the yard organization cost, nor of the service of switching engines, is chargeable to trans-state traffic.

"There is nothing to be done with trans-state traffic passing through the State but to give it straightaway movement. The trains must be broken up at these division terminals, incidental to taking off the state and interstate traffic, as may have its destination at such points, or, on lines radiating therefrom.

"To increase the efficiency of operation and give the potential tonnage to locomotives, other cars must be added and these may
3419 be intrastate, interstate or trans-state cars. This brings about, of course, the physical handling of this trans-state traffic in these classification yards, and at times other trains may pick up trans-state traffic that has been set out because of blockade, embargo or some disarrangement of the orderly course of procedure, such as wrecks and washouts. This, however, is not due to any requirement of the trans-state traffic. It arises from physical conditions in the State of Arkansas; either from floods, casualties, or other disturbances of the orderly movement of businss."

Mr. Doddridge on page 12, vol. 2 of the printed record, referred to trans-state freight being transported across the state as upon a bridge.

I will ask you if you have made any investigation from the records, of the facts in regard to this theory upon which these gentlemen have spoken, as to trans-state business passing through the State as upon a bridge, and if you can, give us the results of your investigation upon the facts, as opposed to the theory upon that subject?

A. I have here a record of about three thousand cars, 1454 in October, 1907 and the balance, 1560 in March, 1907, a spring month and fall month.

Q. Describe how you got at that movement and the result of it?

A. In endeavoring to see just how long it took this trans-
3420 state freight to go through Arkansas, and how long it was on the company's rails, in Arkansas, in completing its journey across the state, and how long it remained inside of the state, we had recourse to the waybills for what we thought were typical movements of that character of freight. That is, we took in the October month, billing from Texas roads, going to the Iron Mountain at Texarkana, and moving via Little Rock and Van Buren and on out into Oklahoma and beyond, destined to Kansas City points, in that territory or beyond.

We took the movement from Louisiana, crossing the state line some distance below McGehee, and leaving the state five miles above Van Buren, destined to Kansas City and points in that territory.

We took the movement from Memphis, via the Memphis division, main line and the White River division, the last terminal in the state being Cotter, going to Kansas City and points in adjacent territory.

We took the movement from beyond Texarkana, straight up the main line into Missouri, the last terminal in Arkansas being Hoxie.

We took the movement originating in Louisiana and moving via McGehee, Little Rock, Hoxie and into Missouri, and the movement originating at Memphis or beyond, moving via Bald Knob, Little Rock and Van Buren, and so out of the state to Kansas City and adjacent points. By the way, that movement from Texar-
3421 kana to Hoxie, if I said that was headed to Kansas City, that was in error; it was to St. Louis.

We took the movement southbound from the White River Division, main line, Little Rock, and out into Louisiana by the way of McGehee, that being the last terminal.

The movement from Van Buren, coming from beyond, and going out into Louisana through McGehee.

The movement coming down the Main Line from Missouri and going off into Texas at Texarkana.

The movement from Missouri and beyond over the White River Division, Main Line and Memphis Branch, to Memphis and beyond.

We went to the billing without knowing where we were going to find the movement of the cars, abstracted all the cars for a period of fifteen days, then traced the cars into the first terminal in Arkansas, and out of the last terminal in Arkansas, most of them being very close to the border, because the only record we could get was at the last terminal.

The record we have of their movement is actual, it is taken from the wheel reports, showing the movement in trains into the first terminal, and the movement out of the last terminal; the intermediate time was spent in Arkansas.

All those cars, on the movement from Texarkana through
3422 Van Buren, a distance of 298 miles, the schedule time for which movement, linking up the through freight schedules, without any terminal delay, is 28 hours.

Q. Where did you get that?

A. From the company's official time cards for the ordinary freight. The company classifies its trains between Red Ball, Green Ball and ordinary, and this is the slow time.

On that movement, there were 100 cars, which consumed in total, 1477 days, on an average of 14.7 each; some of the cars might have gone through quicker, some took a longer time; in fact, our detail shows it did; it amounts to the same thing whether one car spent 14 days or one hundred cars spent 1400 days. The lost usage of cars is there just the same.

Q. What was the excess over the 25 hours which the cars visited in the State of Arkansas?

A. 14 days—about 12 days, lacking 4 hours.

Q. They found the climate inviting down there on their transstate flight?

A. I don't know as to that; this is what the wheel reports show on the movement through Louisiana and McGehee and Van Buren, a distance of 256 miles, the schedule time for which, on the same basis

as I mentioned, was 26 hours; a movement of 28 hours consumed in total 340 days, an average of 12 days per car.

Q. Without going into too much detail, what did that dif-
3423 ference in run make?

A. On the 1454 cars?

Q. No, on that particular item?

A. The difference was practically 11 days, less two hours.

Q. You don't catch the point I want; one would be delayed two days, and one 20 days, something of that kind, just give us a few instances of the two extremes, the longest and shortest and then give us the average, I don't want too much of the detail, but I want some of it.

A. One car got through in three days, and 7 cars got through in 4 days.

Mr. MOORE:

Q. Can you give us the number of the cars as you go along, so they can be identified?

A. That detail is available; I cannot give it right now; I can get the car number, if you desire, the time, date and the hour in and out of the state and the train numbers; I have it but I haven't it with me.

I found one car consuming 3 days, 7 cars, 4 days, 3 cars taking nine days; four cars taking 25 days, one car 43 days.

Q. Just give us a few illustrations, I just want to see how they were running?

A. That is the movement between McGehee and Van Buren, which were the first and last terminals; the movement from Memphis and beyond, going out of the state through Cotter on the
3424 White River Dixision, a distance of 240 miles, the schedule time for an ordinary freight train, the entire distance, is 23 hours.

I find 134 cars consumed 772 days, an average of five days per car.

Q. Against what is the schedule?

A. A little less than one day, 23 hours; we have one car that got through in one day, 28 cars that got through in 3 days, 12 cars in 9 days, six cars that took 14 days, one car that took 22; there were other cars.

Q. That is the division—we had some testimony that those grain trains went through like greased streaks of lightning.

A. Yes, sir. I might say in that connection, in locating the billing for the White River Division, that is the division we speak of, for October, 1907, and on some of their local trains in the state, we found a great deal of that wheat moving on local trains.—I say a good deal, I haven't the number of cars, but it is obtainable from our memoranda.

Q. When that export wheat came through on local trains, it didn't go through like a greased streak?

A. No, sir, it couldn't when it got on that local run.

Moving from Texas, through Texarkana, and up the main line

through Hoxie into Missouri, a distance of 264 miles, I am giving the distances between the first and last terminals in the state,
3425 and not from state line to state line.

Q. Some of those cars might have gotten lost after leaving the terminal?

A. Yes, sir, but these are pretty close to the state line, and I suppose they got across.

264 miles, Texarkana to Hoxie, schedule time for ordinary freight trains, 27 hours, movement of 166 cars, consumed 932 days, five days per car, and between Texarkana and Hoxie are but two through freight divisions, through freight trains should run, Texarkana to Little Rock, and Little Rock to Hoxie. That would indicate to my mind that the schedule time of 27 hours for two through freight divisions, where five days were consumed by this number of cars, that they must have been in a yard some place, or a passing track.

Q. They would hardly be on the main track during those five days?

A. Not if they ran any other trains.

Q. I understand the main track was about all this trans-state freight needed?

A. The figures speak for themselves.

The movement from McGehee, by Little Rock, and through Hoxie into Missouri, a distance of 221 miles between McGehee and Hoxie, schedule time for ordinary freights, 35 hours; 98 cars consumed 635 days, an average of 6 days per car. McGehee to Little Rock is one through freight division, and Little Rock to Hoxie is another; the same remarks would apply there as on the Texarkana-
3426 Hoxie movement.

Q. Add a few of the shortest and longest movements as you go along?

A. From Texarkana to Hoxie, where the average was 5 days per car for 166 cars, I found that made it on the schedule, got through in time.

Q. That was one of Mr. McCutcheon's onions?

A. I don't know the contents of the car now; I found 46 cars that got through in 2 days, 20 cars in 4 days, and 43 in 3 days, 14 that took 5 days, 3 that took 23, 2 that took 25, and 1 in 66 days,—that car must have been in bad order.

On the movement from McGehee to Hoxie, 98 cars an average of 6 days apiece, I find 10 cars made that run in 2 days, 27 in 3 days, 18 in 4 days, 2 of them in 14 days, and the maximum is one car which consumed 56 days, and the one immediately preceding that, being 1 car in 34 days. The movement from Memphis to Van Buren, a distance of 305 miles, via Bald Knob and Argenta, schedule time 31 hours, 25 cars 195 days, average of 7 days per car; I find that out of those cars, that 5 took 4 days; that is the minimum, 4 took 5 days, 5 took 6 days in transit; the maximum was 1 car 16 days; ranging from 4 to 16 days or an average of 7 days.

I might say, in stating those averages, that we dropped the fractions; that really figures 7.8 to split hairs on the proportion; it might really be called eight.

3427 Moving in the opposite direction, from north of the Missouri-Arkansas line, via the White River Division, via Bald Knob and Wynne and McGehee out into Louisiana, and beyond, a distance of 281 miles from Cotter to McGehee, the schedule time for ordinary freights is 39 hours; I find 138 cars consuming 930 days, or an average of 6 days per car.

Q. That is the greased streak of lightning road I believe?

A. That was the way export grain you refer to was handled, that is, if it was off the White River Division.

Q. I think there was some testimony that that was the route it used.

A. I find the minimum was 4 days, 8 cars consuming that much time; 32 cars, 5 days; 38 cars 6 days, 31 cars 7 days, 9 cars nine days, 1 car took 23 days, moving southbound between Van Buren and McGehee, originating beyond Van Buren in Oklahoma or beyond and destined to Louisiana, a distance of 256 miles, schedule time 22 hours, I find 291 cars consumed 2004 days, an average of 6 days per car.

Q. That is on October?

A. Yes, sir, still on October; the minimum on that movement was two days, between Van Buren and McGehee, 2 cars consuming that much time; 28 cars 3 days, 73 cars 4, 41 cars 5 days, 45 cars, six days, going up, 21 cars nine days, 13 cars 11 days, runs
3428 on up to 12, 14 days, up to the maximum of 32 days consumed by one car.

The movement from Hoxie to Texarkana, originating in Missouri, destined to Texas a distance of 264 miles straight main line over two through freight divisions, schedule time in that direction, 24 hours; 216 cars consumed 670 days, or an average of three days per car, or exactly three times the schedule time—24 hours. In that movement, is included 14 cars that got through on schedule time, 86 cars took twice the schedule time, 76 that took three times, and 22 cars that took four times, speaking in round numbers; the maximum was one car consuming 19 days; that car was perhaps in bad order.

From Missouri and beyond, via White River Division to Memphis and points beyond, that should come from Cotter to Newport, on the White River Division down the main line to Bald Knob, across to Memphis, a distance of 240 miles, schedule time 24 hours; 258 cars consumed 823 days, an average of three days per car; in that movement, we find 55 cars that got through on schedule time, out of 258; 76 cars took twice the schedule time, 45 cars took three times the schedule time, 37 cars took four times, and the maximum time consumed was 15 days by one car; that is the October movement.

Q. Have you a summary of the October movement there?

A. Yes, sir, totalling it all, 1454 cars, averaging 6.03 days, in round figures six days; the schedule time averaging it all, would have been 1.1 days per car; it consumed almost five days in excess of the schedule on the average.

3429 Q. I reckon those cars liked Arkansas pretty well, when they got down there.

A. That is the detail of the movement.

Q. I believe you stated you took those as you came to them?

A. We took the trans-state billing to and from certain territories, with no previous knowledge of how the stuff moved; we took all the billing for the period we examined.

Q. It is not just selected billing, but all of the particular period, from particular points?

A. Yes, say we took the Kansas City waybills to Texas, or from Texas to Kansas City, we took the whole bunch in that book.

Q. There was no selection, you just took the territory as you investigated it, as you found it?

A. Yes, sir, we took the tissue book and took all the waybills we found in that book, for instance, for the Kansas City territory.

Q. And without making any selection of the waybills?

A. Yes, sir.

Q. Give us the March movement, it was made the same way, I presume?

A. Yes, sir, we took a spring month for comparison with a fall month; I find that while I have the recapitulation for March, I haven't it by cars; I have the summary.

Q. We will bring that in later.

3430 A. In March, I have a movement from Texas to Missouri, Texarkana to Hoxie on the main line, the first and last terminals being Texarkana and Hoxie; the distance is 264 miles, and the schedule time is 27 hours on ordinary freight. We found 127 cars which consumed a total of 449 days, an average of 3½ days. I see this is carried out to fractions here; to make it consistent, with the other, I will drop those and make it three days.

Q. If you have the fractions read them into the record.

A. The movement from Louisiana points to St. Louis and beyond, McGehee being the first terminal in Arkansas, the cars travelling through Little Rock and up the Main Line to Hoxie, which was the last terminal, a distance of 221 miles—shall I repeat all these schedules?

Q. Yes, give it in full.

A. We had 104 cars which consumed a total of 486 days, an average of 4.6 days; the schedule time was 35 hours.

From Louisiana to Kansas City territory, McGehee is the first terminal and Van Buren is the last, 256 miles, and the schedule time is 26 hours; 38 cars, 137 days, an average of 3.66 days.

From Texas points to Kansas City, an adjacent territory, moving via Texarkana, and Van Buren, a distance of 298 miles, schedule time is 28 hours; 84 cars consumed 313 days, an average of 3.7 days per car.

3431 Southbound from St. Louis to Texas points, via Texarkana, the first terminal in Arkansas being Hoxie, distance 264 miles between those terminals, schedule time 24 hours. I found 391 cars consuming a total of 2170 days, or an average of

5½ days a car; that is a little over four days above the schedule time.

Moving from Kansas City via the White River Division, Main Line and Memphis Division to Memphis and beyond—that is Kansas City and territory—it is not all from Kansas City—distance 240 miles, schedule time 24 hours. I find 376 cars consuming 1009 days, averaging 2.7 days per car.

Kansas City territory to Louisiana and Texas, via Van Buren and Texarkana—some Louisiana stuff went that way—298 miles, between Van Buren and Texarkana, schedule time 22 hours, 355 cars consumed 1566 days in transit, average of 4.4 days per car.

Kansas City territory to Louisiana points, via Van Buren and McGehee, 255 miles, schedule time 22 hours, 85 cars consumed 296 days, or an average of 3½ days per car. Total schedule time for movement of those 1560 cars, on an average, was a little over one day per car, the actual time consumed averages a small fraction over four days per car.

Q. They found the spring months almost as inviting as the fall?

A. We found about the same condition: the averages are a little longer in October than in March, but the delay was there in

3432 March; that covers a total of roughly speaking, 3,000 cars.

Q. Have you the detail of that, giving the waybill, car number and everything, to show the data upon which these tabulations were made?

A. It is in our possesion, the detail back of these recapitulations.

Q. Have you that all ready so if these gentlemen want to investigate it, it is ready for their investigation?

A. I think it is in shape so it can be easily handled, yes, sir.

Mr. HILL: I will state, Mr. Moore, if you want to go into it, we will furnish you all the detail you may want to investigate it.

Q. There has been a good deal said in this record, about the division handling of cars; there seems to be quite a marked theoretical difference between the handling of trans-state, interstate and intrastate, have you investigated the question of handling of cars at terminals?

A. Yes, sir.

Q. Have you got any data worked out as against these theories, about the handling of them there?

A. We have made an investigation; I have the result of it here.

Q. State generally the methods that you have pursued, and what you have there, and then we will take it up somewhat in detail.

3433 A. I have a set of figures here, representing the condition of affairs that we found at all the through freight division terminals in Arkansas for five days in the month of October, 1907; the first five days—we stopped at the fifth day because it was an immense task; the cars were standing around the terminals so long it was a superhuman task to find some of them going out, and we didn't attempt to get more than the five days; I say all the terminals; I discovered this morning that the Little Rock figures had not been recapitulated although they had been compiled; that is being

done now, and I will have to omit that for the present, and I will get it for you a little later.

Q. What are the division terminals?

A. On the main line, Hoxie, Little Rock and Texarkana; speaking of the through freight divisions; there are locals mixed up between.

On the White River, Cotter and Newport; Newport is a junction of the Main Line and the White River; on the Helena Branch—that is the line from Knobel to Helena, Paragould and Wynne.

On the Memphis Branch, Memphis, Tenn.

On what was known as the Little Rock & Ft. Smith line—Central Division, Van Buren and Little Rock.

South of Little Rock on the Arkansas and Valley Divisions, McGehee.

On the Warren Branch, Warren, the terminus of the branch.

3434 Q. Did you mention Texarkana there?

A. Yes, sir, Hoxie, Little Rock and Texarkana—the main line—that was where I started.

Q. Give us the result of your investigation, take them up by division points?

A. We got at our figures in this way, taking Hoxie as an example; I can explain it by reference to a particular terminal better than I can by an abstract example.

We took all the trains shown on the dispatchers' sheets, as through trains, moving into Hoxie from the North; we listed each train, showing all the car numbers, the hour and date of their arrival at Hoxie, and as a little further guide, what the conductor said was the final destination of the car, in some cases the contents; having listed all the train as it came into the terminal, by car number and initial, we proceeded to trace those cars leaving the terminal, our plan being to find them going out in another train; that information being derived from the wheel report of the train that took them out of that terminal, and of course, when the cars were not in the care of the train crew going into the terminal or going out of the yard, they were charged up as being in the yard.

Q. May be they were out on the main line if they were transstate; did you find whether passenger traffic had been interrupted by storing them on the main line?

A. Of course, that wouldn't be good railroading to leave the main line blocked.

3435 Q. So you have assumed that they didn't leave that transstate freight on the main line?

A. No, sir, there is no question but what they were put away, stored somewhere.

Q. Then what did you do?

A. Deducting the hour and date of arrival in the terminal, from the hour and date of departure of the car, the lapse of time was the time the same was in the terminal, or the time in which the car remained in that terminal.

Q. From that dispatcher's sheet, you got the time it went into the terminal and the time it went out?

A. From the dispatchers' sheets we located all the through trains that went into the terminals, and then we took the conductors' wheel reports of those trains and the car numbers, and the hour and date of arrival of the train, and the hour and date of departure in other trains.

Q. From what the dispatchers' sheets or what the wheel reports showed?

A. From the wheel reports; we used the dispatchers' sheets as an index to what through trains came in that terminal, so we might know whether we got them all.

Q. Go ahead and explain what you have found?

A. Taking the Hoxie terminal—these figures cover all trains for the first five days of October, 1907, into Hoxie from the
3436 North, during that period, there were 23 through trains, hauling a total of 842 cars, 830 loads and 12 empties; the caboose is excluded from all these figures; it is a service car and is necessarily taken off at the division terminal.

Of those 842 cars, there remained in the Hoxie yard quite a long time—I will state the average first; I found that those 842 cars, the cars in that individual train went south from Hoxie in from two to seven other trains, and remained in the Hoxie yard from one hour and twenty minutes to two hundred and twenty-five hours and fifteen minutes.

Q. That is a nice place up there at Hoxie.

A. We found seven cars that stayed there 121 hours and 20 minutes; seven cars that stayed there 6 hours and 5 minutes; 2 cars, 52 hours; 2, 45 hours; four cars, 36 hours; 10, 34 hours; 35, 19 hours; 14, 22 hours.

Q. Was there any discrimination between the visitation at Hoxie, of trans-state, interstate and intrastate cars?

A. The only information we have on that is what the conductor said was the destination of the freight, and that is not very good, because we found they were not reliable on that; we didn't go to the waybills.

Q. You just took the wheel reports?

A. Yes, sir, he might have said it was going to Texarkana, and it would stop at Little Rock.

Q. You used whatever might be indicated on the wheel
3437 reports for whatever probative force it was worth; is it indiscriminate between the classes of traffic?

A. In the case of these trains coming from Hoxie from the north, through Missouri Division trains running all the way from Piedmont most of them, as we understand, are through trains; they may make some pick-ups and set outs, but with the exception of that, all of it was interstate; I wouldn't say all of it was, but the major portion of it was.

Q. It would be necessarily all interstate except what might be pickel up between the state line and Hoxie?

A. Yes, sir, some sixty miles of road.

Q. I believe you stated you haven't the Little Rock figures here?
A. Yes, sir.
That was stuff from the north into Hoxie which we traced out southbound; of the trains from the south into Hoxie, we found 13 trains, carrying 572 loads and 78 empties, total 650. Those cars went out in from three to seven other trains, remaining in the yard a period varying from 1 hour and 20 minutes to 103 hours and 40 minutes; we found 14 cars that stayed there 1 hour and 20 minutes, and 40 cars, 12 hours; 27 cars, 16½ hours; 34, 11 hours, and there are some cars that stayed there but two hours,—19 of them.

Q. Did you get the averages of that?

3438 A. They went out in from two to seven other trains; I have no average here in days; they can be figured from this data.

Q. Going out on the different trains was what I was asking you about; it was from two to seven?
A. Yes, sir; that is, the consist of any one train, went out in not less than two trains and some went out in seven trains; I mean the cars carried by the train.
Q. You mean that of the cars coming into Hoxie on those known trains, instead of going through on a bridge, they would go out on from two to seven trains?
A. Yes, sir, one train going into the terminal, the cars in that train going out in perhaps two trains, perhaps seven, that is the widest range, none less than two and none more than seven.
Q. You didn't find the unbroken train there?
A. Not at that terminal.
Q. I believe you did find that onion train somewhere else?
A. We found a train some place, I will get to it presently.
Q. Go ahead.
A. At Texarkana, we made no figures, because Texarkana is the end of the road; all trains are made up there or taken apart there, unless they should go over the T. & P. solid; I don't know as to those conditions; we had no means, without having access to the records at Texarkana, to check the deliveries from or to the T. & P.;

3439 a great many trains are taken apart there and put together there, that is the assumption.

Q. Proceed with the other divisions?
A. Beginning at the north end of the White River—Cotter terminal, trains coming from the north, we found 11 of them, hauling a total of 135 cars, 122 loads and 13 empties; one of those trains came through without a break, got through Cotter.
Q. Did it get through Newport without a break?
A. I can't say as to that; that was a train consisting of 9 carloads when it came into Cotter, stayed in Cotter yards from 9:40 P. M. until 8:35 P. M. the next day; that is the train, first 253 of October 4.
Q. How about the others in the Cotter yard?
A. I want to state that I got those figures backward; the cars remained in the yard there from 1:05 P. M. until 9:40 P. M. One train got through; the others went out of Cotter in from two to

three trains, some in two, some in three trains; the time which the cars remained in Cotter yard varied from one hour and 35 minutes to 147 hours and 50 minutes; 23 cars got through in an hour and 35 minutes; 5 got through in 1 hour and 40 minutes; next, 15 in 3 hours and 40 minutes; 10, 28 hours; 11 in 42 hours; 2 cars in 53 hours—there are others in between.

Moving through the Cotter yard in the reverse direction, coming up from the south, coming from the direction of Newport,
3440 we found 7 trains, 87 loads and 18 empties, total 105 cars; those went out to the north from Cotter in from three to six other trains, consuming in the Cotter yard time ranging from 1 hour and fifteen minutes to 181 hours and 50 minutes; six of them stayed there an hour and fifteen minutes; the next I find is 14 in 8 hours; 6 in ten hours; 16 in 18 hours; 12 in 21 hours; 9 cars in 58 hours and some few minutes.

Newport is a through freight terminal for the White River Division, although it is not a through freight terminal on the main line, as I understand it; coming down the White River Division from the north into Newport, during this period, I found six through trains, carrying 76 loads and an empty, 77 cars, which went out of Newport in from one to four other trains; here is a train that got through unbroken; it has twelve cars in it.

Q. It wasn't the same train you had up there at Cotter, because that had only 9 in it?

A. They may have added some up the line; they might have added some at Diaz or Batesville. The time consumed was from 3 hours and 20 minutes to 25 hours and 16 minutes; 13 cars, consumed the minimum time; 12 cars the maximum—in between, I find 3 in 12 hours, 20 in 17 hours; 15 in 3 hours and 40 minutes.

In the reverse direction, I find some trains that ran up the main line into Newport, set out their whole train there; they were exceptional, however, because Newport is not a through freight terminal of the main line, as I understand it.

3441 Those trains of which there were four, hauled a total of 66 loads and 20 empties, total of 86 cars; they went out in from one to eight other trains; here is one train consisting of 37 cars that was sent out in eight other trains; the train that came out solid, got through Newport, without being taken apart, consisted of 19 cars.

In that connection, I have here before me an abstract of the wheel report of train #254 into Newport, Oct. 3, 1907, ordinary freight, a train of 37 cars; it is my understanding, the conductor in listing his cars, puts it down in his train book and subsequently copies that and makes his wheel report; he will check his train beginning at either end of the train, at the engine or caboose, I don't remember which; when I used to come in contact with that, he used to begin at the head of the train, taking the numbers, and the yard clerk took the seals, and he came in and made up the wheel reports in that order and called for waybills; this copy of the report would indicate to me that this particular train was listed by the conductor

in that manner, or it had to be switched around a whole lot or virtually pulled to pieces.

Q. It was not governed by the "touch not, taste not, handle not," that some of them testified to?

A. I just mentioned that in passing; there were cases where two or three cars were switched together, but other cases where
3442 the individual cars were switched several times.

That disposes of the White River Division.

I have the stuff coming from the north into Van Buren, I found a total of 12 through trains, hauling 389 cars, 359 loads and 30 empties; they went forward in from two to nine other trains, and remained in the Van Buren yard from 2 hours and 35 minutes to 235 hours and 50 minutes.

Q. That is a nice country up there, I don't blame them for staying. Give us some of the instances there.

A. 15 cars, stayed 66 hours, in round numbers; 17 stayed 67 hours; 4, 80 hours; 12, 82 hours; 4 cars 174 hours; they range in between; here are 16 that stayed 2 hours and 40 minutes; 20 that stayed 14 and a half hours; 12 cars that stayed 39 hours.

Q. That was all necessarily interstate traffic, coming into Van Buren?

A. Yes, sir, I don't see how they could pick up any state business between the state line and Van Buren.

Q. There are no stops between Van Buren and the State line?

A. No, sir; that is between Van Buren and the state line, which came into Van Buren from the South.

Q. I thought you said from the north?

A. If I did, I was mistaken about it.

Q. That which would stop there would probably all be state business, and that which went out was necessarily all interstate?

A. Yes, sir.

3443 Q. Have you anything showing how much of that stuff stopped at Van Buren?

A. Yes, sir, 19 cars.

Q. Out of how many?

A. I don't know whether they were loads or empties.

Q. How many did you have, including the empties?

A. 389; 359 were loads.

Q. 19 of them were probably state business, if it didn't originate beyond the state coming into there, and the balance of them was necessarily interstate?

A. Yes, sir, if they left Van Buren, they were necessarily interstate.

In the other direction, coming into Van Buren from the north, I find 17 trains hauling a total of 372 cars, divided between loads and empties, 360 and 12 respectively. Those trains went out in from one to eight other trains; three trains got through unbroken.

The minimum time consumed in the Van Buren yard by those cars was 2 hours and 55 minutes, and the maximum 233 hours and 30 minutes.

Q. Those greased streaks of lightning took 2 hours——

A. They stayed in the yard 2 hours and 55 minutes, practically three hours; in between, I find 4 cars, 106 hours; 4, 136 hours; 26 cars, 33 hours; on the other hand, I find 18 cars that took 2 hours and 55 minutes; 13, 3 hours and 25 minutes; 18, 12 hours and a half; ten cars 22 hours, 12 cars 28, and so on.

3444 South of Little Rock on the Valley Division, I have the McGehee terminal, going into McGehee from the north, I find nine through trains, hauling 240 cars; 198 loads and 42 empties; those cars went out in from two to nine other trains out of McGehee; they remained in the yard a minimum of 6 hours and 55 minutes; a maximum of 127 hours and 15 minutes. I find in between, 6 cars, 98 hours; 2 cars 118 hours; 21 cars 58 hours; on the other hand, 4 cars got out in 12 hours; 19 cars got out in the minimum time,—6 hours and 55 minutes, virtually 7 hours.

In the other direction, coming up from the south, into McGehee, I found seven trains, pulling a total of 224 cars, 219 loads and 5 empties, forwarded from McGehee in from two to eight other trains. The minimum time which any car on these trains remained in the yard was three hours and a half, and the maximum, 552 hours and 20 minutes; that was only one car. We find 8 cars that remained 173 hours and 25 minutes; 51 cars, 22 hours; 23 cars, 28 hours; 19 cars, 42 hours; 4 cars, 114 hours.

Paragould on the Helena Branch, is a through freight terminal for trains coming down over the leased track of the Cotton Belt, the Illinois Division trains.

Q. They are all interstate going south and going north too?

A. Yes, sir, I understand the track being leased, I under-

3445 stand the Iron Mountain would not have the right to do local business on that track, and all of it is leased between the State line and Paragould.

Q. Necessarily all those figures are interstate?

A. Yes, sir. I found 7 trains—I would like to qualify that in this respect; in case some stuff came from the south in a through train, it might have been that the stuff was going on north of Paragould on the Helena Branch, to Knobel or Corning, which might have been State business, but so far as stuff coming from the north into Paragould is concerned, your assumption that it is all interstate, is correct.

Q. Something originating in south Arkansas, coming up there, might be diverted over to the Main line or Branch line west of Paragould?

A. Suppose we had a car at Wynne, destined to Knobel, a state shipment, and a train for Paragould made up largely of Illinois Division freight, perhaps the engine was short of her rating, the tonnage was light, they might very properly put the Knobel or Corning car on that train, take it off at Paragould and put it on the local, and that would be state freight, but the reverse movement coming from Missouri into Paragould terminal, must necessarily be all interstate.

Q. Do you know whether that movement that would be diverted there could be of any considerable extent?

A. There is not a great deal of track left to serve between
3446 Paragould and the Missouri-Arkansas State line, via Knobel, and I should not imagine there could be a great deal of it.

Q. About how much track is there of that?

A. About 81 miles.

Q. Necessarily all which is northbound freight would be interstate, except that possibly there might be some cars serving that territory of 81 miles?

Mr. MOORE: I object to that, that is a very unfair assumption, to my mind—necessarily all of it going north would be interstate freight.

Mr. HILL: I say except that which might be diverted on this 81 miles of track?

WITNESS: Perhaps, I did not make that clear, Judge; I will: what I meant to say was this, that a train going into Paragould from the south, moving up the Helena Division, unless the freight was destined to Paragould proper, or to some other station on the 81 miles of track between Paragould and the Missouri-Arkansas State line, it would necessarily be interstate freight; for this reason, it would only be hauled to Paragould for delivery there to the Illinois Division or for delivery to some station on this 81 miles of track in Arkansas, or for delivery to the Illinois Division, which operates north out of
3447 Paragould and over the leased track, and as on that leased track, the Iron Mountain has no right to do local business, and it has none, it would have to haul trains across the Missouri-Arkansas State line intact,——

Mr. MOORE:

Q. How many stations are there north of Paragould on that branch?

A. I said that also included the main line between Knobel and the State Line; I am assuming also that they would not haul any stuff up to Knobel and backhaul it; there might be a little of that.

I find between Paragould and Knobel, two stations at which agents are maintained, and 4 stations at which no agents are maintained.

Mr. MOORE:

Q. Isn't Jonesboro one of those stations?

A. It is not on the Iron Mountain; it is on the Frisco and Cotton Belt.

Q. Isn't that right off the Iron Mountain's line?

A. It is south of Paragould on the Cotton Belt; I meant to cover all that by saying the car destined to Paragould,—as far as the Iron Mountain is concerned, a car destined to Jonesboro would be taken to Paragould, and there delivered to the Cotton Belt.

Q. If there was a shipment on the Iron Mountain to Hoxie,
3448 it might be delivered there.

A. That is back haul stuff, I should say, down to such a point as the mileage would equalize the distance by Bald Knob and Wynne.

Q. Those are important stations——

A. Yes, sir, but there are no important stations on that line between Wynne and Paragould to ship anything from.

Mr. HILL:

Q. If it originated in Memphis, where most of that stuff originates, how would it go?

A. It ought to go to Bald Knob and up the main line, because they would have to back haul it the other way, if they did not send it that way.

Mr. MOORE:

Q. What stations are north of Knobel in Arkansas?

A. I haven't included Knobel, it was the junction; I will take that in now as a main line station; do you want them by name?

Q. It is immaterial.

A. The only station of any size is Corning, then Moark; those are the stations at which agents were maintained.

Q. Is Moark in Arkansas or Missouri?

A. It is a mile and a half south of the line; including Knobel, there are three stations shown with station agents, and seven stations without agents.

Mr. HILL:

Q. A through train is not supposed to stop where there is
3449 not an agent?

A. I don't know, sir. Those trains into Paragould would carry cars going to those stations at times.

Referring to Mr. Moore's question, whether there might be some stuff originating south of Paragould, and destined to Knobel, that would have to be back-hauled, I should say it would be a very rare occasion where that stuff would be hauled in through trains, and it is through trains I am discussing; it would be locals that would pick up that stuff, in the orderly conduct of the road's business.

Any business from north of Wynne and south of Paragould, which it would be expedient to haul around by Knobel and down the main line south, would be in a local and not a through train, and if it moved from Wynne, the sensible route and usual route would be over to Bald Knob and by the main line; we are only considering through stuff, and if it was destined south of Knobel on the main line, it would not originate on a through train north of Wynne; the local would pick it up and carry it on to Knobel.

Q. I believe you have demonstrated that there was a possibility of some of these negligible quantities being shipped that way?

A. The backhaul stuff if it originated south of Paragould, would not go in a through train; it ought to go in a local, and a local sets out all its cars at Paragould.

From the north into Paragould, that is the other side of the
3450 proposition, coming over the leased track where we have said the business would necessarily be all interstate, I find five trains, 112 loads and 24 empties, total 136 cars, which went out in

from one to seven other trains. Two trains came through unbroken; the minimum time consumed in the Paragould yard was 1 hour and 49 minutes; the maximum, 250 hours and 25 minutes.

Mr. MOORE:

Q. Can you distinguish between loads and empties as to which ones went out?

A. Yes, sir;—that is the detail will give that; I haven't tabulated that; I have just considered a car as a car, whether loaded or empty.

Mr. HILL:

Q. Have you that so you can state that in that connection?

A. No, sir, I would have to make the figures, it can be done if you desire it.

In between those two extremes, I find 22 cars remaining in the yard 12 hours; eight cars, 13 hours; 3 cars, 31 hours; however, there were 21 cars that remained but two hours and a half.

From the south into Paragould, I find seven through trains, hauling 93 cars, 81 loads and 12 empties, which went forward in from two to five other trains. The minimum time which any of these cars remained in the Paragould yard was 8 hours, eight cars staying there that length of time. The maximum is 481 hours;
3451 that was apparently a bad order car, or was held for some extraordinary reason. I find two cars, 59 hours; 21, 26 hours; 12 cars, 27 hours; others in between, ranging from 10 hours to 25 hours.

Mr. MOORE:

Q. Did you say 7 trains with 93 cars?

A. Yes, sir.

Q. Isn't that a little unusual?

A. Yes, sir, they were light, but I have the car numbers and initials; that is all we found.

The Wynne proposition is rather negligible; I have some figures here; most of that stuff runs through Wynne, although I found two through trains, 41 cars, all loads, minimum one hour, maximum 104 hours and 50 minutes; one went out in two other trains and the other went out in four trains.

Q. That is practically all interstate?

A. It might be anything at Wynne, it might be state or interstate, or anything else; that was moving from the north into Wynne.

On the Helena Branch points from the south into Wynne, I found three trains, 54 cars, all loads, minimum time, 1 hour and 20 minutes, maximum 66 hours and 15 minutes. In between, I found cars ranging from nine to 34 hours up to 66; those trains, of which there were three, one went out in four trains; another in three trains, and another in four trains. That cleans up that

proposition, with the exception of the Little Rock figures,
3452 and as I recall, we didn't find any trains that came through Little Rock without stopping; that will be ready after lunch, if you want it.

Q. That finishes all of those?

A. Yes, sir.

Q. While we are on this trans-state proposition, there is some talk about the various facilities that were used for trans-state business—it was said that the trans-state freight did not use the facilities, and there was some testimony that the cattle traffic is practically all interstate? Have you any data there showing what facilities there are for the cattle traffic, interstate traffic, whatever it may be?

A. I think I have, yes, sir. The Company's official list of station and agents—I had the list of the Company effective in 1907 when I made these figures; I haven't it here now, shows the stationary live stock facilities in the state, shows where they are located, the number of pens, and their capacity in cars, and details, as to whether the water is accessible. Do you want the details?

Q. No.

A. I found that stock pens are located at 65 stations, and equipped with stock handling facilities; that 187 pens, having a total capacity of 504 cars are maintained, as stated in the Company's official list.

Q. The cotton platforms, I believe that is already in evidence, that all stations are equipped with them?

3453 A. I don't know as to that.

Q. Have you in your possession, the data from which you have deduced these figures you have read into the record, the car numbers and details of it?

A. Yes, sir, it is one step from our sheets which I have here to the Company's wheel reports.

Q. You have those ready for inspection of these gentlemen, if they want to inspect them?

A. Yes, sir, with the exception of Little Rock.

Q. We will take that up after lunch.

Mr. McPherson said that strictly speaking, no part of the yard organization cost, nor of the switching service, is chargeable to trans-state traffic.

Mr. MOORE:

Q. What page is that?

Mr. HILL:

Page 343 of Volume 1 of the printed record.

Q. "Strictly speaking, no part of the yard organization cost, nor of the cost of switching service is chargeable to trans-state traffic." Do you know from your experience in terminal work, where these trains would be and what service would be performed to these trains that you have shown laying in yards for days?

A. I have no first hand knowledge of conditions in Arkansas, and was never employed around an Arkansas terminal, but from

my experience in other terminals, I should say that they were moved around a good deal, kicked around a good deal, as
3454 the switchman call it; a car staying in the yard 50 or 60 hours would undoubtedly get moved around a good deal.

I base that on this, it was at one time, at intervals, a part of my duty, to take a check of the yard when I was employed by the L. & N. in East St. Louis; we used to go out and take a check of the yard over the Yardmasters' head, every once in awhile, and I have done that sometimes on four or five successive days; I acted in that capacity when the work was light on the bill desk, helping the chief clerk; I used to have it very forceably impressed on me, that I never found the same cars on the same track, indicating that the cars were moved around a good deal; I don't know whether the local conditions in Arkansas are the same; I do know that cars left in the terminals will get shifted a good deal.

3455 Q. Have you now before you the results of the investigation of the Little Rock terminals?

A. Yes, sir, that is, of the handling of through trains in those terminals.

Q. I wish you would give them in the same way you did the other terminals.

A. This is for the yard at Argenta, Arkansas——

The MASTER:

Q. Trans-state?

A. No, sir; through trains.

It covers the first five days in October, 1907, the same that was covered by the data given for the other terminals.

I find 18 trains running into Argenta from the north, hauling 822 cars, 797 of which were loads and 25 were empty. These cars went out of the Argenta yard in various directions in from three to eleven other trains and none of them got through unbroken.

I find that the time spent in the yard varied from 3 hours and 40 minutes to 189 hours even.

I find at the minimum figure, 42 cars.

I find 26 cars remained 7 hours and 40 minutes.

40 cars remained 11 hours and ten minutes.

3 cars remained 16 hours.

17 cars remained 19 hours.

3456 18 cars remained 29 hours.

17 cars remained 42 hours.

Ten cars remained 60 hours.

That is along the lines of the information given as to the other terminals—that is, from the north.

Now, from the south into Argenta:

I find in the same period 15 trains hauling a total of 444 cars, of which 367 were loads and 77 were empties.

Those cars were forwarded out of Argenta yard in their various directions in from two to seven other trains,——

Mr. HILL:

Q. You did not find the onion train?

A. It did not show up in those five days——

The time consumed in the Argenta yard varied from 2 hours and 30 minutes to 104 hours 55 minutes. Only one car consumed the minimum time.

I find 25 cars stayed in the yard 10 hours; 20 cars stayed 11 hours. 16 cars stayed 15 hours; 25 cars stayed 50 hours; and so on up. Some few cars stayed a shorter time; for instance, two cars four hours; three cars stayed five hours and one car stayed six hours.

The bulk of the cars were in the yard 15 hours and over, some of them as long as 104 hours.

3457 Q. I want to call your attention to the testimony of Mr. Frank May, on page- 332-3, volume 2 of the printed record:

"Necessarily the revenue basis is dependent upon how nearly the rate is based upon the cost of service, isn't it?

"A. Yes, sir.

"Q. If the rate does not reflect the cost of service, then this, as a basis for ascertaining the respective expenses intrastate and interstate, would not be of value?

"A. If that was true, if the rate did not reflect at all the cost of service, of course it would be of no value.

"Q. Its value is entirely dependent upon how nearly the rate reflects the cost of service?

"A. Yes, sir."

Now, have you made an investigation of the rates prevailing in Arkansas upon the leading commodities, to ascertain how nearly that rate reflects the cost of service?

A. Yes, sir, we have made an investigation of actual movements under the rates prevailing in Arkansas, during the period which is the subject of our inquiry here, but we have arrived at our conclusions as to their relation to the cost of service, rather on a comparative basis, than by any attempt to segregate the rate into cost and profit.

3458 Q. Let's take up in detail the result of your investigation; what is the first one we have?

A. I see here on the top of my pile, Exhibit #40, which was the rate map prepared by us and approved by Mr. Perkins, and filed by him, showing the zone rates on pine and cypress lumber, and articles taking the same rates from certain producing territory in Arkansas and Louisiana to St. Louis, Cario and Thebes.

Q. Take that lumber map and explain it and the practical operation of the same?

A. The map was intended to show the size of the zone from which rates apply on a flat or blanket basis, and we undertook to ascertain what the actual movement was from the various points in that zone to the receiving territory at St. Louis and Cairo, indicated on the map.

Just a word of explanation before we go into the results of our examination.

To explain the map a little further, the producing zone shown on the map, circled by a heavy black line, marked "A" includes stations shown in the St. Louis, Iron Mountain & Southern Tariff #4903-A, Inter State Commerce #5057, from which a blanket rate of 18 cents applies on pine and cypress lumber, carloads, to St. Louis, and the blanket rate of 16 cents to Cairo and Thebes is applied.

Q. Just a word of explanation of the blanket rate; you mean by that a rate which is simply a flat price from that zone to the point of destination?

3459 A. Yes, sir, I will say that this 18 cent rate to St. Louis applies from each of the 584 stations in that zone, some in Arkansas and some in Louisiana.

Q. Some in Texas too, aren't there?

A. Not shown on this map, no, sir. That is another tariff, and the map confines itself to one tariff, and the similar rate from the same stations, 584 in number, but 2 cents per one hundred pounds lower, applies to Cairo and Thebes.

The most northerly point in the zone that is nearest to Cairo and St. Louis is Little Rock; the southern extreme of the zone is at Lake Charles, Louisiana.

Q. How far apart are those?

A. The business would not be moved from Lake Charles through Little Rock, and the comparison would fall to the ground there, it would follow the route through McGehee, Wynne and Knobel.

Little Rock is 345 miles from St. Louis. Alexandria, the junction of the line which takes freight from Lake Charles to the Iron Mountain rails, is 599 miles to St. Louis, short line mileage.

That explains in a general way what the map is for, and explaining further the blanket rate feature, I would say that of the 584 stations I have described as being in this zone, and from which that rate applies to St. Louis, 319 are located on 36 other lines, which connect with the Iron Mountain, and which necessarily would receive for their haul, a varying proportion of the blanket rate,

3460 shrinking the Iron Mountain earnings by the amount of the allowance for their haul.

As an illustration, the rate from Lake Charles to St. Louis is 18 cents, according to the tariff, and so shown on the map; out of that, the divisions of the rate current during the period of our inquiry, would allow the St. Louis, Watkins & Gulf Road, for its haul from Lake Charles to Alexandria, six cents, leaving for the Iron Mountain haul from Alexandria to St. Louis 12 cents. If a car of lumber originated locally at Alexandria, even though it were hauled in the same train as the car from Lake Charles, it would earn for the Iron Mountain 18 cents per hundred pounds for exactly the same haul. In other words, the Iron Mountain will get just two-thirds of the earnings on a car of similar weight originating at Lake Charles, that it will on one originating at Alexandria.

Q. The cost of service is less when they received it from another line than when they haul it on their own line?

A. Yes, sir. There seems to be a question as to whether a car originating at Alexandria would not entail a heavy terminal ex-

pense, on account of the car being placed on some industry track or placed for loading, and taken away when loaded; that is the most unfavorable condition that could prevail, the most expensive condition that could exist, first the placing of the empty, then the removal of the loaded car, and hauling to the train track after
3461 it was loaded; it has been assumed,—I think Mr. Perkins made the statement, that there would be a greater terminal expense in connection with the last car than the one coming from the connecting line, the Watkins and Gulf, for instance.

Without questioning the accuracy of that statement, I would like to call attention to the fact, that moving out of Alexandria in the month of October, 1907—and our investigation covers the period ranging from the 1st to the 15th of the month—we took half the month just to get a line on it, moving out of Alexandria during that period, I found 22 cars going from the Louisiana Railway & Navigation Co. to the Iron Mountain, the Iron Mountain's proportion of the rate being 12 cents a hundred. I found 22 cars coming from the Louisiana Ry. & Navigation Co., of which the Iron Mountain got 13 cents I should have said, and 16 cars coming from the Watkins & Gulf at Alexandria, on which they got 12 cents, both connecting lines at least; it appears to me on the fact of it, that a similar service would be rendered for 22 cars on which they got 13 cents, and for the 16 cars on which they got 12 cents, but there is one cent a hundred pounds difference in the cost; one of those rates is not based on the cost of service.

Alongside of that movement, I have 18 cents flat, nine cars, showing that the assumption I started my statement with, is borne out by actual movement.

3462 Just along that line, I have the whole movement that we found under this tariff for the 15 days I spoke of. All of this business is handled to St. Louis. We start at Little Rock, the most northerly point in the zone, and I find 11 cars on which the Iron Mountain got 18 cents, a hundred, a haul of 345 miles; down the Main Line of the Iron Mountain 24 miles at Benton, we find a movement of 18 cars, on which they got but 14 cents, although the Iron Mountain's haul on its Main Line over the same track, the Benton cars passing directly through Little Rock on their way to St. Louis, was 24 miles further in the case of the Benton shipment, and the rates 4 cents less for the shipment. If the Little Rock rate is an index to the cost of service, the Benton rate is not, and vice versa. The reason the Iron Mountain got but 14 cents was that it allowed the Little Rock & Hot Springs Western Railroad four cents per hundred pounds for its haul, for freight originating on its line.

I find 14 cent rates, comparing them with that Benton rate, applying from Pine Bluff, 36 cars moving 387 miles to St. Louis, and necessarily moving through Little Rock on their way to St. Louis. The other four cents of the blanket rate, in that case, went to the Pine Bluff & Western.

I find again 4 cars moving from Malvern, originating there at flat 18 cents, 389 mile haul to St. Louis; I find cars originat-
3463 ing on the Iron Mountain rails at Saginaw, below Malvern seven miles, moving at 14 cents; the other four cents went to the Saginaw & Ouachita Valley Railroad.

I find a movement of three cars from Donaldson, still on the main line 400 miles from St. Louis, at 18 cents, originating locally at Donaldson, and the Iron Mountain getting all the rate; ten miles below, I find a movement from Daleville, coming from the U. T. A. & M. Ry. for which the Iron Mountain accepted 12 cents.

As a parallel for the illustration I gave at Alexandria, I find movements from Montrose, on the Valley Division of the Iron Mountain, business coming from the Crossett Railway, five cars, 14 cents, eight cars from Montrose proper, at 18 cents.

7 cars coming from the Mississippi, Hamburg & Western at 14 cents. Wherever the rate I am quoting is less than 18 cents, the difference between the rate quoted and the 18 cents, went to the connecting line originating the business, or at least delivering it to the Iron Mountain.

Q. Whether it was a railroad or tap line?

A. They are all connecting lines to me; I don't know whether they are common carriers or not, but they are getting divisions of the rates.

3464 At Prescott on the Main Line, 442 miles from St. Louis, I find 9 cars coming from Prescott & Northwestern, of which the Iron Mountain got 13 cents, having allowed 5 cents to the connecting line; there is a movement 97 miles further than Little Rock, directly through Little Rock, at 5 cents less rate than a car can be shipped from Little Rock; if the 13 cent rate indicates the cost of service from Prescott, surely the 18 cent rate cannot indicate it from Little Rock 97 miles closer to St. Louis.

I find at Warren, Arkansas, the end of the Warren Branch of the Iron Mountain, the haul to St. Louis from Warren being 455 miles, two cars originating locally, on which the Iron Mountain got 18 cents a hundred; 41 cars coming from the Warren & Ouachita Valley Railroad, on which it got 15 cents, there being an exactly similar haul for the Iron Mountain after it got the cars; and one car from the Wilmar, Johnson & Saline Railway, via same junction, same haul, on which they accepted 13 cents. There are three rates covering a total of 43 cars, two of which moved at 18 cents, 41 at 15, and one at 13. Some two of those rates are not based on the cost of service; one may be.

Q. The cost of service seems to have been a little mixed up when it got to Warren?

A. Yes, sir; the strongest contrast there is between the two rates applying on cars coming from two connecting lines, where the service would be similar; there might be that difference in service

3465 on stuff originating locally that I spoke of in the first instance.

Q. Have you ascertained the different divisions that the Iron Mountain makes with its connecting lines, or tap lines, as the case may be?

A. Yes, sir, the difference is between the 18c rate and the rates I have been quoting.

Q. Have you a separate tabulation of the division sheets?

A. Yes, sir, I have a memorandum that will afford that infor-

mation. I don't know that it covers the division sheets, because we simply got enough information to cover the cars we had on our sheets.

To draw a comparison between the extremes on this statement, I find that 18 cent rate applying from Little Rock 345 miles from St. Louis, and 12 cents from Alexandria, 599 miles: Those two movements would be over different portions of the Iron Mountain road; that is, the Alexandria shipment need not come through Little Rock, very probably wouldn't, but comparing the extremes on one line of road, I find 18 cents from Little Rock and 11 cents from Hope, which is 458 miles from St. Louis.

Q. Passing over the same tracks?

A. Yes, sir, necessarily passing through Little Rock on its way to St. Louis.

Again on this division, I haven't the division sheets here, they are not open to public inspection, we were given the information I desired.

Q. You made a memorandum from these?

3466 A. Yes, sir; speaking now of St. Louis business under the 18 cent blanket rate, the Little Rock & Hot Springs Western got 4 cents.

Q. That is four cents of that 18 cents?

A. Yes, sir, that is the proportion they got for their haul up to the Iron Mountain rails?

The Gifford & Southeastern, 3 cents.

Pine Bluff & Western, 4 cents.

Perla & Northern, 3 cents.

Malvern & Freco Valley, 3 cents.

Saginaw & Ouachita River Railway, 4 cents.

Elmore & Southwestern, 2 cents.

U. T. A. & M., 6 cents.

Arkansas Southwestern 6 cents.

Clark & Pike County 3.

Q. How much of a railroad is that Clarke & Pike County?

A. I made some inquiry, and my information is that during the latter half of 1907, it was something less than half a mile in length; previous to that time, the Interstate Commerce Commission report shows it to be 12 miles, but the steel had been torn up. Three cents for a one mile haul would be 60 cents a ton a mile.

Q. How much would it be a ton a mile if they still had twelve miles of rail?

A. It would be 1/12, 5 cents.

Q. That is a pretty juicy division sheet itself.

A. I don't know the conditions which dictated the di-

3467 vision.

Crossett Railway got 4 cents.

Miss. Riv., Hamburg & Western, 4.

Prescott & N. W. 5.

Q. How long a road is that?

A. In the year ending June 30, 1907, which is the last issue of

the Interstate Commerce Commission report that has been gotten out, the Prescott & Northwestern Railroad was 41 miles long.

Q. What was its division?

A. On St. Louis business, they got 5 cents.

Q. How much did that Clark & Pike County get?

A. 3 cents; of course that 5 cent division allowed the Prescott & Northwestern applied from all stations on its line.

Q. Whether they picked it up a mile out of Prescott, or whether they went 41 miles?

A. Yes, sir, to the terminus of the road.

Q. Go ahead:

Lester & Ouachita Valley allowed 4 cents.

Arkansas & Gulf, 3 cents.

Warren, & Ouachita Valley, 3 cents.

Wilmar, Johnson & Saline, 5 cents.

Arkansas & Louisiana, 3½.

Q. How long a road is that?

A. It runs from Hope to Nashville, in that direction, I cannot find that in this report.

Louisiana & Arkansas, 6 cents, which connects at the same junction as the Arkansas & Louisiana road.

3468 Q. Is that the one that runs way down to Minturn, La.?

A. Yes, sir.

Dorcheat Valley Railroad Co., got 6 cents.

Louisiana Ry. & N. Co., connecting with the Iron Mountain at Selma, La., got 3 cents.

Boston & Little River Ry. Co., connecting with the Iron Mountain at the same junction, got two cents.

Schwartz & Ouachita City, got 4 cents.

Monroe & Southeastern Ry. Co. got 4.

Louisiana & Pine Bluff 5.

Ouachita got four.

Natchez, Urania & Ruston got 3 cents.

Texas & Gulf via Rochelle, two cents.

Enterprise Ry., a Louisiana Railroad, 4 cents.

Natchez, Ball & Shreveport, got four cents.

Louisiana Railway & Navigation Co. got 5 cents, and the St. Louis, Watkins & Gulf, 6.

Those cover the divisions allowed these roads, whose billing we found moving during that period; we found movement covering all those, aggregating 566 cars.

The divisions which we have used here were furnished us by the Assistant Auditor of Freight Receipts of the Missouri-Pacific, whose duty it is to make a settlement with their connecting lines on this through business. They were given us, taken from the division sheets in our presence, as being the divisions current at the time these shipments moved.

3469 Q. Summing that up, it runs from one cent up to seven?

A. Yes, sir.

Q. You have some other lumber maps there?

A. Yes, sir.

On the Cairo movement, also shown on this map, we find practically a similar condition, the divisions being the same, and the length of the haul varying relatively, not in the same figures, because Cairo is further south from St. Louis; we find a movement of 215 cars from the same territory, ranging from the 16 cent rate from Little Rock to 11 cents from Alexandria, Little Rock being 254 miles from Cairo and Alexandria 507.

Q. It seems to me the cost of service out of Little Rock is pretty heavy on lumber?

A. I am just stating the fact; I find a nine cent rate to Cairo from Hope 296 miles from Cairo.

Q. Who is it that got the nine cents?

A. The Iron Mountain, and the Dorcheat Valley got seven.

Q. They have the same division to Cairo that they have to St. Louis?

A. Yes, sir, the division sheets give the same division to these two points.

That takes up the map known as Exhibit 40, filed by Mr. Perkins.

Q. There is another lumber map there, isn't there?

A. Yes, sir.

3470 The other map is Exhibit 39; it is gotten up along the same lines as Exhibit 40, tending to show in more or less graphic form, during the time the exhibits cover the rate applied from and to certain places.

There are three receiving or consuming zones shown on this map, one of which extends to Coffeyville, Kansas on the south, to and including Omaha, Neb., on the north; it extends as far east on the main line of the Missouri Pacific as Etlah, Mo., about 80 miles west of St. Louis, taking in Kansas City, Atchison and St. Joe and stations between those points and Omaha, and between those points and Coffeyville.

The rate to that zone from the producing zone, marked "B" is 23 cents, from all points in the zone to all points in the other.

The other zone marked "C", embraces some territory in middle Kansas, the rate being 28½ cents to all stations in that zone, from all stations in zone "B".

The third zone, marked "D" begins just west of Hoisington, Kansas, on the Missouri Pacific line, crosses Kansas and Colorado and extends to the western terminus of that line at Pueblo, and takes in the Denver & Rio Grande from Denver to the south end of the road below Trinidad, in Colorado. The rate to Zone "D" from all stations in Zone "B" is 34 cents.

These rates were taken from Missouri-Pacific, Iron Mountain joint freight tariff 5116, Interstate Commerce No. 6228, effective during the last six months of 1907.

3471 Q. Explain the practical operation of that?

A. Zone B, the producing territory, covers 236 stations on the St. Louis, Iron Mountain Southern, and 300 stations on other connecting lines, just as we have been discussing in the case of the St. Louis rates.

Zone A the consuming territory, includes 390 stations on the Missouri-Pacific Railway in Missouri, Kansas and Nebraska, to which the 23 cent rate applies, from the 536 stations in Zone B.

Zone C, the consuming territory, covers 42 stations on the Missouri Pacific Ry. in Kansas, to each of which a 28½ cent rate applies from each of the 536 stations in Zone B.

Zone D, consuming territory, covers 52 Missouri-Pacific Stations in Kansas and Colorado, and 80 Denver & Rio Grande Railroad stations in Colorado, and to each of these 132 stations in Kansas and Colorado, a 34 cent rate applies from each of the 536 stations in Zone B, in Louisana and Arkansas.

We found some movement under those rates; I haven't the waybill numbers here; this is a summary we have; the numbers of the waybills, the dates, the stations making the waybills, and the car number for each of these movements.

Q. What is the extent of that movement?

A. From producing territory Zone B, to Zone A, we found a movement in the first fifteen days of October, 1907, under the rates shown in Exhibit, of 426 cars.

3472 The movement from Zone B to Zone C was 57 cars, and to Zone D, 61 cars.

Q. It was not a paper tariff?

A. No, sir, and the divisions of those rates vary with the allowance made the originating lines in Arkansas and Louisiana, as they did in the case of the lumber zone.

Q. What division is also made with the Denver & Rio Grande at the other end of the line?

A. There is a division made, but that information is not available at this time; I didn't attempt to show the Missouri-Pacific figures, except what was allowed the originating line, and treated the Missouri-Pacific and D. & R. G. as one proposition; we made some other figures in that connection, showing the allowance at both ends.

Q. The cost of service seems to be very nicely reflected there—we will go on to the next item you have.

A. Where the hauls are similar, and the rate differs, one rate does not reflect the cost of service; of course, which one, I am not prepared to say.

We have a map, exhibit #42, which covers Texas common points, approximately 2600 stations in Texas, to which a blanket rate applies from large territorial zones.

The map does not show all the zones in what are known as defined territories, because it would have been so confusing you

3473 could not have told where one zone began and one left off; we elected to show the Pittsburg territory, Chicago-Cincinnati territory, and St. Louis territory, and those are shown on the map respectively as Zones A., B., and C. The receiving territory is shown as Zone D, which includes the common points in Texas.

Q. That is all movement towards Texas?

A. Yes, sir, this is southbound movement.

The St. Louis rate territory extends from Southern Mississippi and a portion of Southwestern Alabama to Central Illinois, extending

west almost to the Missouri-Kansas line, taking in the major portion of Missouri, and some sections of northern Arkansas; the result being that the same rate applies from St. Louis to any of the 2600 common points in Texas, as from Newport, Arkansas, for example, or the same rate applies from Jefferson City as from Whitehall, Illinois. In the case of the Jefferson City shipment, the shipment is Missouri-Pacific, that company performing the haul to St. Louis, and in the case of the Illinois shipment, the division would have to be allowed the connecting line east of the Mississippi River, and some provision has to be made for the absorption of the bridge transfer at St. Louis either by the Missouri-Pacific or the connecting line; that would probably be taken care of, in arriving at the eastern line's division.

Zone B, Chicago and Cincinnati territory, takes in Frank-
3474 fort, Kentucky on the southeast, and extends out to Omaha;
its connects with the St. Louis Zone near St. Louis, the boundaries of the two zones being the same line, but the rates from Zone B territory are made by adding a fixed differential on each class, to rates from St. Louis, and those rates do not, as Mr. Watson has testified, divide as they are made; in other words, business from Chicago, where a certain differential is added to make the through rate, added to the St. Louis rate to make the through rate to Texas—say the Chicago and Alton Road bills a shipment from Chicago to St. Louis or East St. Louis, for delivery to the Iron Mountain the C. & A. would give a fixed part of the rate, more than was added to the St. Louis rate to make the Chicago rate, resulting in a shrinkage of the Iron Mountain earnings south of St. Louis on a shipment for Texas, as compared with the rate which they would get from St. Louis on an exactly similar shipment from St. Louis, and where they would do the same service from St. Louis to Texas, on each of the two shipments.

In my particular case, my experience with the terminals at St. Louis and East St. Louis, and from my practical experience in handling business through these terminals, would lead me to say that the terminal expense on shipments crossing the river, say one
originating in Chicago, would be greater than on the one orig-
3475 inating locally, and for this reason, if the western line absorbed the transfer charge, while that would not be charged to operating expenses but deducted from its freight earnings, in fact, it is done automatically in making the waybill, nevertheless, it would be the cost of getting the goods to its railroad in St. Louis or to its warehouse, in the case of L. C. L. freight; a shipment originating locally in St. Louis would be dumped at the warehouse door very close to the car in which it was to be loaded, if the freight house was properly operated.

There would be less revenue to the Iron Mountain, and they would have to divide the through rate. If one rate reflects the cost of service from St. Louis to Texas common points, the other would not; that is, assuming they were both going to the same point in Texas and not considering the blanket rate feature down there.

The same is true of rates from Pittsburg territory, only the differential is higher.

Q. Take the illustration of the shipment from Chicago, on the Chicago & Alton, and supposing that shipment would go to the farthest point in Texas in the common point group, and the shipment originating in St. Louis would go to the nearest point within the Texas group, what would be the difference in the haul down there?

A. As far as the lines south of St. Louis are concerned,
3476 and that is where the Iron Mountain's interest in the shipment begins, there is a possible variation in the haul of 400 miles, between the nearest and most distant Texas common points; that is in round figures.

Q. How is that division made in the exhibits in this case, of that revenue that has been received on these shipments passing through the state to Texas common points?

A. You mean the division as to the earnings on the Iron Mountain Railroad, on a track mile basis?

Q. Yes, sir, explain what effect that would have?

A. To allot to every mile of the Iron Mountain, the same revenue on that shipment, the same proportion of that rate.

There is another feature in connection with the blanket end of the rate in Texas, and that is the Texas lines get varying divisions, which naturally vary with the length of the haul, so while the Iron Mountain would be performing the same service from St. Louis to Texarkana, its revenue would diminish as the divisions allowed the Texas lines increased.

For instance, I don't know the exact figures, I haven't the T. & P. divisions here, but this seems quite a possible case to me, that a carload of merchandise was loaded at St. Louis for distribution on the Texas & Pacific, that could go through unbroken, assuming such a car moved, and it undoubtedly would get the same service,—each
piece of freight in that car would get the same service on
3477 the Iron Mountain rails, but the Iron Mountain revenue on each piece of freight would be determined by the divisions allowed the Texas lines, owing to the length of the haul in Texas.

Q. And beginning at the first instance, with the division allowed before they get into St. Louis if the shipment originated beyond——

A. That is a variation at the other end; this illustration is for shipments in the St. Louis car.

Q. I believe these gentlemen have testified something about the ton mile reducing every thing to a common level; there seems to be some common level reduction in the other basis that could reduce the revenue from all these shipments originating east of St. Louis and going to varying points in Texas, where exactly the same service is performed from St. Louis to Texarkana, to a common level, when they go to take the revenue to put it into these exhibits, as indicating the interstate revenue?

Mr. MOORE: I want to object to that on the ground that it is a matter of inference, does not involve the facts, and is argumentative.

A. Without having any actual data as to the movement, and we did not consider it necessary because I think it would be admitted by anybody who knows the Iron Mountain road, that it has
3478 a large volume of Texas business, without having any figures; as a matter of common logic, I should say that the service was reduced to a common level, but the operating expenses charged against it on the revenue basis of division, fluctuate as these divisions of rate fluctuate.

Q. Had you finished that Texas common point proposition in that explanation?

A. Yes, sir.

Q. Take up the next map.

A. I have Exhibit 41, covering zone rates on cotton seed products, from Arkansas and Louisiana producing territory to points in Missouri and Kansas; we found that that tariff was actually in operation, and that there was a blanket rate of 17 cents from various points in the cotton belt—cotton oil mill belt, to a lot of stations in Missouri, and we found enough to show us that the rate was a blanket rate, but the movement was light, and I am not familiar with agricultural conditions in Arkansas, so I do not know whether that was due to the fact that we were looking for information in the wrong season, but we confined ourselves to the same month that we made our other figures on, and we found a very light cotton seed movement. I might say that what did move during the course of the fifteen days we figured on—25 cars of that—the blanket rate of 17½ cents was applied, on hauls ranging from 256 to 598 miles. The movement was light, cotton seed was not moving apparently.

3479 Exhibit 43, covering blanket rates on cotton from Arkansas and Louisiana, Oklahoma and Missouri to the eastern seaport points, principally to Boston and Boston rate points, quite a heavy movement of cotton, but the zones from which cotton moves on blanket rates were not large.

There are some striking illustrations, as for instance, out of a 75 cent rate from Newport to Boston, the Iron Mountain got 40 cents to St. Louis; it got 45 from Little Rock, 45 from Pine Bluff, 42 miles further south, and 45 from McGehee, 102 miles south of Little Rock. It got 55 cents from Ft. Smith, and cotton was hauled through Little Rock on its way to St. Louis, hauled about 165 miles further for a ten cent high rate; and there was quite a heavy movement from McGehee and Pine Bluff and Little Rock, and the points I have mentioned, and the range was not so much but it is a blanket rate, as I have stated.

Q. That is the originating end you are speaking of?

A. Yes, sir. That would not affect the Iron Mountain earnings because their portion to St. Louis is fixed, the arbitrary is to St. Louis, and the allowance east is a certain proportion of the rate—it is the balance of the rate.

Q. That would tend to show that the allowance east of the river also reflected the cost of service, by hauling it a thousand miles further to one point than to another?

3480 A. I think I stated that proposition exactly backwards; the lines east get 35 cents and the Iron Mountain gets the balance of the rate.

Q. How wide a zone is that in the east?

A. The short line mileage from St. Louis to New York is 1053 miles, and Boston is a little further.

Q. What is the widest scope of that territory that they got 35 cents for?

A. It has been so long since I have worked on eastern rates, I don't know that I can tell exactly; it takes in quite a large zone around Boston, and points north of Boston.

Q. They get that 35 cents whether it goes to Boston or Portland, Maine?

A. Whether it went to Boston and went through the expensive Boston terminals and went out to some point north; I don't know where the rate breaks, whether it is St. Louis or East St. Louis.

Q. The rate so far as we are interested in it, is 45 cents to St. Louis?

A. Yes, sir, from Little Rock, Pine Bluff and from McGehee.

Q. Take a shipment like this—what did you say was the rate from Ft. Smith to St. Louis?

A. 55 cents.

Q. Rather, that is the division?

A. Yes, sir, the Iron Mountain's proportion.

Q. Suppose instead of that cotton originating at St. Louis, it originated at Paris, Arkansas, 43 miles from Ft. Smith?

3481 A. I don't know as to that; our tariff which we had, only covered Iron Mountain stations, and did not show that, as Paris is not on the Iron Mountain.

Q. Take some other Iron Mountain points to illustrate the question, say Salisaw in Oklahoma?

A. The proportion of the rate from Ft. Smith is 55 cents; the rate from Salisaw, the Iron Mountain proportion of the rate would be sixty cents; as the haul increases the rate increases there; there is not as wide a range in these zones as there is in the lumber zones.

Q. They get five cents from Salisaw to Ft. Smith?

A. Yes, sir.

Our motive in discussing these propositions was this: We had asked Mr. Perkins to put in these maps after comparing the rates; we had no knowledge when we drew these things up from the tariff as to whether there was any movement under them; we did find, as I have detailed, we did find a lumber movement, and I investigated them all to see whether the movement was heavy or light and have made the showing.

Q. In Exhibit 38, the rates on grain and grain products from Missouri-Pacific stations to some Iron Mountain stations, shown on the map, what about that?

A. The forwarding territory, the producing territory, is marked as Zone "A" on the map, and the consuming territory, to which the rate applies, is marked "B."

3482 We found that there is a rate published in the tariff of 19 cents on corn and articles taking corn rates, which I will detail:

From 157 Missouri-Pacific stations in Missouri and Kansas, to each of 369 Iron Mountain stations in Missouri and Arkansas, that blanket rate of 19 cents applies, according to the tariff, on 45 different commodities.

We find a 23 cent rate on wheat and articles taking wheat rates from the same territory to the same territory.

The corn rate covers 45 different commodities, as I stated before, and their comparative weight and bulk, value and casualty risk is rather interesting.

For instance, under the head of casualty risk, a good many of the manufactured or partially manufactured articles, cereal articles, included in these corn rates, take the same rates as raw corn, and they are much more liable to damage in transit, although raw corn is subject to wet and rust; while it is true that new corn will heat and spoil, a car with a leaky roof might ruin a whole car of cereal products. We find under that head, rolled oats, oat meal, rye flour, chop feed, cerealine, and corn meal. It seems to me that those articles—and the tariff did not restrict the shape in which they should be packed, they might be packed in paper boxes for instance—would be much more liable to damage than corn itself, or oats; although oats takes the corn rate, the waste space in loading which has been dwelt on at some length, is marked; oats
3483 takes that corn rate; corn for instance, weighs 56 pounds per bushel; you can load the car's tonnage capacity in a given number of feet of car space, which is less than the space occupied by an equal quantity of oats, as oats weighs but 32 pounds per bushel.

Going back to the time that I was interested in furnishing cars to elevators, I recall that we used to load oats to the roof of the car without danger of overloading, but we did not dare do that with corn; we could not load corn above two grain doors, and that that was expected by the traffic men who made the tariff, is further indicated by the minimum weight specified; the minimum weight on corn is 40,000 lbs. for a car, while the tariff specifies a minimum of 30,000 lbs. on oats; the car's capacity being but 40,000 lbs., they expected to get 40,000 lbs. of corn in there, and but 30,000 lbs. of oats.

Q. And the same rate applies for both?

A. Yes, sir.

Again, on oat hulls, I should imagine they would be lighter than oats. I haven't any figures on that, but they take the same rate.

The movements under that tariff—there was quite a little of it—was found to be from Washington, Missouri, Herman, Holden and Independence, some from Omaha, Neb., some from Leaven-
3484 worth, Kansas, some from Atchison, Kansas.

We took the main line billing on the Missouri Pacific and Missouri River points, and found it moved in quite large volume; it is not quite as large a volume as in the case of lumber, but the

movement was there. The tariff was not what would be termed a paper tariff.

Q. The commodity did move?

A. Yes, sir.

Q. Go ahead.

A. While we were investigating that proposition, we found some other movements through the zone, through the consuming zone in Arkansas and beyond, from these stations up here in Missouri, at lower rates than zone rates.

Q. It cost less to haul it from there.

A. The rate on flour, which by the way took the wheat rate, from Herman, Mo., to McCrory, Ark., is 23 cents. We found flour moving from Herman, Mo., quite a little of it, moving right through McCrory, Arkansas, into Memphis at 12 cents; in fact, it went right through there to Jackson, Mississippi at 22¢, in connection with the Illinois Central.

We found a lot of flour moving from Independence, Mo., on which the rate to Arkansas in the zone was 23 cents; moving to points in the southeastern territory through Memphis—Atlanta, Augusta, Asheville, N. C., and points in Georgia and the Carolinas, at 14 cents for the Iron Mountain's haul from Independence
3485 to Memphis, although the rates to points in the zone through which the shipments would pass, was 23 cents.

Q. The cost of service was very nicely represented there.

A. Yes, sir—not only on the Iron Mountain, but to points in the southeast; I find the same proportion allowed lines beyond Memphis in half a dozen common points in the Southeast, Atlanta, Augusta, Marietta, etc.

Q. Let me see if I catch that; the revenue the Iron Mountain got from some point up in the producing territory to McCrory, Arkansas was 23 cents; if it went to Memphis through McCrory, the Iron Mountain got 14 cents?

A. Yes, sir, when it was destined to Southeastern territory.

3486 Q. What is the next map you have, Mr. Hamilton?

A. That exhausts the maps. Those were put in evidence by Mr. Perkins——

Q. Have you not a citrus fruit map there?

A. Yes, sir.

Q. I believe there are some matters out side of the maps in connection with those movements of which you made memorandum: Probably I had better take those up before we go to the citrus fruit.

A. I have some other items here, some lumber figures——

On the proposition of citrus fruit rates: from the Pacific Coast fruit belt. Applying through Arkansas, to the territories in the East, with the exception of Texas, the same rate applies from the entire Pacific Coast fruit belt, on lemons, to practically every station in the United States East of the Cascade range of the Rockies.

There are exceptions to that, but I have here a tariff which Mr. Perkins very kindly furnished, "The Trans-Continental Freight Bureau Eastbound Special Tariff on Citrus Fruit in car lots."

That tariff bears the Missouri Pacific number indicating that the

rates apply via its line, which I am informed they do, the Iron Mountain number being 5118-R. The tariff was effective during the latter half of 1907.

3487 It names rates of $1.00 per hundred pounds on lemons, to Colorado common points; Missouri River common points; Mississippi River common points; Chicago and common points; Cincinnati; Detroit and common points; Pittsburg; Buffalo; New York; Boston and common points.

The tariff refers to another publication of the same Bureau, which describes in detail the common points or territory of which these are the descriptive titles.

Taking that tariff we find that there are some exceptions to the application of the rate to several points East of the Rocky Mountains, except Texas, in the first instance, but they do apply to all points in Maine, Vermont, New Hampshire, Connecticut, Rhode Island, Massachusetts, New York, New Jersey, Pennsylvania, Maryland, District of Columbia, Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Kansas, and to portions of Virginia, West Virginia, Tennessee, Kentucky, Alabama, Mississippi, Arkansas, Louisiana, North Dakota, South Dakota, Nebraska and Colorado.

Q. Now, take the practical effect of that upon our interstate revenues:

Suppose a shipment of two cars of oranges is made from Los Angeles, one stopping at Little Rock and the other at Boston——

A. The rate I quoted was $1.00 on lemons. I would like to add here that the same kind of blanket rates apply on oranges and grape fruit, in car lots, or oranges and grape fruit mixed with lemons,

3488 $1.15 to all of the points I have enumerated, except Colorado common points, to all of which the rate is two and one half cents less, according to this tariff. That takes in the points in Colorado, known as "common points."

Q. Take that illustration on the two cars shipped out of Los Angeles for the East, one stopping at Little Rock and the other going to Boston?

A. As I recall it, Mr. Ludlam put the different mileage on those hauls in evidence. I have not the figures here now.

At any rate, it is apparent that the haul from Los Angeles to Little Rock would be 1398 miles shorter than the haul to New York, passing through St. Louis.

From Little Rock to St. Louis is 345 miles and the short line mileage East of the River is 1053 miles.

Q. What would be the effect of that upon the revenue that would go into their accounts in the case of those two cars?

A. Somebody would have to shrink; either the Southern Pacific, the Texas & Pacific, the Iron Mountain, or the lines East of the Mississippi River. I haven't the division and don't know where the shrinkage occurs.

Q. That is not material. There is bound to be a shrinkage owing to the difference of more than one thousand miles and the difference in the haul for the same price.

A. Yes. For instance, take the lemon rate—I say "lemon rate"

because the Colorado common points take the same rate ex-
3489 cept on oranges—the lemon rate from the Pacific Coast to Denver would be the same rate as to Boston.

The same rate would apply to Omaha, Nebr., as to Portland, Maine.

The same rate would apply to Topeka, Kans. as to Philadelphia.

The same rate would apply to St. Paul, Minn. as well as to Buffalo, N. Y.

The same rate would apply to Little Rock, Ark. as to Trenton, N. J., to Chicago as well as some point in Rhode Island, say Providence; it would apply to Duluth, Minn. as well as Detroit; to Lincoln, Nebr. as well as Washington, D. C.; it would apply to Memphis, Tenn. as well as New York City.

I just want to say in that connection, that that goes to the general proposition of rate making and I think it is only fair to state that there was, during our period here, a light movement of citrus fruits over the Iron Mountain. Whether the season of the year was responsible for that or not I do not know. There was some, but it was light.

Q. Now, Mr. Hamilton, take up the next matter there.

A. There are some other movements from the Pacific Coast of somewhat similar character, such as dried fruits; canned goods and vegetables; dried beans, celery and some fresh vegetables, that
3490 move on somewhat similar blanket rates.

The tariffs are lined up the same way and cover practically the same territory.

I have some movements here over the Iron Mountain rails, but there are not any great majority of them.

Q. Substantially the same kind of rates as the lemon and orange rate?

A. Yes, sir. Just as an illustration: Here is some dried fruit. I have some twenty two cars in the first half of October, and find there is a blanket rate of $1.25 applying to Southeastern points.

For instance, here is a shipment of raisins from Fresno via El Paso, Texarkana, on the Iron Mountain to Memphis and delivered to the Southern Railway there at $1.25 through to Knoxville, Tenn., on which the rate from Fresno to Memphis is 90 cents from the coast to Memphis.

On an exactly similar shipment destined to Atlanta, Ga., the rates from the coast to Memphis was 83 cents, the balance for the line beyond.

Q. Then it depends on what the destination is beyond the River, how much it costs to carry it to the River in those instances?

A. Those are types. I have about one hundred cars, all told, of those various commodities.

Q. You had some lumber illustrations there, outside of the zone?

3491 A. In investigating the movement under the rates carried in our maps, we found quite a large movement where the rate shrank at both ends.

Q. The cost of service got less at both ends?

A. I cannot say as to that, but varying proportions were allowed the lines beyond the Iron Mountain-Missouri Pacific rails, as well as to the lines originating the business and giving it to the Missouri Pacific. The through rates being the same, the shrinkage necessarily came in in the intermediate haul, which in this case was by the Iron Mountain and Missouri Pacific.

Here is a movement of about 184 cars from the same lumber producing territory as we have discussed under our map, to Kansas City, but all of which originated on connecting lines in the producing territory and went to connecting lines at Kansas City.

Q. Kansas City was not in the connecting zone?

A. Oh, yes, but this stuff is going beyond Kansas City and did not move on the zone rate.

Q. It went to some point ultimately beyond the zone?

A. Yes, it went to Sioux City; Denver; Manhattan, Kansas; Colorado, and Nebraska points; Missouri points—those catch my eye from the detail here.

As showing the non-relation to cost of service of these rates, or at least some of them—I do not know which ones—I would like to make some comparisons from possibly 200 cars I have here.

3492 We found a movement from Alexandria to Kansas City, 812 miles, originating on various lines beyond Alexandria and destined to points on various lines beyond Kansas City.

The shipments were all of like character, consisting of pine and cypress lumber.

The Iron Mountain haul in each instance was the same, but its revenue ran the scale like this—these are cents per hundred pounds: 11 cents, 12 cents, 12½ cents, 13 cents 13½ cents, 14 cents——

Mr. MOORE:

Q. Can you not give the destination in connection with each of those?

A. I can, sir, but it will take some time to dig it out of here.

Mr. MOORE:

Q. Well, never mind then. We can get that later.

The WITNESS: Each of these is indicated here by the number of the waybill under which it was transported.

To continue with these figures—13½ cents, 14 cents, 14½ cents and 16 cents.

Mr. HILL:

Q. For exactly the same haul on the Iron Mountain rails that was the varying revenue received?

A. The Iron Mountain hauled 812 miles from Alexandria to Kansas City for those varying rates:

3493 Two cars of lumber at 11 cents; two cars at 12 cents; one car at 12½ cents; eleven cars at 13 cents; three cars at 13½ cents; seven cars at 14 cents; one car at 14½ cents; two cars at 15¼ cents, and two cars at 16 cents. Which of those rates reflects

the cost of service I am not qualified to state, but it appears, even to a layman, that all of them, as a matter of logic, cannot.

Q. You have a memorandum of the way bills reflecting each one of those movements?

A. The number, date and full description, showing the destination and the division allowed the line at both ends. That is the Alexandria illustration.

Now, this is a case, Judge Hill, where all these cars were received from connection at Alexandria and all were delivered to connections as Kansas City. Absolutely no difference in the service required.

The difference, if any, might be in the cost of service in delivering the car at Kansas City as between one line to another, but I do not know that that exists.

Q. It is not provided for in the tariff, if it does exist?

A. No, sir.

Now, take Smithton, Ark.; 600 miles from Kansas City:

3494 We found two cars moving at 9 cents; three cars at ten cents; seven cars at eleven cents; nine cars at twelve cents; four cars at thirteen cents; one car at fourteen cents; three cars at sixteen cents, running from nine to sixteen cents.

We found at Prescott, Ark., 618 miles to Kansas City:

Sixteen cars at eleven cents; one car at twelve cents; six cars at thirteen cents; nine cars at fourteen cents.

Now, comparing the differences in the haul, those are similar hauls at different rates.

We found the thirteen cent rate from Benton, Ark., 545 miles:

The same rate from Perla, 565 miles;

The same rate from Smithton, 600 miles;

The same rate from Prescott, 618 miles;

The same rate from Hope, 633 miles.

Now, each of those shipments that I have indicated—and there were several cars on most of them, moving at a thirteen cent rate for varying lengths of haul, from 445 to 633 miles—would cover the most distant ones—in other words, they are on the same main line of the Iron Mountain, Benton being the most Northern and Hope being the most Southern, the rate being level.

Q. It did not cost them anything to move it from the various points until it go to Benton——

3495 A. I found fifteen cent rate on four cars from Benton, 445 miles, and an eleven cent rate on two cars from Alexandria, 812 miles.

Except for twenty four miles, from Benton to Little Rock, those cars beyond Little Rock will travel over the same track. There is no difference so far as I know, in the operating conditions. There are many other illustrations here, and here is the other side of the proposition showing a much higher rate than even the Benton rate: 20 cents from Texarkana, 665 miles, as against eleven cents from Alexandria, 811 miles.

I have not enumerated them all (there are 184 cars on this sheet) but those are typical of the others, and they are all repre-

sentative of actual movements of lumber for which we have the waybill number, the date and the billing station.

I found along similar lines business moving from this same producing territory at Pueblo, and a comparison of the length of haul there would be interesting, I think.

I found stuff moving from Smithton, Ark., to Pueblo, 1022 miles, short line mileage, on a rate of 16 cents.

I found a 16 cent rate from Smithton to Kansas City, but 600 miles.

I found on business moving to Milton, Kansas—the Iron
3496 Mountain accepted on lumber for delivery to the Kansas City, Mexico and Orient, hauled from Monroe, La., at rates varying in proportion from 16½ to 19½ cents.

I found traffic moving through St. Louis, originating beyond the Iron Mountain, from the small lumber roads, and destined beyond St. Louis, moving from Hope, Ark., 458 miles, at 7½ cents, 11 cents, 11½ cents and 13 cents.

The total rate from Hope is 18 cents alongside of the 7½ cent rate——

Q. There could not be very much parity of rates between seven and eighteen cent lumber, hauled side by side.

A. The only explanation I can see, if they both represent the cost of service, is that the terminal service ate up pretty nearly two-thirds of the rate.

That covers the lumber situation. I have not given all of the detail. It is rather lengthy, but that typifies the rest of it.

Q. You have for inspection the data showing those movements?

A. Yes, sir, it is all here.

Q. What is the next?

A. We went into the cost of service proposition.

Q. Mr. Hamilton, there has been a great deal said in this testimony about the parity between the state and the interstate rates, the relation that exists between state and interstate rates:
3497 Have you made any examination as to that parity or relation, or whatever it may be called, existing between state rates and interstate rates?

A. Yes, sir.

Q. Give us the results of some of your illustrations?

A. Mr. Watson, and perhaps Mr. Perkins, or Mr. Flippin, one of the gentlemen from the Traffic Department of the Railroad interested here, as I recall it, said that the Arkansas distance tariff issued by the Commission dominated the rate from Memphis into Arkansas points, and that the Memphis rate was a bridge toll higher. That is, to get a rate from Memphis to an Arkansas point, they added a bridge toll to the distance tariff from Bridge Junction on the West side of the River opposite Memphis.

Taking that proposition first, I have made a graphic chart covering the rates from Memphis to the line of the Iron Mountain, extending South from Little Rock, some seventy miles, to Arkadelphia (actually to Gum Springs, the station beyond) and commenting upon the statement that Memphis rates were based on the Ar-

kansas rates, plus a bridge toll—that they were made that way—I found that the first class rate ran level across the chart———

Q. That is interstate?

A. Yes, sir.

That is, that the rate is seventy cents from Memphis to
3498 each of these twenty seven stations shown on this chart, which are seventy miles apart. That is, the most Northerly one is seventy miles from the Southern extremity of the route.

I found the Commission distance tariff beginning at sixty cents and mounting step by step until it reached seventy six cents, a fluctuation of sixteen cents.

Q. Owing to the distance?

A. Owing to the distance. It is graduated according to the distance. The rates are made in five mile graduates.

The rates published by the railroads from Memphis to these points, on first class, are absolutely level. That is, the seventy cent rate applies to the entire group.

The distance tariff rate, which I have compared with the Railroad interstate rate, is the rate from Bridge Junction, and would be, according to Mr. Watson's statement, the railroad's rate less the bridge toll. The bridge toll does not fluctuate. There is no distance element in it. It is an arbitrary toll. So that if the interstate rates published by the Railroads were based directly on this state rate, they also should fluctuate. As a matter of fact, the chart shows they do not.

The same is true of second class, which is absolutely level across the chart, on the interstate rate, and goes from fifty three to sixty eight cents in the standard distance tariff of state rates.

3499 On third class, the interstate rate goes 37 miles before it begins to climb, and then climbs, the last time thirty three miles, some six points; while the state rate begins at 45 cents and climbs in the direct relation to the first and second class state rates until it reaches 57 cents at the last station in the group.

The fourth class interstate rate runs 52 miles level before it begins to climb, although its predecessor, the third class rate, began to climb after thirty seven miles, and it ultimately climbs four cents; while the state fourth class rate, which is now, as it starts with the first station, a cent higher than the interstate fourth class, although the first, second and third class interstate rates begin on a higher level than similar state rates.

This state fourth class rate climbs all the way and is graduated according to distance, starting at thirty seven and reaching forty three.

Now, on Class A, which in these tariffs is higher than fifth class, and is therefore mentioned first, we find the interstate rate again absolutely level, although some rates between it and second class, which are absolutely level, have been graduated.

We find the state Class A rate graduated according to distance.

3500 The same is true of the interstate fifth class rate. It is level, while the state fifth class rate is graduated according to distance.

The state Class B rate is graduated almost exactly, relatively, to the other state rates, while the interstate Class B rate goes some 37 miles before it begins to rise.

3501 The state Class C rate is graduated, as is also the interstate Class C rate. There is some resemblance to the graduation on that one rate.

The same is true of the Class D, on the state, but not the interstate. It travels level for fifty-nine miles before it begins to rise.

The two Class E rates are most relatively graduated.

I should say that it is apparent there that there is no relation in that set of rates, between the state rate and interstate rate, for the reason that while the interstate in most instances is level—that is, is the same to the first station as to the last station in a group, the extremes of which are seventy miles apart, the state rate is graduated according to distance.

Now, as to the other phase of it, as to there being an internal relation between the interstate rates:

Something has been said here, for instance, that the fourth class should be a certain percentage of the first class, if rates were scientifically made—take these interstate rates: we found first-class absolutely level: second-class absolutely level; the third class graduated; the fourth class graduated; Class A absolutely level; fifth class absolutely level; Class B almost so, rising at the last two stations on the group.

3502 If there is a relation between the level rates, there certainly can be none between them and the graduated rates.

I am speaking from the chart—in this chart we have shown the names of the stations to which the rates applied.

Q. Have you carried any commodities on that chart?

A. Nothing but class rates on this chart. Down the side we have shown the rates per hundred pounds, in cents; each square across the chart represents a station; the graduations are shown in that way——

Q. I wish you would attach that chart as an exhibit.

The chart referred to is accordingly marked "Defendant's Exhibit C-1, T. A. Hamilton, 6/17/1910. M. J. C" and is in the words and figures following, to wit:

For Exhibit "C-1", see Volume 9, page 5853.

3503 Q. Have you made any comparisons of the relation to the St. Louis rates?

A. These are St. Louis rates that I have in this (indicating) chart. On the other chart we have shown only class rates and have shown the state and interstate rates on the same chart; that is, on the same page of the chart.

Here we have shown both class and commodity rates and have shown the interstate rates on one side and the state rates on the other.

The St. Louis rates, of course, are interstate rates, and are for the whole distance from St. Louis to these points in Arkansas indicated on the head of the chart.

For purposes of comparison, we have set against them state rates which apply for the distance that these interstate rates would cover, in the state of Arkansas. That is:

Here is the rate from St. Louis to Arkadelphia. The haul in Arkansas on that is 226 miles. Against that I have set over here (indicating on chart) the 226 mile distance tariff rate.

Inasmuch as the division of the rate is not in question, but only its relation, and further, inasmuch as the Iron Mountain in dividing the revenue derived from these St. Louis rates, divided on a track mile basis, the comparison holds good for any mile that the freight travels over.

3504 Q. Now, please explain what you have on that chart.

A. The first class rate from St. Louis to stations—from the asylum in Arkansas, which is the first station south of Little Rock, to and including Gum Springs, the first station south of Arkadelphia.

The first-class rate is $1.00 to all those stations from St. Louis.

Q. That is represented by a level line?

A. Yes, sir, and so marked on the chart.

The state rate for the same haul in Arkansas is set opposite that and graduates from 64 to 77 cents.

Q. Graduating according to distance?

A. Yes, sir.

The second-class rate from St. Louis to these points is eighty-five cents, to all of them—a level line across the chart.

The Distance Tariff state rate graduates.

The third-class rate, interstate, travels thirty-seven miles before it is graduated.

The third-class rate, state, closely follows the first and second-class rates, state, graduated all the way.

Mr. MOORE:

Q. You mean interstate?

A. No, the interstate does not. The state rate preserves, in a measure, the relation, but the interstate does not—two of them are flat and the next one is graduated on the interstate.

3505 The fourth-class interstate rate runs out a distance of 214 miles before it begins to rise.

The fourth-class state rate is graduated all the way, although not so markedly as its predecessors, the other three rates.

The fifth-class rate, interstate, is absoluely level.

The fifth-class rate, state, is graduated. Not as markedly as its predecessor, but graduated according to distance, nevertheless.

The Class A rate, interstate, parallels the fifth-class rate and is absolutely level.

The Class A rate, state, is graduated.

The Class B rate, interstate, does not begin to rise until it has traveled thirty-seven miles.

The Class B rate, state, is graduated in the first eight miles and goes up—that is, the first ten mile group.

The Class C rate, interstate, runs forty miles before it begins to graduate.

The Class C rate, state, is graduated exactly as is the Class B rate, beginning in the first ten miles.

These other rates speak for themselves and show that while a great many of the class and commodity rates, interstate, are blanket rates or level rates, the state rates are all graduated, preserving a closer internal relation between the various state class and commodity rates than there is preserved between the interstate, and lacking
3506 a proper internal relation of each, I fail to see how there can be any relation between the two sets of rates.

Judge HILL:

Q. Have you some commodity rates there?

A. The commodity rates are on agricultural implements, less than carload. That is an absolutely level rate, interstate. In fact, it is really the second-class rate, although it is published as a commodity rate. The same rate, state, is graduated exactly; that is, the second class rate follows it all the way, step by step.

Q. That is, a relation of a flat rate with a graduated rate?

A. Yes, sir.

The carload rate on agricultural implements, interstate, is graduated all the way, but the less than carload rate on these implements is a flat rate.

If the relation between carload and less than carload, interstate rate on implements, at the first station, was correct, then the relation at the last station is distorted, because there is not a level rate on the less than carload, while there is on the carload. To put that into figures:

The less than carload rate from St. Louis, on agricultural implements, say to Mabelvale, Arkansas, is eighty-five cents. The carload rate is thirty cents. Now we go to Arkadelphia and we find the less than carload rate still eighty-five cents, but the carload rate has gone from thirty to thirty-nine cents. In either one
3507 of those cases there is some distortion of relation.

Q. I expect there is a physical condition down there that makes the handling of carloads very much more expensive than less than carloads over that particular piece of track.

A. I should say that there was some commercial necessity for a lower carload rate to some of those points near Little Rock that there was further away. What it is, I do not know, but that may be the cause in the change of the relation.

Now, comparing carload and less than carload and showing that this tariff is not related, the same statement holds goods on "bagging and ties."

The carload rate is a level rate of nineteen cents to each of these twenty-seven stations, while the less than carload fluctuates from thirty-nine to forty-six cents.

If there is a definite relation, whatever it is, between that carload and less than carload "bagging and tie" rate, it is not apparent at just which of these two points that relation is.

Q. The parity has gone awry?

A. If it is there to begin with it is not there as you go down the line; or if it is there at the end, it was not there in the beginning.

Q. You don't know whether the parity belongs to the first or the last end——

A. No sir. We have a similar condition on the "canned
3508 goods," but in this case instead of it being the carload rate that is level, as in the case of the "bagging and ties" it is the less than carload; the carload fluctuates and disturbs the relation.

We have a level rate on salt, less than carload, the same to each of these stations, while the carload rate fluctuates, just as in the cases of others I have spoken of.

Now, in the state rates it is true that the implement rate, for instance, less than carload, is not graduated exactly as the carload is, but there is some graduation in both and they more nearly approach a relation of some character than the interstate rates do, because they — both graduated, while in the case of the interstate one is level and the other graduated. That is the point I had in mind. The lines on the chart speak for themselves.

Q. Will you attach that chart as Exhibit D-1? Are the numbers there?

A. Yes, the tariff numbers are quoted on each chart. I have the tariffs here. They were very kindly furnished by Mr. Perkins.

Q. Mr. Hamilton, summing up your investigation of the reflection of the cost of the service in the rates, I wish you would state what conclusions you have reached as to how rates are made, as the result of your experience before you began investigating these cases, and the result of your experience after going through these cases to which you have heretofore testified?

3509 A. Before doing that, I will attach this chart as an exhibit.

The chart last referred to is marked, "Defendant's Exhibit D-1, T. A. Hamilton, 6/17/10, M. J. C." and is in the words and figures as follows, to wit:

For Exhibit "D-1", see Volume 9, page 5855.

3510 A. Now, answering your last question, I would like to say in that connection, Judge Hill, that except in a perfunctory way, I have never been charged with the duty of making freight rates for promulgation to the public.

In my experience with the L. & N., I have been called upon in the daily exercise of my duties as a rate clerk and bill clerk, to make a great many rates on a combination basis, defeating published through rates.

I gave a great deal of thought and study to the rate conditions in that territory—southeastern territory—for a good many years. I had to do it to earn my bread and butter. I saw those rates in their daily application, covering practically all the territory east of the Mississippi River and south of the Ohio and Potomac Rivers, and

I do not believe that there is a more complex territory, from a rate-making or rate-applying standpoint, in the world.

Rates were made down there—or at least they appeared on their face to be made—so no sane man could understand the reasons for them. Certainly a great many of them were made without any relation to the cost of service. I would like to illustrate that just a little:

The Mississippi Valley tariffs to common points in the New Orleans group, carry from St. Louis a great many commodity rates.

For instance, the rate on soap from St. Louis to Mobile,
3511 was twenty-eight cents. The rate applied from the west bank of the river. The L. & N. paid the river transfer, as did all of its competitors, the Illinois Central, the Mobile and Ohio and the Southern Railway.

The rate to points directly north of Mobile, through which Mobile traffic would pass on its way from St. Louis, were almost double the Mobile rate.

The shippers here in St. Louis would secure what we called "combination rates." They had the privilege of shipping their stuff to Mobile at twenty-eight cents and shipping it back at the local rate, making a much cheaper rate than the local rate to any intermediate point. As I recall it, those rates reached clear back to Montgomery. That is, we could make a combination rate cheaper than the straight of way local as far back as Montgomery, and not only that, but when you made the combination on Mobile, you made a St. Louis rate which absorbed a transfer. Your local rate was an East St. Louis rate, which did not.

That is just one illustration of a great volume of rates that we made in that way.

I recall that we had a considerable movement of stoves into interior Georgia points, and we found that in the every day application of the rates we could make a cheaper rate by applying the rate
from St. Louis to Jacksonville, Florida, and the local rate
3512 back into the interior of Georgia, than the published straight rate to the interior point. That came about by the fact that the rate from St. Louis to Jacksonville is built on the rate from St. Louis to New York, plus the water rate down——

Mr. MOORE:

Q. Were those rates in force in 1907 and on these roads involved in this litigation?

A. I think that the Iron Mountain—in fact, I know that at that time the Iron Mountain was a party to the same Mississippi Valley and southeastern rates. The Mississippi Valley traffic of the Iron Mountain passed through Arkansas, but their southeastern stuff went largely through Belmont, Missouri, or Columbus, Kentucky. I know we used to compete with the Iron Mountain for traffic——

Q. When were those rates in force?

A. When I last handled them was in 1905. I was explaining my familiarity with the application of rates.

Q. You are stating facts here now in regard to rates. I do not think it is competent to state such facts as this— —

Mr. HILL: You had your witnesses stating their experience in Minnesota, Wisconsin, Canada and other places.

Mr. MOORE: But I did not have them stating details such as Mr. Hamilton is stating.

Mr. HILL: I want Mr. Hamilton to show he had some dealings with rates.

3513 Mr. MOORE: I have no objection to that, but he is going into detail as to what the rates were on these lines——

The MASTER: That is the only way to show his familiarity.

Mr. MOORE: I want to note my objection to his going into such details.

The MASTER: Very well.

The WITNESS: Another instance of making rates to meet the necessities of traffic, regardless of the cost of service, was a set of rates we had in another matter, East St. Louis to the Ohio River, on grain destined to the southeast.

We got grain delivered to us at East St. Louis that originated west of the Missouri River, as I recall it, and if it was properly reconsigned through the Southern Freight Committee—virtually a milling-in-transit arrangement, we hauled it to Evansville, Indiana, for one cent, and if it originated in Missouri locally we got four cents for the same haul. If it originated in an East St. Louis elevator with no indication or surrender of tonnage beyond St. Louis, we got 6½ cents for the same service.

We had what was known as a proportional rate on grain, which was the same as that. We had a connecting link between Henderson, Kentucky, across the river from Evansville and Louisville, which was much shorter than our own line through Guthrie——

3514 The MASTER: The witness is now stating what occurred two years before, in the actual operation of another road.

Mr. HILL: Just leave out the illustration and state, generally, your experience.

A. It was along those lines, the handling of rates, not the making of them, their practical application to the every day traffic, and applying that division of them between our line and other lines; work of that character. The building up of rates where we found that the fabric of our through rates could be defeated by combinations. It required quite a study; not only of the railroad I was with, but all of our competitors in that territory.

That lasted some five years, that actual every day experience in meeting these problems and applying them to the freight traffic of my employer, the railroad company.

I have listened with a great deal of interest to what has been said by the gentlemen in this case regarding rate-making and it coincides quite a little with my experience in applying rates, and I would like to summarize that with my best thought on the matter.

When a railroad traffic man states that the cost of service is considered in making rates, he undoubtedly has in mind the ideal con-

dition. But as a matter of fact, the basis of his rates, owing to the manner in which they are adjusted from time to time—patching a new rate on to the old—must necessarily be tradition and precedent, and it would be necessary for the origin of that tradi-
3515 tion and precedent to go back to the very genesis of railroad rate-making. Assuming that even at that time the first schedule of rates had a cost basis; that the road knew its costs and added a certain percentage of profit to that in making its freight rates—we would have to assume it knew its cost by actual commodties, but even that is doubtful, because the first railroads had to meet stage and wagon competition, as well as canal boat competition. Stages and canal-boats were there before we had any steam engines, and if they had to meet that competition they had to meet the cost ideas of the canal-boatman, the stage driver and the man who drove the freight wagon.

If that is the basis of the present rate fabric, and rates are made by readjusting and re-arranging, patching, extending and contracting existing rates, I feel that any traffic man will bear me out in my statement.

That does not seem to be cost foundation, to begin with. If a traffic man has any idea at all as to the cost of service, it must necessarily express itself to him in some specific terms—he must have a unit, a yardstick to measure by.

The freight service rendered by a railroad consists of the movement of weight over distance, and as a usual thing, he takes a ton, or a fraction of a ton, as his weight unit, and a mile as his distance unit, and from those two he secures the ton mile. That is,
3516 if he has any idea as to cost, it is ton mile cost, and unless special tests are made, he has no specific ton mile cost by commodities. He has the average cost. He has the total operating expenses of his road, or the division of his road, divided by the ton mile of all classes of traffic, silks and satins, baskets and bar iron, etc., as the case may be, and that is, under present day railroad statistics the only information he can have as to cost unless he makes a separate test as to the cost of each individual commodity on which he makes a rate.

Now, if we assume that the ton mile cost of transporting each individual commodity on a given line of railroad was known to the traffic manager of the road and he desired to make his rate based on that cost, plus his percentage of profit, it is a grave question how far he could go in that direction. Certainly, he could not go beyond the first junction where he met short line competition. He would have to meet his competitor there, and his cost ideas, or go out of business. He could not go beyond the first navigable stream where he would meet boat competition with rates made on a package basis in many instances, as in the case of many commodities between St. Louis and New Orleans, and St. Louis and Memphis.

The traffic manager's duty to his road is to build up the traffic of the road. That is what he is there for—to get something to put into the car, and to get out of the traffic all that he can, not only
3517 currently, in dollars and cents, but in future traffic.

He must foster the industries on his own line and protect

them in marketing their product. He must equalize not only local labor and raw material, supply conditions between industries on his own line, but protect them in their competition along those lines with industries on other lines. He must put them in the market if he wants to live, and if they want to live. If I may make the comment that would be excellent rate making to do that. That is what the railroad is there for, to handle traffic, to get traffic, and get out of it what you can. You have a plant there: make the fullest use of it. The fuller use you make of it the more you spread your overhead and fixed expenses. It would perhaps pay you to take stuff at what might be, in conjecture, an unremunerative rate, rather than run the empty car. The traffic man should preserve to the jobbing centers, their natural distributing territories. He aims to do that. Whether it is good public policy, I do not know. I am not competent to say, but from a railroad standpoint he aims to do that. He tries to protect them in their markets and considers their geographical location one to the other, not only with relation to the consuming points which they serve, but also as to the manufacturing centers that they draw their supplies from.

It is a great question whether a traffic man could solve all these problems and meet so many different conditions of operation
3518 and cost on other lines, and so many other traffic men's ideas of what rates are profitable, and still adhere to a basis of actual cost plus a percentage for profit.

Another thing we must consider is the question of reciprocal loading for his company's cars. He must endeavor to create traffic to reduce the empty car movement; and balance his tonnage movement as far as he can; keep his power balanced on the road and keep his empty cars filled.

To create traffic he must offer inducements to the shippers and his most potent inducement is a favorable rate, one that will open up new industries and produce traffic to fill up the empty cars.

As a matter of fact, a traffic man gets out of such traffic as high a rate as he can, but he must be satisfied with what the traffic will bear, or the industries will not open and his cars will come back empty.

This reciprocal traffic must be considered, too, in making rates on business in the opposite direction where the volume of traffic is, where the predominating traffic is, as the fewer empty cars you have to haul back, the less burden of that empty car movements cost your outbound traffic will have to bear.

Rates to and from large territorial zones are made by freight committees and tariff bureaus, for all the roads operating in the territory affected, and while each road has nominally a voice in making the rates so promulgated, still the views of all or the majority of
3519 those roads interested must be met and harmonized. If they did not do that they would not promulgate the rate.

Rates made in this way are applied by divers routes and the length of haul, and general operating conditions, I would say are seldom, if ever, the same on any two roads between any two given points. For instance, the rate from St. Louis to Kansas City, first class, has been for years and still is 60 cents:

The same rate applies, via the Alton, Wabash, Rock Island, Missouri Pacific, and even via the Burlington, via Hannibal—there is a difference in the mileage and in the way the roads are operated—that is the point I was trying to illustrate.

Surely rates made on the bureau plan are not based on the operating cost of any one railroad interested. Rates so made often operate to keep down rates to an intermediate and strictly local points where the conditions and cost of operation are entirely different. I can think at the present time of no better illustration of that than the trans-Missouri rate. Many rates on the Wabash, for instance, from St. Louis to points between St. Louis and Omaha, are absolutely dominated by the Omaha rate.

The interstate commerce Act prohibits the charging of a greater rate for the shorter haul than for the longer haul over the same road, in the same directions.

3520 The Omaha rate of 60 cents from St. Louis is based on the Hannibal, St. Joe rate—at least, so I am told, and in any event, it is the same as the St. Louis-Kansas City rate.

Combination rates are authorized by many railroads. That is, the through rate to a given point for a longer haul, plus the local rate back to an intermediate point makes a combination that is lower than the rate published direct to the intermediate point.

It is plainly apparent that the cost of service is not considered in making both these rates. It may be considered in making up one.

That sums up what I gathered from the situation and listening to the testimony of traffic men in this case.

Q. Those are the reasons, as you understand them, why there are other conditions and considerations than the cost of service that produce the rate factor?

A. Yes, sir.

Q. I believe you started with the assumption, or the theory that the rate did not represent the cost of the service, and you have given your reasons why it did not?

A. Yes, sir.

Q. Now, to go one step further: take the evidence that has been introduced in this case as to the rates—principally this which you have been developing—which it is apparent does not represent the cost of service in the instance given: I will ask you what is your opinion as an accountant, based upon the experience that

3521 you have had in the accounting problem, of using the revenue derived from these rates, or rather, these two sets of rates, interstate and intrastate rates, to measure the cost of operation of business, state and interstate?

A. I would say in that connection that I agree most heartily with Mr. Nay. As I heard him say in this case, the value of the revenue basis is predicated or is dependent entirely on the assumption that the rates are based on the cost of service.

I think that it is a plain proposition, and as a matter of plain logic, if your revenue is derived from rates which are not based on the cost of service, it is mathematically impossible to accurately divide those expenses on the basis of factors derived from that revenue. If there

is no relation between the revenue and cost, I cannot see how you can use the revenue to divide cost.

Q. In your experience as an accountant, have you known the revenue basis to be used as a method of ascertaining the cost of production?

A. No, sir, never.

My first acqauintance with the revenue basis for dividing operating cost or cost of production was in the Missouri rate case where it was presented by the railroads.

3522 Q. I call your attention to the further statement made by Mr. Nay, that the revenue theory was not only dependent upon the cost of service, but also dependent upon their being a proper relation of cost between the state rates and the interstate rates, and ask you, from your experience with the rate situation in Arkansas, whether there is such a relation in the state and interstate rates so that those could be used as the two yard sticks with which to measure the cost of service of that respective kind of business?

A. There may be rates published effective in Arkansas, which are built in that way, but they are few.

When you consider the whole rate fabric as I have found it in going through the company's way-bills, which are records of actual movements, as I have been illustrating from these lumber and other movements, considering it all, there is not any such thing. If there is, we have not been able to find it.

Q. Take, for instance, this: What relation could there be between the lumber moving interstate on these various tariffs that you have put into evidence and the lumber moving within the state on standard distance tariff?

A. I think I have made illustrations this afternoon to the effect that the further you haul the lumber the lower the rate you can get. I know the standard distance tariff increases the rate according to distance.

Q. That makes the relation or parity between those an impossibility.

3523 A. Yes, sir, that is a good instance of it.

Mr. HILL: That is all of the direct examination at this time, but I will reserve the right to recall Mr. Hamilton later, if necessary.

3524 CONWAY W. HILLMAN, a witness of lawful age, being duly produced, sworn and examined, testified on behalf of the defendant as follows:

Direct examination.

By Mr. HILL:

Q. State your name, age, residence and occupation?

A. Name, Conway W. Hillman; age 53; occupation Public Accountant and President of the Mutual Audit Company of Louisville, Kentucky; place of residence, Evanston, Illinois; place of business, Paul Jones Building, Louisville, Kentucky.

Q. How long have you been in the business of a public accountant, Mr. Hillman?

A. For about four and one-half years.

Q. Prior to your work as a public accountant in what business were you engaged?

A. I left college——

Q. Just give a brief biography of your work, if you please. I will not interrupt you but ask you to go on and state in your own way.

A. In 1873, graduating from Dickinson, at Carlisle.

I went to Lafayette College in Easton, Pennsylvania, and took a course in civil engineering, graduating from there in 1874.

3525 In the Fall and Winter of 1874 and Spring of 1875, I was engaged in engineering work on the Cumberland Valley Railroad, one of the Pennsylvania lines running southwest from Harrisburg, Pennsylvania, to Martinsburg, West Virginia, and also some engineering work for the Quincy, Alton and St. Louis railroad, then an independent line and now part of the Burlington system, I believe.

I then determined to enter the operating department of the railroad and went into the office at Carlisle, Pennsylvania, and acted as messenger in order to learn the business of telegraphing.

I then went to Harrisburg, Pa., as telegraph operator for the Cumberland Valley road, in 1876—the date, I believe, was the first of May. I served the Cumberland Valley Railroad in various positions, as ticket agent, freight clerk, scales clerk, yard clerk, agent and as assistant dispatcher stationed at Harrisburg, Pa.

I then went to Chambersburg, Pa., the headquarters of the road, and was the superintendent's clerk, transferred very shortly to the position of assistant dispatcher at Chambersburg, the headquarters of the road.

I retained that position until the Fall of 1880, when I resigned and took a position in the treasurer's office of the Northern Pacific Railroad, in New York City. My duties there were that of stock bookkeeper. I mean by that, keeping the record of the transfers of the capital stock of the road.

3526 Six months afterwards I was made transfer agent of the road and had charge of the transfers of both stocks and bonds.

I worked in various capacities in that office for seven years, when I was elected assistant treasurer of the Northern Pacific road, with headquarters in New York City.

In 1891 I was transferred from the New York office to the Chicago office of the Northern Pacific road, the Northern Pacific having then leased the Wisconsin Central and obtained control of the terminals in the city of Chicago, now principally known as the "Chicago Terminal Transfer Railway."

Their express business was transferred from St. Paul at the same time and placed under my charge.

I served the Northern Pacific in this capacity at Chicago until 1893, when they went into the hands of a Receiver.

I then served the Receiver for eighteen months, until 1895, when

the control of the road having passed into other hands, I left there and took the auditorship of the Metropolitan West Side Elevated Railway Company in Chicago, which is an electric road, and the first—or almost—of its kind in the country.

I devised its system of accounting and placed this system in consonance, as far as possible, with requirements of the Interstate Commerce Commission.

3527 In 1903, the management of this road changing, I left there.

I went back to the Rock Island road for a year—probably a few months longer than a year. I went to work in the Assistant Comptroller's office, under Mr. J. L. Kramer, who is now comptroller and vice-president of the C. H. & D. road of Cincinnati.

I had special charge in that road of the insurance matters, having been in that line when I was connected with the Northern Pacific.

I left there and attempted to establish myself as a public accountant.

After varying fortunes in this regard, I became connected with the firm of Baker-Vawter Company in their accounting department. These gentlemen have a large manufacturing interest in loose-leaf ledgers and labor saving devices, and incidentally to that they have found it necessary to establish an accounting department.

I stayed with them a year and four months and left them to take the position of Cost Accountant for the Indiana Audit Company, at Indianapolis, Indiana.

I left the Indiana Audit Company after 60 days, owing to the fact that the Company was, as I found, an insolvent concern. They are out of business now so there is no harm in mentioning this

3528 fact. That is the reason of my having left them.

I then established, in connection with Mr. William H. Gleason and some Indianapolis men. The Mutual Audit Company, the present incorporation.

At this time we obtained the work of the Kentucky Railroad Commission in their suit over the two cent rate and the reduction in freight rates and we found it desirable to move our headquarters to Louisville, Kentucky, where we have since remained.

From that time on I have been almost continuously in the railroad accounting business for various railroad commissions, the exception being about three months of an interval when this work not being active, I engaged in our other branch of business, the general accounting work.

Q. Mr. Hillman, what railroad commissions have you represented, if you have no objection to stating?

A. The Kentucky Railroad Commission, North Carolina, Alabama, Florida, Minnesota, Illinois and Ohio.

I have at present also been engaged (but have not yet done any active work) by the Commission of Indiana.

I was also called into consultation for a short time in the Missouri Rate Cases, but my work for them was merely advisory and in the nature of stating what we could do provided we could have the time

to obtain the necessary information. But as Missouri was unable to obtain this extra time we practically did nothing for them.

3529 Q. Your work has necessarily made you familiar, I presume, Mr. Hillman, with the "revenue theory," as it is commonly called, that has been adopted by the railroads in this case:

That is to say, they seek to divide the property devoted to state and interstate business on the basis of revenue received from each class of traffic and seek to divide the expenses of operation between each class of business—from the revenue received from each class of business:

I will ask you if you have given that theory any investigation and thought?

A. Yes, sir; I have.

Q. I wish you would state your views in regard to it.

A. I consider the earnings or the "revenue basis" as an illogical proposition.

I consider that it has been adopted in a number of cases and decisions rendered upon it because it was the only factor bearing upon that subject which had been presented to the courts, and necessarily the court, as I understand it, not creating its own factors, it was used. I, therefore, feel that in making this criticism I am not putting myself in antagonism with any decision of any United States court in making these criticisms.

3530 The first reason is that in the use of this factor, the earnings equalized the operating expenses; all matters are handled on the same percentages.

This leads to the second point, that an unjust rate, one which is producing too high an operating revenue, would be enabled to perpetuate itself by having assigned to itself a high operating cost, and the converse of that proposition, which is that a non-renumerative rate, one causing a loss, would also tend to perpetuate itself by having assigned to itself a low operating percentage.

Also, the contention on the part of carriers of the inadequacy of a rate and the contention on the part of the State of the unjustness of a rate, would necessarily in each case, be measured by the yard-stick that is in dispute, which is the earnings.

We can illustrate that, perhaps, by taking the comparison of roads having a longer mileage than other roads between certain points; that is, a road which is in competition for a large portion of its business with short line competitors. This road must necessarily spend more money in handling trains because it has a longer haul and, therefore increase the cost of what you might call the "haulage expenses" and it also must offer extra inducement in the way of equipment in order to obtain the traffic over its longer road, or it must have more expert traffic men solicitors who can obtain

3531 the business for them, even under these adverse conditions, and such men come high and must be paid higher salaries than the average run of trafficmen.

Yet, under this plan of the gross earning basis, the relative expenses on these two roads would be measured by the earnings and it alone.

This is quite forcibly illustrated in the Minneapolis and St. Louis road, which is one of the parties to the rate case in Minnesota.

This road is in competition with other roads for Chicago business. The route from the twin cities to Chicago is over the Minneapolis & St. Louis to Albert Lea; from Albert Lea to Chicago over the Illinois Central.

In handling the grain business from the west the Minneapolis & St. Louis, together with other roads, are compelled to grant a mill-in-transit privilege at the various mills along the road, principally those at Minneapolis.

The result is that on this rate the Minneapolis & St. Louis will take a carload of grain and haul it to Minneapolis at its local rate. If this car is destined to Chicago, or the product of this car after milling is destined to Chicago, the road is then compelled to haul this car from Minneapolis to Albert Lea, 113 miles, without receiving any compensation whatever, the entire proportion of that through rate going to the Illinois Central road. Therefore, on the carload
of grain passing locally from a point in Minnesota to Minne-
3532 apolis, the M. & St. L. will collect the full rate. On another
car going the same way, to Minneapolis, being milled in transit and then proceeding on its way to Chicago, they will obtain exactly the same rate, plus two dollars per car for the privilege of milling-in-transit.

As the expense of milling-in-transit amounts to something, the practical result is that the earnings on a car from the western part of southern Minnesota to Minneapolis, and the earnings on another car from the same point to Minneapolis and thence southward to Albert Lea,—a distance of 109 miles—are the same, while the expense of handling must necessarily be larger.

This condition of affairs is borne out by the analysis of the M. & St. L. accounts and is used by me as an illustration of the unfairness and inadequacy of the earnings basis for a division of expenses.

Where this method is used, as it is often used by railway companies for the division of expenses, first adding an arbitrary varying from 15 to even 100% as an extra charge, or an extra cost of carrying intrastate freight over interstate freight, this inadequacy and unjustness of the earnings method is accentuated.

The usual method of applying that is to consider that it costs 15% more of the gross earnings to do one class of business than the other,
regardless of how those gross earnings may be made up,
3533 whether on a ratio of intra, two and inter, one; or whether
that ratio is intra-1¼ and inter-1.

To the earnings, intra, will be added the arbitrary percentage of 15% or more. To that result will be added the entire earnings and a repercentage taken of the total, and that repercentage is used in the case of this arbitrary addition of the amount which we assume to be 15%, as the percentage of expenses which should be charged to intrastate.

This is the method adopted by the Chicago & Northwestern Railway Company in their exhibits, in the case against the state of South Dakota.

Q. Mr. Hillman, you are stating the matter too modestly for the railroads in this case: they charge from one to four hundred percent on the freight and 25 to 50% on the passenger, intrastate, extra expenses.

A. I left a little margin. I said "15 per cent or more."

Q. It is the "more" proposition we are up against here. Did you finish?

A. I have finished concerning the expenses. I believe your question, if I recollect it correctly, also asked concerning the apportionment of the property——

Q. Before you go into that, I want to ask you a question on the subject of expenses:

Has your attention been called to a claim of a parity or relation between the rates, state and interstate as affording a mean by
3534 which the two classes of traffic could be measured, the revenue produced from these rates? Have you made any investigation as to that phase of the question?

A. I have given no investigation to that phase of the question, personally. Of course, in the hearings where I have been, that matter has been up, more or less, and has been discussed, and I will say here, very much in the same manner of the showing of Mr. Hamilton yesterday on the stand.

As an illustration, in showing graphically the rates which were in existence on railroads and which were proposed by the Minnesota Commission, I had made a graphic representation of those, using first class only, to show how they would work out. I had not presented it in the Minnesota case, but it was referred to in that by me in my testimony.

Q. Is there any such relation between them, so far as your investigation as an accountant went——

A. No, sir; I should say there was not.

Q. This chart that Mr. Hamilton exhibited as showing the non-relation of the two, is in conformity to investigations you have made along the same line?

A. As I said, my investigations in that line have been quite limited. It is in conformity to other testimony which has been given and in which I was an auditor—or rather, a listener.

3535 Mr. Moore: Do you think that is competent evidence to bring into this case, testimony of what Mr. Hillman has heard in other cases?

Mr. Hill: No, not testimony, but information which he has gathered from the testimony.

The Master: He refers to that as being the foundation, the source of his knowledge.

Mr. Moore: Very well; if you take it that way.

Mr. Hill: I am not seeking to introduce testimony given in any other case——

The Master: No; but the source of knowledge.

Mr. HILL:

Q. I wish you would express your opinion, as you started a few moments ago to do, about the division of property the reveuue basis, and what in your opinion would be a proper basis on which to divide it.

A. In the division of property I do not consider that the revenue basis is the proper one to show the amount of the property used in the transaction of the different classes of business.

I do consider that the expense basis is the proper basis for the division of the property.

The reason for that is, that in making up the expenses which go against the different classes of business, I, in my methods, have used those factors which reflect the use of the property. I have used the tons, ton miles and train costs, under the varying conditions of local and through.

3536 I have used passengers and passenger miles.

I have used the terminal expenses and endeavored in each case to use the factor which expressed the use of the property, the result being that when the operating expenses were assigned between the different classes of business, intrastate and interstate, passenger and freight, that those expenses reflected the use factors and therefore the property which was in use by the railroad company. However the value of that property may be determined as an entity is reflected by the expenses and by that factor only.

Q. Mr. Hillman, have you read any authority that represents your views upon this subject of the revenue basis, that you can endorse as a correct statement of it?

A. Yes, sir.

Mr. MOORE: I object to the question.

Mr. HILL: We have read into the record on both sides authorities to support opinions. Mr. McPherson commenced it by reading a good many statistics and statements from well known authors. There are several instances where you have done it and we have done it.

Mr. MOORE: That is all very well as to statistics, but not as to authors. The authors themselves are more competent witnesses as to their views. I could cross-examine the authors but I could not cross examine——

Mr. HILL: Both of us put in Noyes' work—I don't remember the name of it.

3537 The MASTER: That was not objected to. I think this would be incompetent in this connection.

Mr. HILL: What we want to read into the record is an opinion that Mr. Hillman called my attention to, what he says reflects his views on this subject, delivered by Judge Farrington, as an analysis of the figures practically as Mr. Hillman has analyzed the figures here, and it seems to me that it is very competent for a matter of that kind to go into the record in support of his views.

The MASTER: I do not think there would be any objection to his stating simply that he had read an opinion of Judge Farrington sup-

porting his views. Go that far with it, but I would not read the opinion into the record.

Mr. HILL:

Q. Is this the opinion you have in mind—I will give the page number here—the Southern Pacific vs. Biatine, 170 Federal Reporter, page 725?

A. Yes, sir.

Q. Mr. Hillman, having given your reasons for discarding the revenue basis or theory of dividing expenses between state and interstate, I would like for you to state, without going into detail, the general principles upon which, from the standpoint of an accountant—by that I mean a practical railroad accountant—that such division should be made?

3538 A. The general principles, as I have stated are to use those factors which show the use of property. I have taken each operating account, 108 of them I believe, and have assigned each of those operating accounts upon the use basis between the inter and the intra—do you want the detail?

Q. No, first the general principle, and then we will go into the detail a little later. I want the underlying principle for doing that.

A. The underlying principle is that when an expense is intrastate, it is incurred for a certain purpose. That purpose necessarily is reflected by some portion of the railroad by the movement of a train, by the movement of a switch engine, by the work of the men on the platforms, in freight; the work of the men across the ticket window in the passenger; the agents' general work of way-billing, ticket reports; the telegraph man; dispatching; the operation of signals; repairs to the track; the maintenance of equipment, and each one of those is undertaken according to the work which is on hand, interstate or intrastate, and is measured by a certain factor which shows the relation of the inter and intra business accomplished under that special heading, and, therefore, it is divisible upon some factor which represents it, which factor we have taken in detail with each account.

Q. In other words, you would not use any one factor to determine the whole division, but use each appropriate factor for what you consider the appropriate sub-division?

3539 Yes, sir.

Q. And work it out in detail in that way?

A. Yes, sir.

Q. Have you gone over the accounts filed by the State's accountants in this case; if so, I will ask you if those accounts recognize these underlying principles which you have just referred to and are made in conformity therewith?

A. Yes, sir, they do. They have taken into account the use of the property by the different classes of traffic which passed over, and while I do not arrive at my results exactly by the same route that these gentlemen have taken I have, in the very short time which was at my disposal and the very limited amount of information which I had, roughly figured over the matter in this St. Louis Iron Mountain & Southern matter (which is shown on Exhibit "I-O")

and have roughly arrived at a result which adds $30,000 to the intrastate expenses as figured by the accountants of the state.

I will say that this amount, of course, might vary if I should work into the details of the account, but on this rough figuring basis I should say that I would increase their expenses not to exceed $30,000, intra, for freight business, I should say. On the passenger business it would be practically a parity with their figures.

Q. On the whole, that would be an inconsequential matter, in the matter of percentage in making the calculation?

3540 I should judge it would make a difference of about probably one per cent in the return which they have figured on the property. It might be less than that, but I should judge, just thinking it over, that it would make about that difference.

Q. As I understand you, you in your work along this line and the state's accountants here have followed the same principle:

You have worked yours on a different detail from which they have, but they would reach the same result, with that difference you have referred to?

A. Yes, sir.

Q. I want to take up some of this detail: take the first account there—in the first place, I will say that in the first division the accountants just took the railroad company division of freight and passenger on a train mile, accepted their division and commenced their work after that, and then divided between the local and through: take "freight trains" and take "Maintenance of way and structures"; and car miles—what use is made by railroad companies of car miles as a factor?

A. In apportioning the divisions of the maintenance of joint tracks, yards and terminals, and very frequently in apportioning the operation of joint yards and the operation of joint tracks, what is called the "wheelage" basis is used.

3541 They count the number of wheels. By that, I mean the number of cars, in and out of the station.

The reason that "Wheelage" was used is that it is one of the relics of old railroading, when they had four wheel dump cars against the eight wheel trucks; and we had some six wheel cars; so we got to counting "wheels" instead of cars. Now that is obsolete. We count cars but the old nomenclature of "wheelage" still hangs to the division.

Q. The car is the modern use of the same principle, is it?

A. Yes, sir.

Q. Is that an accepted basis among accounting officials of railroads for such work as this as it was used here?

A. Yes, sir, I should say, generally, that that is the basis upon which the joint maintenance is divided. There may be some exceptions to those, but that is the general principle.

Q. I am speaking of the general principle: did you mention leased tracks from one road to another as one of the places where this factor is used?

A. No, sir, only where the tracks are in joint use. The lease would be upon a track contract between the roads as to valuation,

and other matters, but where it is in joint use these expenses would be divided upon the wheelage basis.

Q. Now, Mr. Hillman, I wish you would take up this "Maintenance of equipment": that seems to be the proposition that
3542 our friends on the other side are criticising very much. I would be very glad to have you go through that with some detail.

A. On this "Maintenance of equipment" I find that the accountants for the state have first taken the expenses and divided them between yard, local trains and through trains.

This method of handling it altogether, with their percentages which they have added to each of these, is, to be a little trite, a "new one on me."

I had made the division of those accounts recognizing the switching but dividing the switching in the freight on the basis of the handling, counting it on the tons.

I had divided the rest of the expenses which are the road expenses, on the basis of the ton miles. I was anxious to see how that would pan out here and with the information I have, I ran that up. I find they charge on this basis to intra, in the neighborhood of $76,000 for those "maintenance of equipment" items, included in locomotives and car repairs.

In my basis it amounts to a trifle over $73,000.

Q. A difference of how much?

A. A difference of $3,000, or approximately 5%, between the two methods.

Q. Our accountants were——

A. Your accountants' figures were higher than those that I would have placed had I been making the division.

I was very anxious to see how this would come out, as it
3543 struck me that they had allowed very liberally for the extra expense incurred by the damage done by yard locomotives to the equipment in the switching process. They have made a further allowance for extra switching done by locomotives on local trains, amounting to 75%. This is quite heavy, and in my opinion, it is a very liberal allowance to this factor.

Q. It is in evidence here that they attempted to take the maximum on all of these allowances that are shown in this head, and I will ask you if in your judgment that is true, that they were high enough to be the maximum for these various items?

A. Yes, sir. I should say they are. I would further say that I have considered in the matter of allowing the switching, in my own division, upon the ton basis, that I was giving an allowance to the contentions of the railway Companies, and I have always felt in doing that that I wanted to place my figures beyond criticism and have therefore made that allowance on the ton basis. In doing so, of course, we ignore to a great extent the fact of switching of interstate tons at terminals, in making that division, but I think it is the best factor that we can get, unless we absolutely take the cars and their loading, which are switched at a terminal, and then apply that switching over the average length of haul, the ton mile basis,

which would be almost an impossible work to pick out after you have gone over an account. It could be kept at the time.

3544 Q. In other words, it would be reducing it to an exactitude that the effort would not justify?

A. I don't think it would justify it.

Q. Take this proposition on "Maintenance of Equipment":

I believe you say that you use the same principles in arriving at it, but you follow a different detail:

Is this a sound proposition, the way they followed it—not whether it is the soundest or best—but is it a good accounting proposition the way it is handled?

A. Yes, sir, it is.

Q. By "accountant" I am always referring to railroad accounting, Mr. Hillman.

A. I understand.

Q. I am not certain, but I believe you referred to that 50% extra switching of local engines: did you refer to that when you were referring to these others or not?

A. Yes, sir, I did. I referred to the allowance of 50% and I understood that that was a maximum allowance. The only factor that I have to check to see if that is proper or not would be taking the time of a local train covering the same distance as the time of a through train on the road.

I find, looking casually at it, on the Arkansas Division, that the average of the through train runs there is a trifle over eight hours on the schedule time.

That the length of the local run over the same division is

3545 10 hours and 15 minutes, which is practically an addition of 25% to the time of the through train.

Supposing, of course, that those trains as a general proposition make their schedule time, or their relative schedule time, it would be the proposition that the entire extra time consumed by switching along the line, which the local freight does and not the through, would be 25%.

Q. They have allowed 50%?

A. Yes, sir.

Q. You got those matters from the official time card of the Iron Mountain Road?

A. Yes, sir, from the official time card.

Q. That should represent the judgment of the man who arranged the time card as to what should be done, should it not, Mr. Hillman?

A. Yes, sir, and would represent to a certain extent what is done on the road, as a superintendent making up his time cards would not keep a time card in force wherein the train could not make its schedule. It requires too much work and entails too much expense, and you would naturally suppose that that had been the result of operating conditions as judged by the superintendent of that division.

Q. Now, I would like to call your attention to sub-division (C) there, under this "Maintenance of equipment, which is called "Supervision and General":

They are divided between local and through service on the
3546 basis of the direct charges for "Maintenance of equipment," and ask you what you think of that principle?

A. It is the correct principle. That is, that the superintendence in any block of accounts such as "Maintenance of way and structure"; "Maintenance of equipment"; "Traffic expenses"; "Transportation expenses", should be divided upon the basis of the other expenses which had been incurred in that division.

To this superintendence would be added such items as "Stationery and printing" and other expenses.

Under the block of "Transportation expenses" such items as superintendence; repairs of track tools and machinery; other maintenance of way and structure expense; stationery and printing; and injury to persons.

Under the block of accounts "Maintenance of way and structures"——

Q. I do not care so much about the detail of that.

A. They should be divided upon the basis of all the other accounts in that division which we have been able either to allocate directly to the account or divide between the different accounts on an approved——

Q. That is the principle which you have applied?

A. Yes, sir.

Q. I understand that these matters that you have enumerated are all there, so there is no difference in the detail?

A. No, sir.

3547 Q. I would like you to explain that. That is used here in all of these applications and is also used in the—I believe it is the fifth sub-division, the "General expenses"?

A. The same principle is applied to the block of accounts called "General expenses" for the reason that the duties of those officials and their assistants whose expenses are mentioned in that block of accounts, are to supervise and run the expenses which have been incurred up to that point, and therefore they are divided properly upon the expenses which have been brought from the other four blocks.

Q. Is that a recognized accounting proposition?

A. It is not, no, sir, generally recognized by railroad acountants. They still adhere to the arcade train mile basis.

Q. How is it in business and other enterprises?

A. That is understood in cost accounting that the overhead should be applied upon the basis of actual expenses incurred.

Q. Among what accountants is this principle usually and generally applied, Mr. Hillman?

A. The cost accountants, although there is a notable exception to what I mention, concerning railroads using it, which has just been filed in the Alabama case, or the L. & N. Railroad against the state of Alabama, where the principle of the division of these general accounts on the basis of the allocated or divided accounts has been applied in that case by Mr. Colson, the assistant comptroller of that system.

3548 Q. Then the railroads seem to be getting away from the prehistoric method of handling that?

A. (No answer).

Q. Now, take No. 3 "Traffic expenses":

You see there that these have been divided on a straight revenue basis although it is stated they are of the opinion that this unduly burdens the intrastate business:

I wish you would express your views as to a proper method of division of "Traffic expenses."

A. If I express my views, I would read exactly from this paper, which I happen to have before me.

Q. You mean the state's exhibit?

A. Yes, sir.

We have a set of expenses here for which we have no basis of division, unless a cost accounting method is introduced right into the traffic department and tab kept on the time that the men put in on interstate and intrastate work, and having no other basis for that, we are practically driven to the basis of dividing it upon the gross earnings.

I endeavored to get away from the gross earning basis where I can, but there is one case where I see nothing else but to use it, and certainly we are doing no injustice to the contention of the common carriers, the railroad companies, when we use that basis of division of the accounts.

Q. What are your reasons for making that statement, Mr. Hillman? Will you please explain the matter.

3549 A. A very large proportion of the intrastate business comes to the road without solicitation, or without being hunted for. The duties of the traffic department are to go out and obtain traffic for the Transportation department, to handle, and for the production of revenue.

In that, they go into competition with other lines, much more extensively in the interstate business than in the intrastate business for the reason that I have just stated that a very much larger percentage of intrastate business naturally falls to the road than does interstate business. For instance, in the case of outside agencies, they are maintained outside of the building which is attached to the track, you might say, and as a general thing, the roads have a large force even at points their lines don't reach; the roads maintain in all the eastern cities, large forces to obtain this traffic for them, and for that reason, I have stated that these expenses when divided upon the revenue basis, are unduly burdening the intrastate expense.

Q. Take the next item, four, transportation, the first item there is the station expenses; I will ask you what you think of the division that has been made there of the station expenses.

A. The station expenses as divided here, have been divided on the basis of two and one,—two to one, against the interstate; that is, the intrastate has been taken as two, and the interstate as one, re-percented and upon that basis, the division of station expense has been made. Where I have not had any other factor to go on, I

3550 have used this basis always, in dividing this expense.

Q. That uses the ton as a factor, I believe?

A. Yes, sir.

Q. Is that a proper factor there?

A. Yes, sir, that would be the proper factor for station expenses. I have at times gone into further detail upon this point, in order to determine how much of this expense was due to interstate and intrastate.

In one case, I went over the freight records, consisting of agents' abstracts principally, supplemented where necessary by the waybills, and made a calculation as to how many times——

Mr. MOORE: I object to the statement of the results of an investigation on another line of railroad; I understand Mr. Hillman is going to state now the results of an investigation upon another line of road.

The MASTER: I don't think it would be competent, except as a source of general information.

Mr. MOORE: I mean the result of it, that is what I object to.

Mr. HILL: Mr. Moore put into evidence at Chicago a lot of investigations made out in Iowa, Minnesota and other places, to re-inforce the judgment of his witnesses about the case.

3551 Mr. MOORE: I was taking the testimony of operating men, to show what their views were upon their experience.

Mr. HILL: They were making tests just like this gentleman was, to find out the truth about it.

The MASTER: Just keep within the lines of your experience and knowledge, what you have found out in those investigations is a matter of experience, and do not give the results.

A. I took the handlings of the less than carload lots, and upon the result of that investigation, I divided what is called our station labor, consisting of, as far as the freight portion of it goes, the freight handlers, for, as you may know, very little of the carload lots are handled by the employees of the railroad company. There was exceptions, of course, but those exceptions are not great and can be ignored, and I took these for the absolute number of times that the labor would have to handle this freight. I made the division on that basis for two of these roads, and from the result of those investigations, I would not——

Mr. MOORE: That is what I object to.

A. I am not going to tell the results, I don't know whether it is competent or not, that is what I am going to see; from the results of those investigations, I would not hesitate to indorse

3552 the method which has been followed here in the division of station expenses, with the statement which I have already made, that where I do not have that detail, I have followed that method myself in dividing the station expenses.

Q. That next item is yard and terminal expenses, divided between local and through business on the basis of the number of cars handled at terminals; are you familiar with that method and that factor of reaching that item of expense?

A. Yes, sir. I have not always gone into that detail. I am doing it now in one case that I have on hand, but I have not always gone into that detail where I have not had that factor; I have divided that, as I stated before, upon the ton basis.

Q. Which is the nearest factor, in your judgment?

A. The handling of cars at terminal stations, switching at stations, is undoubtedly the factor to be taken into consideration.

Q. When you cannot get that, you take the next best, as you have in some instances?

A. It really is not necessary to go into that much detail.

Q. The next item here is fuel and expenses; that matter was handled in this way, on the Iron Mountain; they took the fuel that was ascertained by a test made by the Cotton Belt Railroad, and the gentleman who had been general manager of both railroads,
3553 said that the fuel conditions should be practically the same upon those, and they have applied the factors obtained in the Cotton Belt test to the Iron Mountain in the absence of any data from which they could get the actual fuel consumption. What is your opinion of the proper way to divide that expense, or the way it has been divided?

A. The way that it has been divided seems to me to be proper. Of course, it depends to a certain extent, upon whether the conditions between the two roads were on an equality; if there is testimony to that effect on file, it should receive its confirmation, as far as that test only goes to confirm it.

Q. If you were confronted with a statement made by a witness introduced by the carriers, who had been general manager of both of the railroads in controversy, that that was a fact, would you feel justified in using his figures?

Question objection to and not pressed.

A. I would say further, that in the absence of the testimony of the character of which I have spoken, I have taken that consumption of fuel on the straight engine mile basis, as between the local and the through trains; I mean by that, when I have not that percentage available, I have taken it on the straight engine mile basis.

Q. The next item is engine house expenses, road; which are divided between local and through, on the basis of engine
3554 miles of each class of service, during a given month, where the test was made; there was an allowance, however, made of 12% more engine house service per engine mile on the local than the through, owing to the difference in the mileage; what would you say of that factor of dividing that item of expense?

A. Engine house expenses depend upon the engines using the facilities; necessarily, if the run, or presumably if the run of the local train was 12% shorter than the other, they would use that facility so much more than the other, and therefore, I would say that in the absence of absolute accounting of the engines using the facility that the factor which has been used here is correct.

Q. Loss and damage, that is an ascertainable quantity, and was

ascertained in this case, so there is no matter for discussion there; you recognize that as an ascertainable quantity?

A. Yes, sir, to use the phrase coined by Mr. Plant, comptroller of the Southern Railway, that is a question that is capable of allocation.

Q. That was allocated here. I want to call your attention to the exhibit, Division 7, this work has been done on a division between local and through expenses, and then the ton mile state and interstate taken care of on each respective train, and the division between state and interstate arrived at on that basis.

I will ask you your opinion of that, as to whether that is a sound method of ascertaining the state and interstate result, after
3555 working it out through the local and through train?

A. That is the method which is in vogue upon all roads, in determining this expense, and going upon the subdivision which the accountants for the state have done, I would say that if there is no discrimination in the handling of traffic upon the part of the railroad companies; that is the correct method; I mean by discrimination, it is a possible thing for all state business to be regulated as far as possible, to a local train, although it might be entitled by its length of haul, extending over an entire operating division, to a through movement, or the converse might be true, that interstate freight might be regulated to a local train; in other words, they might fill up their local trains with either inter or intra exclusively, to fill up the train to its capacity exclusively, when really it should be upon an apportioned basis, but that would require, to my mind, too much handling in examination, and I would therefore say, that I consider this method which is taken here, which shows the absolute facts which existed, and the method that it was handled, as sufficiently accurate for the determination of that matter.

Q. I will state as a matter of information, that witnesses both for the carriers and the State in this case, have testified that
3556 state and interstate freight has been carried indiscriminately, and handled indiscriminately, upon cars and upon trains; that is an established fact in this record, of the traffic conditions in Arkansas; there is no such thing as separation between state and interstate cars or state and interstate trains.

In view of that established fact then, what would you say of this division?

A. Considering that a fact, the method employed in Exhibit 7 is correct.

Q. There has been a great deal of testimony in this case, directed to an attack upon the ton mile basis of division of expense between state and interstate; I presume you are familiar with what is commonly called the ton mile or flat ton mile division of expenses between state and interstate, and I will ask if this division here, between local and through trains to reach the state and interstate, is subject to the objections that you are doubless familiar with, that have been urged against the flat ton mile as a division between state and interstate?

A. No, sir, I should say not, for the reason, that in this number

7, on these train expenses, these train expenses are incurred in making the train mile, and while the train mile is not a proper factor for a large part of the expenses, it certainly is the factor for these expenses, which consist of the train movement.

3557 Q. It is the proper factor to use at this particular division; the other factors have been taken care of before they reach this point?

A. Yes, sir, we have not used this ton mile in dividing all our expenses; the criticism on the ton mile basis is where we use that as the basis for all expenses, not for the expenses to which the ton mile properly applies; you could criticize the general use of a factor, and yet its use in a special case would be perfectly proper, while its use in a general case would not be.

Q. What do you say as to the general use of the revenue factor all the way through?

A. I have expressed my opinion on that subject.

Q. I wish you would turn to the passenger side of this exhibit, and without going into detail, just express generally what you think is the proper basis of dividing passenger expenses?

A. As a general proposition, all items on the passenger list—those that pertain directly to the train movement, are divisible upon the passenger mile; those which pertain to the station expenses,—I mean by that, the handling of those passengers before they get on the train, are divisible upon a passenger basis and not a passenger mile basis.

In making that passenger basis, we must also recognize the fact that there are two terminals on an intra passenger, and one

3558 terminal to the inter passengers.

We also should recognize the fact, that as a general proposition, an inter passenger requires more attention for his one service than does the intra for his one service.

I have therefore taken, almost invariably, the position taken here, as regards station expenses, that they accrued on intra passengers in passenger miles, intra passengers, t-o, and inter passengers at one.

Q. You used the passenger as a unit where you used the ton as a unit before?

A. Yes, sir. There is a slight exception to this, but the amount is so small that it can be considered a neglible quantity; that is there is a switching movement of passenger trains; that switching is for the train itself, not for the passenger, and when you have switched the train at a terminal, you have undergone an expense which prepares that train for its run over the entire mileage made by the train, and as such, that expense of switching should be divided upon the passenger mile basis, as preparing the train for that, there is a slight difference between that and the ton handling; if you will think of the inertness of the ton as against the activity of the passenger, you will see the reason why we leave the

3559 freight on the ton mile basis, and extend the passenger mile basis to cover the switching in the passenger business.

Q. I call your attention here to the division of the train between the coach, Pullman, mail, express and baggage, without going into

detail, you are familiar with the way that has been divided in this case?

A. Yes, sir.

Q. I will ask your opinion of that?

A. That is the refinement of the case that I have never gone into, but it is a basis which is correct, provided the information upon which the space in the cars which are used for joint mail, express and baggage is correct, the basis taken here is a correct basis for setting up those expenses.

Q. As I recall the testimony, information was obtained from the contracts with the express company and the contracts with the Government for the mail, as to the space allotted to each; of course, you know nothing of that, and have to assume that is correct information.

A. I want to add here, that I have never in my handling of these questions, set up mail and express cost. I have proceeded on a different method which gives, however, practically the same result, if you will think of it for a moment; and that is, I have taken the earnings which accrued from these various operations of the
3560 passenger department, and allowed the through expenses to remain in with the other passenger expenses, but apportioned the earnings upon the basis of the passenger expenses already determined. That amounts to the same thing as we have here.

Q. As a principle of accounting, what would you say of the division that has been worked out here?

A. As a principle of accounting, the divisions that have been worked out here, have been worked out on a basis that is fair and reasonable.

Cross-examination.

By Mr. MOORE:

Q. What do you mean by determining these questions on principles of accounting?

A. That would mean the correctness of applying the factors of use which we have added to the expenses.

Q. Isn't that a matter though, that depends in the first instance, upon the manner in which the business is conducted, and the uses that is made of the various instruments that are engaged in the transportation of freight as well as passengers, rather than upon the method of accounting, isn't that the underlying thing?

A. Certainly, and only as accounting is based upon those underlying principles, is it correct as an accounting proposition.

Q. In other words, an accountant, in order that the
3561 methods he adopts may reflect the result correctly, say in this case, the divisions to be made, he must first get the business on that basis, and that basis must be the actual operations of various accounts involved in the handling of traffic, and when I say that, I am including instruments of transportation, cars, and equipment, that is correct, isn't it?

A. Yes, sir, he must apply to his basis of accounting, the factors of use; otherwise, it is not a correct proposition.

Q. In other words, the system and method of accounting is simply the application of the facts, so to speak, which characterize the service, and the different varieties of service, in the division of the expenses or the earnings, as the case may be?

A. Yes, sir, it is the proper recording of those factors which you have mentioned.

Q. What is included under the division of passenger expenses in the exhibits to which your attention has been called, what is included under the third item there, traffic expenses, what character of expenses is included in that?

A. The expense of the superintendence of traffic, the outside agencies, the traffic associations, and the necessary stationery, printing and so on, that go with those.

Q. Now, what connection has that service, and what benefit
3562 accrues from that service to the mails carried on the trains?

A. The traffic manager, in all probability, would be called into consultation as to the making of those contracts with the Government, and as to the usual triennial checking of the amount of mail carried over the road; he would have something to do with that.

Q. Are not the terms of those contracts prescribed by the Government, and are not modifications in them governed by certain rules prescribed by the Government?

A. Yes, sir, but nevertheless, he would have something to do with that; at each checking and at each contract letting, they are the subject of more or less correspondence and controversy between railroad officials and the Government, or sometimes they are the subject of competition between different roads, to obtain the contract from the Government, and there the traffic manager would have something to do with it.

Q. The great bulk of that traffic expense is advertising and travelling and getting up matters of that kind, isn't it? I say, the great bulk of traffic expense, is in travelling, advertising, and matters of that sort, and in maintaining agencies in other states?

A. Yes, sir, in obtaining traffic.

Q. The consultations which you say the traffic officials may be called into, would be a very small proportion of the expense, wouldn't it?

3563 A. Yes, sir, it probably would not require as extensive an outlay of time on the part of the traffic manager as the other business would; either in proportion to the return which he would get on it, and it would have very little to do—about the same to do, with the clerical effort of his force.

Q. When they have a regular traffic organization on a railroad, aren't those consultations and correspondence handled rather with the operating officials, the manager of the road and the executive officials?

A. It is very hard to draw the line where the general manager and the traffic manager's duties end and commence; the traffic manager would not be justified in making a contract with the Government of mail, or with an express company for express, without consultation with his general manager; there is no question about that.

On the other hand, the general manager would not be justified in taking the matter in his own hands, without consultation of his traffic men.

Mr. HILL: I think your question assumes a fact that is not in evidence here; I understand their mail department is under general expenses.

Mr. MOORE:

Q. Isn't that service, making contracts, and the matters you mentioned in your last answer, in charge of the mail agent who
3564 represents the railroad company in making all contracts with the Government?

A. That is possible, that might be done.

Q. Isn't that expense carried in another branch of the service?

A. I should think not.

Q. Is that included in traffic expenses?

A. Yes, sir.

Q. You base your impression you have given here, upon the assumption that that is charged in the traffic expenses, and not in other accounts?

A. I believe, since you speak of it, the superintendent of mail is under the general officers.

Q. That being the case, what do you think about the propriety of charging part of that to mail?

A. How is that?

Q. Charging part of that expense to mail, charging 11.63% of the traffic expense to mail?

A. I don't see any particular objection to it, excepting that as I stated, in that amount there might be some difference in the amount of work which that man did under the mail contracts.

Q. You say there might be, but assuming now, and taking it from the standpoint of the orderly methodical conduct of the business of a railroad, and the division of the duties among the different departments and different officials, what would you say about it?

3565 A. In that matter, the division of those expenses, it is possible that there may be too much percentage charged in there, in that special case, to the mail department, of the traffic expense, but if it leaves the traffic expense here, it will go under the item on the next page of supervision in general, upon which the percentage is 10.95 as against 11.63 here, a difference of seven tenths of one per cent, in whatever amount you would transfer from one to the other; I should think it would be a matter that would be inappreciable and negligible, as there are really some duties in connection with the mail that are correctly charged to the traffic department.

Q. Assuming that all matters in connection with the mail is under a separate department, the mail department, that the expense of that department is charged to general expense, would you say it was proper under those conditions, to charge any part of the traffic expense to the mail?

A. No, sir, not under that supposition.

Q. What service is rendered by the agents of the Company in the traffic department to the superintendence of the business?

A. That comes under the traffic official to a greater extent than does the mail.

Q. What service is rendered by traffic officials in connection with the handling of express matter on the railroad, assuming that
3566 the expense business of the railroad is conducted by an entirely different and distinct corporation and is not under the control and is not conducted by the railroad company?

A. There are questions constantly arising between the express company and railroad company, which are referred to the traffic officer for adjustment. As those matters come up, they are taken and decided and adjusted by him.

Q. What do you mean by the traffic officer.

A. I mean the man, say like J. M. Haniford, 4th Vice-President of the Northern Pacific.

Q. Is his salary and expenses included in this item of traffic expenses?

A. A certain proportion would be.

Q. You assume that to be the case, but assume that the officers' salary is charged to general expenses.

A. Then it should be charged to general expenses.

Q. And should not in that case be charged to traffic expense?

A. Only if the supervision of that matter is removed entirely from the traffic department, and removed to the general department, then there should be no charge here.

Q. Suppose your assumption made a moment ago, that the traffic manager would have occasion to adjust some difficulty between the express company and railroad company, suppose that traffic
3567 manager is charged against general expenses, should that charge then go into traffic expenses?

A. Not if the officials should have absolute charge of that matter; if it is all charged under general expense, there is no question that the traffic expense should not be put in here at all; there is no question of that.

Q. That being a fact, the assumption you made a moment ago, the basis of what I have stated, that that business is conducted, but the expense that there may be goes under the head of general expenses, should not this expense be divided in the same manner that you did the direct traffic expenses on the gross earnings of the business, as you stated awhile ago? together with the passenger business in this department of service?

A. Yes, sir.

Q. Now, there is 19.33 per cent of the traffic expense charged on this exhibit to mail and express; if that view is correct, that would be an improper charge to that account, would it not?

A. That would be an improper charge to mail and express, and what has been charged there would necessarily be divided between interstate and intrastate.

Q. In the same way that you divided the freight?

A. In the same way as it is divided in the first two lines of that station which you are quoting.

3568 Q. What service accrues to mail, which would justify the charge made on this Exhibit of 12.82% of supervision and general expenses to mail?

A. The repairs of the mail cars, the repairs of the locomotives, necessitated by the proportionate weight of the mail cars on the train, would necessarily be included in this supervision in general, and reflected in that, the same as they are in locomotive car repairs and train car repairs.

Q. What other expenses are included in that account, supervision in general, if any?

A. Superintendents, shop tools and machinery, stationery, printing, injuries to persons, and what we used to call other general shop expenses, and other maintenance of equipment expenses would be included in that supervision in general.

Q. Take the Pullman cars, what service which should be charged to supervision in general, is rendered to Pullman cars?

A. That is the supervision rendered necessary by the superintendence of the maintenance of the motive power, the engines, on which repairs were necessitated by the pulling of the proportionate weight of the Pullmans in the train.

Q. Do you feel that 13.88% of the total amount charged would be a proper charge.

A. Yes, sir. If you will note on division A of that same #2, the prior page, page 1, you will note that the $35,000. is the

3569 Pullman mileage proportion of the expense to engines. No Pullman car repairs have been charged by the accountants on this basis; it is simply a question of figuring the percentages from the figures here.

Afternoon Session.

Q. You were talking about the division of general expenses under the head of maintenance of way and structures when we adjourned at noon; as I understand the basis of the division of this expense is the direct charge contained under the head of maintenance of equipment, under the head of locomotives, that is correct, isn't it?

A. No, sir, I understand your question to say, general account of maintenance of way and structures, did you not?

Q. No, sir, I was talking about maintenance of way and equipment, this item of supervision in general; it states it is on the basis of the direct charges as apportioned, and that is under A locomotives, isn't it? I think you explained that to be the case this morning.

A. It includes all the accounts in that division, maintenance of locomotives, passenger train cars and everything else.

Q. Going back to the basic matters, I will ask you if you

3570 think it is proper that a charge of this character of expense should be made to the Pullman, when the railroad does not in fact maintain the Pullman cars?

A. This is supervision in general; this is for the reason that that Pullman expense, if you notice it is marked there in direct charges,

that is the expense of the repairs to the engines, the motive power, which is caused by the strain of pulling the Pullmans.

Q. Does it cost as much per car per mile to maintain Pullmans as it does mail, express or passenger cars?

A. No, sir.

Q. If that is so, is it proper to divide that on that basis, because it is divided on the basis of the car mileage arranged there?

A. Yes, sir, you will note there are two divisions, the first is locomotives divided in Pullmans, coach, mail and express.

Q. I am speaking of cost of maintenance of locomotives, if it doesn't cost as much to maintain the Pullman, and if the Pullman doesn't run in a great many trains, and if the express cars do not run in a good many trains, and the mail cars do not run in a good many trains, if it is proper to charge them up on an equality,—I mean in the locomotive expense, on the basis of the car mile.

A. Yes, sir, because locomotive expense here, is divided, if you will note, upon the basis of the mileage made by the cars, and, of course, that would include the differences in the mileage made by the respective equipment, coaches, Pullmans, mail and ex-
3571 press. When I said that it did not cost as much to maintain a Pullman as the other equipment, I referred to the fact that the Pullman charge only accrues in locomotive repairs, and does not accrue upon the passenger train cars.

Q. After you have ascertained the percentage of the maintenance of locomotives that is chargeable to Pullmans on a car mile basis, assuming for the time that that is correct, then you divide the expense of supervision in general on the basis of the charge on the locomotives per locomotive, these direct charges, locomotives and passenger train cars?

A. Yes, sir.

Q. The Pullman is not included in passenger train cars, therefore, it is on the basis of locomotive expenses, isn't it?

A. It isn't on the basis of locomotive expenses, but it is on a basis which includes both maintenance of the locomotives and maintenance of the train cars, and as it only enters into one of those expenses, it is upon the expense which accrued under locomotives only.

Q. That is what I meant to call your attention to; I will repeat the question I asked you awhile ago; the railroad company does not maintain that class of cars, why should you enter a charge here against the Pullman car, under the head of supervision in general, why should you base a charge there against that class of cars?

A. We base a charge against supervision on account of that class of cars, for this reason——

3572 Q. Wait a minute, let me explain what I want to call your attention to. I understand that you assume that the expense of maintenance of locomotives is divided between the different classes of cars under sub-division "A", I understand that, and you state that is properly done because the damage is inflicted in part by the Pullman to the extent that car is used on the track. What I call your attention to is this; assuming, that is correct and that that is a proper direct charge, what I want to know is, is it proper that you

should make the fact that it is subject to that direct charge under subdivision "A", on account of the locomotive maintenance, is that fact any reason why you should charge an equal amount, that is an amount of expense proportionate to the mileage of the Pullman car, under the head of supervision in general, when there is practically no service to amount to anything, rendered under that heading to a Pullman car?

A. If you will notice, we do not do that; if you will take "A" under this division, maintenance of equipment, you will notice that the amount charged under that percentage to coaches is $94,500.26; if you will now turn right over to "B", the passenger train cars, you will see that the amount charged there to coaches on the percentage, and Pullman is omitted from that $62,711.39; the same is true of the $94,500.26, and that and the $62,711.39 make up the amount of $157,211.65 shown in the first line under the heading, direct charges, in division "C", supervision and general. If you
3573 will then refer again to maintenance of equipment, division "A" locomotives, you will see that the Pullman is there charged for its proportion of the repairs of the locomotive, with $35,206.63. It is charged with nothing in Division "B"; the total with which it is charged under direct charges in "C" line 2, is $35,206.63. If you will then, in the same way, refer to the mail cars, you will see that under Division "A", they are charged with $19,559.24; in division "B" they are charged with $12,969.06; in division "C" they are charged with the sum of these two, $32,528.30. The same way with express cars, under division "A", $17,195.48. Under Division "B", $11,418.70; under Division "C", the sum of the above, $28,614.18, these accounts, coach, Pullman, mail and express coaches have two items charged against them in Division "B", the Pullman having but one item charged against it in Division "B"; mail having two items charged in Division "B", and express charged it in Division "B", they are then added together, and the percentage which these charges show to coach, Pullman, mail and express are percented, and the expense is charged for the supervision and general expenses on the basis of those percentages, which is correct.

Q. I understand all of that perfectly, and I know that you have added the expenses of "A" and "B" together, so far as the coaches are concerned, and you have charged the per cent, the percent of Pullman expenses under Sub-division "A" was 21.15 of the total, and the percentage under Division "C" arrived at in the way
3574 you have described is 13.88; an explanation you have made accounts for that difference in percentage; I understand that; assuming that to be true, I repeat the question, in view of the fact that there is practically no service of the kind that is included in the expenses, supervision in general, applicable to Pullman cars, is it proper to charge that percentage of the total maintenance as shown by Sub-divisions "A" and "B" to Pullman cars?

A. Yes, sir.

Q. Explain to me what service it is that justifies that?

A. As I have said, the superintendence, and speaking of the superintendence, I mean the supervision of these general accounts, they

find it necessary that they look over and direct all of the operations and the conduct of this block of accounts, maintenance of equipment. In this block of accounts, we find that there is a percentage of those repairs which they supervise, which is due to the fact that Pullman cars are pulled upon the train; it applies only to the locomotives, the Pullman Company taking care of car repairs save certain little odds and ends. Therefore, in the supervision of his locomotives, this superintendence is necessarily devoted to these locomotives and a certain proportion of his time, of which 56% accrued upon the coach time, because of the coaches pulled by locomotives; 21.15% upon Pullmans, because the Pullmans were pulled by the
3575 locomotives to that extent, 11.75% on the mail, because the mail cars and cars carrying mail were pulled upon that percentage, and 10/23 to the express, because the express cars were pulled upon that basis. Therefore, of the time that he spent in supervising the locomotive business, 21.15% was chargeable to the Pullman service.

Q. You are overlooking the fact when you go to apply that to supervision in general expense, that there are a great many other kinds of service in the auditing department rendered to the coaches and even to mail and express, that are not to the Pullman, are you not?

A. In what department is that you say?

Q. Expense under the head of supervision in general; the only expense I could conceive of that would accrue against the Pullman car is that which would occur in the auditor's office, excluding locomotive supplies and expenses; what is the character of service rendered to the Pullman car under sub-division "C"?

A. It is the percentage of the locomotives. I think you mistake in that matter, that this supervision and general is only the supervision and general items under the head of the block of maintenance of equipment; it is not general expense which accrues in general expenses and the expense of the auditor's office; that accrues at the end of the accounts, further on.

Q. I will ask you what the general expense under sub-division 5 to Exhibit M represents?

A. Under maintenance of way and structures, you will note
3576 that the Pullman——

Q. I asked you under sub-division 5 of Exhibit M, general expenses.

A. That is the proportion of the general expenses which have been incurred on account of the pulling of Pullman cars; if you will note under #1, on page 1, that there is $106,021.02 incurred on account of Pullmans. Under #2, maintenance of equipment, division "A"——

Q. That is direct expense that is made the basis of it?

A. Yes, sir.

Q. You do not understand my question, I understand that; I asked you, what does general expense under that heading include; what is the meaning of that as used there?

A. As used in division 5?

Q. Yes, sir.

A. The expense of the general officers and their clerks, and what they call other general expenses, which are included in that block of accounts.

Q. On the basis of direct charges to other classes of expenses, 18% of general expense is charged on this sheet to Pullman cars, what, in your opinion, will justify that charge of 18% to Pullman cars?

A. It is justified by the fact that in charging directly to the expense which had preceded this block of accounts which is headed general expenses, that there have been $273,188.56 of expenses which has been shown to have been charged to this expense on
3577 account of the Pullman cars being hauled over the line.

Q. That is the way you have ascertained the ratio is it not,—what the percent is?

A. Yes, sir.

Q. What justification is there for charging any part of the item of general expenses there to the Pullman cars?

A. For the reason that the expenses have been incurred by the operation of the Pullman cars on the line.

Q. The particular character of services represented by this item is services in the general office, isn't it?

A. Yes, sir.

Q. What have the general offices of a railroad to do with the Pullman car?

A. They have to do, not with the Pullman car perhaps, but with the expenses which are caused by the Pullman car, as I quoted in maintenance of way and structures on page 1, there was $106,021.02 of the expense incurred on account of the hauling of Pullman cars over the line. Therefore, to that extent, whatever supervision was given by the officers in block 5, general expenses for maintenance of equipment, 21.15% of that was charged to Pullman service in the same way, under maintenance of equipment——

Q. I think that illustrates what you mean. The question I am trying to ascertain is, if the services rendered under these various headings, and part of it which pertains to Pullman cars, in
3578 view of the fact that the Pullman car is charged with 21.15% of the maintenance of way and structures, it pays there for its charge of the injury that may be allotted to maintenance of way and structures; the same is true of maintenance of equipment; it is charged with 21.15% of the expense of locomotives, and so on; that illustrates it without tracing it through; it pays its own way along through; it is not that expense you are talking about now, we are talking about expense of the general offices. Now, there is no expense of the general offices incident to Pullman cars except may be the time of one clerk to keep the accounts in the auditor's office, and that would be a very small portion of his time; assuming that fact, is it justifiable to charge 18% of the general expense to that account?

A. Yes, sir, for the reason, that when a Pullman has paid its share or there has been a charge to the Pullman of its share of the maintenance of equipment expenses and maintenance of way and structures, conducting transportation and so on, it has not then paid all

the expense which has accrued by reason of its use; there is still the general expense, which is coming on another account, of which it has not paid its proportion, and therefore, as these charges were made against it, it was simply paying under block 5 its proportion of general expenses which were incurred by reason of its use in prior accounts.

3579 Q. If I understand correctly, you stated in your examination in chief, speaking of the apportionment of expenses of switching as against the movement of through trains, you said that expense was in regard rather to the trains and not the passengers; please explain that to me; my recollection is a little indistinct as to that.

A. I meant by that, that when a passenger train is made up at a terminal station, it is switched at that time. It has on it just so many passengers starting out from a terminal, but the switching which it gets at the terminal lasts during its entire run, or to the next terminal, the end of its run, therefore, that expense which prepared for every passenger that gets on, should be on the basis of passenger miles, and not on the basis of passengers who happened to be on the train at the terminal when it is switched, and therefore, is an expense which is a train expense and not a terminal expense, although it is incurred at the terminal.

Q. What is the difference between that character of switching service to a passenger train and the switching of freight cars?

A. For the reason that the freight train car switching, lasts, you can say, for the life of the car only; the freight has to be put out; it has to be absolutely handled itself; the passenger handles himself after his train is once fixed for him, and in that respect, the ton basis, the number of tons handled, would be the factor for

3580 the switching charges, and not the ton mile basis; if the passenger were inert, and compelled to be handled as a freight car is,—that is, if it was necessary to switch your passengers when you take them off and on, it would then be necessary to take them on the passenger basis and not the passenger mile basis.

Q. Doesn't the handling of the freight though, doesn't that enter into the station service rather than the switching service?

A. The handlings, yes, sir, enter into the station service; I am speaking simply of the switching in that regard, and not the station service; we handle our passengers upon the basis—we handle that expense I mean—upon the basis of passengers and not in passenger miles.

Q. That is terminal expense you speak of?

A. Yes, sir, as when a ticket is sold, it is sold without reference to the fact whether it is a five mile run or a fifty mile run.

Q. You divide the terminal expense with regard to freight the same way?

A. The station terminal expense, yes, sir.

Q. If you adopted the same method in regard to station expenses, and in regard to passenger train and station expenses which are analogous, why not adopt the same handling or same method in regard

to switching service which is similar; you do not handle and
3581 do not render station service, switching service, to the contents of a freight car any more than you do to the contents of a passenger car; it is switching service I am talking about; you do not handle the contents in a freight car any more than you do the passengers in a passenger car?

A. Yes, sir, for the reason that as soon as it is necessary for that ton of freight to leave the train, that carload of freight, it doesn't handle itself as the passenger does, it has to be handled by the appliances of the road.

Q. Isn't that charge under another heading than switching expenses, the handling of the carload or car?

A. No, it is under the switching expenses; it is switching expenses of which I am speaking now, that when you get a freight car out, you have got to handle it; when you get the freight out, you have got to handle it with the road's appliances, making it rather a ton matter than a ton mile matter, while the passenger, as far as switching goes, his train is ready for him and he handles himself. I would be very much pleased to have it, for this contention, on this ton mile basis, as it would accrue a little to our advantage.

Q. Taking up, under Exhibit "M," under sub-division "B" of maintenance of equipment, the state's accountants have divided the
expense of passenger train cars as between coaches, mail cars
3582 and express cars, on the car mile basis; I want to call your attention to the difference of the use and the service on this; the coaches are loaded with passengers, the mail and express cars are loaded and used in a different way, do you think that it is proper to divide that expense as between those cars, in view of that to which I call your attention, on a car mile basis, thereby attributing the same character and amount of use in every way, to mail and express cars, that you do the coach?

A. That percentage existing there, should be taken upon the allocations of the repairs of the different classes of cars used in passenger service; if the amount of annual repairs per mail car is only 75% of the annual repair to a passenger coach, the mileage of the mail car should be reduced to that percentage of coach miles; that is a matter that is subject to the creation of the absolute allocations of repairs to the different classes of cars.

Q. Has that plan been followed in the division of that class of expense in the exhibit before you?

A. No, sir, that has not been done; in there, there is an assumption of the parity of annual repairs to both coach, mail and express.

Q. Going to station passenger expenses, which you will find under sub-division "A," under transportation expenses?

A. Yes, sir.

3583 Q. The expense is divided in the formula filed by the state's accountants, between intrastate and interstate business, on the basis of the number of passengers of each class handled, assuming that each passenger intrastate makes two uses of terminals, and an interstate passenger makes use of one terminal; that leaves out of the question, doesn't it, the fact that trans-state passengers

who should happen to be on these trains, are not handled at all at terminals in that state?

A. They may or may not be, depending upon the method.

Q. Assuming that they are not, then would that be a proper division of the expense?

A. No, sir, it would not, considered directly in that way. As I stated before, I think I stated it in my direct testimony, I have adopted this method of division myself, of station expenses, intra two and inter one, ignoring what we might call the bridge work of interstate passengers, considering that it was fully off-set by the extra amount of labor entailed when an interstate passenger did receive attention at a terminal.

Q. What additional attention do you have in mind when you speak of additional attention to interstate passengers at terminals.

A. The bulk of the intrastate passengers are served with tickets which are called by various names, general, simplex tickets; they are readily handled, require little time, the rates are well
3584 in the agent's head, and known; an interstate passenger is more, to a greater extent, served with a coupon ticket, in which it is necessary to write in the name or to punch the name of the station from and to; it has to be stamped and the limit punched on the ticket. This requires considerable time; the fact is, that with the card tickets or simplex tickets, probably ten passengers could be served and gotten out of the way, while one coupon ticket passenger is served.

Q. Isn't that rather an extreme assumption?

A. There is some assumption to that; I will admit that I am quoting the extreme of the cases, because there are certain tickets which are interstate, which are handled on the line of the road, which are just as familiar to the agent and just as easily handled as the other; on the other hand, there are some interline intra-state passengers which require just as much attention as an interstate coupon ticket passenger, but the percentage of coupon tickets interstate is very much larger than the per cent of coupon tickets intrastate, and for that reason, I have assumed that the bridge work would be thoroughly off-set and more than off-set, in my opinion, by this extra percentage on coupon tickets.

Q. You assume then that the extra service you speak of,
3585 will be equivalent to the terminal service of the interstate passenger, in the case of the trans-state passenger?

A. Yes, sir.

Q. I believe you stated this morning, you used tons as a basis of dividing yard expenses between state and interstate; would it not be better to use that unit there, than to make the division between local and through trains on the car mile basis, and then divide between state and interstate on the ton mile basis, wouldn't it be a more direct way of arriving at the result?

A. I would not like to say that it would be the better way of doing it; it is a method I have pursued heretofore myself, in handling those expenses.

Q. I take it you pursued the method you thought the best?

A. I pursued it because my attention had not been called to this method of handling; I think I stated when I went over it, that it was a new one to me, that it received attention from me as to how it bears out, and it looks very fair on the face of it.

Q. Assuming if your plan is the proper plan, wouldn't it be better to divide the car expenses, I mean the expenses on the basis of the cars, between state and interstate, rather than to divide it between local and through trains, and then on the basis of ton miles between state and interstate, as far as it could be done?

3586 A. I think that the absolute car basis of the handling of the cars would be the best, and if my recollection serves me, that is the way the accountants for the state have taken it up.

Q. If you will turn to page 4 of Exhibit K, you will find that the yard and terminal expense is divided between local and through business on the basis of the number of cars handled at terminals, that assumes, as I understand it, a division between local and through trains, that is the way it is divided between local and through trains; after that is done, then this expense is divided between state and interstate business on the ton mile basis. Now, what I want to ask you is, what is the use—is there any good reason for dividing that expense between state and interstate business upon a ton mile basis, where it is practicable, in so far as it is practical to divide it on the basis of the cars in which the freight is handled?

A. Offhand, without, as I have stated, going into this matter further, as I wish to do, I should say that I would prefer to accrue the switching cost upon the cars at the terminal, and after that amount of money had been determined, I would then, of course, distribute it by the ton mile basis to state and interstate, as that would be the factor, or you might say, not the factor, but the term in which I would express costs. I would not base the costs

3587 on the ton mile, but after I had the cost of this ton and all other expenses, I would then express that in a cost per ton mile.

Q. You would make your division on the car basis?

A. Yes, sir, I think I would, as I see it now, without going further and comparing it further, I think I should fasten it on the car or ton.

Q. The state's accountants, in the exhibits in this case, have divided a large part of the train expenses—of the expenses, I mean of trains—on the car mile basis, and in doing that, the car is a car without regard to its contents, whether it is empty or loaded; if it is loaded, without regard to the weight of the load. Now, what is your view as to the proper method of dividing that character of expense between freight and passenger cars?

A. That is, the expense of switching?

Q. Yes, the maintenance of way and structures and equipment, all that sort of thing, I am speaking now of these large divisions, maintenance of way and structures, maintenance of equipment, and that character of expense which is divided on a car mile basis as between local and through trains; what in your judgment, would be

the better way of dividing that between passenger and freight—I speak of the car itself?

A. The car mile or the car basis, and terminal car basis, as set up here, and dividing it by the ton mile would not enter into the division between freight and passenger.

3588 Q. You do not understand me; I say, after the freight and passenger expense has been divided, then the expense we will say of freight traffic is divided first between local and through trains and that division is made, or the larger divisions made by the basis of car mileage, made by each train; what I want to ask you is, why should not that unit be used as a basis of dividing between passenger and freight, as well as between the two kinds of freight trains?

A. The car miles?

Q. Yes?

A. I would not use the car mileage in the division between freight and passenger, I would use train weights for maintenance of way and structures, the maintenance of equipment is allocated, passenger equipment and freight equipment.

Q. The expense between passenger and freight in these exhibits filed by the state, is divided on the train mile, isn't it?

A. I don't know, sir.

Q. That is the train mile made by each class of train?

A. That is whatever the loads had done, I don't follow that.

Q. Which would you regard as the better method of division?

A. Which two, do you mean?

A. The train mileage or car mileage?

A. Neither of them.

Q. Give me your views upon that subject?

3589 A. My views on that subject would be that the expense of maintenance of way and structures should be divided upon the basis of the train weights in lieu of train mileage.

Q. Explain to me what you mean by train weights?

A. I mean that a passenger train will weigh approximately 250 tons, and a freight train will weigh approximately 900 tons, engine and tender included. The division should be made upon a gross ton mile basis.

Q. You would adopt that instead of the train mile basis?

A. Yes, sir.

Q. When you say trains, you speak of the weight without regard to the contents, do you?

A. No, sir, I mean the weight of the engine and the tender, and the weight of each car, what you call light weight of each car, that is the weight of the car without any load on it, and to that, I add the number of tons which are loaded on those cars, so it would be the weight of the motive power, the weight of the rolling stock and the weight of the live load and also the weight of the caboose.

Q. That is freight?

A. Yes, sir.

Q. On the passenger, you adopt the same method?

A. Yes, sir, the weight of the engine and tender, the weight of

the equipment, the rolling stock, the average passenger miles, taken at the basis of 150 lbs. each, an allowance for 50 lbs. of baggage per person, and the express, varying according to the amount
3590 of express which the road carries, light or heavy; mail the same way, the load of your cars.

Q. What would you think of the propriety of applying that method of division as between trains and cars, local and through trains?

A. It would be practicable to do it, equally as well as it would in dividing between passenger and freight; that weight basis only concerns the wearing out of your track. I probably should state further, with regard to that, that the switching must be included in any computation which may concern the work of maintenance of way and structures; the switching work must be included; I would say that between the local and the through trains that should be—the weights should be taken into question, in so far as they applied; we can only apply that partially, owing to the fact that there is extra switching down along the line by those local trains; taking that into consideration, as has been done in this case, the weight basis could apply.

Q. Your method of division as between freight and passenger, according to the weight of the trains, applies to total expenses?

A. Only the maintenance of way and structures.

Q. The total maintenance of way and structures expense, doesn't that include switching in that division?

A. It includes the weight of the switching movement, yes sir.

3591 Q. If it would be proper to make a division on that basis, including the switching as between freight and passenger, wouldn't it be equally proper in dividing between through and local freight trains?

A. Yes, sir.

Q. You could use the weight basis without any trouble, and so you attach some importan[illegible]o the weight as one of the factors in determining the relative expense; what do you think of a division that totally disregards the weight and puts an empty car on the same basis as a car that weighs 48 tons.

A. It depends on what expense you are treating.

Q. Take first, maintenance of way and structures?

A. I consider that it should be upon the basis of the weights.

Q. What effect would that have with regard to maintenance of equipment?

A. Nothing practically.

Q. You say freight cars is included in maintenance of equipment,—the repairs to freight cars?

A. Yes, sir.

Q. Is that not affected by the loads those cars carry?

A. No, sir, not to an appreciable extent; the cars are liable to injury from movement when empty as well as when loaded.

Q. Are there any other items of expenses besides maintenance of way and structures, in which you would take into account, the

weight of the contents of the cars, speaking of freight cars now?

3592 A. No, sir, none where I would use that factor; there are certain expenses, such as the fuel, locomotives, and so on, that depends to a certain extent upon the weight which is back of the locomotive, but I would not use that weight as the factor for determining that, because there are other methods by which that can be determined.

Q. What are the other methods?

A. The direct allocation of the fuel to engine pulling the train, which is what we call individual engine performance sheets, kept on almost all roads.

Q. When did you undertake the service that you mentioned in your examination in chief, for the Louisville & Nashville Railroad, in its litigation?

A. I first commenced an investigation of the Louisville & Nashville for the State of Kentucky, three years ago, today, I think it is, or at least three years ago this month. The service has been, however, intermittent; since I have been examining for Kentucky, I have worked for Florida, and then for Alabama, and they are under examination for Alabama again the second time——

Mr. HILL: You asked the question, Mr. Moore, when he undertook the examination for the L. & N.; I think he stated that he examined the road for the Commission of Kentucky.

Mr. MOORE:

Q. I think you stated that you were employed by the
3593 Commission?

A. Yes, sir.

Mr. HILL: Your question implied that he had been employed by the Louisville & Nashville Road.

Mr. MOORE: I didn't mean that.

Q. I observe that you suggest the expense as a basis of division, I want to ask you,—I mean as a unit of dividing between the two classes of business, if expense is not a fluctuating quantity itself, with the rise and fall of the cost of labor and material?

A. Yes, sir.

Q. And it is not by any means a stable factor?

A. No, sir, the expenses vary from year to year, and it is also my claim, that the use of the property varies as the expenses which are put upon it.

Q. For instance, you take the expenses today, of operating a railroad, compared with what it was a few years ago, and it would make a great difference in the expense of conducting the same kind of business, in the same manner, would it not, growing out of the difference in the prices of material and labor?

A. Yes, sir, the expenses would be higher, and you must recall at the same time, that advancing step by step with all the expenses,

the traffic has increased, they have advanced together, and
3594 that, therefore, the expenses would advance step by step, and the relation or percentage between these two expenses, would hold stable whether the prices were low or high.

Q. In drawing a comparison between the fluctuating quantity of the earnings and of the expenses, you assume that the rates are more variable than the cost of service and expenses?

A. No, sir, the rates have nothing to do with the use of the property.

Q. Take the revenue then, is the revenue more variable than the expenses?

A. It is not a question of variation at all, it is a question of the proper factor to apply.

Q. The statement has been made here that one objection—I don't think you made it—that there was one objection to the revenue as a unit of division, and the objection is that the rates fluctuate, and that the revenues are therefore not stable; now, what I want to ask you is, what is the degree of variation, if any, between fluctuations in revenues and in expenses of conducting the business; do you find there is any very great difference?

A. There is a difference, of course, in the expense; that is, the expenses would rise with increases in the price of labor and material, while you might not be able to, at the same time, increase
3595 the rates, your traffic figures, but the question of the variation is not a variation from time to time in the amounts, but the inequalities which exist in the rates for the same class of service.

3596 Q. You do not think, then, that the fluctuation in revenue produced by changes in rates, is one of the foundations of your objection to that basis of division, do you?

A. Oh, no, sir. It is only an indicative factor on the general supposition that railroad men keep those rates on a cost basis and that they are based on a cost proposition. As soon as you depart from that cost proposition you depart from their relation to the expenses.

Q. Is it not an axiomatic truth, Mr. Hillman, that in railroads as in any other business, there is of necessity a relation preserved between the cost of producing the service rendered and the compensation that is required for rendering it? I mean, as a whole. I am not speaking in detail.

A. As a general proposition, that is the supposition. That is the reason I say, as I said when I started my direct testimony on that point, that it is an indicative factor, and that it was used by courts in making decisions because no other factor had been presented to them. While it is an indicative factor, it is not the factor. It is better than a guess and that is all you can say for it.

Q. Do you know any business in which the value of the property used in the business is measured by the expense of producing the output of that business?

A. Where the use of that property is joint, yes, sir. Where the use of a certain facility is distinctive to its own class of business,

the cost of that particular facility should be charged to that business.

3597 Where the use is mixed and joint it should be upon the basis of the expense.

Q. I understand that, but the point I want to call your attention to is a little different, I think. It is this:

We are speaking now, first, as to the value of the property:

Can you cite any instance in which the expense segregated from the earnings, the revenue that is produced, is used as a factor of estimating the value of property, unless it may be under some peculiar circumstances, where you say there is some joint interest where it could come in?

A. In cost accounting the expenses of a factory would be set up upon the basis of the use of floor space, machinery, steam heat and power, according to the operations and the expenses of the operations which were conducted by that power and heat and on that floor space.

Where a machine would be segregated from its general use and be used for a particular purpose, the cost of that machine would, of course, be charged against the product which is made by that machine.

As the use of the facilities of the railroad are almost entirely joint between interstate and intrastate, the expense basis governs.

I have had cases in railroads where a facility was undertaken absolutely and solely for the purpose of an interstate matter

3598 or an intrastate matter, and there that account was segregated from the expenses and the cost of that utility charged directly to that account.

Q. That was some special condition, was it not?

A. Yes, sir. I tendered this explanation to vindicate that the same method would be pursued in setting up a cost system in the factory.

Q. You stated this morning that you had taken 108 separate accounts and divided them as between state and interstate business: or, rather, you expressed your views based upon a separation made that way, as to the manner of dividing expenses between the two classes of business:

I understood you that you had prepared a formula but you told me later that you had not. I wish to ask you if you will prepare a formula or outline indicating the method upon which you would proceed in making a division as between state and interstate traffic, and file it as an exhibit in this case.

In saying that, I mean a formula based upon your views as you expressed them in your testimony, as to the proper method of division.

Mr. HILL: I do not think it is right to burden this witness with formulas. You can ask him his views, but I do not think it is a reasonable request to ask him to get up a formula.

Mr. MOORE: I do not ask that he include a great amount of figures, but I say an outline.

1513

3599 The MASTER: It is a matter between the witness and the attorney, altogether. If he volunteers to do so it will be all right, but I will not compel him to do so.

The WITNESS: I will state for the information of the attorney and the court that I declined to do so in the Missouri Case and I think that as the matter stands now,I will decline to do so in this case.

Mr. MOORE:

Q. You stated in that connection that this basis of division in which you took 108 separate accounts, reflected the expense of the state and interstate business, respectively.

Now, I want to ask you this: was the formula that you speak of made in accordance with the statement you have made in evidence today as to your views as to the basis upon which the division should be made?

A. Yes, as a general proposition.

Allow me to state right here that I stated in my testimony, when I started, that this was very general and roughly made, and while there were 108 accounts—I believe that is the number of Interstate Commerce Commission accounts——

Q. I believe that is correct.

A. I did not make 108 computations on it. I lumped them as I found them expressed upon this statement "K"—I believe it is furnished by the accountants for the state—and did it very roughly.

I do not want you to think in that matter that I made 108 computations. Knowing what I could group together, I made
3600 groups of them and roughly divided them, and that is the reason I stated that a more accurate division, and taking them item by item, would produce undoubtedly a result varying somewhat from the $30,000 difference which I stated I had.

Q. In arriving at that result did you divide the expenses between passenger and freight on the train weight basis that you spoke of this morning?

A. Yes, sir.

Q. Where did you get the data for doing that?

A. That was simply from the general idea I had of the weight of a freight train, as I quoted to you today,—a passenger train 250 tons and a freight train in the neighborhood of 900 tons—and take the switching rate into account; that is the reason I spoke of the general application.

Q. Did you think that any allowance should be made in favor of local trains on account of switching?

A. As regards the wear of the track, yes, sir, there should be some allowance made.

As regards the other expenses of running your train, what you would call your "haulage" expenses, I would determine that by the absolute allocation of my train expenses.

Q. Does that apply to road switching?

A. Yes, sir; that is, when an engine reaches its terminus, it has done a certain amount of switching, but the men are paid for their

run. There is no expense though they have done the switching. It is included in the local trains' expenses. Having the
3601 local trains' expenses, you have covered all the switching work that those men have done, but you have not covered this one point, which is wear of the track due to that switching. That is the only point that is not covered.

Q. And that is the only basis upon which you make an allowance for switching?

A. Yes, sir.

Q. Suppose your local train had lost time on account of the large amount of switching and the crew had to work overtime?

A. That is provided for in the rules of the Company. Where there is a detention at a station, the time they are detained is charged up to switching and is treated as a switching movement, included in switching mileage. That is the usual custom and I have no doubt it is so upon the roads in question here.

Q. Now, speaking again of the division of expenses between state and interstate business: I would like you to tell me if, after you divide the cost on the basis that you mentioned a while ago, you make any allowance in favor of the intrastate freight on account of the extra expense of handling, or additional expense of handling that class of freights?

A. Do you refer to train expenses, haulage expenses, station expenses, or expenses in general?

3602 Q. Expenses in general?

A. Yes, sir, we make the allowance for that in our "station expenses," the extra cost of handling. We make no allowance for the haulage expenses—that is the train expense of intra freight, beyond the fact that so much of it was hauled upon a high priced local train and so much of it was hauled upon a low priced through train.

We make an allowance for the terminal switching of intra freight by, in my method, using the ton basis for that, and outside of those we make no further allowances.

Q. How do you apportion your "Yard and terminal expenses" as between through and local trains or between state and interstate business, whichever way you may divide it?

A. I have heretofore divided that directly upon the ton basis.

Q. You do not divide it on the basis of cars handled?

A. No, sir; that is the matter of which I said a few minutes ago, that I proposed to look into and see if the method which the state used in this case is better than my own. If it is, I think—with due deference to the state and their allowing me to infringe upon their patent—I will adopt it.

Q. Does not a division on that basis assume that every car has the same handling?

A. Yes, sir.

Q. Without regard to what the contents may be?

3603 A. Yes, sir.

Q. Or what changes might be brought about by reason of the contents?

A. Yes. In two cases I have used what I call an "equated ton." That is, I have taken my less than carloads on the basis that only on an average 1/7 of the usual carload would be hauled upon a less than carload, or upon what we call the "peddling car," and have, therefore, multiplied my less than carloads, inter and intra, by seven, and to them have added the inter and intra tons handled in the carload basis and made the equasion of my switching between inter and intrastate on that basis.

Q. Does that give proper credit for any extra amount of switching that would be done in connection with intrastate freights do you think?

A. Yes, I think it would.

Q. You think that would take care of it. It is based on an assumption, of course?

A. No, sir, it is based upon an actual experiment, the data for which was furnished to me by Comptroller Gray of the Northern Pacific road, and is part of the testimony in the Minnesota case, in their preliminary papers filed to obtain the injunction.

Q. In applying it to another roads or to a different part of the same road, at different times and different seasons of the year, it would be an assumption that the conditions would be the
3604 same?

A. Yes, sir, we would assume that the conditions would be the same. It would not, however, be what I would consider a violent assumption, although there would be a variation.

Q. You stated a while ago that this division on the basis of cars handled assumes that every car has the same handling: is that a correct assumption?

A. No, sir, it does not have the same handling.

On the doctrine of averages we could safely go on that basis, however, for in handling a large number of cars—while we would pick out specific instances where this would not hold, yet on thousands of cars which they have mentioned here, the doctrine of averages would hold and render that a usable factor.

Q. The state's accountants in this case have made an allowance in dividing engine house expenses, of 12 per cent, on account of the shorter run of local trains:

How about the application of that to state and interstate, as well as to trans-state business? Do you think that would work equitably between the three classes of business?

A. Well, you cannot well apply it that way with the method which they have done, as that engine expense——

Q. It is engine house expenses.

A. The engine house expense is necessarily taking care of the engine after it has gotten in and it would be simply an expense which would have to be set up and then divided upon the
3605 basic factor.

Q. What I mean is this: those different engines are engaged in different classes of service. Some of them do much more work than others. Some of them do work in which there would be a necessity for a greater amount of repairs. Some of them haul state

freight and some of them haul interstate freight. Some of them haul trans-state freight. All of that sort of thing.

Do you believe that that allowance of 12% will work fairly all around?

A. Oh, yes, sir; that would work fairly. I don't know of any engine, though, that hauls specifically any kind of freight, such as interstate or intrastate or transstate.

Q. I understand that and what I am going to ask you is this:

Should there not be some method devised, if you are going to adopt that system, by which the onerous service of the engines, that which applies to the class of traffic which necessitates more onerous service, should not, as nearly as it could be located and fixed upon the service?

Mr. HILL: What do you mean by "the more onerous service?"

Mr. MOORE: I mean increased switching, we will say as between short runs and long runs, and those runs in which the engine is pulling a "peddling" train as against one where it is pulling
3606 a train of full loaded cars.

The WITNESS: That would have nothing whatever to do with the engine house expenses. That is simply a terminal expense. It don't matter if the engine is worked hard the whole trip or run light the whole trip. It goes to the engine house and receives the same attention anyhow. If it has undergone any damage during the time, it is charged up in engine repairs and comes into the accounts through the "Maintenance of equipment" expenses.

Q. The evidence in this case shows that the average haul on one of the lines that is engaged in this litigation, of interstate freight is as to state freight, five to one, and on the other something over three to one:

Will you make any allowance of extra expense in the handling of that state traffic on account of that difference in the haul?

A. Yes, sir, the allowance would be made in this account as handled here by the expense of through train and the expense of the local train and in the division on the ton mile haul.

Q. That is the only allowance it would make?

A. Yes, sir, that would take care of it, with the addition they have made for the extra terminal in each case, which would be required by the shorter haul.

Q. Now, in division 7 of Exhibit "K", the method of dividing train costs is developed and after that division is made on
3607 the basis of the percents that are set out in Exhibit "C", the cost of each kind of traffic is divided between intrastate and interstate in proportion to the volume of traffic of each kind handled in each class of service. This is set out in the same division.

The effect of that is to first divide the train cost as between through and local trains to ascertain the relative tonnage of state and interstate on those two classes of trains, and then divide the expenses between state and interstate traffic on the ton mile basis, is it not?

A. Yes, sir.

Q. In other words, the effect of that is to adopt the ton mile basis

as a unit of division after having made such division and allowances as the accountants thought proper for extra service, for the extra expense incident to different branches of service?

A. Yes, sir, on what we call the "haulage" items, the train service items, yes, sir.

Q. The difference between that and the ton mile theory of division, as it has been heretofore spoken of, is that the extra allowances were not—the extra allowances of increased costs were made before the ton mile theory is applied instead of after?

A. Not on the ton mile theory which has been so severely criticised. The ton mile theory which has been so severely criticised is the application of the ton mile to all expenses, whether mile-
3608 age or cost haulage, and this is simply determining the cost of the local train and then the proper factor, when you have determined that cost of the local train as against a through train, is to take the ton miles on each, as that is the proper factor for the basis of train expenses.

Q. Does that basis of division have any regard to the different kinds of commodities that make up these ton miles?

A. No, sir, it does not. It handles them directly as—that is, a ton of silk has no more to do with it than the ton of coal that is on the train.

Q. In so far as the criticisms that the ton mile basis are founded upon, the disregard of the differences in the commodities carried, this is as open to criticism as the other, is it not?

A. Certainly, the very establishment of a lump cost for both classes of service, through and local, without regard to the loading which as a general thing goes to make up those trains, is subject to that criticism.

The engine, and the fuel burned, as a usual thing do not care much what is back of it: nor does the engineer care what is back of him, whether it is a ton of coal or what, and it practically makes no difference what it is, save in the matter of the bulk which it has and therefore of a heavier load to haul to get that much live traffic over the track. In that case there would be a difference.

3609 I could readily see where a train loaded habitually with high grade stuff, where the weights hauled would be lower per carload than the heavier low grade stuff, if that was continued indefinitely it would be a matter which we would have to take under consideration, and in the commodity rates, which I have had to examine for some time for determining the cost of carrying a single commodity as against the other freight matters, I have taken that into consideration.

Q. The only item in the exhibits filed by the state in this case, in which the cost if actually ascertained from the records of expenditures is "Loss and damage to freight" in transit and wages, I believe every other item——

Mr. HILL: Wages and fuel?

Mr. MOORE: Possibly fuel.

A. It is susceptible of allocation——

Q. Well, we will assume that it is those three, but I think your

examination of the tables will show that merely on the "Loss and Damage" of trains in transit it is actually located. But aside from that, and possibly the other two mentioned, all of these divisions of expenses were made upon assumptions, more or less arbitrary, were they not, Mr. Hillman?

A. No, sir.

Q. Well, let us see——

A. I would like to explain that. I want to answer it in that way in order to make the explanation if you will allow me to do so.

3610 Q. Very well, you may do so.

A. There is an assumption in the cost of the local train that there must be 50% added to the mileage on account of the switching done.

There is also an assumption that the switching mileage is 50% more destructive to the equipment than regular line train mileage. Those two matters are assumptions and do enter into the train costs, local and through, as shown upon this exhibit, and, therefore, each of these exhibits are affected by the matter which you mention, of an assumption being in them.

But the reason I wanted to make that explanation was that having determined this cost of the through and local trains, I consider division of the expenses upon the amount of tonnage hauled of each class, inter and intra, on through and local trains as—I will not say mathematically exact, but I feel very much like saying it—I consider it in the nature of a fact.

Q. You mean after you have assumed that the differences in cost——

A. Between local and through trains, yes, sir.

Q. Now, there are a number of cases there where indirect expenses are divided on the basis of direct expenses of maintenance of way and structure——

A. Yes, sir.

3611 Q. Take the item of "Maintenance of Equipment"; "Locomotives"; and then take "General Expenses" and "Traffic expenses"—perhaps I am mistaken in saying "Traffic expenses"—take "General expenses"; that is on a basis of a direct expense:

All those are based upon the assumptions upon which the original division or the direct expense is based upon, is it not?

A. Yes, they are based upon the divisions which have preceded them. Any error in the figures which have preceded them will, of course, reflect itself in any of those matters which are divided, as you say, upon the basis of all accounts pertaining to that block or to the preceding blocks.

Q. I imagine we all agree, but I will ask your views about it: if it is not a fact that any division of expense of conducting state and interstate traffic is compelled to be founded upon assumptions, more or less arbitrarily?

A. They are founded, yes, sir, upon assumptions which are more or less arbitrary—I hardly like to apply that term to them, as they are arbitraries founded upon well known facts incident to rail-

roading. Yet there is in many cases and in most cases, a certain element of uncertainty and to that extent the application of these various factors is an arbitrary matter.

Q. I believe you stated this morning that while the accounting officers of railroads, are in fact, of industrial concerns—par-
3612 ticularly in railroads—devised methods which they used in separating and apportioning accounts, they had to be based ultimately and finally upon the characteristics incident to the different kinds of service represented by those accounts:

That is substantially what you stated this morning, I think?

A. Yes, sir; that any arbitrary basis of division or any basis of division which is not based upon an investigation of the facts in the case is valueless.

Q. How do the accounting officials of railroads get the information as to the cost in the handling of traffic and the trains on their lines?

A. It is sometimes the division between the various operating accounts, of which I indicated there are 108 as made by a clerk in the Auditor of Disbursements office.

Q. In what?

A. The clerk in the Auditor — Disbursements office. A man who is practiced in those matters and understands the division that is made at headquarters.

In other roads it is paid for each division by a division accountant and the results of his division, as sent in, between the various operating accounts, are merely summarized in the main office.

It depends upon which way the accounting forces of the road is made up, in the division account or a general ac-
3613 count.

Q. In a general way, that is the manner in which accounts are made up in the offices?

A. Yes, sir.

Q. What I want to ask you is this: where do the accountants who make these entries get the information upon which they base their various entires and their various divisions of expenses?

A. They usually know the detail itself. It is a detail matter. They usually know the detail itself.

Q. In making your division of yard expenses between state and interstate, do you use the same total tonnage as you do in the division of "station expenses"?

Mr. HILL: Are you referring to those in these exhibits?

Mr. MOORE: No, in his statement as to his method.

A. No, sir; in my method I would prefer, and would always if I had the time, make an analysis of the tonnage handled at my stations, which would be principally carload lots for labor—for what they call "Station labor" and then divide the expenses of the agents and their clerks upon an accredited basis which would include the car lots. But if I had not that, I would then use the same tonnage for my division of my "Station expenses" as I would my "Switching expenses" if I did not go into that detail.

Q. Does that include the total figured tonnage?
A. Yes, sir, it includes the total tonnage.

3614 Redirect examination.

By Mr. HILL:

Q. Mr. Hillman, as I understood your position about the division between freight and passenger, you did not approve of the division which had been made by the railroad companies in this case, and wanted to get one based on the weights; is that correct?
A. Yes, sir.
Q. Now, I want to ask you this: Suppose you could not get and did not have the data to get the weights of the passenger trains and the passengers carried, and you had the — of shifting the cars around from here to there, and you had to go back to the records two or three years, which would be an impossibility: what unit would you then adopt as the nearest approximation?
A. If I was debarred from that, I would be compelled to fall back on the train miles as an indicative factor, not an actual.
Q. The next best to the truth you could get at?
A. Yes, sir; if I was unable to get other items, I would be compelled to take that.
Q. Mr. Hillman, I believe you stated that you thought it was proper, in dividing the expenses of "Maintenance of way" also to take into consideration the weight:

3615 I will ask you if that is a factor that enters very deeply into that account, and I ask you what is the usual division of "Maintenance of way" between wear and weather?

A. The usual division of the "Maintenance of way and Structure" account, as between wear and weather is: "ballast"—10% wear; 90% weather.
Q. I believe that is what Mr. Parker, the engineer of the Texas Commission testified they had been using.
In view of that fact does this question of weight cut deeply into the division of expenses of "Maintenance of way"?
A. Not deply; but it would cut some.
Q. I believe it would only affect the 10% that is usually accepted as the amount attributable to wear?
A. Well, it would affect all those accounts, of which the one that I have mentioned, the ballast, is only a representative account. There are a number of others in there, such as ties and rails——
Q. It would affect the others, whatever the proportion was?
A. Yes, the difference between the weight proportion and the train mile proportion.
Q. If you were not able to obtain the data to ascertain the weight, what would be the basis that you would use for "Maintenance of way and structures"?

3616 A. If I were not able to obtain the train weights, I would then take for that portion my train miles and obtain the percentage which exists in the train miles.
I would then take my car miles and obtain that percentage.

I would add the two together and divide by two and use that.

I would do that because it would come closer to the train weight basis than would the train mile basis, and that would be the basis which I would be seeking.

Q. I believe that is what is done here—put the car mile on the train mile.

Mr. Hillman, you testified to some question that Mr. Moore asked you that I did not quite catch. I got mixed up on which subdivision you were referring to about passenger trains. I believe it was the division of "Mail and express." You and me had some discussion about that and in looking for the place I failed to catch it: Would you mind repeating what the substance of that was?

I think it is (B) on page 2 of the "passenger." I am not quite certain, but I will ask you to look at it and see.

A. There were two thoughts that came up with reference to that matter and I will ask you if you refer to the one concerning whether it was proper to charge the repairs on mail and express cars, and coaches, on the basis of the mileage by these different cars, regardless of the fact as to whether a repair on a coach might not
3617 be more per year or for a given time, than the repair of a package car. Was that the one?

Q. Yes, I did not catch Mr. Moore's question or your answer to it.

A. He asked if I considered—that is it is my recollection that he asked if I considered that a fair division in view of the fact that there might be a difference in the use of these cars.

My answer was that the proper division would be to determine the amount of repairs necessary to keep mail cars, per unit, in order; express cars, per unit, in order; and coaches, per unit, in order, and on that basis to correct, if necessary, the mileages of the respective coaches, mail cars and express cars, and use that unit.

Q. Now, Mr. Hillman, I want to read you one of the Iron Mountain Exhibits, which is statement No. 5 of Exhibit No. 3:

"The bases used in dividing operating expenses taxes and other fixed charges between states and between the freight and passenger business."

That is the heading.

"Maintenance of Equipment:

This account includes all cost of repairs, renewals and depreciation of cars and locomotives, also shop machinery and tools. The cost of repairs, renewals, and depreciation of equipment being of a general nature and not applicable to any particular state is divided between all states upon the basis of the mileage of each class of service in each state.

The cost of repairs to shop machinery and tools, stationery and printing, and supervision, is divided between states upon the
3618 basis of the total engine mileage over the territory under the jurisdiction of each shop superintendent.

The cost of repairs to freight and passenger cars *are* compiled separately and all expenses of a common nature *is* divided between freight and passenger upon the basis of the number of train miles in each class of service."

That gives you the explanation of the way the railroad company has handled the freight account of equipment.

I will ask you, in view of that, what you say as to the correctness of the average car mile basis being used here?

A. If the passenger car mileage—the repairs of passenger cars is taken on the total passenger car mileage for each state, regardless of the class of passenger cars, the division shown upon page 2 of this Exhibit M, is correct.

Q. Now, Mr. Hillman, I understood from the questions put to you, that the plaintiffs were criticising this division of "Traffic expenses" apportioning a part of the same to mail and express on the revenue basis: You seemed to have had quite a discussion with Mr. Moore on that subject:

I want to call your attention to Exhibit No. 3 in this case, filed by the Iron Mountain in which 21% of passenger expenses is charged to the "miscellaneous" on the basis of the revenue. That "Miscellaneous" of course you understand includes the mail and express, and the expenses divided includes "Traffic expenses";

Do you think the railroads having made that charge that
3619 way, that the state is subject to criticism for making some charges against the traffic there, or against mail and express—or the traffic expenses, I mean?

A. I would consider that a very fair precedent at least, for adopting the same method.

Q. Mr. Hillman, I believe you heretofore expressed the opinion that it is not really proper to get at the absolute truth of it, to divide the traffic on the revenue basis, but in the absence of any better basis, you have been driven to accept it: is that about your position on that subject?

A. On the "Traffic expenses" yes, sir.

Q. And that is what the railroads have done in this case and I presume, in the cases which you have been interested in?

A. Yes, sir.

Recross-examination.

By Mr. MOORE:

Q. Will you explain what you mean by the statement that in dividing the freight and passenger expense, you would take the "train miles" and the "car miles"?

A. I meant by that, that in default of having my train wait for a factor—not being able to determine that factor, I should take my train mileage, switching included, and establish the percentage which existed between freight and passenger.

3620 I should then take my passenger car miles and my freight car miles and establish the percentage which exists between those two.

I should then add these two percentages together and divide them by two and use that factor as approximating more nearly to the train weights than I could find in any other way.

Q. If you could get, though, the cars, have the weight of the

contents and passengers of cars, and the number of passengers you would use the train weight as your factor?

A. I would use the train weight.

Mr. MOORE: That is all.

Mr. HILL: That is all.

3621 Cross-examination of Mr. T. A. HAMILTON.

By Mr. MOORE:

Q. I believe you worked for the Missouri-Pacific Railroad Co. from 1893 to 1900, the last time, did you not?

A. Those are the dates roughly, yes, sir.

Q. You have already stated the capacities in which you have worked, and now, what salary did you receive during this period?

A. I think the maximum salary that the Missouri-Pacific Ry. ever paid me was $50 a month; I would like to say in that connection, that I left the service of the Company because they had promised to pay me more, and after I had, as I thought, made good on the proposition, they didn't keep their promise, and I left the road for that reason.

Q. You went in 1900 to the Illinois Central?

A. Yes, sir.

Q. Engaged in billing freight?

A. Yes, sir.

Q. What salary did you get there?

A. The first month, as I recall it, $50. a month; I went on up to a salary of $70. in a month or two.

3622 Q. What was your position during the time you worked for the Louisville & Nashville, during 1901?

A. They paid me first $70., and then $75., and as chief billing clerk, $95.

In the office of the General Agent at St. Louis, my salary was $90. on the payroll, and the general agent, out of his expense account—that is a state secret, but it is a fact nevertheless—brought it up to $110.

Q. When you returned to the Iron Mountain in 1903——

A. I was temporarily loaned to them.

Q. But you returned to the Iron Mountain in 1903, you say?

A. Yes, sir, that is what I refer to.

Q. Weren't you with the Iron Mountain or Missouri Pacific two or three years after that date?

A. No, sir, I spent two months with them at Bixby.

Q. I will withdraw that question then; I was under the wrong impression; what salary were you getting when you were working for them at Bixby?

A. The superintendent allowed me $85., Mr. Peyinghaus had promised me a salary which the L. & N. had paid me, and the first month he was in charge of that station, I was paid that extra ten dollars; I never knew where it came from, and the second month I got it in the same way, although Mr. Kell was agent.

Q. After that, you continued with the L. & N. until you went to Haskins & Sells, and you stated what your salary was?

3623 A. Yes, sir.

Q. You made exhibit the division of expenses shown in statement 4 to exhibit 3, the basis of your work in preparing Exhibit I, did you not?

A. Not in preparing Exhibit I.

Q. In the work you did, what did the state's accountants do, or did they accept that division as shown by the railroad company?

A. The expenses shown in statement 4 of Exhibit 3 for the Iron Mountain and State of Arkansas, were verified by us to this extent, we had recourse to the company's expense distribution books, on which the department, at that time under Mr. Johnson's charge, distributed the various vouchers and expense reports, the superintendent's expense reports throughout the various accounts. In dividing these expenses between freight and passenger, or rather in checking and taking off the company's division of them from that record, we necessarily verified the total as set forth by Mr. Johnson; we didn't go back of his record; that is, we didn't go to the individual vouchers or to the superintendent's reports, except in a few minor instances, and I saw no objection to that as a basis, for the reason that it is made the basis of all the company's statistics.

Q. And you regard it as a correct and proper basis?

3624 A. Yes, sir, we applied some broad tests to it also, to see whether this period averaged up with charges of like character on other periods; on track maintenance, for instance, we took the average cost per mile for several years back, and saw that they averaged up, and that this was fairly normal.

Q. You found though, no objection to that as a proper basis, or as to the manner in which it had been worked up, as far as your verification went?

A. We have no doubt as to the accuracy of these figures; I don't think there is anything wrong with them.

Q. What was your views as to the revenue train mile as a basis for dividing common expenses between freight and passenger traffic?

A. My opinion on that subject, of course, must be based on just what thought I have been able to give it, and what I have heard people say; I have had nothing to do with the operation of trains in an executive capacity. If you want that, I would be glad to give it to you.

Q. Yes, I would like to have that.

A. I should think it was a very fair basis, basing my opinion on what I have just stated, that the extra weight of the freight train would be off-set by the extra speed of the passenger train, and that might make it a fair division.

Q. If that was a proper division between freight and passenger, why did you depart from it in dividing the expense of

3625 operating local and through trains?

A. It seems to me that where you are considering the freight train as one unit, and the passenger train as another unit,

usual divisions between the two classes of service, and you have lumped all your freight trains, that that might be some justification in itself for the first division; that is, you have light local freights and heavy through trains, and they might average up with passenger trains, but when you come to the division between two freight trains, you have a common unit there, both hauling freight cars, and the number of car miles would be the better division.

Q. In your formulas prepared by you and filed by Mr. Wharton in this case, you have disregarded the contents of the cars, haven't you.

A. I would like to take a little exception to that; you say formulas prepared by me and filed by Mr. Wharton; the formulas were prepared by Mr. Wharton and filed by him; I simply consulted with him and did the field work and gathered the figures upon which the formulas were made.

Q. Tell me just what connection you had with the exhibits filed by Mr. Wharton, I would like to know, as accurately as you can state it?

A. We discussed some of the points he referred to in his testimony, and I gave him the benefit of what knowledge and information I had on the subject, from my knowledge and experience; aside from that, my connection was in preparing the figures,
3626 doing the mathematical work, making the calculations, after the data was gathered.

Q. Under whose direction was the method and division adopted in the exhibits filed by Mr. Wharton, prepared?

A. Mr. Wharton, I think, prepared the formula largely himself; we consulted somewhat about it, he asked my opinion on certain points, but the formula was largely his.

Q. Those methods of division were not made at your suggestion, and were not your creation, you might say?

A. No, sir; we read the testimony of witnesses in this case, and we read the testimony of witnesses in other cases, and we have discussed it somewhat, and after those discussions, Mr. Wharton arrived at this formula; these bases.

Q. What I want to know is, who it was that conceived the idea of using this method, whether you or Mr. Wharton, or some other person?

A. It was got at in that way, but in the last analysis, Mr. Wharton prepared the formula you see in these exhibits.

Q. To go back to the question I asked you a moment ago, in making your divisions on the car mile basis, did you take into consideration the weight of the contents of the cars?

A. No, sir, a car mile was a car mile with us.

3627 Q. You have treated an empty car in the same manner you did a loaded car?

A. Yes, sir.

I would like to go back to the question you asked me awhile ago; in questioning me as to what compensation I received from the Missouri-Pacific Railroad; I was employed the major portion of my time under the direct supervision of Mr. W. Q. Morcom, who was

then chief clerk of freight accounts, a position which nowadays on the Missouri-Pacific carries the title of Auditor of Freight Receipts.

I would like to state that Mr. Morcom often regretted that Mr. Schuyler, the general auditor, would not allow him to pay me any more salary, and in fact, he moved me temporarily out of his department and the line of my service, in an endeavor to get me more salary; I never had any fault found with my work; I relieved a man whose salary was the maximum in the department, I recall, for several months in succession; I checked the accounts of Kansas City, Atchison and St. Joe stations, filling the position of the highest salaried man in the department, outside of Mr. Morcom himself, and I finally left because they wouldn't pay me any more.

Q. Are the employees of Haskins & Sells graded with reference to salary and importance of their work?

A. I don't know what guides our firm in fixing salaries; I don't know first hand, but it seems to me, the basis is, the man's
3628 ability to earn a salary, and the character of work he can do.

Q. What I asked you was, if their employees were graded, first, second and third grade, and their salaries fixed on that basis?

A. We have classes, Class A, Class B and Class C, and the men in Class A get more than the men in Class B, and the men in Class B get more than those in Class C.

Q. Class A are paid higher than class B men?

A. Yes, sir, I should judge so.

Q. What class are you in?

A. I am class B man at present.

Q. You referred in your testimony in chief, to a statement prepared by you or in which you assisted in the preparation, in September 1906, I think it was, on the C. B. & Q. road; was that statement similar to Exhibit 26 filed by Mr. Johnson and Mr. Roth?

A. Yes, sir, I think it is pretty near an exact copy, as far as form is concerned; of course, the figures are different.

Q. How long were you engaged in that?

A. Four months and a half.

Q. You did similar work on the Missouri Pacific?

A. I did part of the time.

Q. How long were you engaged in that?

A. About a month, I think, until I went on to take charge of the Chicago work.

Q. You stated that you have assisted in the audits and
3629 conducted some audits of manufacturing, business concerns, and so on?

A. Yes, sir.

Q. What do you find to be the annual earnings of concerns engaged in that class of business, as a rule? I mean, just stated in a general way, about what the average net earnings are?

A. I wouldn't undertake to answer that without having the figures before me; they fluctuate too much, some extremely high and some extremely low; I have some in mind that pay as high as 44% and some that do not pay but 3 or 4, much bigger concerns.

Q. I believe you stated you had verified the methods used by Mr. Roth in preparing Exhibit 26; that was prepared at the request of Mr. Wharton, wasn't it?

A. I can't say as to that.

Q. Were you not present when the request was made in the Judge's chambers at Little Rock?

A. No, sir, I understood from Mr. Roth or Mr. Johnson that it was so made.

Q. You are familiar with the method used in preparing that exhibit?

A. Yes, sir, I think so; Mr. Roth gave me a memorandum of it.

Q. You have already explained in considerable detail and some length, the manner in which you proceeded to make that exhibit I, and I shall not take you over that ground, because I think
3630 you covered it sufficiently, but I would like you to state how long you were engaged in that work?

A. I began in July, 1909, and I had some of my force working on that up until the end of the year, say in December sometime; I thought I had a memorandum here of the date, but I see that I have not; we found it necessary to go over the figures later on, and finally turned the statement over to Mr. Johnson, as I recall it, in February.

Q. The 14th of February, I understand; did you turn it over to him at the time you completed it, had it ready for use?

A. It was never completed until it was turned over to him; I did some work on it a day or two before he got it; it was practically completed in December some time.

Q. It was not completed until after the 14th of March, you gave Mr. Johnson some sketch or an outline of it; I understood at that time, it was not ready for you to give him the real sheets and details?

A. I may be mistaken as to the dates; I know we had the statements in practically complete form; there was some revision and some checking of it; we checked the whole recapitulation over after that time; it was practically in complete form, either in late December or January, but it was not turned over to Mr. Johnson until possibly March—I thought it was February.

3631 Q. That statement covered about 11% of the total business down in that month, didn't it?

A. Expressed in what terms, Mr. Moore?

Q. You worked up only local trains?

A. Yes, sir.

Q. When I say the total business, I mean of the business on local and through trains?

A. Do you mean ton miles or do you mean trains?

A. You can answer it any way you see fit.

A. I would have to look at it to see.

Q. I will say first, ton miles, I think you made the statement while you were on the stand the other day.

A. Expressed in ton miles, it was 11.18% of the total business.

Q. What part of that really was the most tedious and consumed the most time?

A. Locating the way bills for the car.

Q. And why was that so?

A. I think the explanation of the process we had to go through, which I gave in my direct-examination, is perhaps the best answer to your question; it was a very tedious process.

Q. You used the time cards, train dispatchers' records, wheel reports, and waybills, just speaking from my memory.

A. Yes, sir, and some records from the auditor's office.

Q. The ultimate record was the waybill?

3632 A. Yes, sir, those were my instructions to my force.

Q. And it was the waybill that gave you trouble in locating, and took up the time?

A. Yes, sir.

Q. You turned your work sheets over to the accounting department of the railroad? so that they might verify your work?

A. I turned them over to Mr. Johnson, yes, sir, in a conference between myself, Mr. Clardy and Mr. Wharton and Mr. Johnson.

Q. In looking over your work sheet, I see you prepared a form, pencilled with certain headings, and among them is the heading for reference to the waybill?

A. Yes, sir.

Q. And I find also that on most of the forms, I have examined, and I am told that is the case on practically all of them, that the reference is usually left blank?

A. Yes, sir.

Q. And there is no means of information for verifying your work by tracing of the waybills, was furnished by those work sheets? Is that correct?

A. Yes, sir, I recall the form very distinctly; this is apparently one of the first sheets that was set up, I see it is numbered 11, and I see from its heading, it covers the first portion of the line we tackled, the main line, and we set up this form, not knowing where our investigation was going to lead us; it was a new proposi-

3633 tion, with the intention, if we found it necessary, to set in the waybill number; I can recall a great many sheets where we have noted the waybill number, simply for our convenience; where it was not convenient to go from our record we were working on to the waybill, the waybill was shown on the sheet; simply as a matter of convenience, to aid us, it was often put down.

As I see it, your question comes to the proposition of leaving no information by which the waybills could be located and referred to, thereby leaving anybody who followed us, to go through the same steps we did?

Q. Yes, sir.

A. That is true; we did not put the information on there because I had four men at my disposal for the matter; I don't doubt we would have been working on the statement perhaps yet, if we had done that; not only this statement, but every other statement I compiled, I took pains at every step to inform Mr. Johnson of what we were about to do, and we would have been glad at any time to have his men work with us; in fact, we would have saved the state

some money; there was no desire to hold up these folks and make them do unnecessary work—we were just trying to shorten ours.

Q. Wouldn't it have been an easy matter to insert the waybill reference in the blank space prepared?

A. It would have taken a great deal of time.

Q. I can't see that; of course, you had to have that infor-
3634 mation as a basis of your work, and having the information and having the space ruled off for it here, why could it have produced any delay of any consequence to insert?

A. I think I can make that a little more clear to you; for instance, two men worked together, one with the scale record in front of him locating the cars on these trains; another man with the waybill book, one calling him the number of waybills he found on the scale report, the information as to the train, and the second man calling the weight of the car, and the classification, a much quicker process than noting down the waybill number, and afterwards going through the waybill books, just to refute any charge of unfairness.

I will say that our sole object was to save time, not to prevent anybody from checking the statement; in addition to that, I would like to say too, that in a great many cases, where the waybill book was not readily accessible, reference to those sheets will show that we have noted the waybill number on there, as our own future guide; we did that in order to save time.

Q. I notice here statements of weight of interstate freight? Were not those statements taken from the waybills?

A. Yes, sir.

Q. Would it have consumed any more time to insert opposite that the number of the waybill?

A. I thought I had covered that; we worked a great deal in
3635 pairs or teams; for instance, Mr. Wright would take the scale report, find the cars in that scale record that we wanted on the trains, when the waybill was issued, from and where; I had the waybills scattered all around me; being familiar with them, I could keep track of them; and he called the waybill number; I opened up the book; he called the weight and it was put on that sheet.

Q. The waybill number was known at the time; how much more time would it have taken to insert the number of it in these exhibits?

A. Not a great deal; I can give you no other reason except to save time.

Q. Would there have been any material loss of time; you had that information, the number of waybill at the same time you had the weight shown by that waybill; you called out the number and inserted the weight, and although it required a fewer number of figures to insert the number of the waybill instead of the weight, did it involve a loss of time?

A. My judgment was, when I was doing the work, that it did.

Q. With both those facts before you, as a common sense proposition, with all the information called out to a man who was making the figures, and who put down figures of weight which involved a larger number of figures, and with a blank space for them, would it require any considerable loss of time?

3636 A. No, sir, it would not require a larger number of figures than the waybill; you would have to write in the station series covering the waybill number, and perhaps its date, and if it were a foreign line waybill, you would have to write, in some cases, the name of the road that made the waybill.

Q. I see right here before me in the space under the head of waybill reference, a few references on this sheet; I see under that head 3926 F. S. W.; that is the kind of writing that was necessary to identify that waybill?

A. No, sir, "3926 F. S. W." means that it was received by the Iron Mountain at Ft. Smith from the Ft. Smith Western; that is the number of the Ft. Smith station, and we had to go to another record for it.

Q. Even these references in this sheet are misleading?

A. Those sheets were not intended as exhibits.

Q. They were your work sheets?

A. If in the Missouri-Pacific General Auditor's Office, there is a man who cannot look at that sheet and tell what that means, I wouldn't think much of his intelligence.

Q. Well, we will assume that is an exact reference; I was not criticising that; assuming that does give the waybill number, tell me how much time it consumed in giving those figures there?

A. As to how much time it took, I couldn't say; it wouldn't take but a very small time to write the figures you had on there; we only made a reference of that kind in guiding us, where we had
3637 to; you will find no unnecessary references there.

Q. You say sometimes it took you two or three hours to locate a waybill?

A. Sometimes it did, but I can readily say that our plan was no harder to follow than that the railroad has employed in this case.

Q. Your failure to make a record of the waybill reference, if the railroad should undertake to check those figures, would involve upon those engaged in it, the necessity of going through the same labor you did, and tracing it?

A. Yes, sir, inasmuch as they did not see fit to make a joint matter of it, in the first instance.

Q. Isn't it a fact that in the data worked up by the accounting officials of the railroad, and delivered to the representative of Haskins & Sells, they gave you tracing references so you could verify their work without going to as much labor and trouble and expense as the railroad would be put to on account of the absence of those waybill identifications?

A. I don't know that I follow you; I will say this, that Mr. Johnson has shown us every courtesy and every facility, but we have had to dig out a lot of stuff for ourselves.

Q. Did Mr. Johnson give you the figures based on some record without the references? Didn't he, as a rule, give you the reference to that record so you could turn to it? And you didn't do
3638 that, you did not reciprocate in preparing these work sheets?

A. Yes, sir, but Mr. Johnson has given us no statement of the magnitude of that one.

I gave you an incomplete answer awhile ago; you asked me whether it was not a fact that it took three or four hours to locate a waybill for a car; it did for a few, for perhaps some hundreds of them, but the great bulk of them were not that hard to locate.

Q. You used the wheel reports for what purpose and to what extent?

A. First, as I explained, when working on the dispatcher's sheet, if it showed a local train in operation where a through was scheduled to run, and didn't show on his sheets positively that that local train was annulled or cancelled, we had reference to the wheel reports for that section of road for that day, to see if he had not himself classified a local train as a through train, and as I explained in my direct examination, having satisfied ourselves that he had misclassified it as a through, we took that particular train as a local for that day; that was the first use we made of the wheel report; it gave us the character of the trains' work, and we classified them in that way.

The next use we made of it, was to get from it the numbers and initials of the full carloads, the point at which each car was picked up and set out by the train, and I mention it because it appears
3639 on our sheets, the ultimate destination of the car, as shown by the wheel reports, although it wasn't worth much.

Q. Why wasn't it?

A. Because it was wrong in a great many instances.

Q. That grew out of the want of method and accuracy on the part of the conductor?

A. Yes, sir.

Q. To what extent can those wheel reports be relied upon as correct records of information written in them by the conductor?

A. As to the number of cars he pulled, as to where he picked them up and set them out; if that information is incorrect, the railroad knows nothing about what is going on on the road, and we assumed it was correct, and I treated it as correct.

Q. In other words, the identification and journey of the car?

A. Yes, sir.

Q. You regarded it as substantially correct as to that?

A. Yes, sir.

Q. In other respect, how is it?

A. The conductor shows sometimes net weights, which may be correct and may be incorrect, depending on whether he estimated them, whether they were the billed weight, or whether they were the net weight obtained on track scales.

He shows the gross weights, car and load, which I should
3640 say are seldom, if ever, accurate; they would be accurate in the case where he had the scaling of the car on the waybill, because that would be an actual scale weight of the car and load, but in the case where the car had not been scaled, in the first place, the contents of the car would be shown on the waybill at an estimated weight; in the second place, to get the gross tons, he would have to add an estimated tare weight; I say he would have to; the tare weight is available on the side of the car, but as a matter of fact, the conductor estimates the weight of the car.

Q. Why does he do that, when the tare weight is printed on the side of the car; isn't that for the information of conductors?

A. Yes, sir, and weighmasters, but my experience is that they take them up and weigh them on the desk in the yard office; and there is also a schedule on the back of the wheel reports of estimated weights for empty cars, to be used by conductors when they have cars not stenciled, or hauled without waybills, or miscellaneous information, it says here. My recollection is when I mixed with train men,—I was around the yards with them very often,—practically all of the time when a car had not been scaled, they estimated the tare weight, and filled up the estimated gross tonnage in that way?

Q. That is kind of guessing it off?

A. Yes, sir.

3641 Q. Are they as a rule, careless or particular or careful men?

A. They are as a rule careful, but they are not clerks—they are trainmen.

Q. I mean of clerical habits?

A. As far as estimating car numbers is concerned, there is a check on that, and there is not much chance for it to be wrong; take a train leaving a terminal—I have officiated as yard clerk many a night and Sunday when I was chief bill clerk of the station the conductor goes out and checks the lists the cars that have been made up ready for him to take out on the road, the yard clerk accompanies him, takes the seal protection on the cars; they come into the office, the conductor takes his train book and calls on the yard clerk for the waybills by car number; those waybills are dealt out to him, and as he takes the waybill and enters the contents of the car and destination in his train book, he checks the car numbers to see that he gets the waybill for the cars he has in the train; incidentally, the yard clerk who has taken the seal protection for the cars, gives the conductor that information for the side of the train he took, so that he may have a complete record of the cars he takes out of the terminal, contents and destination as shown by the waybill, and its seal protection; when he gets through

3642 checking up the train with the yard clerk, when he gets the seals on the cars, and has located the waybills for the cars as he lists them in his book, he has a pretty correct record of what he has on the train.

Q. If I remember correctly, you stated on your examination in chief, that it frequently occurred the agent would have duties to perform on the platform which would interfere with his work in the preparation of way bills; I wish you would repeat your statement; you know what I am calling your attention to?

A. That had reference entirely to less than carload business; the agent would have two or three packages of freight to be taken from his station in the local train, and he would make the waybill before the train arrived at the station, take the impression copy of it, have it ready to hand to the conductor, that he might take the waybill and check freight into the car from it; in order to do that, he must make a copy of that waybill without the car number, because he

cannot know in advance of the arrival of the train, into what car the freight will be put, and I said, for that reason a great many waybills covering the L. C. L. freight, would be without car numbers, so far as the auditor's impression copy was concerned.

Q. In other words, that affects the value of the waybill as a record of the car numbers?

A. Of less than carload freight only.

3643 Q. I mean in L. C. L., the kind you are speaking of; is it a fact that practically the agent and the conductor go through the process you described awhile ago, of the one reading off the waybill and the numbers and so on, to the other one, and the numbers of the cars—the correctness of the numbers of the cars as shown by the wheel reports, being protected in that way?

A. Yes, sir, it seems to me that is a protection of it.

Q. The point I asked you, you stated awhile ago, as the principal reason why the description of the car numbers contained in the wheel report was more reliable than other contents of it, that the agent would read off perhaps some number, I don't remember what it was, and the conductor would take it and enter it, and in that way, it came in there by a mutual process between the two? That is what, I refer to now; I want to ask you if practically that is absolutely carried out, or if in the practical manner of conducting their work, the agent does not simply hand the conductor the papers he has, and the conductor takes it and later on works it out.

A. I can only speak from my own experience in a yard office, and I will amplify that process a little for you; as a matter of fact, the conductor takes his train as I described; he lists the numbers of the cars from the cars themselves in the train that is made up for him to take out on the road, and then he comes into the yard office, and asks for waybills to cover those cars; he is not allowed to transport them without some form of waybill, the regular

3644 waybill or card waybill, which temporarily takes the place of the waybill; he comes in and asks the yard clerk for the waybill for the first car in his train. The yard clerk files those waybills in little pigeon holes, according to the terminal number of the cars; the yard clerk takes the waybill; reads the car number, and hands the waybill to the conductor, tells him the contents and destination; the conductor takes that; the process is repeated until the train is covered.

I speak not only from observation on that, but from actual experience in handing out those bills, which was part of my duty in the Bixby yard that I spoke of, on the Iron Mountain; it was often my duty in the yard in East St. Louis, when I relieved the yard force during the press of business and lack of help; as a matter of fact, the conductor checks his train over with the yard clerk to see that he has the waybills for all his cars.

Q. You think, as far as the numbers are concerned, and the place of the car picked up and the place where it is dropped off, the wheel reports are fairly reliable?

A. Yes, sir.

Q. Do I understand that in other respects you do not regard them as reliable records?

A. Not in the question of tonnage; you understand that the figures shown by the conductor may be the actual ones on the way-bills he has in his possession, but they are afterwards subject to weighing and revision, and to the actual tonnage being inserted, and of that, the conductor knows nothing.

3645 Q. Their habits, business and work is not such as to qualify them for doing work of that sort, is it?

A. They are not clerks but trainmen, but I see no reason why the statement of cars they carry and where they carry them to and from, should not be accurate.

Q. I am asking if in other respects from these three, if you regard those wheel reports as reliable records?

A. No, sir.

Q. Speaking about one feature of that record, you referred to, you said that the record shows where the car was picked up, and where it was dropped; tell me now just what you mean by that, take a station like Little Rock, where are the cars that are brought into Little Rock, destined to Little Rock, where are they dropped off the train?

A. My recollection is they would be dropped at Argenta on the main line.

Q. What would the wheel reports show about that?

A. It might show they were left at station #829, 830 or 831.

Q. What are those stations?

A. Those are the stations in the Little Rock terminals. 829 is Argenta, 830 is Baring Cross, and 831 is Little Rock Union Depot; some of the conductors call the Little Rock terminals by that number, although it is a passenger station now.

3646 It might be shown as set out at Little Rock 3998, which is the number on the Ft. Smith branch, or they might have been shown, if they came up the Valley Division, to have been delivered at station 4000, which is East Little Rock, depending on where they were coming from and what direction.

Q. In other words, what they try to show is, they try to designate the place at which they were left?

A. Yes, sir. I might say in that connection, that while sometimes, take Little Rock for example, the conductor will show the cars left at 830 or 831 or 829, apparently three different stations; if his train went into Argenta, the heading of his wheel report is pretty correct, and that shows that he came into Argenta and took those cars into Argenta yard, since he showed those cars were left in Little Rock terminals.

Q. In other words, the information you think would be fairly reliable there as to the place of the yard he left it in; if he left it on the north side of the river, he wouldn't regard it as being left on the south side of the river, would he?

A. If his train broke up at Argenta, it certainly did not take the car any further; if it broke up at East Little Rock, it did not take it any further.

Q. What does the record show, the wheel report?

A. In case of conflict between the information given in the body of the report as to where the individual car was left at
3647 Little Rock terminals, and that information given in the heading as to where the train's journey ended, we do not attempt ot run the car any further than the train; if the wheel report showed the car stopped at Argenta, and the conductor said that he took the car to Little Rock, we figure it stopped at Argenta or Baring Cross; we consider Baring Cross and Argenta all one yard.

Q. In checking over the wheel reports, I wish you would state from your memory, where those reports showed most of the cars destined to Little Rock, we will say from the north, were left, whether at station 829, 830 or 831.

A. I would have to have the sheets here to tell you, I don't recall now; I do recall that the conductors mixed those numbers at times.

Q. Then you took the train book——

A. We endeavored to get, as far as we could ascertain, the actual mileage made by the car.

Q. Why is it that you do not include in your abstract, the description of the L. C. L. carloads; I think you stated in your examination in chief, that you included the number and initial of all full carloads, but you did not of the L. C. L.

A. As I explained before, we knew that it was impossible to locate all the waybills for L. C. L. package freight, and made no attempt to locate any of it; we saved time by not setting up the cars separately; we afterwards applied the average loading as estab-
3648 lished by the Cotton Belt test; the individual car meant nothing to us.

Q. What are the records in the office of the auditor made up from, in regard *of* handling of freight?

A. The auditor's record of freight handled is made necessarily from the waybill, whatever records he makes of its handling; his revenue records are made from the waybill.

Q. They are the basis, I suppose, of the auditor's accounts?

A. Yes, sir.

Q. Do those waybills show the tonnage?

A. Yes, sir, the waybill would not be a regular waybill without that.

Q. Are the waybills used in the auditor's office as a basis for keeping account of tonnage, the statistical amount of tonnage?

A. My understanding is, and from Mr. Roth's statement in this matter, that primarily the waybill is the basis of tonnage figures.

Q. And does it show the tonnage of trains on which the billing was issued?

A. No, sir, it shows the weight of the individual shipment, covered by the waybill.

Q. Perhaps I asked my question in the wrong way; what I wanted to know was, was there accounts of the tonnage of trains made up from the waybills?

3649 A. My understanding is that is not a matter of compilation by the auditor; my understanding is that the information which is compiled in the office of the car accountant, is compiled from the wheel report; that is, they get the gross ton miles in that way.

Q. And in like manner, you went to the billing frequently I suppose, to get an account of the freight hauled in these local trains?

A. Yes, sir, we went to the billing.

Q. Did you confine yourself to the billing for that month?

A. No, sir, we confined ourselves to the waybills covering the cars that were in the trains; some were September waybills.

Q. The waybill doesn't show the train the freight goes on, does it? The auditor's copy of the billing doesn't, does it?

A. No, sir.

Q. You deem it necessary, in order to get the weight of the contents of the cars, to go beyond the wheel report and to trace it up,—somewhere I believe you said you did, and explained how you did it in your examination in chief?

A. Yes, sir.

Q. Of course, in doing that, whatever you did was confined to local trains?

A. Yes, sir.

Q. You didn't take up the through trains?

A. No, sir.

3650 Q. And you wouldn't have any information as to the tonnage that was carried on through trains from the scaling of them?

A. No, sir, we compiled no information for the through trains.

Q. The local trains, the trains that run as a rule within the limits of the state,—through trains as a general rule, I think, come from outside of the state?

A. Not necessarily.

Q. Not necessarily, but I am speaking of the general rule, that is the general case, isn't it?

A. The Iron Mountain has local trains on its Memphis branch, that run over into Tennessee.

Q. Yes, sir, they treat that as a local train?

A. Yes, sir; on its main line, running north from Hoxie, into Missouri,—Poplar Bluff.

Q. Give me the terminal points?

A. Hoxie and Poplar Bluff, as I recall; it may run to Piedmont; out of Van Buren, local trains run up to Wagoner; from McGehee, one runs south into Louisiana to Monroe, and from McGehee south into Louisiana to Lake Providence; when you get down close to the border divisions, locals pay no attention to the state line.

Q. Those, you say, are treated as local trains, and were they treated as local trains by you?

A. Yes, sir, necessarily so, because they were local trains for the mileage which they travelled in Arkansas.

3651 Q. You described in your examination in chief, the process of getting the scale weights?

A. Yes, sir.

Q. What you said about that, is confined to local trains?

A. Yes, sir, and to their performance in the state of Arkansas, when they cross the state line.

Q. Suppose that freight was brought into Arkansas on a through train, interstate freight operating into Arkansas on a through train; in such a case as that, would those cars be scaled at the first place where there was a scale, after it started out from the initial point of the trip?

A. That, I think, is the usual practice.

Q. That, in all probability, would be some point in the State of Missouri?

A. Yes, sir, it may have been in Missouri or Kansas.

Q. Freight that is brought in on a through train as distinguished from a local train, you did not trace back for the purpose of getting the scale weight?

A. Not unless it got on a local train in Arkansas, when we became interested in them and ran them down.

Q. What effect did that have on the correctness of your weights as to trans-state freight and interstate freight that happened to go into the state on a through train, instead of a local train, and which was scaled in Missouri?

A. If they moved on a local train inside of the state, we got them.

3652 Q. Suppose it did not do that; suppose they moved on a local train inside of the state, but they were not sealed inside of the state and came into the state on a through train, how would you get at the correct weight?

A. It would not make any difference to us where they were scaled as long as they were scaled.

Q. You went to the scaling for the purpose of verifying the weights on the wheel reports?

A. No, sir.

Q. For the purpose of getting the correct weights?

A. Yes, sir, and to locate the billing that covered the cars.

Q. You said you traced those scalings in one direction or the other direction, but that was all on local trains?

A. Yes, sir.

Q. May there not have been a case, in which goods handled on local trains, were brought into the state on through trains, and for which you were not doing any tracing?

A. Yes, sir, I see your point now; I guess you misunderstood my explanation; it did not make a bit of difference to us where that car came into the state, where it was going, or anything about it, until it got into a local train; how it reached that local and became a part of it, was of little interest to us. The fact that it was scaled before it reached the local, or that it came to the local in a through train, had nothing to do with it; if it was scaled, it was re-

3653 ported to the auditor regardless of the service it got before it got to the local train, and that was all we were interested in.

Q. You didn't trace it and get to any record, for the purpose of tracing it up the line of the direction of the through train as you described yesterday?

A. I did not intend to say that, if I did; what I mean was, if we did not find it weighed at the first track scale that the local hauled it over, we went back to the next track scale in the direction which the car was coming; we did not know whether it passed that other scale in a through train or local train.

Q. Suppose it did not pass a track scale or was not scaled in the state of Arkansas on a local track.

A. It might have been scaled in Kansas, Missouri, Nebraska or Colorado.

Q. What I am trying to ascertain was, what you did in that case of that class of freight, trans-state and interstate, which was hauled in on through trains?

A. Assume we had a car moving in a local train from Hoxie to Newport on the main line, and we did not find that car was weighed on the scales at Hoxie; it was going south; the supposition was, in most cases, it was moving steadily in one direction; we tried Poplar Bluff scale, the next scale north; if we didn't find it there, we proceeded on up; I haven't the exact scale locations here now; let's assume there was none between Poplar Bluff and De Soto, we
3654 tried De Soto, and then we tried the St. Louis scale, and in that way, we, in most cases, located our car.

Q. You don't mean there was a local through from Hoxie to De Soto or St. Louis, do you?

A. No, sir, but if the car came over Iron Mountain rails from St. Louis to Hoxie, it certainly had a chance to be weighed at any scale between St. Louis and Hoxie.

Q. You mean, to that extent, you investigated the records of through trains?

A. No, sir, I didn't care what kind of train it was in; I investigated the scale records, looked at the records of scales it moved over.

Q. Going to the matter you mentioned a moment ago, in order to ascertain the tonnage of the L. C. L. cars, you say you got the total figure and multiplied it by 4?

A. The total car mileage figure, multiplied by 4.

Q. In order to get the ton miles?

A. Yes, sir.

Q. And you say you based that on the exhibits 19 and 20, filed by the Cotton Belt railroad in this case?

A. Yes, sir.

Mr. HILL: He said he deduced that from the statistics there found.

Mr. MOORE: I said he took that as the basis because exhibits 19 and 20 showed that.

3655 A. I said, we figured from the basic figures given in Mr. Kimbell's exhibits and that result was obtained; that figure appears nowhere in his exhibits.

Q. I understand that is what you say here; it was the result of calculations based on that exhibit?

A. Yes, sir.

Q. That is what I understood all the time; I don't understand that you took it bodily out of the exhibits. Do you think that it is fair and right, and that you could properly apply a condition of that kind on the Cotton Belt road, where the average haul is 40 miles, to the Iron Mountain Railroad, where the average haul is 72 miles?

A. I don't see the connection.

Q. It seems to me there is a good deal of connection.

A. I think I said in my examination in chief, that I was of the opinion—it is a matter of opinion pure and simple—that the average loading would be heavier on the Iron Mountain, owing to a greater density of traffic; aside from that, I did not express any opinion.

Q. Yet you applied the rule, based on calculations in the Cotton Belt exhibit, to the Iron Mountain, notwithstanding, in your opinion, it would not have been proper to do it.

A. I didn't say that.

Q. You said it was your opinion there would be a heavier tonnage and yet you apply that rule to it?

3656 A. I gave you my opinion on the subject; we used the figure four as a result of a consultation between Mr. Wharton and myself, and when we finally decided on its use, we thought that we were stating for the Iron Mountain the minimum, in making use of the figure so arrived at; we put all the ton miles state L. C. L. shown in Mr. Roth's exhibit, on the local train. Now, any increase of that figure 4 will simply result in putting more interstate L. C. L. ton miles on the local train; any reduction of it, would take some off.

Q. That is all very true; we will assume that is all true; the point I want to call your attention to, is whether that is a correct basis upon which to ascertain the loading of those cars in ton miles?

A. The only way in which the actual figures can be obtained is to ride the trains, as was done in the case of the Cotton Belt.

Q. Mr. Ludlam testified in the Missouri rate cases, didn't he, that an estimated figure such as you have stated you made in the C. B. & Q. case, was of very little value, that the only way reliable information could be obtained, upon which a statement could be based.—a correct statement could be based, was to do it at the time, and as you say to ride the trains, didn't Mr. Ludlam state that?

Mr. HILL: We want to object to that; Mr. Moore has ob-
3657 jected time and again to stating testimony in other cases.

The MASTER: The record shows what Mr. Ludlam testified.

Mr. MOORE: I am calling attention to Mr. Ludlam's testimony in the Missouri case; he is the head of Haskins & Sells, and if the testimony of Mr. J. M. Johnson, taken down in Arkansas in another case is competent, this certainly would be.

Q. Didn't he make that statement?

Mr. HILL: I object to the question; Mr. Johnson's testimony that

I sought to introduce over your objection, was proved to be correct in a measure and in a measure incorrect, by the others; that is all I am asking; you are trying to prove what Mr. Ludlam testified; there is a record to prove that.

By the MASTER: I do not think that is a correct question.

3658 Q. Mr. Hamilton, you know what Exhibit 14-a and Exhibit 15 in the Missouri Pacific Case was, do you not?

A. I do not believe I am familiar with them by number.

Q. It is the total tonnage of state and interstate freight, W. C. Fisher's exhibit.

A. I would like to say that I was not present at a great many of the Missouri hearings. I was up in Chicago at that time.

Q. Well, never mind that.

Mr. Ludlam testified on the stand in this case that those were the exhibits showing the state and interstate freight on the Missouri Pacific Railroad, and he also testified that his information was that that data upon which those exhibits were based was obtained by men who went along with the trains.

He further stated that he testified in that case that it was not practicable to get that information accurately as to what makes up the tonnage of particular trains, whether they be local trains or through trains.

Then he testified that he stated further in that case that it was impracticable to ascertain that information from the books and records of the Company subsequent to the operation of the trains and the handling of them:

If he is correct in those statements, is the information obtained by you in the manner you described, as distinguished from the method adopted by Mr. Kimbell, the results which have been ob-
3659 tained in exhibits 19 and 20, correct and reliable data upon which to act?

A. I would say in answer to that, Mr. Moore, that while I did not hear Mr. Ludlam's testimony and am not familiar with the exhibits you refer to, that what Mr. Ludlam had in mind—at least it appeals to me that what he had in mind was the classification of less than carload business.

It is inconceivable how anybody understanding the method in which freight is handled under way-bills and what becomes of those way-bills after the freight is handled, and what a detail record of handling of the freight they must necessarily be, that anyone knowing that, and undoubtedly Mr. Ludlam did, would say that information of this character as to carload business could not be ascertained at any time during the life of the way-bill under which the car moved. The location of the way-bills for less than carload business is open to the objection that I have made to it in my testimoney here.

Q. Now, going back to the Cotton Belt statistics upon a calculation from which you based your four tons to the less than carload car:

It is in evidence in this case that the cotton hauled to compress

points was less than carload business and was treated as interstate business: that is correct is it not?

A. I understand that it is in evidence in this case that cotton hauled to compress points was treated as interstate
3660 business.

Q. And that it was principally less than carload traffic? Did not Mr. Bee so state?

A. I don't recall that he stated that.

Mr. HILL: If you want to read him any testimony, read it, but do not ask him——

Mr. MOORE:

Q. I want to ask you if, in view of the large cotton movement in the month of October, it would be fair to take the Cotton Belt statistics, or calculations based upon the Cotton Belt statistics for movements of freight in that month, as a test for the average loading of less than carload cars for a period of six months.

A. To pass an opinion on that I would first have to know operating conditions and first hand on the Cotton Belt and to know the relative volume of other commodities moving in the various months. I would not like to pass upon that without such information.

Q. You did pass an opinion on it when you used the figures of the October test as a basis to be applied to the six months' period. That is the very thing you did and that is what I am asking you now.

A. I think I explained fully, Mr. Moore, how that was arrived at. That is comparing the two months, the same month in each year on the two roads. I said that in my opinion it was a fair proposition to apply a figure of four to the Iron Mountain because of the greater density on the Iron Mountain——

3661 Q. I am not speaking of applying Cotton Belt statistics to the Iron Mountain, but to the Cotton Belt itself, and the point I want to call your attention to is this:

If, on account of the very large movement of cotton in October, if that would not operate unfairly as between—to apply a deduction made from those figures and the test of Oct. 1907 to a period of six months.

A. I misunderstood your former question. I did not mean to——

Q. Well, now I have made myself plain, what do you say?

A. I will say that in doing that we read Mr. Kimbell's opinion as given in evidence here, that October, as far as the relative volume of state and interstate business was concerned, was a normal month. That is, while the total volume of state and interstate might fluctuate from month to month, the relative movement would be the same. At least, I so construed it, and when he said "interstate," of course he had in mind cotton traffic which is all interstate and that was our reason for applying those figures in that way.

Q. Did you understand Mr. Kimbell as saying, or intending to say, to apply that statement to the loading on less than carload cars?

A. No, sir; to state and interstate business.

3662 Q. We are now talking about the correctness of the principle upon which you have ascertained the average loading of less than carload cars, and you take October, the heaviest cotton month, perhaps, in the year——

Mr. HILL: Is there any evidence of that?

Mr. MOORE: We don't need any evidence on that; we will assume it.

You take the calculations based on those figures: now, I ask you if anything in Mr. Kimbell's testimony was understood by you as justifying that course?

A. I understood it to mean that the relative volume of state and interstate business was the same for one month as for any period—I think he said a period of years, in answer to Judge Hill's question.

He was talking of state and interstate business and the relation between the volume of the two. Now, as both state and interstate move interchangeably, carload and less than carload, in the same cars and in the same trains, I think that applies.

Mr. Kimbell testified on page 91 of Volume 1 of the printed record, and Mr. Doddridge on page 156 of Volume 2 of the printed record—we used the light that these gentlemen gave us, because they were closer to the proposition——

Mr. HILL: Read what Mr. Doddridge says.

A. This is in answer to a question from Judge Hill:

3663 "Q. Mr. Doddridge, I will ask you, from your experience, what would you say was the average loading of the less than carload package freight car?

A. The load of less than carload freight varies greatly——

Q. I am talking about Arkansas?

A. I have no statistics as to Arkansas, but in my judgment, it probably would not run over three or four tons.

Q. What average loading is maintained in such a car, in a day's run, over a local freight train?

A. Well, in a local freight train that is peddling it out; it simply decreases until it is resolved to nothing."

We also had in mind Mr. McPherson's statement as to the average loading of these package freight cars which ran from——

Mr. MOORE:

Q. From two to five.

A. —two to five, I have not looked it up Mr. Moore.

Q. That is my recollecton of it, two to five.

In your quotation from Mr. Doddridge's testimony he states the opinion that the average loading of a less than carload car would not run over three or four tons.

A. I think he says from three to four.

Q. He says exactly what I stated there.

A. Yes, sir; that was my recollection of it.

Q. Now, if that is true, would October not swell the loading above

the average for a year, for a period of six months on account of the movement of cotton that month?

A. It might, yes, sir, but I fail to see how that would
3664 affect our use of that figure materially because we have already loaded on to the local train all of the state less than carload business shown in Mr. Roth's exhibit, put all the state business on which is developed to be the most expensive train. Any change in the total ton mile figure which we put on local trains and from which we deduct the total state to get at the interstate on local trains, would simply affect the interstate figures. If that loading of four tons is too low, then we will have to put some more interstate less than carload in the local train. If it is too high, we will have to put some more of it on the through trains.

Q. You also said in your examination in chief that you thought when you took all the state less than carload ton miles from local trains you worked an injustice to the state business:

You were asked what information you based that on and you stated that it was practical to haul—you gave as a reason for that view it was practical to haul state freight in Arkansas a maximum of 305 miles.

Now, Mr. Hamilton, I want to ask you if it is usual to haul state freight in Arkansas 305 miles?

A. That I cannot say, sir.

Q. Do you not know from your examination of the testimony in this case that a haul of 305 miles on state freight in Arkansas would be exceptional?

A. I stated that was a miximum, Mr. Moore.

3665 Q. Perhaps you did state that. Now, is it fair to take the highest maximum haul that is practicable or possible in the state of Arkansas and base a statement such as you made upon that possibility?

A. I think my statement was that as that haul was practicable that freight moving that distance would move at least a portion of its journey in the through train. That is what I was illustrating. The average haul of all state freight shown by Exhibit 26——

Q. We know what it is—72 miles.

A. Yes. The average haul of all less than carload state freight is shown as a trifle over 57 miles. Of course, that is the average. It takes in all the short haul stuff and all the longer haul stuff and I should say that there is a good deal of long haul stuff in there—perhaps a good deal short of 300 miles, but there are many local freight trains run in Arkansas way below 100 miles, and it would be economical railroading and good railroading, wherever a shipment could traverse a through freight division in a through train to let it travel that way and do its peddling at either end or both ends in a local. I gave as an illustration a shipment from McGehee to Van Buren, 102 miles from McGehee to Little Rock and 150 odd miles further to Van Buren.

3666 While I could conceive that such a shipment might be hauled in the local from McGehee to Pine Bluff, and perhaps again in a local from Pine Bluff to Little Rock, I do not believe

that the agent at Little Rock would allow it to go up the Ft. Smith division in a local.

Take a shipment from Texarkana to Newport, or from Newport to Texarkana; take a northbound shipment; that could have moved in October, 1907, in a local to Arkadelphia. It might move in a second local from Arkadelphia to Little Rock, but I feel pretty sure it would go out of there in a through train.

Take a shipment from El Dorado out on the end of the Camden Branch, as it is called, to say, Pine Bluff—if the Iron Mountain got the shipment—it would move in a local, perhaps, to Gurdon, but while it might go in a local from Gurdon to Little Rock, I think again at the transfer platform in Little Rock it would go in a through train—I do not suppose a great deal of freight moves the maximum of——

Q. I just want to ask you one question about that: I want you to give me your views from your knowledge of the statistics and the records in this case, as to whether such a haul and such movements as you have described are usual or would they be exceptional?

A. Not having analyzed the contents of a less than carload car, I could not answer that question, but it seems to me reasonable that such movements would be made and if they are economi-
3667 cally handled by the railroad, they would be handled in the manner in which I have stated, getting a partial haul in the through train.

Q. I did not ask you if you thought it reasonable that such movements as you gave might occur: I asked you this:

Assuming that such movements might occur and did occur, are they not exceptional?

A. I don't know that it is exceptional. I could not say without analyzing the situation.

Q. Do you think that there is a very large volume of traffic moving between McGehee and Van Buren?

A. I don't know that there is.

Q. I just ask you, speaking of those two stations, if you are able to form a judgment and state whether that would be customary or exceptional?

A. I simply gave those illustrations as those on which I based my opinion.

If you care to have it done, I will be glad to examine the company's way-bills and see if those movements——

Q. I will not ask you to do that.

Your stated in your first examination in this case, referring to the work embodied in the exhibits, that having ascertained the train engine, freight car and caboose miles of the local in each train, you deducted that figure from the total figures of like character in the company's statistics, referring, I suppose, to Exhibit 26?

3668 A. No, sir, that was the ton mile proposition, Exhibit 26. The train mile figures——

Q. I see the distinction, from the statistics compiled by you. Now, those statistics were the total statistics without distinction

between the tonnage carried on local and through trains: that is what you refer to?

A. I think you are confusing two things. Those figures would not have any tonnage in them.

Q. Well, tell me just what you refer to: you say, that having ascertained these elements that I recited a moment ago you deducted them from the totals of figures of like character and the company's statistics. I think that is plain enough. What I want to ask you is this:

If any incorrectness or errors should, by chance have crept into your results and the figures that you made when you attempted to fix the relative quantities—I will call it that for the want of term just now—by the process described, your results were defective and erroneous both ways?

That is to say, your showing of the similar elements on the through train would be affected just as much as the showing on local trains?

A. Necessarily so; to whatever extent that error existed on the through train it would on the other.

Q. In other words, the error would multiply itself in that way?

3669 A. It would be reflected on both sides.

Q. Mr. Hamilton, do you think there is any distinction between the intermediate terminal expenses and the same character of expense at originating and destinating points of freight hauled?

A. Do you mean as applied to the freight or as comparing terminal with terminal?

Q. As applied to the freight.

A. Yes, there would be some, undoubtedly.

Q. What would be the difference, in favor or against?

A. An intermediate terminal, by which I take it you mean a terminal——

Q. What I want to know is, which would involve the greater expense, the terminal or the intermediate——

A. That is what I started to answer, but I want to give my reason first.

Q. Then I want to apply it in another way. I spoke of freight. I will include also the movement of trains handling cars at intermediate terminals and at the termini of the train run.

A. That involves two propositions. When you speak of the handling of freight in a terminal sense it means one thing with less than carload and another thing with carload.

When you speak of handling of trains, it means the handling of cars in the trains.

3670 Q. Take the freight first.

A. The first distinction between the handling of carload and less than carload, the handling of less than carload originating at or terminating at intermediate terminals, would be practically the same as at the destinating or originating terminal. But in that case that I referred to the intermediate terminal would be the origin or destination of the freight.

In the case of freight moving from one small center which would be its originating terminal, to another small point which would be its destinating terminal, through a large intermediate terminal, that freight would undoubtedly get just as much handling at that intermediate terminal as it had at either end, for the reason that it would go into that terminal, possibly, in the way car and be unloaded and reloaded in another way car to go out on the line beyond.

Q. Describe what would be done at intermediate terminals between division points——

A. The handling would be the same at both ends; there would be no material difference.

Q. I want you to compare now the expense at the intermediate terminal with the expense at the originating and destinating points——

A. That was what I was aiming to do.

Q. —in cases where the freight does not pass an important
3671 terminal in going from one place to another, but where it is between important terminals.

A. Where both its originating and destinating points are between the important terminals?

Q. Yes.

A. It would get a handling at both ends, loading at one end and unloading at the other, provided it would not have to be transferred. If the point to which it was destined was not the termini of a local freight run, it would get just those two handlings——

Q. What do you mean by "terminal"? I want to see if we are going at cross purposes. What do you include in the terminal expenses?

A. It depends, in the first place, on what you call a "terminal." In the ordinary acceptance of the term, the terminal——

Q. I mean the sense in which you used it in your exhibit in this case?

A. We used it in a great many senses. If you refer to the particular use I will be glad to define it.

Q. I will call your attention to that part of your testimony that I want explained in connection with the questions I have asked you, which, perhaps, I have not formulated in a happy way to get the information I wanted to get.

You say:

3672 "We took the reports for the entire month of all through and local trains running into and out of a given terminal."

A. Yes, sir.

Q. "Or passing through them": that is what I have in mind now.

"And at the time we found a car set out at an intermediate terminal by a through train we charged that as a terminal handling—whenever we found a car set out by a local—etc."

You are recognizing, as I understand it, two classes of terminal services—terminal services at the intermediate terminals and at the originating and destinating terminals of the train?

A. Yes, sir.

Q. What I want to inquire of you, Mr. Hamilton, is this: which involves the greater expense, the intermediate terminal handling or the terminal handling at the point of origin or destination?

A. Without having before me the expense of operation of each of these terminals where a switch engine was kept, in connection with the number of cars using the terminal, I would not be able to form any comparison. If I knew the expense of a terminal for a given period I could make a comparison.

Q. Do you make any allowance for the difference in the expense of intermediate and other classes of terminals in the formula which you applied in this case?

3673 A. Perhaps, Mr. Moore, if I make a little explanation of my testimony right there, it will be more clear.

Mr. McPherson, or his office, to be more accurate, furnished us with a list of the stations in Arkansas at which switch engines were maintained during October, 1907, the month we had under examination.

Those engines were kept there—aside from their industrial switching—for the purpose of handling cars left there by trains and handling cars to be taken away from those stations by trains.

Now, between Argenta and Texarkana, the termini of a through freight run, I found a switch engine kept at Hope. That engine was there to take care of any cars set out at Hope by a through or a local train, or it prepared for movement any cars to be picked up there by either class of trains, and we have taken a number of cars handled at each terminal as indicative of the use made of that terminal by through and local trains; that is, the number of cars handled for each class of train.

In order to compare the expense of handling those cars, I would first have to know the expense of the Hope terminal, per car, and then set it up against Texarkana or Argenta or these other points to make a comparison.

The engine was there and the cost or expense per car unit of handling would depend upon the use made of the service.

3674 Q. What did you do about it? Did you make any allowance for any increased expense at the termini over the intermediate?

A. I spoke of "intermediate" in the sense that in that case Hope was——

Q. The question is did you make any allowance?

A. No, sir; we took all the cars handled at all the terminals.

Mr. HILL:

Q. You mean terminals where there are switching engines?

A. Yes, sir. We had to do that, necessarily, unless we had separate expenses for each terminal and could pro rate it separately between local and through trains on the basis of the use made of that service at that time.

You will recall, further, that in asking for that information as to the Ft. Smith terminal we were told that it was in the central

division expense accounts and that it was not now obtainable. I think Mr. Johnson made that statement. So we were compelled to lump, not only the expense of terminals but the use made of them to divide that expense.

3675 Q. You spoke this morning about a back-haul in some connection:

If I remember, Mr. Bee testified as to the practice of railroads in carrying freight to division points and then back-hauling. He stated that less than carload freight—we will say from Little Rock on the Iron Mountain—would be carried to Little Rock on a local train and shipped up the line, what he called a "back-haul," thirty or forty miles:

Is that the practice?

A. I don't know, Mr. Moore, as to the Iron Mountain in Arkansas, because we did not go into the less than carload cars to know what their contents were, but there might be occasional for that.

I think that would occur in some cases. I don't know just how the Iron Mountain loads its merchandise and where its transfer platforms are, but I can conceive where that might be done and it might be good railroading to do it.

For instance, St. Louis might have freight for the first, third or fourth stations north of Little Rock, on a given date and not enough to make a full car to break bulk at the most north-

3676 erly station of the three or four; sooner than load that in a car for, say, Newport, to be reworked, they might load it in a Little Rock car to be reworked and come back.

I know the Frisco does that very largely at some of its transfer platforms, at least I am so informed by their superintendent of transportation. But not having gone into the contents of the cars on the Iron Mountain in Arkansas, as I stated, I don't know.

Q. Mr. Bee also stated that that would be done with reference to the carload as well as less than carload?

A. I don't see the necessity of that.

Q. Where would that freight appear in the statements prepared by you, that back-haul?

A. Carload or less than carload?

Q. Either way.

A. The carload would appear in the trains that handled it both ways.

Q. In the train that handled it both ways?

A. Yes, in the trains that handled it in both directions.

Q. Will you please explain that?

A. Say a car was going from Newport to a point north of Little Rock. For some reason that was carried into Little Rock and then carried back. We would have a record of it on each train. I do not recall any of that. I don't think that carload business

3677 would be back-hauled. I don't see the necessity for it.

Q. How would it be on the less than carload?

A. I can't answer that, sir.

Q. Where would it appear in your figures?

A. We would have the car miles of the car that took it in one direction and the car miles of the car that took it in the opposite direction and would multiply that by four, as we did others.

Q. In other words, you would have the cars to Little Rock and on the back-haul from Little Rock to——

A. Yes, any back-haul. If it moved in a local train we would have each.

Q. And that would be multiplied by four?

A. Yes, the average loading.

Whether there was any back haul stuff on the carload business, I don't recall, and I don't know as to the less than carload because we did not analyze the contents of those cars.

Q. But to the extent that there was a back-haul it would appear that way in your accounts?

A. Yes, sir, if there were any, it undoubtedly would.

Q. How would that appear on the record of the Railroad Company?

A. I assume you refer to Mr. Roth's figures?

Q. Yes.

A. Mr. Roth would take into his figures the haul indi-
3678 cated by the heading of the way-bill, as I understand.

Q. That would be from St. Louis to the station north of Little Rock, whatever that station would be?

A. Yes, sir.

Q. We will say Beebe: Mr. Roth's figures were taken into that station?

A. Yes, sir.

I don't believe that in the ordinary conduct of the business of the road a carload of freight would be back-hauled. I don't see the necessity for it. The only excuse would be in the case of a car of perishable stuff or a desire not to stop a car at intermediate stations, and I don't think they make any time by back-hauling——

Q. Now, Mr. Hamilton, were the figures which are the bases of the exhibits filed by Mr. Wharton, compiled with accuracy by you or those who were working under your direction, do you think?

A. The men who assisted in the compilation of them were competent and thoroughly understood their instructions. The plan outlined for their compilation was a good one, in my judgment. To the best of my belief those figures are accurate, yes, sir.

Q. I suppose its value depends upon its correctness?

A. Its value would depend upon the correctness of the percentages which were derived from those figures, because the percent-
ages themselves are what are used in our various calculations.
3679 I am speaking now of the figures on Exhibit "I." And whether those percentages are right or wrong depends upon the correctness of the figures upon which they are based?

A. Necessarily so, except when you are dealing with totals, where large differences are necessary to affect the percentages, which, of course, are expressed in parts of one hundred.

Q. Who are the parties who assisted you in making up those figures?

A. Mr. Wright and Mr. Dutlinger, practically all of the time; Mr. O'Conner, and Mr. Hetzel and Mr. Reichardt, who did simply clerical work, such as copying, additions, and did none of the classifying of the ton mileage.

The gentlemen I have mentioned were employed by the Arkansas Railroad Commission, working under my supervision.

In addition to that, at various times when we could use a man for a few days, we had the assistance of some of the members of Haskins & Sells' staff. Mr. Gilliam, of our St. Louis office; Messrs. Porter and Webster of our Chicago office; Mr. Senft, of our St. Louis office.

The bulk of the work, however, was done by Mr. Wright, Mr. Dutlinger and myself.

Q. Were your figures, at any time, shown to the accountants of the railroad company and was any revision made by you and your men on account of errors that were pointed out?

3680 A. The principal revision which was made in our figures was due to the fact that after we had gotten most of them together, we found that either Mr. Roth had been mistaken or we had misunderstood him as to the basis on which he had figured the mileage in his Exhibit 26.

A great many of the distances which our cars were hauled, were fractional distances. That is, the distance would terminate in a fraction of a mile and we understood that in making his figures Mr. Roth had dropped fractions of ½ mile and under.

It developed later, when our figures were practically completed, that Mr. Roth had picked a half mile up, and over. That necessitated a revision of our figures, our car mile and mileage figures.

We found some minor errors in our figures, principally errors in footing car mileage, in making that revision. Those were the only differences that our attention was called to.

Q. Did you make corrections of all those figures, Mr. Hamilton?

A. Yes, sir, I had the figures gone over by my assistant.

Q. I hand you one of your work sheets and call your attention to what is contained in the column "miles hauled" opposite car number 82,962 P. R. R.

3681 Also car 3972, with the initials of the Cotton Belt, St. L. & S. W., and car 64,413, B. & O.

I wish you would examine that and state what appears upon it in regard to the miles hauled and any corrections that may have been made by you in regard to that; state what the corrections indicated by Mr. Roth were, or by whoever represented the railroad.

A. (After examining paper.) I find that the mileage shown opposite those cars is 41 miles each. Those are the figure- placed on there by one of my assistants.

The information given on the abstract sheet indicates that those three cars were hauled from Station No. 997, which is Harrisburg, Arkansas, to Station 987, which is Paragould, Arkansas.

The mileage between those two points, indicated by the official Station List, is 37.46 miles.

When the mileage of 41 was placed against those three cars, in

the first instance, it was an error of four miles for each car or a total of 12 car miles.

I find that on revising our figures, as I explained a few moments ago—which revision was first necessitated by a misunderstanding between Mr. Roth and ourselves—that we have revised those figures to read "37" miles, which is the exact distance shown by the station list, between the two stations, correcting that original error of four miles per car for the three cars.

3682 I find that opposite our station number "997" on the sheet, somebody has noted station No. "987," indicating that the car was taken there, and showing delivery point at station 786, whereas we have it from Harrisburg to Paragould.

The mileage of 37 miles as latterly placed by us, is correct for the haul which we show.

Whether the cars were actually hauled from Paragould to Knobel, as indicated by this second correction (which was not made) I can only say by reference to the wheel report. If that second correction is correct, the correct mileage would be 21 miles.

Q. Have you the wheel report there?

A. No, sir, the wheel report is part of the Company's permanent record and is in their possession.

Q. Now, Mr. Hamilton, would that four miles difference be accounted for by the fraction you spoke of a while ago?

A. No, sir, the four miles was a revision which we made. We corrected the four mile item at the time we revised our other figures.

Q. You explained a while ago that you had fallen into some errors by reason of a misunderstanding or mistake in the representation made to you by Mr. Roth as to the manner in which he used fractions, which amounted to——

A. It would make a mile each way——

Q. —that was the way you made the errors?

A. No, sir, that was what started us to revising the miles

3683 on these sheets.

Q. That does not explain that difference, does it?

A. I said before, in doing that we found some other differences which we attempted to adjust as we went along.

Q. Do you know if the mileage used by you in making up your ton miles is the same that was used by the Railroad Company in making up Exhibit 26?

A. I understand so, yes, sir. We were informed they took the mileage on the Official Station List of the Company and that is what we aimed to use.

Q. Please explain what figures you used in ascertaining the mileage?

A. We took that out of the Company's Official Station List.

Q. And applied the information you got from the wheel reports?

A. Yes, sir.

Q. You do not know where the Railroad Company obtained the figures, the basis of the ton mileage represented in Exhibit 26?

A. I am informed by Mr. Roth that he used the station list mileage, which is the basis we used. Mr. Roth had given me a

memorandum of the method on which he had compiled Exhibit 26 and the basis used, when our work was about completed.

Prior to that time we had just discussed the matter verbally, which served our purpose as well.

3684 I notice here under the head of "Mileage" he does not state the source from which he got the mileage, but I recall distinctly that he told me it was taken from the Official Station List. I don't see where else he got it from.

Q. Were there a large number of errors corrected by you in the manner you spoke of a while ago, that had been pointed out by the railroad accountants?

A. There were quite a few in the mileage adjusted, yes, sir. Whether you would consider them large in view of the size of the statement would be a matter of opinion, but there were quite a few.

I recall one instance where on comparison of the mileage used by the Transportation Department and that in the Official Station List, we were shown a wire from the Division Superintendent to the effect that the mileage on the White River Division was a mile out of line, I don't know whether it was too much or too short in the station list, but that impressed on my mind the fact that the railroad company did make the station list the basis of its mileage.

Q. Were you able to locate all of the cars?

A. There were some unlocated. I endeavored to have Mr. Dutlinger, who is still assisting me, make an actual count Saturday, but he told me these sheets were in use, and again today—until he gets the sheets I cannot say how many.

3685 It just occurs to me, Mr. Moore, that I left a point uncovered in my last answer:

Reverting back to this car mile revision: I recall that the differences we located were both ways, up and down, and that the net change in our figures was negligible.

Of course, when you consider the revision of a statement of that kind, its accuracy, you must consider all sides of it, because the figures used in our exhibits are the percentages derived from those figures. The mistake which would offset another one, of course, would nullify it.

Q. I hand you one of your work sheets and I want to call your attention to car I. C. 42,282, which is shown to have moved on October 1st, on train 295, from Wynne to Bald Knob:

Will you take the sheet and state what the contents of that car was?

A. (After examining sheet) The sheet does not describe the contents of the car. Was that your question?

Q. Yes, give the pounds and the classification of the freight?

A. It is classified as "trans-state", 56,000 pounds, and I would infer that the final destination shown on the wheel report was Lyndon, Kansas.

Q. Now, take the same car which was hauled on October 2nd, from Baring Cross to Newport?

A. That is not on this sheet. It would be on another

3686 division.

Q. On October 2nd——

A. That appears as the last car in train 92, moving from Baring Cross to Newport. The classification shown is the same. The weight is shown as 44,800 pounds.

Q. There is a difference in the weight, is there not?

A. Yes—that would amount—if the weight shown on the first train of 56,000 pounds were correct—to a shortage in the trans-state weight on the other train of about 150 ton miles.

Q. How would it be the other way if the second was right and the first wrong?

A. That would amount to an excess of the trans-state ton miles on the first mentioned train of about 450 ton miles.

Q. Now, take the same car from Newport to Cushman, on October 3rd?

A. It is a trans-state car moving one day on each local train. I find that the weight of 56,000 pounds shown on the first wheel report which we discussed is shown on that. It is classified also as "trans-state" in each of the three instances.

Q. That is a difference of what?

3687 A. The same difference as existed between the first two cars. It is identically the same weight as shown on the first movement.

Q. Do you know what the correct weight is?

A. I assume, without second reference to the billing, that certainly two weights of one car and one movement cannot be correct. Which is right, I would have to refer to the billing to determine.

Q. I understand neither one is correct; it is 62,000 *thousand* pounds?

A. That would necessitate my examination of the Company's records again.

Q. Now take car C. & O. 6855.

A. Is it a similar movement?

Q. Yes, a similar movement.

A. It is from Bridge Junction to Bald Knob, according to this abstract sheet.

Q. Assume that was from Bridge Junction——

A. My record shows Bridge Junction.

Q. —what is the weight on that car?

A. The weight is shown "trans-state, 76,000 lbs."

Q. Take the next movement made on the 2nd of October: what is that movement?

A. I assume you mean from Bald Knob to Newport?

Q. Yes—Baring Cross.

A. I find that car classified as "trans-state, 42,000 lbs."

3688 Q. That is a difference of 34,000 pounds, is it not?

A. Yes, sir.

Q. That is to the destination of it, I suppose?

A. Yes, sir.

Q. What destination does your record there show?

A. My first record of the car, the conductor has reported it as a

car for Linwood, Kansas. I recall there was a heavy tie movement out there at that time for the Union Pacific Railroad.

The second wheel report from Baring Cross to Newport, the train in which the car was hauled from Bald Knob shows the destination is Kansas City, which is entirely consistent, as the car would route through Kansas City.

Q. Now take C. C. 4143 of the same date, the same train and give the weight of that car on the first movement?

A. From Bridge Junction to Bald Knob, in train 295——

Q. What is the weight and classification?

A. That is classified as "trans-state freight, 63,700 pounds."

Q. Now, take the next movement from Bald Knob to Newport and give the weight and the classification?

A. It is classified as 54,200 pounds of interstate freight.

Q. What is the difference there?

A. 9500 pounds.

Q. There is a difference in the classification, too, is there not?

3689 A. Not as we made use of the figures.

Q. It is classified as "trans-state" in one instance and in the other as "interstate"?

A. You will find no "trans-state" figures on our Exhibit "I" or in our percentages.

Q. You have furnished "trans-state" figures in evidence, have you not? I believe Mr. Wharton did?

A. Yes, sir, at your request.

Q. Take the next movement, now, on *the* October 7th, and see what that is?

A. On the same train? the last I had was on the first, I think.

Q. No. 296.

Q. That is a train moving in the opposite direction, on the White River Division,—no, that is the White River train north of Newport.

Here is a trans-state car that took five days between Newport and Batesville.

We revert there to the original figure shown on the first train, 63,700 pounds.

Q. Now, take car C. M. St. P. 80,800, and turn to train 295, October 1st and state the movement, and the weight and classification there?

A. The car is shown as moving from Bridge Junction to Bald Knob, containing 68,700 pounds of trans-state freight.

Q. What is the next movement—train 92, October 2nd—what is the weight and classification there?

3690 A. It is classified again on that train, as "interstate" business showing a weight of 40,000 pounds.

Q. A difference of 28,700 pounds?

A. Yes, sir.

Q. Now, take N. Y. C. 26,361, on train 295, October 1st: what is the movement there?

A. That moved from Bridge Junction to Bald Knob. The weight is shown as 68,700 pounds of trans-state freight.

Q. The next movement, on train 92, classified as trans-state?
A. 50,600 pounds.
Q. The difference there is 18100 pounds?
A. Yes, sir.
Q. Take C. I. & S. car 182405, in train 295, October 1st, and state where that moved, and the weight and classification of it?
A. It moved from Bridge Junction to Bald Knob and is shown as containing 72,800 pounds of trans-state freight.
Q. Take the next movement, on train 92, October 2nd, from Bald Knob to Newport: what is the weight there?
A. There seems to be a discrepancy there, Mr. Moore. I find this car on train 92 bears a similar number, but instead of being listed as "C. I. & S." it is listed as "C. & E. I." Which of the two is correct, or which wheel report is correct, I don't know without reference to it.

Q. Is it not probably the same car?

3691 A. I would not assume that without seeing the wheel report. We show a weight of 42,600 pounds on it here.

Q. These cars are left together on the same train?
A. Not necessarily. If they did, they are——
Q. Does this not show the moving on successive days on the same train, first from Bridge Junction to Bald Knob and then from Bald Knob to Newport, on the second of October?
A. One train shows a C. I. & S. and the other a C. & E. I. I note that Mr. Wright has marked it on the side "no record." I don't know what is referred to.
Q. What is the weight?
A. The weight in the second train—that is the weight of the car marked C. & E. I. is 42,600 pounds.
Q. That is a difference of 30,200 pounds?
A. If it is intended to cover the same movement as the previous car.
Q. Take I. C. car 35,853; give the movement, the weight and classification on that, on the first day of October?
A. It moved in train 295, from Bridge Junction to Bald Knob and it is classified as "trans-state, 60,300 lbs."
Q. Now, give the movement on October 2nd, in train 92?
A. It is shown as moving from Bald Knob to Newport and is classified the same way, shown as 40,100 pounds.

Q. There is a difference of 20,200 pounds, is it not?

3692 A. Yes—it comes to me, Mr. Moore—I don't know that it applies to these particular cars that we have discussed, but we found a great deal of billing for a movement of ties from points in Tennessee or Mississippi, on the Illinois Central, through Memphis, which had originally been billed at Memphis through to the Union Pacific Railroad, and the Auditor's record showed that the heading of those way-bills had been corrected to read to Kansas City—I believe for the reason that through billing was unauthorized, and I recall—and I think if the tissue book were brought up here it would bear me out—that a great many hand copies of way-bills were posted in the book for which there were already tissues copies in the book.

I notice that the lower weights on this train 92 are in my figures. Also that the other trains we have taken up on these same cars of ties are in Mr. Wright's figures. It is possible he got one copy of the way-bills, while I got the other.

However, an examination of the impression book will show that and bear out my statement that there were a good many duplicate copies of billing for these cars in the Auditor's record.

Q. These are the weights, though, that you used in making up your ton miles on local trains?

A. From these sheets; yes.

Q. Take car I. M. S. 4753, October 1st, train 295, and see what you have in regard to the movement, weight and classification

3693 of that?

A. I find that that car moved from Wynne to Bald Knob, destined to some point in Kansas—it is not quite decipherable, now,—it is said to contain interstate tonnage of 58,300 pounds.

Q. Take the same car on train 92, on October 2nd, and see what you have there?

A. It does not appear on these sheets, on that train. It is not on that train on the second. It appears on that train on the third.

It shows a movement from Bald Knob to Newport for some Kansas destination and is said to contain 60,000 pounds of ties for the company's use.

Q. That is company material, is it not?

A. Yes, sir. Without examining the bill, I would not be able to say whether the car was a confiscated car of commercial ties or whether it had been erroneously classified.

Q. In one movement it is classified as "interstate" and on the other, as "company material" on your working sheets there?

A. Yes, sir.

Q. Now, take Big Four, 20,719, on train 295; it is on the Memphis division, October 1st?

A. It is shown as moving from Wynne to Bald Knob, to a destination said to be Kansas City, interstate business, 38,000 pounds.

3694 Q. Take the next movement of that on October 2nd, on train 92—may be it is the third—either the second or third?

A. I find that classified as "interstate business, 60,000 pounds.

Q. A difference of 22,000 pounds?

A. 22,000 pounds.

Q. Now, take M. C. car 16987, train 295, on October 2nd, and state the number of tons on that car?

A. The car is shown as containing interstate freight, 60450 pounds.

Q. Take it up on the second or third of October on the next movement you find there?

A. I find that car on the third of the month on train 92, with a weight of 49,200 pounds.

Q. That is a difference of 11250 pounds, is it not?

A. Apparently, yes.

Q. Take car M. K. & T. 15805, October 2nd, on train 295, and give me the movement of that with the weight.

A. The car was moved from Wynne to Bald Knob, containing 58800 pounds of interstate freight.

Q. Now, take it up on train 92, on October 3rd, and state the movement and weight?

A. Interstate freight 45,600 pounds.

Q. That is a difference of 13,200 pounds, is it not?

A. Yes, sir.

3695 Q. Take it on train 296, October 7th.

A. I find that is shown there as 50800, instead of 58,800; that would be an error in copying.

Q. Take car D. R. G. 10714: train number is 92 and the date is October 3rd.

A. Where is that moving?

Q. From Baring Cross to Newport.

A. I find that car was moved from Argenta to Newport, the destination said to be Carthage, Missouri. It is classified as "interstate freight, 34,800 pounds."

Q. On October 6th, train 246, is the next movement shown here: see what the weight there is. This is from Newport to Cushman.

A. I find that car classified on that train is interstate freight, 37,900 pounds."

Q. That is a difference of 3100 pounds?

A. 3100 pounds.

Q. Take the same car on train 296 on October 7th, the next day, from Batesville to Cotter, and see what the weight there is?

A. The movement from Batesville to Cotter is shown to contain "interstate freight, 48,600 pounds."

Q. That is 13,800 pounds more than is shown on the first movement, is it not?

A. Yes, 13,800 pounds.

Q. And it is 10,700 pounds more than is shown in the second movement, is it not?

3696 A. Yes, sir.

Q. Now, take car M. P. 30166, train 92, October 5th, from Baring Cross to Newport, and state the weight and classification of that.

A. It is said to have been hauled from Argenta to Newport, destined, according to the wheel report, to Hoxie, Arkansas; classified as state business, 69,200 pounds.

Q. On train 92, October 7th, you will find the same car: see what the classification and the weight is there?

A. That cannot be in the same train because it completed its journey so far as this train is concerned.

Q. It is the other end, is it not?

A. No, sir, the train runs from Newport to Argenta and from Argenta to Newport each day and they only——

Q. At any rate, the next movement of that car, what train is it on?

A. I have it 92 from Newport to Hoxie, which is a different train on the same division.

There are two trains numbered 92 up there.

The car moved from Newport to Hoxie, but here the destination is shown as Cairo.

What is the date of the next movement you gave me?

Q. October 5th. What is the weight shown on this last one?

A. Just a minute, please, until I look that up. (Referring to paper.) The car went into Hoxie on the 5th and is shown on the 7th, two days later, as going back from Newport to Hoxie,
3697 with a different destination.

I have no assurance that that car was not made empty at Hoxie, sent back to Newport and reloaded in the 48 hours intervening. The one conductor shows it destined to Hoxie and the other to Cairo. I will have to examine the wheel report and billing as we did to show it was two different movements.

Q. What was the weight of that car in the last movement, train 92, Newport to Hoxie and the classification?

A. Understand, Mr. Moore——

Q. I understand, you say it may or may not be the same loading, but I want to get your record.

A. That would necessitate an examination of the billing.

Q. I want to know what your record shows is the weight of that?

A. I will give you that in a moment.

The second weight, in which we show the car as destined, not to Hoxie but to Cairo, shows a weight of 61,200 pounds and is classified as interstate, which would be correct if its destination were Cairo.

Q. There is a difference there of 8,000 pounds?

A. There would be no difference where there is no comparison, and I don't know that it covers the same movement.

We found lots of those cars in very active service.

Q. At any rate, between those two weights there is a dif-
3698 ference?

A. Considering those figures in the abstract, yes, sir.

Q. How do you treat it there? Do you treat it as one car in your figures?

A. No, sir, I have two movements of it, two different trains.

Q. Mr. Hamilton, on the first movement shown here—from Baring Cross to Newport, is it not?

A. Yes, sir.

Q. The date is October 5th?

A. Yes, sir.

Q. That would probably take that date, to get that from Baring Cross to Newport on a local train by daylight?

A. Possibly, yes, sir.

Q. You say that car was destined to Hoxie; when would that car reach Hoxie in the ordinary course of business, would you say, it being now, as shown here, its first movement from Baring Cross to Newport?

A. It could have reached Hoxie in very short order. The local freight train from Hoxie to Newport goes down and back in a day, but I suppose a through train would take it up there in a few hours.

I do not know the exact schedule time of through freight, but it is only a few hours difference between Newport and Hoxie. They

are not very far apart. It could go up there on an ordinary through freight train in three hours.

3699 Q. You mean that would involve a second movement between Baring Cross and Hoxie?

A. It would mean that it moved from Newport on a through train that evening.

Q. It would get there that evening, it would have to be unloaded, would it not?

A. At Hoxie?

Q. Yes.

A. No, sir.

Q. If you assume it is two different cars?

A. Yes.

Q. And then carry it back to Newport?

A. Yes, sir.

Q. And load it there for Cairo?

A. Yes, sir.

Q. Would it have been in accordance with the rules used in operating trains to have started that car out on a local train billing to Hoxie—from Baring Cross to Hoxie—and transfer it from that train to Newport on another train going to Hoxie?

A. It would have to transfer into another train upon arriving at Newport in a local, because that is the terminus of the local's run.

Q. But on the next movement you see the same car got to Hoxie on train No. 92?

A. Yes, with an interval of 48 hours.

3700 The only way to tell that would be to find the way-bill to cover——

Q. We will pass that; it is not worth while taking more time for it.

A. We found a lot of cases of that kind where there were two very close movements of cars. I speak from memory—and that might have been one of them.

Q. Now, take car Big Four 20725, October, 7th, on train 92, from Baring Cross to Newport:

I want you to show the weight of that car and its classification on that date.

A. That car is shown as moving from Bald Knob to Newport. The conductor said its destination was St. Louis and we have classified it here as interstate business, 42,600 pounds.

Q. Did you go to the way-bill for your classification?

A. Yes, sir. I see nothing in what I have said to——

Q. You said the conductor said on the wheel report——

A. I am just giving the information I have here.

Q. What is the next movement of that on October 12th, train 92?

A. That fellow had five days at Newport.

It moved out of Newport classified at 42,300 pounds and this time in the trans-state.

Q. There is 300 pounds difference in the weight?

A. Yes, sir.

3701 Q. Suppose that weight should have been 47,800 pounds: of course, you have nothing there to show it and neither have I, but that would have made quite a difference?

A. A difference of 5500 pounds, if that were the correct weight.

Q. Take car Q-43197, train 92 on Oct. 19.

3702 A. I find that car moved from Little Rock terminals,—from Baring Cross, to Newport, and that it was classified as 44,700 lbs. of state business.

Q. Turn to train 246 on October 20, next day, and see what you find there about that car?

A. From Newport to Cushman on the 20th; it is shown now to be destined to Webb City, according to the conductor, and has interstate business of 45,800 lbs.

Q. So there is a difference of a few thousand pounds in weight, and difference in classification, transferred from state to interstate?

A. If it is the same movement, yes, sir; one movement, according to our memorandum here, is shown to be destined locally to Newport; the other, on the succeeding day shows the car destined to Webb City, Mo.

Q. Take car M. P. 62141, train 92, from Newport to Hoxie on Oct. 1st, what do you find there to be the weight and classification of that car?

A. That car is said, on this sheet, to be destined to Carthage; that is the conductor's information, and to have contained interstate freight 54,600 lbs.

Q. Now turn to train 294, Cotter to Crane, and see if you find that same car there, and what its contents is?

A. Yes, sir, I find it on October 8th, train 294, seven days later, on the White River Division; there it is shown to be destined to Crane, Mo. Apparently that was the end of the division and the conductor got mixed on it, but it now contains company supplies; that was seven days later.

3703 Q. What is the weight?

A. 20,000 lbs; that is seven days later than the other movement.

Q. It was shown to be an interstate movement on the first movement?

A. Yes, sir; where the car was in the interval, I couldn't say; in the first movement, it was destined to Hoxie, and in the second movement, it was destined to a White River point.

Q. Isn't it destined to Crane, Mo. in the first instance?

A. That is the second move.

Q. Isn't it true also of the first?

A. My record doesn't show that; it may have been; the conductor showed in the first instance it was destined to Carthage, and we have apparently located the billing on that examination; I see there is a check against the destination, indicating to my mind it was found there; this other movement is seven days later; whether those two will compare or not, I cannot say; it is quite possible for the car in seven days to go from Newport to Carthage, and again moved seven days later, in company service, from Cotter to Crane; they are not a great distance apart.

Q. Turn to car I. C. 33909, which moved on Oct. 8th, on train

245; what is the weight and classification of the freight? That is Cushman to Newport.

A. I haven't it here.

3704 Q. May be it is on train 295.

A. The train I had is Cushman to Newport.

Q. 295 is Cotter to Batesville?

A. Yes, sir; it is on train 295 from Cotter to Batesville, southbound.

Q. What do you find there?

A. The car is shown as going from Silamore to Batesville, and the ultimate destination of it is shown as Paragould, and it is classified as state business, 67,200 lbs.

Q. Turn to train 91, Oct. 11, Newport to Argenta, what do you find there?

A. Moving from Newport to Bald Knob, and said to contain 45,000 lbs. of company freight; here the destination is shown as station 937, which is apparently in error, because the car is moving south from Newport, and the destination indicated by the conductor is Cairo, Ill., which is north. The destination given on the first sheet is Paragould, which would require a northward movement from Newport to Knobel; this car seems to be going the other way.

Q. You have there train 295, and then I gave you the last train 91; in between that, there is train 245, Cushman to Newport?

A. Yes, sir.

Q. It is not worth while to look at that, because the weight and classification is the same there as on train 295, and you find it the last time on train 91.

3705 A. That wheel report on 245 confirms the statement that the car is destined to Paragould; I notice here that we have noted in the waybill reference, that the car was waybilled at Silamore, and the weight was the same. I would infer that either the number of the car shown in train 91 is in error, or that same was reconsigned, or other disposition was made of the car; the two movements of the car on the White River division indicate it being destined to Paragould, which would require a northward movement from Newport, but the train on the main line is hauling it south to Bald Knob; there is no indication that it is the same movement; of course, I don't know that it is not, but it seems improbable.

Q. The difference in the contents of the car is 12,200 lbs., and the classification is different?

A. If it be the same movement the comparison is right; I don't know how you could compare them if they were not moving under the same waybill.

Q. Can you move either way, north or south, going to Cairo; it might go off the White River Branch via Bald Knob?

A. I can't conceive of anything short of a blockade on the main line that would take it all the way around by Bald Knob to Cairo.

Q. It might go by the way of Paragould then.

A. I am not clear as to which is the short haul, but I can tell you in a minute; it would be a longer haul by way of Bald Knob, considerably.

Q. If it would go the other way, would it go by Paragould?
3706 A. By Knobel, which would be north of Newport, and then down the branch 20 miles to Paragould; it would be a somewhat longer haul the other way; it might go the other way.

Q. That is one of the cases we were discussing the other day, when you were testifying in regard to the movement of trains and retention of trains in terminals, and you were talking about the back haul through Knobel?

A. Yes, sir.

Q. This business might have gone to or from Newport, south by way of Bald Knob or north by way of Knobel and gone to Paragould?

A. Yes, sir, there is a choice of routes.

Q. This had to travel a good distance on that line from Silamore?

A. Yes, sir; once you get the car to Newport, it is just a question of which route you take on the main line; the shorter route is by Knobel; of course, it may be the same movement, but it is not linked up here.

Q. Turn to Missouri Pacific car 29263 on train #91, the first move, Oct. 14, Bald Bnob to Judsonia?

A. Yes, sir.

Q. What do you find to be the weight and classification?

A. Said to be moving from Bald Knob to Judsonia, and to be destined to the latter point, and to contain company material, weight of 82,200 lbs.

Q. On Oct. 17, on the same train, I take it that stuff moved from Judsonia to Kensett, showing the same weight and classifica-
3707 tion; see if you find that?

A. Yes, sir.

Q. On Oct. 21, the car moved still on the same train, from Kensett to Higginson, what is the contents and the classification of that movement.

A. It is shown as containing state business, 80,400 lbs.

Q. On Oct. 30, you will find car on the same train from Higginson to Garner, what is its contents on that occasion?

A. The car is shown again as containing coal, 82,900 lbs., of interstate business.

Q. So that car appears to be classified company material, containing state business, and containing interstate business, on these three movements?

A. You will notice that on the first move from Bald Knob to Judsonia, the car contained 1800 lbs. more than it did on the second move from Judsonia to Kensett. That is a Mo. Pac. coal car, my memorandum on the margin of these sheets indicates the car was loaded with coal; that looks to me like a car of station coal, peddling down the line, but that does not account for its commercial classification during the last move; there was a lot of coal stored at Bald Knob during that period, I take it as being company coal; it was a car which was partially emptied, probably, but sent on down the line, and that accounts for the decreasing weights, where it is classi-

fied as company business; whether it was eventually handled as commercial coal, I couldn't say.

3708 Q. That doesn't account for its being classified as company business?

A. Not for the last moves.

Q. Take up car Erie 51746, train 91, Oct. 4, that car moved from Hartshorn to Newport, what was its weight and classification.

A. I do not find an Erie car in train 91 between Newport and Baring Cross on the 4th.

Q. I said Hartshorn, I should have said Hoxie?

A. That is shown as picked up at some point, moving to Newport.

Q. The first movement, I call your attention to, is from Hartshorn to Newport.

A. Yes, sir, moving from Hartshorn, which is the second station north of Tuckerman to Newport, shown as containing 87,400 lbs. of interstate freight.

Q. The next movement is on train 91, from Austin to Baring Cross, that is on the 14th of October.

A. I do not find the same car.

Q. On the 12, it moved from Newport to Austin, and on the 14th it moved from Austin to Baring Cross.

A. The car moving from Austin to Baring Cross on the 14th is 51,796 Erie.

Q. Returning on the 12th, Newport to Austin, train 91, what do you find there?

A. No, sir, that is car 51,796; those car numbers have been checked by the transportation department to see if they were right; I will say for your information, if you desire to compare the

3709 movement of 51,796 Erie on the 12th and 14th, there is a difference there of about 400 lbs., I think—there is no difference practically—the cars are classified and the weight is the same on both trains.

Q. Do you recall that the car reports show that the conductors made a mistake that day in those cars, and that those are really the same car, that the number was 51,746, and that he made a mistake in entering it on the list as 51,796?

A. Not out of this multitude of cars; I would say for your information, that we attempted to use the company's car records to locate some of these cars, and we gave up in despair. We found that back in 1907, under another management than that which now has charge of the car accountant's office, the car account was not very reliable; I found many instances where the car was entered under two or more different movements, under two or three different conductors on the same day, and I endeavored to find some of these cars in the car record, but it would show the car in question in Kansas or some other place the same day we had it in Arkansas; we had very little reference to them, but what we did do, we found they were of no use to us.

Q. Give us the weight and classification of that car?

A. Which?

Q. Moving from Newport to Austin and Austin to Baring
3710 Cross, car 51796.

A. I have a move of 51796 Erie on the 12th of the month, from Newport to Austin, and the weight is classified as interstate 87,800 lbs. I find the same car, 15,796, Erie, moving on from Austin to Argenta, two days later, and it is classified in exactly the same way, same weight and same classification.

Q. How is it classified on the 12th?

A. Interstate, 87,800.

Q. Isn't it classified as trans-state on the 14th?

A. No, sir, not on this sheet.

Q. Do you know the character of that tonnage?

A. No, sir, I would have to see the waybill.

Q. Turn to car P. L. 559,115, train 91, Oct. 25.

A. I find 559,115 Pennsylvania Line, on that day; it is shown as moving from Hoxie to Newport, and is said to have contained state tonnage to the amount of 56,300 lbs.

Q. Turn to the same car on train 91, Oct. 26, and see what the weight and classification there is?

A. That shows to have been loaded with 44,100 lbs., and it is classified here as interstate business, but it is moving from Bald Knob; there may have been a confusion of car numbers there, for this reason; here is a car moving on the 25th from Hoxie to Newport, and the next day, it shows it is picked up by another train at Bald Knob.

Q. What I want to know is, if your working sheet, your
3711 abstract shows that car, the number which you have there, moving on those two days and on those two trains?

A. Yes, sir, and it shows a missing haul in there between Newport and Bald Knob, when probably it is the same movement, with a through train movement during the night.

Q. The difference in weight is 12,200 lbs., and it is classified one time as state and the other as interstate freight?

A. Yes, sir, if it is the same movement.

Q. I want you to take C. B. & Q. 100,718, less than carload shipment of an automobile.

A. I wouldn't know that from this sheet; it might be a less than carload or carload; it is optional to take the carload rate, minimum or less than carload rate; sometimes the carload rate is cheaper.

Q. That moved out train 91?

A. I haven't the movement here on 91.

Q. On Oct. 23?

A. Yes, sir, the weight shown isinterstate business 20,000 lbs.

Q. Take the movement from Swifton to Newport on the 25th on the same train?

A. I find the same number two days later, moving from the station at which it was set out by the other train, differently classified; in the first instance, the conductor shows that the car was destined where it was set out; in the second instance, where the
3712 car is classified, it is shown as trans-state, and the destination is shown as Alexandria, La., which I find is checked; it

would occur to me that the car was unloaded and re-loaded, or possibly re-consigned.

Q. What does your sheet show as to the weights and classification?

A. Into Swifton, 20,000 lbs., from Swifton into Newport, 10,000 lbs.

Q. Take the same train south, 91, and state what is shown on the movement from Bald Knob to Baring Cross on the 26th of October?

A. The car now is said to contain wheels, company material.

Q. No weight given?

A. We didn't bother with the weights, because at that time, we were not going to use company material weights, and didn't classify them; this is a copy of the wheel report for a train that was missing on our first check, which Mr. Emlett very kindly obtained for us. That is why there are no company weights on there where there was on the other sheets.

Q. Take M. P. 62173, train 295, 10th of October, moving from Earle to Wynne.

A. That car was billed from Earle to Wynne, the man said it was destined to—looks like Ft. Smith; apparently it was not classified as state business; 80,000 lbs.

Q. The next movement is on the same train from Wynne to Bald Knob, what is the weight there?

A. Yes, I find it; it is classified as state 73,800 lbs., a differ-
3713 ence of 6,200 lbs. I assume that we had the billing on that car, on the first movement before it was weighed, and the next time, had it after it was weighed, or there is a mistake there; I think we had the billing in one case; I am inclined to think we had two waybills for one car or to give two movements.

Q. Do you remember where that shipment originated?

A. No, sir, I am just assuming that as it would probably account for the difference.

Q. I am told it was really an interstate shipment.

A. I would have to see the waybill to determine that.

Q. Take Mo. Pac. 600,07, lumber from Norvell, Ark. to Kansas City, Mo., train 295, Memphis to Bald Knob, 22nd of October.

A. I find M. P. 60,007, moving from some point on the Memphis Branch to Wynne, said to be destined to Kansas City.

Q. What is the weight of that?

A. 79,800 lbs, interstate.

Q. The next movement is on the 23rd from Wynne to Bald Knob?

A. Yes, sir.

Q. What are your weights there?

A. Shown there as interstate, 66,0004.

Q. That is a difference of 19,400 lbs.?

A. Yes, sir.

Q. Take car #58,581, New York Central & H. Railroad, 21 of Oct. Movement from Newport on train 245, Cushman to Newport?

3714 A. I find that car moving from Newark to Newport in that train on that day, shown as interstate 13,500 lbs.

Q. Isn't it 12,500, that is the figure- I have here?

A. No, sir.

Q. Look at the same car in train 91 from Newport to Baring Cross, on Oct. 22, and see what its weight and classification is?

A. That car is moving from Newport to Baring Cross on the 22nd, and it is said to contain 47,100 lbs. of state business; the first move was from Newark to Newport, and the weight of the contents, and the memorandum which we have on the sheet here, indicates that it contained cotton; I assume if it contained cotton in the first instance, the cotton was unloaded at Newport; 47,100 lbs. in the car south out of Newport was not cotton, because you couldn't get it in the car.

Q. The difference in the weight is 34,600 lbs.

A. Yes, sir, if it covers the same shipment, which I doubt, because there is a compress in Newport which would undoubtedly take care Newport cotton.

Q. There is a difference in the classification too?

A. Yes, sir, cotton is all interstate in Arkansas; the point I was making is that if the car carried cotton into a compress point such as Newport, it would undoubtedly leave it there, and the other movement showing a different weight, I would think there was a different shipment.

Q. The waybill showed it contained 35,600 lbs. of cotton seed.

3715 A. After it left Newport.

Q. I understand the waybill shows that.

A. I would have to see the waybill to say that; it looks to me like two movements.

Q. One is on the 21st and the other the 22nd?

A. Yes, sir.

Q. The next movement of that car was from Bald Knob to Baring Cross, can you turn to it without the date?

A. On the 24th, from Bald Knob into Baring Cross; this time it contains cotton seed, said to be loaded 60,000 lbs.

Q. That is a difference of 12,900 lbs. in weight?

A. Yes, sir, if they are the same movements; those are into one point and out, and into another point and out, as you go along.

Q. I want you to take up car 6607 C. H. & D., train 97, Malvern to Texarkana; on the 4th of October; it moved from Malvern to Prescott; state the weight and classification?

A. That is shown as moving from Malvern to Texarkana, 857 to 894,—that is Texarkana.

Q. On the 4th of October?

A. Yes, sir.

Q. What does the record show?

A. Said to contain 27,248 of state business.

Q. See if there is a movement of that same car on that same train Oct. 14?

3716 A. You have got to the end of the road when you get to Texarkana; it couldn't be a connected movement of that

car; it would hove to be in the opposite direction or another movement; you see, if you moved the car in the first place from Malvern to Texarkana, you couldn't move it any further.

Q. Your sheet there from which you have made up these figures, shows that it went on a continuous journey from Malvern to Texarkana?

A. Yes, sir.

Q. That, of course, would indicate that the next movement was a different car?

A. I should judge so, especially so as it is ten days later.

Q. I want you to give me the movement of that number of car on the 14th?

A. I find that this car on the 14th, 6607 CH&D, moved from Prescott to Hope; that movement is entirely inside the first movement, and ten days later; in the first instance, the car is shown as moving from Malvern to Texarkana, and it would, of course, complete any journey it had to make on the Iron Mountain, when it got to Texarkana, and it would, of course, complete any journey it had to make on the Iron Mountain, when it got to Texarkana; this second move is from Prescott to Hope. Undoubtedly, it is not, according to my mind, the same movement; in the first instance, it is shown as being destined to Texarkana, and the second instance, to Hope.

Q. Where did the information as to the movement of the first car from Malvern to Texarkana, which sheet does it come

3717 from?

A. It comes from the wheel report and is put on this sheet.

Q. We will have to go to the waybill, of course, to settle that; give the weight and the classification of the car on the 14th?

A. On the 14th of October, I find car 6607 CH&D moving from Prescott to Hope, and in that instance, I find the weight shown as 60,300 lbs. I see no connection between that movement and the one previously mentioned on the 4th of the month, where it is shown on the wheel report that the car was taken into Texarkana, as far as it could go on Iron Mountain rails; I don't believe they have any relation one to the other.

Q. What is the second classification?

A. The second is trans-state apparently.

Q. Take car 10426, ART, that moved on the 16th of Oct. from Cotter on train 295, from Calico to Batesville, state the weight and the classification.

A. 10426 ART shown as being destined to Newport, contained 8,000 lbs., cotton for the Newport compress, and it is classified accordingly as interstate business.

Q. Take the same car on the 24th from Batesville to Newport in train 245, and state its contents?

A. I find a movement ten days later, from Batesville into Newport; this time the car contins 30,100 lbs., of state business; the other was evidently a cotton movement; the car has perhaps been into Newport and back out to Batesville for another load.

3718 Q. The waybills will determine that?

A. You may find two waybills; it would determine for

each movement, for the two movements; there would be two waybills if there were two movements.

Q. I want you to take cars 169 B. C. R. N. and 230 L. & E., on train #98, the 18th of October, and see what you find on that date, in regard to those cars, in respect to weight and classification?

A. 98 is from Texarkana to Malvern; I find both those cars, and they are said to contain each 40,000 lbs. of bridge material, company business, property of the Iron Mountain road.

Q. Turn to the same cars the next day, the 19th, on train 96 from Arkadelphia to Malvern, and see what they show; the weights are the same, see what the classification is?

A. There is a reference on this sheet, in my own handwriting, that the cars are on both trains; I say on one, see 96, on the other, see 98! whoever copied the *the* weights there has copied them in the wrong column; that soaked the state business with 80,000 lbs. of company freight.

Q. It entered into your figures as 80,000 lbs. of state freight?

A. Yes, sir, the state got the worst of it about that; we went through a lot of those trains and matched them that way to save extra work; whoever copied them, copied them in the wrong column, side by side.

3719 Q. Take car 14,411 M. K. & T., train 97, Malvern to Texarkana, Oct. 29, car moved from Arkadelphia to Gurdon; state what the weight and classification was?

A. The car is shown as moving from Arkadelphia to Gurdon and contained 8200 lbs of interstate freight, apparently cotton.

Q. On the next day, Oct. 30, that car moved on train 891, from Gurdon to Camden?

A. Yes, sir, the Camden Branch local.

Q. State what the contents and classification there was?

A. There it is shown to have contained 27,000 lbs. of state freight; they evidently unloaded the first load at Gurdon, and re-loaded it for a point on the Camden Branch.

Q. The billing will show?

A. Yes, sir, whether it was two movements or one; for two movements, there will be two waybills.

Q. I want to call your attention to car 36,963, I. C. on Oct. 9, train 845, frobm Buel to Van Buren.

A. That car is not on the train; I see a B. & O. car of that number.

Q. See if it went from Buxel to Van Buren, on the 9th of Oct.

A. I find that movement, yes, sir.

Q. What is its weight and classification?

A. It is classified as interstate business, 81,000 lbs.

Q. Do you find that car on train 191, on the 23rd of October?

A. That is 14 days later, isn't it?

Q. On the 22nd, Higgins to Wrightsville, see what your
3720 working sheets show in regard to that?

A. I find the same car, but carrying 60,000 lbs. of state business; but I don't connect it with the movement from Buel to Van Buren 14 days previous.

Q. What is the description of that car?

A. B. & O. 36,963.

Q. Follow that car on the 23rd from Wrightsville to Woodson, and state what your abstract there shows as to the weight on the same train?

A. I find the car moving from Argenta, according to this sheet, it is shown as moving from Argenta to station 4005.

Q. Did you treat it as a movement from Argenta?

A. Yes, sir.

Q. It is so shown?

A. Yes, sir, it overlaps the movement you quoted before.

Q. I will assume that is a mistaken, the wheel report shows it is from Argenta to Wrightsville?

A. Yes, sir.

Q. State what the weight is?

A. If you are comparing those movements, which there is no basis here for connecting, I can give you the separate weights of the two movements; one is 60,800 lbs. of state freight, and the other is 80,200 of company coal; the car is a company car; the first movement, Buel to Van Buren, is still more remote.

3721 Q. Take the same car on the 25th from Woodson to Redfield.

A. There I find the car moving from Woodson to Redfield, and the tonnage is 66,300 lbs.

Q. Take the same car on the same train the next day, the 26th, Redfield to Pine Bluff, state what the weight is and classification?

A. The car is moving there, classified as company material, said to contain 80,000 lbs. It seems extremely probably to me, that there were two cars of some similar number moving on that line.

Q. Take the same car on train 193, moving from Pine Bluff to Varner on the 28th, and see what you have in regard to that car?

A. That is still two days later; I don't find it under that initial; I find now that I have car 36,963 B.M., that is said to contain company coal 62,600 lbs.

3722 T. A. HAMILTON.

Cross-examination resumed by Mr. Moore:

Q. Mr. Hamilton, how do you account for the mistakes to which your attention was called, in the weights and classification of cars as they appear on your working sheets?

A. I would like first, Mr. Moore, to satisy myself that they are all mistakes.

Q. Assuming that they are mistakes: how do you account for them?

A. Human fallibility.

Q. If those mistakes were of any considerable extent they might very seriously affect the value of your exhibits, might they not?

A. If expressed in ton miles the net difference was such as would materially change the percentage shown on Exhibit I, to just the

extent that they affected that percentage they would impair the value of our exhibits.

Q. I believe you stated that you took these weights from the waybills, did you not?

A. Those were my instructions to the gentlemen working under my supervision, yes, sir.

Of course, you understand, Mr. Moore, that in the tabu-
3723 ulation of a statement of this size, it would be impossible for me to see every figure. Had I done that, I would have compiled the statement myself.

Q. I understand, Mr. Hamilton. No one man can do that. You have to rely upon the skill and accuracy of others.

A. Speaking of the effect, Mr. Moore, that changes of the character I have outlined, might have on this statement, I would like to refer to a somewhat similar check that I had occasion to make in the Missouri Rate Case.

The Missouri Pacific Railway submitted a large statement as showing the effect on the Company's passenger earnings of the operation of the two cent fare law.

I recall it took some three or four six-months' periods before, after and during the operation of that law.

On behalf of the State of Missouri, we checked that statement. I, personally, did a great deal of the work; in fact, a major portion of it, and as I recall it, there were between 1500 and 2000 errors in the statement, which I, however, tabulated as I went along.

When I got through and figured up the effect of those errors, give and take on the statement, I found that the net difference was so small that we approved the figures.

It is so in large statements of that kind where work is condensed into a comparatively brief space of time and worked up hurriedly,
but where the principle on which the statement is correct,
3724 and the work is conscientiously and consistently done, I always have great faith in the net result, regardless of minor errors.

Q. Did you make any comparison of the weights that are contained in your abstract sheets with those shown in the Company records, to see that they corresponded as to this local tonnage?

A. Those weights were derived from the Company's records as to each particular record.

Q. You did not make any particular comparison?

A. We got them from the record in the first instance.

Q. For that reason you saw no necessity for comparing them?

A. We saw no necessity of doing the work twice.

Q. It would have been a verification, would it not?

A. It would virtually have been making the statement twice.

Q. In allotting or determining the amount to be charged to interstate business, did you take into consideration the fact that the movement of empty cars in local business was very large, nearly 100% of the cars that were hauling the following commodities:

Lumber and other forest products to manufacturing centers; cotton seed to oil mills; coal, stone, sand and gravel from producing

points to consuming points, would involve a return movement, either going—usually going—of empty cars?

3725 A. That would depend on many things, Mr. Moore.

Q. I mean now in the operation of local cars, in the conduct of this local traffic?

A. Whether it would be necessary to provide a return load for the car going in any given direction, or hauling any given class of traffic, would depend first on whether that car had to be brought back to the point at which the shipment originated, or to the territory in which it originated.

It might be a car belonging to another line, very advantageously home routed with a load in the direction in which it was going. The movement might be the reciprocal loading for some other movement.

It would require a man who knew exactly the details of the traffic on each piece of the road, to answer that quetsion as to whether there would necessarily be such an empty movement.

But if you ask whether we took that into consideration in dividing our state and interstate expenses, I will say that a car mile was a car mile to us.

Q. Which means that you did not take it into consideration?

A. I don't see how we could.

Q. Suppose it should turn out that upward of eighty per cent of that class of business involved an empty movement:

Would you not think that was a material consideration

3726 which should be brought out and taken into account in making the division of expense as between state and interstate business?

A. Our division, of course, was primarily between through and local trains, and it seems to me that we would have to have the exact factors as to which business caused the most empty movement, state or interstate, before we could intelligently answer that question and before anybody could pass on it.

Q. Now, apply it to the train itself, the train movement as between local and through trains:

There you have on local trains a condition under which there is a very heavy movement of empty cars which produce no revenue, but are an expense to the railroad company, and as to which there is no corresponding condition existing as to the through local trains:

Should that not be taken into consideration in determining the expense of operating the two classes of trains? Not speaking now of the business itself, but the operation of the two classes of trains?

A. I would first have to know why these empty cars were put on the local. It seems to me that the local in that case is relieving the through train.

As to the effect of it on the division between state and interstate business, we would have to know for what class of business the empty movement was made, whether it was an empty return

3727 movement of interstate business, or a movement to load interstate business, or the same for state.

Q. The matter I am speaking of is state business, because it is

lumber and forest products to manufacturing centers; cotton seed to oil mills—

Mr. HILL: What state—

Mr. MOORE: The state movement of these commodities.

Q. I am confining myself to that. Let us now pass from that to the effect upon the business itself—the traffic:

You divided your expenses on the basis of the car mileage and disregarded the loading of the cars: if the fact should be established that as to that kind of local business there was a large empty movement, would it not be a consideration that should be taken into account when you came to divide the expense as between state and interstate traffic?

A. I understand you to say about eighty per cent?

Q. I asked you if about eighty per cent of the traffic of the cars that hauled these commodities one way, don't result in an empty movement in the opposite way?

A. I don't see how eighty per cent of the Company's business, expressed in ton miles, which is the intrastate ton mile total, could possibly cause eighty per cent of the empty car movement.

Q. I did not state that. I said, if about eighty per cent of the movement—we will say in the transportation of cotton seed
3728 to the cotton mills—if about eighty per cent of the cars that hauled the seed to the mill, do not return empty to the point where they obtain the seed?

A. I have no information on that.

Q. I wanted to make it plain to you. I do not mean of course, eight or eighty per cent of the total movement of cars.

A. But you would have to first determine what the cars were hauled empty for in each class of train, before you could consider that factor.

Q. But if what I have assumed were true, would it not be an important element of expense? That is the point I want to call your attention to. I am not trying to prove whether it is true or false, but I am trying to ascertain your view as to whether it would be an element of any importance if it is true?

A. I would first have to have all the information I mentioned, before I could pass an opinion. I would not want to do so otherwise.

Q. What is the information you have to have?

A. As to the purpose of hauling those cars in the local train; whether they are hauled for the state or interstate traffic.

My understanding is that the state traffic takes care of itself prety well, in the way of empty cars. The dispatcher usually
3729 finds cars on his division to take care of his needs, except in the cases of every large movements, and it seems to me that they keep those cars pretty close at home, and the local would distribute as many cars at its way stations to take care of interstate business, as it does to take care of state business.

Q. Let us get down now to a simple basis by assuming that cars that haul these products—that is, lumber and forest products to

manufacturing centers; cotton seed to oil mills; and coal, stone and gravel from producing to consuming points.

In point of fact, the cars which haul those commodities from the producing to the consuming point, do in fact return; that is, a large proportion of them do in fact return empty back to the place where they were loaded.

Now, just assume that fact; that is all that is necessary for the proposition that I want to call your attention to. I want to know if, in your judgment, that would constitute an element of any importance in dividing the expenses, either between trains, or between local and through business?

A. If you will eliminate the question as between trains and confine it to a division between state and interstate business, I can answer it.

Q. Well, I will do that.

A. I will say that if your assumption that there is no
3730 return load for cars handling the traffic you speak of, in state business, and that you further assume that that is a large portion, that the statement is correct; that the extent to which there was no return load for those cars, there would be an extra expense of that business.

Q. You stated, Mr. Hamilton, that that local business took care of itself:

Do you mean that the cars that are employed in it, in local service, are retained at the local points——

A. I don't imagine that a dispatcher who knew his business would let cars lie around, there should be a great deal of loading at these stations where cars are made empty and in that case it would obviate the necessity of setting out cars. I should think a dispatcher would make his agent make use of his empties, sooner then send him any.

Q. Now, going back a little to your Exhibit I:

Your first column represents the ton miles of freight carried on local trains?

A. Yes, sir.

Q. Your second column represents the ton miles of freight carried on through trains during the month of October; both of these are the month of October?

A. Yes, sir.

Q. The last column, which is headed "Total" represents the total tonnnage, and expresses in the various ways as expressed in the exhibit, as you obtained it from the exhibits filed in the
3731 case by the Railroad Company——

A. Exhibit 26.

Q. Now, in making up your exhibits and preparing the figures upon which you have based your division of expenses, you made no effort through any investigation of your own, to ascertain what business was done on through trains? You confined yourself to the local trains: that is correct, is it?

A. We made no attempt to analyze the performance of through trains from the wheel reports.

Q. You determined the performance of the through train by determining the local trains—deducting that from the tables as ascertained from Exhibit 26?

A. Yes, sir; that is the plan.

Q. Of course, the correctness and the value of the figures prepared by you depends upon whether the two sets of figures—that is, the figures based on your investigation of local trains, and the figures shown in the column taken from Exhibit 26, reflect similar conditions?

A. That would seem to be the logic of it.

Q. Is it not true, Mr. Hamilton?

A. Yes, sir.

Q. What per cent of the total business did you investigate on the Iron Mountain road, as shown by you? It is about 11.18%, is it not?

A. Expressed in ton miles.

Q. What is it on the Cotton Belt road?

3732 A. 10.9%. Of course, that is Mr. Kimbell's figure.

Q. You have already testified, Mr. Hamilton, that you know how Exhibit 26 was made up:

State in detail what your understanding is as to the manner and the sources from which Exhibit 26 was compiled?

A. After we had our misunderstanding as to the mileage basis, which I referred to yesterday, at my request Mr. Roth furnished me with a memorandum as to how Exhibit 26 had been compiled, covering certain points that I desired specific information on, and it confirmed the verbal understanding I had had with him prior to that time, except on the mileage proposition, and I have that before me now. It expresses my understanding of how he got his figures.

Q. Please state what it is.

Mr. HILL:

Q. Is that Mr. Roth's statement? Read it into the record.

A. Yes. It covers a lot of minor matters that are not basic matters, but the basis on which he got his figures is in here.

Mr. MOORE: Read it in part or all, into the record.

A. "System business": The data is taken from the Company's journals. The journals are abstracts, as I explained in my examination in chief, of the way-bills, or the impression copies of the way-bills, on which the auditor basis his check of agents' "freight received" reports, and ascertains that the Company is getting its proper freight——

3733 Q. Are you still on the "journal"?

A. I have not quite finished.

Prior to journalizing those way-bills of course they should be—I don't know what the practice was just at that time—gone over to see that the rates and extensions are correct and that the revenue shown therein is the amount that should be collected by the agent. Some adjustments are afterwards had, necessarily, where there was a disagreement between the agent and auditor as to rates, weight, etc.

Q. What do these journal entries represent?

A. They represent the charge to the agent, in the first instance, for freight which he is to collect; the credit to him for freight collected at other stations and which is billed as pre-paid; the charges to him of advances to other stations, the collection of which he is charged with. They show the weight of the shipment and an index to its classification, for the purpose of the Company's statistics—that is, by commodities and classes.

In addition to that, they give the index of the way-bill number and date, and supposedly, in the case of carload shipments, the car number.

That information is grouped by receiving and forwarding stations in approximately a geographical order.

Q. What do you mean by the term "System Business"? You said "System Business".

A. Business intercharged between stations on the Mis-
3734 souri Pacific Iron Mountain System, which includes the Kansas branch lines of the System. That is ordinarily known as the "Missouri Pacific System". It would not take in the T. & P.; the I. G. N., or the Denver & Rio Grande.

Q. Does that journal show any freight in the month of October that was not billed in that month?

A. No, sir; it is entirely on the "forwarded" basis.

To explain what I mean by "forwarded basis" it is an abstract of the way-bills made at Missouri Pacific stations during that month, to stations on the Missouri Pacific.

Q. It then represents the date of the billing or receiving of the commodity at the station on the Missouri Pacific System at which it was received rather than the date at which it was moved?

A. Always the date of the billing. The date of the receipt might be, in extraordinary cases, in the next month.

Q. But it is the date of the bill and that is ordinarily the date it is received?

A. I suppose there would be very little of the Missouri Pacific business—I am not informed as to that. That is, that a shipment billed at one Missouri Pacific point, unless billed near the end of the month——

Q. It includes only such business as is actually billed in the month of October?

A. It is on a "forwarded" basis entirely.

3735 Q. I want to ask you if that billing record as it appears in the journal, actually represents that class of freights? I am going now to the "System business" that is handled over the rails in the state of Arkansas, during that month?

A. I can readily conceive where some business billed in a prior month would finish its journey on the System rails in the following month.

Q. That would not be included in that journal?

A. No, sir; it would be in the journal for the preceding month, on a "forwarded" basis.

Q. I believe you stated yesterday, when you were asked about

tracing the movements from the wheel reports to the waybills, that you went back into the waybills of September to get some of the bills that did not appear in the journal representing the October System business.

A. No, sir; it should have been journalized and was journalized in September.

Q. On the other hand, suppose a carload of freight, or less than carload, as the case might be, is billed in October and does not move until November or December:

That journal does not in that case reflect the movement over the rails of the railroad company?

A. No, sir; it reflects the date on which the shipment was waybilled.

Q. If such delays as you have indicated in your testimony
3736 existed in the forwarding business on that road, did occur and were as general as you have advised us they are, there might be a good deal of business billed in October that did not move that month, as shown in your "total" column?

A. There might be business, and there was business billed in September which moved in October.

Q. And in October which moved in November?

A. I can't say as to that. I was working on a movement basis and concerned myself only with the stuff that moved.

Q. If business was not in the habit of moving promptly and swiftly from the time it was received by the railroad, but there were delays, then what would be your judgment as to whether the commodities that are billed and shown on this journal "B" reports, could be assumed to have moved in that month, all of it?

A. It would be my opinion, Mr. Moore, that there would probably be as much October business moved in November, as there was September business that moved in October, the conditions being the same throughout that period.

Q. So this billing record, then, would not in fact represent the real movement of traffic over the rails of the railroad in Arkansas?

A. It would represent its way-billing dates.

Q. Mr. Hamilton, do you think there is a large percentage of that lap-over business from month to month, that you spoke of just now?

3737 A. Pardon me a minute. I have some figures here that I would like to refer to.

Q. Very well.

A. (After examining figures): I worked up from the Company's records the total freight train mile figures in Arkansas, for some months—for the entire six months in which we were interested, and I found that there is not a great deal of fluctuation in that figure from July to August; August to September; September to October; October to November, and November to December.

It runs along pretty well, and I should assume from that that if there was a heavy September lap-over into October, and if the Company ran almost as many trains in November as it did in October,

some of the October business would have lapped over into November. They would not run trains that they had no use for.

Q. Mr. Bee and other witnesses have testified that there was a blockade beginning in October of that fall, which impeded the movement of trains and the handling of freight: What effect would that have upon this particular month, October 1907——

Mr. HILL: Did Mr. Bee testify that there was any blockade on the Iron Mountain in Arkansas?

Mr. MOORE: I think so; yes, sir.

Mr. HILL: I would like to be cited on that.

Mr. MOORE: If he did, it has been stated—I asked him
3738 if he thought it was on that line and I think he stated it was, if I remember correctly.

Q. —and upon these fluctuations to which you referred a moment ago?

A. I find that in October, 1907, the figures taken from the Company's statistics show 274,000 freight train miles—in round figures; there are some odd; and in November, 268,000 freight train miles. Pretty close together. From that it would seem that whatever traffic conditions existed in October, also existed in November.

I base that, of course, upon the assumption that the Company would not run freight trains, except locals, until they had tonnage for them, and that the trains run were necessitated by the volume of business which was moving, and that the practically level train movement would indicate like movement in the two months.

Q. How was it in September?

A. September runs 265,000 train miles as against 274,000 in October.

Q. Do your investigations there show the per cent of the lap-overs, of the fluctuations in October?

A. Do you mean in ton miles?

Q. Yes, in ton miles?

A. No, sir. We interested ourselves in finding waybills to cover the movement of these October trains, and when I made the
3739 statement that some of them were September way-bills, I recall going to the September records for them.

Q. What would be the per cent of difference on state freight, if you can say, as shown by the records kept by the Company, showing the billing, and the actual movement as developed, we will say, by the exhibits introduced by the State in this case?

A. As we based our Exhibit I, on Mr. Roth's Exhibit 26, and the total intrastate freight on Exhibit I, expressed in ton miles, agrees with the total ton mileage of intrastate freight shown on Exhibit 26, and Mr. Roth states that he took his figures for Exhibit 26 from the Company's records, I should say that the total of our Exhibit I, agrees with the Company's records. It depends, of course, upon the accuracy with which Exhibit 26 was compiled.

Q. That is all right, but what I want you to state now is this: what is the difference, in per cent, in the state freight in the month of October, as shown on Exhibit 26, and the amount of freight

actually moved and handled on the rails of the Company in Arkansas, during that month?

A. To answer that question and to give you a mathematically exact answer, it would be necessary to work up the performance of the through trains, added to the performance of the local trains, and compare the result, expressed in ton miles, with Exhibit 26.

We have gone on the assumption that the lap-over from
3740 month to month, would take off trains, such September way-bills as are not included in Exhibit 26, and add to our trains such October way-bills which were included in Exhibit 26, and moved in November. So far as the actual train movement is concerned, the two are about equal.

Q. Do you know what proportion or part of the state freight in local trains was not included in Exhibit 26?

A. No, sir.

Q. Could you have found that by making an investigation?

A. Yes, sir, we could have tabulated the September way-bills which we located on our local trains.

Q. Would that not have given you some relation between the figures worked up by you and the showing made by Exhibit 26?

A. No, sir; there would have been another side to the proposition. I would have had to find out how much November movement on trains was on October business.

Q. What would have been disclosed to you if you had made that examination?

A. That there was included in the October train movement certain September ton mileage, according to the Company's journal records.

Q. Have you any idea, or can you state approximately what the per cent of difference is between the business shown by the Exhibit and that actually moved in state business that month?

3741 Mr. HILL: He has answered that question in different forms, about four different times. I submit it to the Master——

The MASTER: He may answer the question this time, but there is no need for repetition.

A. I have no information and cannot answer——

Mr. MOORE:

Q. I did not ask you that question before, or anything like it: I have asked you if you could state amounts, but now I asked you if you could state approximately.

A. I think my other answers would cover that. Unless we had tabulated those September way-bills we could not have told what the percentage of ton mileage covered by them was.

I said we had not tabulated the way-bills. To clear that up and reduce it to one answer, we worked entirely on the assumption that the lap-over of September billing into October, covering freight which we found on our October trains, was off-set by the lap-over of October billed stuff that got on to November trains. That is it in a nut-shell.

Q. Are the lap-overs in the same proportion, on state and interstate business?

A. I should assume that they were. In Mr. Kimbell's judgment the movement in October was typical of a series of years, so far as the relation of the two classes of traffic are concerned.

3742 Q. Have you made any investigation for the purpose of informing yourself, whether there would be any difference in the proportion of the lap-over between state and interstate freight?

A. No, sir. Inasmuch as we applied the percentage we obtained on this one month's business, to the six months' business, it seems there the lap-over would take care of itself pretty well.

Q. How would the proporition of the lap-overs compare as between freights carried on local trains and those carried on through trains?

A. Mr. Kimbell's assumption being that the two classes of traffic, state and interstate, would move in relatively the same volume for the six months, or for a period of years, that it did in October, I would have to imagine a violent change in the method of handling state and interstate freight, as between through and local trains, to make any particular difference.

I suppose the state freight that ordinarily traveled on local trains in October, would naturally follow the same channel in November, and the same is true of interstate, and also of the two classes on through trains.

Q. If we assume that the difference in state freight, as shown on Exhibit 26, as compared with that actually handled on account of lap-overs, was 4½%, and that the difference in interstate

3743 freight was 23%, would you think that that statement of the larger percentage of interstate freight seemed excessive, or do you think there would be as great a difference as that?

A. I will have to answer your question Yankee fashion.

Q. That is all right.

A. I infer from your question, Mr. Moore, that your percentage assumption referred to the September freight which was carried on October trains?

Q. I refer to this: I refer to the tonnage or amount of freight as reflected in Exhibit 26, that class of freight, state freight, and the amount that was actually handled and moved in the State of Arkansas—referring, of course, to the state freight first, and then afterwards to interstate freight.

A. The difference between the two would be the lap-over we speak of, and in my judgment would not exceed, if you consider both lap-overs, September into October and October into November.

If your percentages do not contemplate both those lap-overs, I should say that in my judgment they are not correct percentages.

If they contemplate the September lap-over only, you have stated only one side of the proposition. You would have to have all the factors before you.

Q. Let me explain: I am not assuming that it was a September lap-over, if that is what you mean; that is, business of Sep-

3744 tember that was carried or not carried:

I assume now that the total difference, as shown by an in-

vestigation of the business handled, according to the records upon which Exhibit 26 was compiled, and that actually handled upon an investigation of the performance of the local trains as made by you. Upon that basis I want you to state it.

A. I cannot see the ground for comparison——

Q. I want you to state the effect upon the relative business, state and interstate, if the difference in the interstate business was five times as great as on the state business.

A. It comes right back to the question of what went into these local trains' figures. In those local train figures is some September lap-over.

Now, considering that alone and comparing the relative percentages of those figures with Exhibit 26, which covers all of the billed or are counted for business of the month, you have left out an element, and that is the portion of billed or accounted for business in Exhibit 26, which moved on November trains, and you cannot consider one without the other.

The lap-over at both ends in those figures which you referred to as compiled by me covering local train ton mileage from certain September way-bills. Before I can compare Exhibit 26,
3745 which consists of all October business, as I understand it, I must know what there was of October business in Exhibit 26 that went on the November trains and how it compares with the lap-over from September. Then I can tell you how Exhibit I compares with Exhibit 26.

Q. Do you go upon the assumption that if this 23% I mention, is correct, as appears from the record, that there would be a similar lap-over and a similar percent in November?

A. That is what I stated, sir. My opinion is that the lap-over from month to month would be approximately the same.

Q. Do you work on that assumption?

A. That is what I stated in the first instance, that we worked exactly on that assumption.

Q. I wanted to get that clearly into the record.

Mr. Hamilton, I think you stated yesterday that your figures were made out on the same basis of those of Mr. Kimbell's, as shown in his Exhibits 19 and 20:

Did I understand you correctly?

A. I said, Mr. Moore, that there was no difference in the results so far as the carload business was concerned—or should not be—speaking of the ton miles, of course.

Q. I do not want to take time to turn to Mr. Kimbell's testimony, but as I remember, Mr. Kimbell testified that he obtained the data and made the basis of his figures by putting men on the trains, riding trains, and at terminal points, and obtaining from
3746 actual observation the movements: you did not do that?

A. No, sir.

Q. You took the data that was—so far as the performance of local trains was concerned—it was that alone you were dealing with—you obtained that in the same way as you described in your examination in this case?

A. Yes, sir.

Q. Are you correct in the statement that you obtained it in the same way that Mr. Kimbell did?

A. I do not believe I said just that, Mr. Moore.

Q. You do not intend to say that?

A. What I intended to say was——

Q. I may not be accurate as to that——

Mr. HILL: I will say that I called upon him to state the difference between the method followed by Mr. Kimbell and himself, and he made a calculation by demonstrating the difference in the less than carload——

The WITNESS: I take it, Mr. Moore, that what you are chiefly concerned in, is whether our results were similar——

Mr. MOORE:

Q. No, that is not it. I am trying to ascertain if you meant to say your method was the same?

A. No, sir; what I meant to say was this—and what I think I did say:

Mr. Kimbell placed men on the local freight trains who rode the trains and got the information from the way-bills in the con-
3747 ductor's possession. He placed men at division terminals who handled the way-bills brought into the terminal by through trains, which was practically riding trains; with this difference that they accepted the conductor's statement as to the freight set out between terminals. In that way he got his information from the way-bills. Mr. Kimbell—during my examination in chief—stated and I think the record shows it, that the reports of these men were corrected up in the Auditor's office on the basis of actual scale weights.

We worked from the impression copy of the way-bills on file in the Auditor's office.

I fail to see the difference.

3748 Q. Doesn't Mr. Kimbell's method give him all the freight that was moved on through trains from actual investigations?

A. I thought we were discussing local trains?

Q. No, I am discussing the whole situation; doesn't Mr. Kimbell's method give him the freight actually carried on through trains?

A. Mr. Kimbell's figures represent, if they are accurately compiled, and I doubt not they are, the movements on through trains, taking from the waybill covering the freight in those trains; I think I have explained two or three times now, that we did not work up any through train figures.

Q. Wasn't there any other difference in the methods and in the results?

A. Mr. Kimbell's method not only caused him to act with reference to the waybills, but he was dealing with the freight.

Q. His men were there present at the time on the trains, and didn't he, in his methods, eliminate that element of uncertainty

growing out of the lap-overs that would exist from taking the records from the billing of the railroad?

A. Undoubtedly, whatever elements of uncertainty there is, it exists in working up the accounts and statements as exhibit 26 is, and deducting therefrom an actual figure or calculation, obtained in a manner which closely approximates and brings the same
3749 result as Mr. Kimbell's local train figures; whatever the difference is, there will be that difference between the two methods.

Q. I believe it is shown that your exhibit I, does not show the average haul of state and interstate freight on local and through trains?

A. That would be impracticable, when they are carried in the same cars, in the case of less than carload business.

Q. It would be quite an important fact in determining these questions, if you could determine it, wouldn't it?

A. The average haul of state freight in a local train can be ascertained, but you would have to match up the haul of each particular shipment in every local train it travelled in, for its entire journey, to get at the average haul of state shipments on local trains, and then if it got on a through train for an intermediate haul, it would further complicate the matter; I don't believe figures on that kind would be of much value.

Q. On what mileage have you based your figures in ascertaining the performance of trains 205-6, between Cotter and Batesville?

A. I would have to see the sheets to tell you that.

Q. Haven't you stated you used the station book?

A. We had some discussion as to that; in checking over some figures placed on our sheets by the railroad people, I found a difference of a mile; I was shown a telegram by Mr. Johnson from the division superintendent to the effect that the mileage of that
3750 particular division in the station list was wrong; we had some discussion about it; there was a difference of one mile; I can look at those train sheets, and I would be glad to tell you.

Q. Wasn't that telegram to Mr. Amouck?

A. I think he was present, I forget who it was addressed to.

Q. Who was the telegram from, you said Mr. Johnson showed you the telegram?

A. I was at Mr. Johnson's desk, and Mr. Amouck was there, and we were discussing the matter, and the telegram was there between us, and the question came up as to the actual length of that division, and I know it was a question of whether it was 95 or 96 miles; the station list shows the mileage to be 96, figuring the fractions, 95.63, which we would consider 96 miles, and my recollection of that telegram is Mr. Amouck said the correct mileage would be 95.

Q. What basis did you use?

A. There is a conflict of authority there, one the company's official list, and the other a telegram from the company's superintendent of the operating department; it would be immaterial in either event.

Q. I want to call your attention to another condition in regard to the mileage; you testified, I believe, that you thought it would be

good railroading, and you would assume that local business would be handled in local trains. Now, take business off the White
3751 River Division, going to points we will say on the Valley Division, Pine Bluff or McGehee; what is the mileage shown on the railroad's schedules, and upon which that movement would be figured in the records on which exhibit 26 was compiled?

A. From a White River point to a point on the Valley Division?

Q. Say to McGehee, for instance. I mean, would the straight mileage from the originating point to the terminal station, be used by the railroad company?

A. You say to McGehee?

Q. Yes, sir, I am not asking for figures, I want the comparisons. How would the mileage on a movement of that sort be ascertained in the figures upon which Exhibit 26 is based?

A. My understanding is that the company, in its regular statistics from which Exhibit 26 was derived, figures short line mileage between points, or is governed by certain routing circulars.

Q. I am not speaking about the different lines of railroad.

A. They have routing circulars on their own line, and I assume that the actual movement except for some physical obstacle would be by short line mileage.

Q. I will assume the movement is by the way of Newport, Little Rock and Pine Bluff, eliminating any question about the routing.

A. Yes, sir.

3752 Q. Where would they go to get the mileage upon which Exhibit 26 is compiled?

A. They would take the mileage over the White River from the point where the shipment originated, through Newport, Little Rock and Pine Bluff to its destination, totalling the mileage, picking up or dropping the fractions at the end of the run.

Q. If a movement of that sort was broken up into three or four movements on three or four trains, and so appeared on the wheel reports, what effect would that have upon the relative mileage between—as shown on your figures and those on exhibit 26?

A. Picking up the fractional miles for each fractional part of that run—we picked up a fractional mile or dropped a fractional mile as the case might be; the way we figured, the run was cut up into sections, and the company figured their mileage from point to point, necessarily so.

Q. Trains #193, 194, 741, 742, 744, 745, and 743 to 746 inclusive, on the Central Division, I believe run from—those trains I mentioned carry freights, don't they, from points on the Greenwood branch to Van Buren?

A. Trains 193 and 194 do not run on the Greenwood branch.

Q. They run from Van Buren to Wagoner, don't they?

A. Yes, sir.

3753 Q. State the run of trains 741, 742, 744, 745, and 743 to 746 inclusive?

A. Train 742 runs out of Greenwood in the morning, runs through Ft. Smith to Greenwood Junction, back from Greenwood Junction to Greenwood, a round trip on the Greenwood Branch; runs from

Greenwood to Greenwood Junction again, and on that trip goes down from Greenwood Junction to Van Buren, comes back out of Van Buren to Greenwood Junction, and goes down the Greenwood Branch to Greenwood, and I suppose, ties up for the night; that is the only train they have, and the different numbers are given it for the different portions of the run.

Q. How are freights hauled from the Greenwood Branch to points in Oklahoma? Are they hauled on those trains?

A. Yes, sir.

Q. There is a haul of seven miles from Greenwood Junction to Van Buren?

A. That is about the figure.

Q. What mileage do you charge in the State of Arkansas on that haul?

A. My recollection is that on those little trains, that ran around Greenwood and Van Buren, and served the Greenwood Branch, there was very little business.

Q. That wasn't the question I asked you, Mr. Hamilton?

A. What little business those trains handled, we figured the mileage which the trains handled it, from the point on the Green-
3754 wood Branch to Van Buren.

Q. That would be seven miles down and seven miles back?

A. Yes, sir.

Q. How does that appear on the records from which Exhibit 26 was compiled?

A. If the business was waybilled from a point on the Greenwood Branch to a point in Oklahoma, the straight away mileage would be figured by the company.

Q. So on every ton of that class of freight, you have charged, by your method of figuring, 14 miles more mileage than appears on the records of the railroad?

A. Yes, sir, but you will have to get a microscope to find the tonnage; there was so little on those trains.

Q. I asked you is that wasn't a fact?

A. Yes, sir, that is true.

Q. There is a train that runs from Van Buren to Wagoner, isn't there?

A. Yes, sir, trains 193 and 194, you spoke of.

Q. Freight that originates at Van Buren and below there, and is pulled on that train, you take that into account in your figures, as a local train?

A. I don't know that I understand that.

Q. What I asked you is, how did you treat that part of the run of those trains that are scheduled to run between Van Buren and Wagoner; did you treat them as local trains in that territory?

A. It did seven miles of Arkansas work, and in apportion-
3755 ing the train expenses, that is the wages, for instance, we apportioned seven miles of that expense to Arkansas.

Q. You charged that mileage up?

A. Yes, sir.

Q. On every ton of freight that passed over it?

A. Yes, sir, it got a seven mile haul in Arkansas.

Q. Is there a station between Van Buren and the state line?

A. No, sir.

Q. Is that mileage included in the records of the railroad company, upon which exhibit 26 is based?

A. It should be if the statement is properly made.

Q. Did you investigate to see whether it did or not?

A. It is Arkansas traffic. We were told that the revenue and ton mileage in exhibit 26 were based on actual track mileage in Arkansas, and those seven miles are in Arkansas; if that isn't true, we have been misinformed on that particular.

Q. Those trains do not handle any Arkansas intrastate traffic do they?

A. No, sir, there is no station between Van Buren and the Oklahoma line at which they could deliver traffic, and if it crosses the line, it is interstate.

Q. All the traffic then is interstate?

A. Yes, sir, so far as Arkansas is concerned.

Q. Are they not in effect and practically, Oklahoma local trains?

A. They serve seven miles of Arkansas, out of a total
3756 run of about 83 miles in Arkansas and Oklahoma.

Q. They carry no Arkansas freight except interstate freight?

A. If there is no place between Van Buren and the line at which they can deliver business, all the freight must be interstate.

Q. The only question about that is whether it should be treated as a local train in Arkansas; an analogous condition exists also, between Eudora and Calvit, on the Louisiana State line; train 345 and 346, between Eudora and Calvit don't do any intrastate business, do they?

A. It is not exactly the same sort of situation.

Q. The only difference is that there is a little station near the Arkansas line on the Arkansas side.

A. You are assuming a whole lot; I found they did quite a lot of business there; I found quite a lot of freight at Indian station, Arkansas, going to Eudora.

Q. Is there any local business there of any consequence?

A. You mean business that originates or terminates there?

Q. Yes, sir, state the business you found there.

A. I would like to have the train sheets for that train; I can do it if I have them.

Q. The point I want to particularly call your attention to, is this: whether there is any state business of any consequence at that station?

A. I recall a movement of logs to Eudora.

Q. I am speaking of state movement.

3757 A. I recall a movement of logs there from Indian, Ark.—I think they went up to Halley, if I mistake not; there was a log movement there; how great it was, my memory doesn't tell me now. I had that impressed upon me that there was a log movement there, and those logs were state business. I didn't finish my

answer to your question in the first instance, as to whether I considered that this train was a local train in Arkansas, and whether the train you mentioned, running from Van Buren across the state line, was a local train in Arkansas; it is charged to Arkansas, the crew is paid local freight train wages; seven miles of its run is charged to Arkansas; I don't know how you could classify it otherwise.

There is this distinction between those two, that in the case of the train out of Van Buren, it served but seven miles in Arkansas, out of a total run in Arkansas and Oklahoma of approximately 83 miles, whereas this other train on the Calvit-Eudora Branch serves in Arkansas, eight miles out of a total run of 37.

Q. Have you ever given any thought to the extent to which these, and any other discrepancies that you may know of as to mileage, growing out of the different methods you have adopted in making your figures, and those adopted in making up the figures in exhibit 26, would have upon the value of your figures, for the purpose of showing the comparative cost as between local and through

3758 trains, and state and interstate business?

A. You say these and any other discrepancies in mileage between my basis, and the basis on which exhibit 26 is compiled; I think we all agree there was one discrepancy in one instance, that is the fractional hauls in short hauls, where we might pick up or drop the fractional mileage, where the railroad company would figure straight away mileage between billing points.

Q. There may be cases in which a shipment might pass to a station where there was a switch engine kept like at Diaz, or such a case as I put to you at Little Rock. The wheel reports would show that the car was dropped at that station, and was put at one point, and the switch engine might put it a mile away; it might have been dropped at Little Rock at the Ft. Smith crossing, and the switch engine might have taken it to East Little Rock, and there it might have been taken up by the Valley train; the wheel reports would only show where it was dropped, and where it was picked up again; the railroad's mileage would be based upon the distance from the point of origin to the destination, and would take in all those intervals that might be covered by the switching?

A. Yes, sir, your proposition is just this, that one train would take the car into one portion of the yard in Little Rock terminals, and another train would take it out of another portion.

3759 Q. My question is, whether those discrepancies growing out of those matters, in your judgment, would materially affect the relation between local and through business as worked up by you and by the compilations shown by exhibit 26.

A. In the case of the Little Rock terminal, where a portion of the haul would be by a switch engine between extremities of the yard, and between the yards in the terminal, there would be no distinction in th manner in which interstate and state freight would be handled. A car from Van Buren to McGehee, would get the same service as a car from St. Louis or New Orleans.

Q. I will confine it to cars in trains, the handling of cars in trains, the mileage you attributed to the cars?

A. We figured the mileage for the distance the train hauled the car; I don't see just what you are comparing it with; I thought I did in the first instance.

Q. Let me state it fully. Your figures relate alone to local trains?

A. Yes, sir.

Q. And if they are based upon one theory or one method of investigation, which would include in your mileage a mile here or exclude a mile there, and fourteen miles here and seven mils there, which is not included in the ton mileage represented in the total column of your exhibit I, wouldn't it have a material effect
3760 upon the result you reached by deducting your local performance from the total figures based on exhibit 26?

A. I don't see where these differences would come in; I saw your illustration of the Little Rock terminal, and I think I can answer you on that proposition; I think the illustration I gave you would serve very well.

Take a car from Van Buren to McGehee say; the mileage from Van Buren to Little Rock is 150 miles,—that is about the figure—the mileage from Little Rock to McGehee is 102 miles, but one mileage is figured from Van Buren into Argenta, and the second mileage is figured from East Little Rock to McGehee, and we will assume as your illustration did, that there is a distance between those two points which is switch engine mileage. As I see it, Mr. Roth's figures of mileage, represented in Exhibit 26, would be the straight mileage from Van Buren to McGehee, overhead, whereas, if we had that car in a train from Van Buren to Argenta, and in a second train from East Little Rock to McGehee, say a mile would be lacking in our figure; that comes under the head of fractional miles we would drop or pick up as I stated before.

I don't think that in itself, would make any appreciable difference in the figures compiled; I would like to see or apply to the individual movements and work it out, before I expressed any
3761 opinion; it is a small matter, and in a statement of this size, wouldn't have a great weight.

Q. You are dealing in ton miles?

A. Yes, sir.

Q. You obtained the total ton miles shown in your total column from exhibit 26?

A. Yes, sir.

Q. You obtained the ton miles in column one in the way you have described?

A. Yes, sir.

Q. Can you make a comparison in that way, can you arrive at correct results, by deducting the local performances from the total, for the purpose of ascertaining the ton miles, unless the mileage is ascertained in both ways on each column—on the two columns?

A. You mean ascertaining them the same way in both columns?

Q. Yes.

A. You would have to analyze the differences and reduce them to figures and see whether they would affect the percentages in which the ton miles were expressed, in order to give an intelligent answer to that. Those are give and take propositions, and I doubt extremely if there would be any material difference in percentages shown here when you got through.

Q. Suppose there was a material difference in the percentages, what effect would it have on the result?

3762 A. It would affect the result just as it affected the percentages.

Q. It is a fact, isn't it, that Little Rock handled more state freight in and out, than any other station in Arkansas?

A. That is a question I cannot answer; I assume that is so; it is a pretty big town; I don't know about that.

Q. It is a commercial center of the state?

A. Yes, sir, I think so.

Q. What would be your view about that, as to the quantity of freight handled?

A. I should imagine Little Rock would handle the bulk of the business, if it was properly favored in the matter of rates, and can get into its own territory, and if Memphis and Fort Smith don't cut it out.

Q. I want to ask you if your figures and methods you have adopted in ascertaining the mileage, is not short from one to three miles on all state freight that is handled in and out of Little Rock, as compared with the mileage shown on the records from which exhibit 26 was compiled?

A. There will be a difference which we have discussed at great length, on business handled through Little Rock, but I don't see how there could be any difference on business originating or terminating in Little Rock.

Q. Let me illustrate; take a shipment billed from Newport to Little Rock; that is the way it would be charged so far as

3763 the mileage is concerned on the records of the railroad company, on the records from which exhibit 26 is made up, to the station of Little Rock, and I understood from your statement yesterday, if it should be dropped in Argenta yards, at Baring Cross or Ft. Smith crossing, that you would charge the mileage to the point where it was dropped?

That illustrates what might be the difference, and the same thing can work the other way too, perhaps.

A. It is the mileage between your yards and your freight house, as I see it; I would have to know that the Company added that and figured its mileage to the freight house in making its statistics, but assuming that to be correct, there would be this difference between the company's statistics and our train figures, that is, the mileage from the yard at which the train was set out, over to the freight house, necessarily, because we do not have any train movement from the yard to the freight house; you would have to have a lot of that stuff to make a dent in 120,000,000 ton miles.

Q. Mr. Hillman testified that in the absence of actual gross

weights, he would take the percentage of car miles in each class of trains, that is local and through, and the percentage of train miles and add them together, and divide them by two, for the purpose of ascertaining the gross weight; he says that would give you a percentage which each represented—I mean the dead weight—
3764 strike out gross weight—I want to ask you if you pursued that method?

A. I think our exhibit K in the Iron Mountain case, states we used the car mile as a basis for the division of expenses; Mr. Hillman was referring to; we did not pursue that method; we used the car miles.

Mr. HILL:

Q. What was that, maintenance of way or maintenance of equipment?

A. Maintenance of way, I think; our Exhibit K shows that we used car miles, after applying a certain arbitrary to the engine miles to make them a car mile equivalent.

Mr. MOORE:

Q. Have you ever figured the difference, either in per cents or any other way, that you have allowed under the methods pursued in making up the exhibits filed by the state in this case, in favor of local trains, on account of the increased expense of operating that class of train over the through trains; I know you have made a 50% allowance here and a 50% allowance there on certain accounts, maintenance of way and some things, and maintenance of equipment and other matters, but have you given any thought to and can you state to me, either the actual or approximately what the difference is, we will say in per cents, or if you can express it in any other way that would express it better, what difference there is, and what allowance you have made, total allowance, in favor
3765 of local trains, on account of the increased expense in operating them?

A. You say in favor of local trains—you mean a charge against local trains?

Q. Well, against, then.

A. It is necessary in order to do that, to see what our arbitrary addition, in each class of expenses where an arbitrary addition was made, figured out in dollars and cents would be; that is, to make figures without the arbitraries and then with them, and then that would express it to you.

Q. Have you ever done that?

A. No, sir.

Q. Are you prepared to state what allowance or charge, if you express it in those terms, has been made against local trains, on account of the increased expense?

A. Any answer to that would be the result of calculation such as I have just described, and I have not made that calculation; anybody can make it from the basic data given in these exhibits.

Q. I will ask you further, have you any idea—any approximate

idea—of the difference if any, that has been made as to the expense of conducting state over interstate business, in the methods adopted in the exhibits filed in this case?

A. Do you mean what our results are in working out the extra cost per ton per mile on state and interstate business?

3766 Q. Yes.

A. I perfer to make that figure and give it to you this afternoon.

Q. Can you work it out there just in a minute?

A. No, sir, it takes some calculations, and I want to prove the figures carefully.

Q. I believe you were going to figure out the cost per ton mile?

A. As I understood your question, it was the cost per ton mile, as per our exhibits, for local and through trains?

Q. Yes.

A. Exhibit J shows in column one, line six, under the head of train cost, total train cost for local trains, as we have arrived at them, using the various bases set forth in Exhibit K, which is an explanatory exhibit. Dividing that figure of $644,008.78 by the total ton mileage of revenue freight of local trains shown on Exhibit I, which is 13,470,970, we find the local train costs per ton per mile to be 4.781 mills; taking the total train costs for through trains, shown in column two of Exhibit J, line six, namely,

3767 $1,948,289.55, and dividing it by the total ton miles of revenue freight on through train shown on Exhibit I, 107,050,490, we get an average cost per ton per mile for through trains of 1.820 mills; the excess of the local train costs over the through train costs per ton per mile, is expressed in percentages, 162.67%.

Q. That is the difference in cost per ton per mile without any discrimination as between classes of freight?

A. That is the average for train costs only.

Q. What is the difference in the cost per train mile as between the local and the through trains?

A. That was not in your question this morning; I will have to figure that. Dividing the train costs shown on exhibit J under the heads of local and through by six times the local and through train miles shown on exhibit I, in order to get a six months figure, I find the average cost per train mile on local trains to be $1.52; on the through trains, $1.65.

Q. If you want to ascertain the increase in the state revenue provided by the railroad tariff of November, 1908, as compared with the Arkansas Commission tariff, what method would you pursue?

A. You are talking now of revenue derived from traffic, not rates published in the tariff; the concrete result of moving the traffic under those two sets of rates?

3768 Q. Yes.

A. As the Commission's distance tariff is entirely on a mileage scale, the comparison would have to be on that basis; you would have to take the actual movements under the railroads voluntary rates, and apply to these actual movements, waybill by way-

bill, shipment by shipment, the rate for that distance on that commodity which would apply under the Commission tariff, and in that way, get a comparison; that is the only comparison there could be.

Q. That is the only way in which it could be ascertained?

A. If you desire to compare the result of applying the standard distance tariff which has been enjoined to the traffic moving under the railroads tariff from November, 1908, the comparison would necessarily be shipment by shipment, rate by rate.

Q. You would have to compare the new tariff to the business for the last half of 1907?

A. You asked me to compare two tariffs in the abstract?

Q. I am speaking now concretely, with reference to this case; therefore, if you want to apply the railroad November tariff to the business that was done in the last half of the year, 1907, you would do it in the way you have stated, by applying it to the business that moved during that period?

A. It could be done in that way, yes, sir, but if you were endeavoring to ascertain the average revenue per ton per mile or the two periods, of course, there would necessarily be the assumption
3769 that the various commodities moved in relatively the same volume, in the last half of 1907, as they did during the period which you were comparing, but you have not said yet, which period you want it compared with.

Q. What I am speaking of, is how you would ascertain the increase of revenue from the same business which was moved in the latter half of 1907, under the latter schedule of rates?

A. If you wanted to know what the rates under standard distance tariff would be an any commodity, or the revenue derived from moving any commodity under that tariff, you would have to apply the rates of that tariff to it.

Q. There have been some other methods suggested and I wanted to see what yours would be.

That is all, Judge Hill.

3770 Redirect examination, Mr. T. A. HAMILTON.

By Mr. HILL:

Q. Some question was raised as to your salary when you were working for the Iron Mountain road; if you have no objection, I would like for you to state what your present salary is, with Haskins & Sells?

A. They are paying me this year $3,000.

Q. Referring to these work sheets that you turned over to the Iron Mountain, representing the work on the October movement, some questions were asked you, seeming to imply that you had not carried forward memoranda that you should have carried forward.

I will ask you what was the purpose you had in making up those sheets; were you doing that for the Iron Mountain or whom were you doing it for?

A. My instructions were to secure, for the information of the

state's attorneys in this matter, the ton mileage performance of local freight trains on the Iron Mountain, to do it as expeditiously and as economically and as accurately as I could. I had no other object in view, than the accomplishment of that purpose.

Q. In making up these work sheets, you didn't do it with
3771 the expectation of turning them over to the Iron Mountain at all—that was not the purpose?

A. No, sir, they were compiled for the use of the attorneys for the state, subject to their disposition.

Q. You turned them over to them subsequently as a mere matter of helping them in their work?

A. Yes, sir.

Q. Mr. Moore asked you, as I understood him, about the excess costs of the local over the through trains; have you also the excess costs as shown, of the state over the interstate?

A. For the Iron Mountain?

Q. Yes, as shown in your October movement, the same as Mr. Moore questioned you about?

A. The figures for which Mr. Moore asked, and to which you refer, were the excess cost per ton per mile of all business on local trains over all business on through trains, and I gave him a figure based on the train costs shown in columns one and two, line six, of exhibit J, divided by the total ton miles of each class of train, as shown in Exhibit I.

Q. That didn't show anything but the train costs, didn't show the maintenance of way and equipment, did it?

A. Yes, sir, it showed everything but traffic expenses, station expenses, loss and damage freight, supervision and general, accruing to the directly allocated portions of transportation expense; the portion of general expense following those previously allocated; those were not train costs, they were divided directly between state
3772 and interstate.

Q. This 162 I believe it was you gave Mr. Moore represented all the train costs and everything except the matters you have just mentioned?

A. It represented the division by the total ton miles on each class of trains, of the figures shown in columns one, and two, line six, exhibit J.

Q. Making it in round numbers about three to one.

A. It was 162.70%, as I recall it, excess.

Q. Give the statement between state and interstate.

A. The excess cost of state over interstate business per ton per mile is 68.11%.

Q. That takes in everything?

A. That takes in all the costs of state and interstate business, as represented by the figures in columns 3 and 4, of exhibit J, shown on line 8, total cost of intra and interstate business, divided by the interstate and intrastate ton miles, shown on exhibit I.

Q. These are all referring to freight, of course?

A. Yes, sir.

Q. Now, give the excess revenue of state over the interstate?

A. The figures which I have given, as I have explained, were based on these six months exhibits, but using the October ton miles.

Q. That was the same basis you gave Mr. Moore yesterday?

A. Yes, sir.

(Two preceding questions and answers read, at the request
3773 of Mr. Moore.)

Mr. HILL:

Q. Is that answer right?

A. Yes, sir, as to what I have done; that is the basis on which I made the figures for Mr. Moore yesterday; in talking of train costs, it may make some slight difference if I took the six months ton miles, figured on the basis of the six months ton miles, the excess cost of intra over interstate business per ton per mile, considering all costs shown in Exhibit J, is 86.9%.

Q. And figured the other way?

A. My figure was in error, I applying only the month's ton miles to the six months' expenses.

Q. Give us the revenue.

A. Exhibit 5 shows the average revenue per ton per mile for the six months period from state business to have been 13.377 mills per ton per mile, and from interstate business, 6.75 mills per ton per mile; the excess of the intra over the interstate, expressed in percentages, is 98.18%.

Q. In round numbers, 98% more revenue and 86% more expenses of the state over the interstate?

A. Yes, sir.

Q. Now on this lap-over proposition that you explained in your cross-examination of one month's business on the other on your October train movement; you explained fully, as I understand, why you thought one would equalize the other; did you have any statistics in mind to bear out that figure?

3774 A. Yes, sir, the Cotton Belt figures.

Q. I wish you would give those?

A. Exhibits 19 and 20, which cover the test made under Mr. Kimbell's direction, show the ton miles of intrastate freight transported as developed by Mr. Kimbell's men riding the trains, to have been 1,381,303, and the ton miles of interstate freight ascertained in the same way, that is the actual movement, to have been 29,087,265; of the total movement as ascertained by Mr. Kimbell's men on the trains, the intrastate was 4.534%, the interstate 95.466%.

The company's statistics which I understand are on the same basis as Mr. Roth's exhibit 26, regularly compiled for the purpose of their own information, show that during the same month, Oct. 1908, the ton miles of intrastate freight were 1,372,093, and of interstate freight, 28,952,919.

The percentage which the intrastate freight ton miles taken from the company's regular statistics, compiled on the same basis, I understand as exhibit 26, was of the total ton mileage so compiled, 4.525%, and the interstate freight was 95.475%.

If those percentages had been handled in the way we ordinarily

handle them, and in the way which we have handled them in our statistics here, running them out but two places—when I say statistics, I mean exhibits we have filed in the case—running them out two places, the percentage figures would have been identical
3775 in each case for the actual movement, and the movement as shown by the company's statistics, as they are shown on this memorandum I have here, the difference is nine one thousandths of one per cent.

Q. How many decimals do you have to carry forward to find the difference?

A. Three decimal places.

Q. That represents the lap over on the Cotton Belt?

A. That would indicate that he actual lap over took care of itself, as I suggested in my cross-examination.

Q. With the exception of how many thousandths?

A. 9 one thousandths of one per cent.

Q. I wish you would attach that as an exhibit?

A. Same is hereto attached and marked for identification as exhibit "E-1" and is as follows:

For Exhibit "E-1," see Volume 9, page 5857.

3776 Mr. MOORE:

Q. Do you understand that the figures on these two roads, the Cotton Belt and Iron Mountain, are compiled on the same basis?

A. I understand they are compiled from the waybills as they are in the case of the Missouri-Pacific statistics; I feel quite safe in the assertion that they are not compiled for the auditor's ordinary purposes by riding the trains.

Q. What I want to get at is if one is not on the received basis in all accounts, and the other the forwarding basis in all accounts, and if there would not be a difference resulting from the use of those two bases?

A. That might develope, I am not prepared to say now. I am quite sure that the company's regular statistics are not compiled by riding the trains.

Mr. HILL:

Q. Speaking further of this lap over, if there were any differences in that, would they affect any of the other statistics shown on the other exhibits, other than the ton miles between state and interstate?

A. I take it you refer to exhibit I, which gives all our statistics in the case of the Iron Mountain.

Any lap over of ton mileage or any discrepancy between the basis on which the ton mileage shown in exhibit 26 and those shown on exhibit I were compiled, would affect nothing but the ton mileage, and the dependent percentages of the car miles, caboose
3777 miles, etc., there would be no lap over; that is the actual movement during the month, caboose miles, cars and engine miles.

Q. The lap over that has been gone into at great length, only goes to the ton mile statistics you finally use, and would be erroneous only to that extent, but not to the preceding bases used?

A. Not to the other statistics used in Exhibit I; it is a ton mile proposition pure and simple.

Recross-examination.

By Mr. MOORE:

Q. The car mileage every month would depend, I suppose, wouldn't it, upon the amount of traffic handled during the month?

A. I think that would be a fair assumption.

Q. If there was a large amount of traffic handled one month, and a small amount in another month, probably the car mileage would be changed?

A. Yes, sir, I don't suppose they would haul their cars around for amusement; I suppose they would let them stand idle, that would be cheaper than to haul them around.

Q. On what basis, do you understand the records kept by the Iron Mountain Ry. Co. of freights handled and upon which Exhibit 26 is based, is made up.

3778 A. I think we went over that before; I can give you that information as I recall it.

Q. What I mean, and I will call your attention directly to it, is the record of freights that are received as distinguished from freights forwarded by the railroad company?

A. It is partly a forwarding and partly a receiving proposition as I understand it.

Q. Just explain that fully?

A. It is a forwarding proposition in this, that the Iron Mountain takes into its accounts, and into its statistics, all waybills made during the month at stations on the Iron Mountain-Missouri-Pacific system; it also takes into account waybills made on other roads, perhaps, in preceding months, receiving during the current month; all waybills received from connecting lines; they may be dated in the current month or preceding month; it takes in all its forwarding business, and such business as received from connecting lines during the month.

Q. How does it treat business originating on another line, passing over its rails in the State of Arkansas, delivered to another line and delivered to its destination?

A. Where the Iron Mountain is intermediate carrier?

Q. Yes?

A. Without reference to the memoranda I have made, I couldn't say whether that settlement is made before the delivery is effected by the ultimate carrier or not, or whether it is carried by the Iron Mountain as freight in transit, on the basis of the propor-

3779 tion they expect to receive for their haul in the ultimate settlement; I think the latter method is the one pursued.

Q. If the entry on the record is based on the settlement, then it would appear of the date that the last carrier, that is the con-

necting carrier, to whom the goods was delivered by the Iron Mountain Road would make its settlement with the Iron Mountain road?

A. Yes, sir, I recall that Mr. Roth stated that he took such intermediate business from company's in transit sheets, and I infer from that, that such intransit business is in his exhibit 26, his memorandum states that fact, as I recall it.

Q. Do you mean that Mr. Roth's memorandum states that his entry on the accounts and on the records of the railroad company before the settlement is made by the last connecting carrier?

A. Mr. Roth's memorandum states he took that business from the company's in transit sheets, that is the only solution I can see.

Q. What do you understand that to mean?

A. Just as I have stated.

Q. You haven't said it in a way that is intelligible to me; at what period, with reference to the shipment itself, from the time it originated until the time it was finally delivered at destination; would that be entered on the accounts of the railroad company?

3780 A. It would be the period in which it passed over Iron Mountain rails, that would take it into the Iron Mountain's accounts, regardless of when it was billed or delivered.

Q. Didn't you have yesterday, a copy of the statement that Mr. Roth furnished you?

A. Yes, sir, I referred to it just now; it is up stairs, I can get it in a minute.

Q. I wish you would do so? Just read whatever you have there.

A. Mr. Roth gives the basis or the source of his information in this manner: "System business from the company's journals interline received from company's B. report; interline forwarded from connecting lines abstracts and our October in transit sheets; interline intermediate from connecting line abstracts."

I see from his fourth statement, that that is settled or taken into the company's accounts as settled for, by connecting lines.

Q. Your impression was erroneous about that?

A. Yes, sir, I recalled the reference to in transit sheets.

Q. Do you know what system is in vogue on the Cotton Belt system?

A. No, sir, not in that detail; they have abandoned the antequated freight journal system, which is still in vogue on the Iron Mountain, and are checking one agent against the other.

Q. In order to avoid any misunderstanding about the effect of your testimony, I want to call your attention to my under-

3781 standing of your statement in answer to my question yesterday, as to the relative costs per train mile of local and through trains; I understood you to state yesterday that the cost per train mile per mile of the through train was $1.65 and for the local train, $1.52, was that correct?

A. We made these figures here yesterday and proved them at the time, and the record will show the cost per train mile was the result of dividing the train mile into the total cost; there is no analogy between the figures yesterday and those today.

Q. What I intended to ask you was if you intended to modify that statement?

A. This refers to ton miles and the other to train miles.

Q. I am just asking you to avoid any confusion about the matter.

A. There is no relation—one is the train unit and the other is the ton unit.

Q. You still adhere to the statement made yesterday as to the train costs between local and through trains?

A. Those were the average train costs between local and through trains; I think those figures were right; that was the result of dividing train miles into train costs—not the ton miles.

Q. How long would it have taken the accountants of the railroad company to have checked the figures prepared by you and used by you in your exhibits in this case, without your

3782 work sheets?

A. We couldn't have gotten any figures unless we had assembled them on the work sheets.

Q. What I mean is, if you had not furnished the railroad company with your work sheets, had simply put the figures that appeared upon the sheet upon the page containing the results of your figures last February and March, how long would it have taken them to go over and check those, without the aid of the work sheets?

A. By working with an average of four assistants, we put those figures together in a little over four months; had the railroad put as large a force and as equally competent one, as I fortunately had to assist me, it seems to me they should have accomplished it in at least the same time, perhaps shorter; we were not familiar with the records when we started in,—that is not familiar with the present system of filing, things of that kind, although we had first hand knowledge of Iron Mountain conditions, Mr. Wright and myself, it dated back a little, and we had to familiarize ourselves with the road to a certain extent; it seems to me, that a group of men taken from the company's present employees, should have done the work as quickly.

Q. Didn't the railroad accountants furnish you with their data and everything they used in their work in making up their accounts?

A. Mr. Johnson gave us access to all their figures.

3783 Q. Didn't you expect in making up those sheets, that the railroad accountants would want them and you would let them have them?

A. I prepared them subject to the disposition made of them by counsel for the state; I had no voice in the matter.

Q. Didn't you at that time contemplate and expect they would be called for and that the accountants of the railroad company would be allowed to use them for the purpose of tracing and checking your work?

A. It appeared to me, if they desired to check our figures, having declined or neglected the opportunity to join in a joint compilation, that they might have wanted to check them.

Witness excused.

It is agreed between the counsel, that Mr. Hamilton may be examined in re-direct examination, in regard to the matters that were brought out on cross-examination, touching the October car movement in the time to be used by the plaintiff in rebuttal.

3784 T. F. WHARTON, being called on behalf of defendants, testified as follows:

Direct examination.

By Mr. HILL:

Q. Have you prepared some statistics based on the Interstate Commerce reports, as to the increased efficiency in train performances, tons accomplished, etc.?

A. Yes, sir.

Q. I wish you would state what you have, and introduce it as an exhibit?

A. Same is hereto attached and marked for identification as Exhibit "F-1" and is as follows:

For Exhibit "F-1", see Volume 9, page 5859.

3785 A. This is an exhibit of freight and passenger statistics, covering a period of ten years, ending with the year ending June 30, 1907, for the entire United States, for the Interstate Commerce Commission Group 8, for the St. Louis, Iron Mountain & Southern and the St. Louis Southwestern Ry. Companies.

It shows in the first column the ton miles of freight carried; these are expressed in millions, the first figure representing 95 billion, 139 million. As to the ton miles carried in the United States, this indicates an increase of 148.7% in ten years; that is the increase of the year ending June 30, 1907, over the year ending June 30, 1897.

The ton miles carried in group 8, show an increase of 174.8% in the ten years period.

On the St. Louis, Iron Mountain & Southern, there is an increase of 139.1% in the ton miles in the ten years.

And on the St. Louis, Southwestern, an increase of 117.1%.

The second column gives the freight train miles in millions; the first figure represe-ing 464 millions. Down under Iron Mountain & Southern, we have had to express that in fractions, the fraction meaning 4 millions 400 thousand, compared with six million, four hundred thousand in 1907.

3786 The same is true of the Cotton Belt, the freight train mileage would be expressed as 1 million 2 hundred thousand, and one million, four hundred thousand.

These figures indicate an increase in the train mileage which hauled the ton miles of freight just referred to, of 35.5% in ten years in the United States, 46.7% in ten years in group 8, and 36.2% on the Iron Mountain, and 14.3% on the St. Louis Southwestern.

The third column, gives the average train load in tons, and indi-

cates an increase in the average loading of trains of 75% in the ten years, in the United States; of 75.3% in group 8; of 75.6% on the Iron Mountain & Southern, and 83.7% on the St. Louis, Southwestern.

The statistics used in the third column are those for the United States and group 8, as shown by the Interstate Commerce Commission report. We have not divided ourselves, the train miles into ton miles to get that figure, but have taken the Interstate Commerce Commission figure itself; in the case of the St. Louis, Iron Mountain & Southern and St. Louis, Southwestern, we made those figures by dividing the train miles into ton miles into ton miles carried.

Q. You are setting up by your own calculation on these two roads, that calculation made by the Interstate Commerce Commission comparisons in the United States and group 8?

A. Yes, sir, the Interstate Commerce Commission does not give the average train load on each road, but only for the
3787 United States and each group.

The 4th column gives the average receipts per ton mile in cents. I think those receipts explain themselves. They have practically remained stationary, during the entire period, the changes being very small; I might say the percentage at the bottom of the 4th column, means seven ten thousandths of one percent, the way it is entered there.

In the 5th column, is given the number of passengers carried one mile in billions, the first figure for instance, representing 12 billions, 256 millions.

The passenger figures indicate an increase in ten years in passenger miles for the United States of 126.1%; for group 8, of 252%; on the St. Louis, Iron Mountain & Southern, 154.2%, and of the St. Louis, Southwestern 172.6%.

The sixth column shows the passenger train mileage in millions, the first figure for instance, representing 335 millions, and the first figure under the head of expenses for instance, representing seven hundred thousand, the decimal point indicating that these figures for passenger train mileage, show an increase in this mileage in the United States of 51.9% in the ten years; under group 8, 100/7%; on the St. Louis, Iron Mountain & Southern, 71.4%, and of the St. Louis, Southwestern Ry. Co., 71.4%.

3788 The seventh column shows the number of passengers per train mile; that indicated for the United States an increase of 37.8% in the passengers carried per train mile; under group 8, of 61.5%; on the St. Louis, Iron Mountain & Southern, of 44.4%, and on the St. Louis Southwestern, of 57.5%.

The figures in the last column, are average receipts from passenger per mile in cents; these show but slight variation in rate during the period.

Q. Does that complete the explanation of it?

A. Yes, sir.

Q. Make that an exhibit to your testimony.

A. I do so, and same is marked for identification as Exhibit "F-1", and is as follows:

For Exhibit "F-1", see Volume —, page —.

3789 Q. Have you read the opinion of Judge Farrington, in the case of Southern Pacific v. Bartine, 170 Federal Reporter, and studied the formula that he has adopted there for working out the division between state and interstate?

A. Yes, sir.

Q. Have you prepared an exhibit using Judge Farrington's formula as applied to the statistics in this case?

A. Yes, sir.

Q. I wish you would explain it and introduce it as an exhibit.

A. There will be two, one for the Iron Mountain and one for the Cotton Belt, which are marked for identification as Exhibit "G-1" for the Iron Mountain and Exhibit "H-1" for the Cotton Belt, and are as follows:

For Exhibit "G-1", see Volume 9, page 5861.
For Exhibit "H-1", see Volume 9, page 5863.

3790 Q. Explain how you made the exhibit?

A. Both exhibits are made in exactly the same manner, one for the St. Louis, Southwestern and one for the Iron Mountain, and both cover six months, ending Dec. 31, 1907.

Judge Farrington, as I understand the case, only passed on the question of freight rates and freight expenses, and in compiling his figures, used the ton mile basis, assuming that the transportation expenses would be three times as much per ton per mile for the state business as for the interstate, and that on all other expenses, the cost would be the same per ton per mile; these figures have been compiled on that basis, using the Iron Mountain and the Cotton Belt ton miles and classification of expenses.

Q. The formula will show for itself; state what is the return on the property if Judge Farrington's formula was applied to the Iron Mountain statistics in this case?

A. Assuming that the passenger business netted the same earnings on interstate business, the return on the property of the Iron Mountain would be 7.37%, and on the St. Louis S. W. would be 11.42%.

Q. That is on all business?

A. Yes, sir, all intrastate business in Arkansas.

Q. Have you had prepared a copy of the original affidavit of Mr. E. K. Vorhees, filed on the application for a modification of the injunction?

3791 A. Yes, sir.

Q. I wish you would attach a prepared copy of that as an exhibit?

A. I will do so, and same is marked for identification as exhibit "I-1":

For Exhibit "I-1", see Volume 9, page 5865.

It is agreed: That the record will not be encumbered by copying the Vorhees' affidavit, as each side have their respective copies, and only one will be filed to take the place of the original.

Cross-examination.

By Mr. MOORE:

Q. How do you account for the falling off in the receipts per ton per mile during the period covered by your exhibit of freight and passenger statistics compiled from the reports of the Interstate Commerce Commission, at the same time that the business seems to have increased throughout the country?

A. Well, I don't account for it particularly, except that the original rating is this rate; I don't believe that would be affected by any great increase or decreased rate, the average rate per ton per mile.

Q. Wouldn't you think that the universal adoption of low state rates by state commissions and state authorities, would bring down those receipts in that way?

A. If the rates were universally reduced that might be possible, but it would effect it only slightly.

3792 Q. In the United States there is a reduction of 4.9% dur- the ten years?

A. Yes, sir.

Mr. HILL: I object to that;; Mr. Wharton has only put in evidence the facts; what his views are about them I don't know; I don't know whether he is qualified to handle those propositions or not.

Q. On group 8, there is a falling off of 9-½% in the ten years in the receipts per ton miles?

A. 10½%.

Mr. HILL: I want to put in copy of the deposition of Mr. J. M. Johnson, in the case of Chapman & Dewey, Lbr. Co. v. Jonesboro, Lake City & Eastern Railroad.

It is agreed that same may be introduced, subject to objection for incompetency, and that same will be filed to take the place of the original, and not copied.

(For testimony of J. M. Johnson see page 3793, this record.)

Mr. HILL: I want to put into the record all the original affidavits used before Judge Vandeventer; they may be part of the record, I don't know whether they would or not; I want to make an offer of introducing the original affidavits; if they are not already a part of the record we want to introduce them and offer them in proper time.

For affidavits see pages 133 to 451.

3793 In the Circuit Court of Craighead County, Jonesboro District.

CHAPMAN & DEWEY LUMBER COMPANY, Plaintiff,
vs.
JONESBORO, LAKE CITY & EASTERN RAILROAD COMPANY, Defendant.

J. M. JOHNSON (Vice-President in charge of Traffic of the Missouri Pacific & St. Louis, Iron Mountain & Southern Railways) first having been duly sworn, testifies as follows, on behalf of the Defendant:

Direct examination by Mr. J. C. HAWTHORNE:

Q. State your name, age, residence and occupation?

A. J. M. Johnson, age 64 years, residence St. Louis, Mo., occupation Vice-President in charge of Traffic of the Missouri Pacific Railway Co.

Q. How long have you been engaged in the traffic department of railroads in this country?

A. Thirty eight years.

Q. Have your duties caused you to come in contact with the earning capacity of Railroads generally?

A. Yes.

Q. Are you acquainted with the physical condition of the Jonesboro, Lake City & Eastern Railroad Company?

A. Well, only in a very general way.

Q. That road is eighty three miles long; it has a terminal at Barfield on the Mississippi River and a branch that runs to Osceola on the Mississippi River, and the two branches connect at Osceola Junction and lead to Jonesboro. The branch and main line make
3794 up eighty three miles of road. Are you familiar with the costs of operating railroads generally, Mr. Johnson?

A. No, I cannot say that I am. I am not an operating official. I am a traffic man.

Q. Take it that on a road eighty three miles in length eighty per cent of its tonnage is forrest products, would a two cent rate on rough lumber be compensatory for a haul of one to twenty miles?

A. I should say not.

Q. Are you familiar with the tariff formulated by the Arkansas Railroad Commission, known as Standard Distance Tariff No. 3, as applied to the Jonesboro, Lake City & Eastern Railroad Company?

A. I am familiar in a general way with the tariff of the Arkansas Railroad Commission establishing the rates on rough material. I could not name the rates for the different distances, but am familiar with the tariff in a general way.

Q. I hand you what purports to be a copy of the tariff put in effect in April 1st, 1907 and in 1908 made to apply on the line of the Defendant Railway Company, being a rate on rough material in addition to shipment of percentages of that material out, the percentages varying according to manufacture of the rough material, this copy being embodied in the complaint of the Plaintiff.

A. So then this is a correct copy?

Q. I would like for you to examine that tariff sheet and state whether in your opinion as a railroad traffic man the rate of two cents would be compensatory on the shipment of lumber from points on the Jonesboro, Lake City and Eastern Railroad to Jones-
3795 boro, or other Junction Points, a haul of fifty miles and under?

A. It would not. The rates established by the Arkansas Commission as applicable upon so called rough material from the point of origin to the manufacturing point were made to be applied in connection with an outbound movement of the product. The rates of themselves into the milling points are not considered compensatory. In fact, they are very much less than the cost of transportation, but are made in connection with an outbound haul, under which the carrier receives a long haul and reasonable rate, so that the rate in the aggregate from point of shipment of the rough material to the destination of the product, considering the stock, is considered fair and reasonable.

Q. When there is an outbound rate of only two cents per hundred pounds on the product of the rough material, would that be compensatory to the road moving both the rough material and the outbound product?

A. It certainly would not. That would only mean a rate of four cents in the aggregate, including a stop, which would mean from two to four terminal movements, which, of course, could not be performed in connection with the haul at that rate with any degree of profit.

Q. Are you familiar enough to say whether a company so situated would sustain a loss if they undertook to move tonnage at those rates, two cents and two cents out on the product, forty per cent of the rough material?

A. Well, it depends of course somewhat on the service performed on the outbound haul.

Q. I mean would the rates be compensatory in the aggregate?

3796 A. Well, as I said, you are receiving two cents for an inbound movement, fifty miles or less. I stated that that rate is not compensatory. Now, in taking up a movement, outbound, we must consider the distance and service performed on the inbound movement. If the inbound movement is of considerable distance, for which you receive only two cents, why I should say it is not compensatory.

If you take the freight, the inbound and outbound, in the aggregate, the finished product only amounting to forty per cent of the rought material, the rate then for hauling in and out would be 2 1/8c. per hundred on the two hauls. Would that be compensatory?

A. I understand the question to be this: would a rate of two cents per hundred on the rough material in from distances fifty miles and less plus a rate of two cents on forty per cent of the inbound

tonnage be compensatory for the single haul of the rough material in? Is that right?

Q. Yes.

A. That would give you a rate of 2 6/10 in the aggregate for the service performed. I should say that would not be compensatory. Now, I want to say in connection with that that the Arkansas Railroad Commission has established rates for the transportation of lumber and lumber products between points in Arkansas. The rates established by the Commission are assumed to be fair and reasonable compensation for the service rendered. Anything less than those rates are not considered fair and reasonable nor compensatory, so this rate, being very much less than the rate
3797 established by the Commission, I should say was not a fair rate for the service.

Q. You understand, Mr. Johnson, I judge you take into consideration in making that answer that they have established a lumber rate of five cents for fifty miles and under and the two cent rate, which you have read in the tariff handed you was conditioned upon an outbound shipment over the same line of forty per cent of manufactured product. When you speak of the rate being less than the reasonable rate the Commission fixed (or one presumed to be reasonable), do you refer to the local rate of five cents on lumber?

A. I refer to the regular scale, which has been established by the Railroad Commission of Arkansas. I do not know whether it is five cents or not. I know that it is much higher than two and one eighth cents. The point I want to make is this. The Railroad Commission has established what it called lumber rates. They represent a rate for the movement of lumber and its products between points in Arkansas when the shipment originates at a given point and is sent to another point, that service being complete within itself. Those rates are separate and distinct from those rough material rates. They have no relation to rough material rates whatever. The Commission had no thought, so far as we are advised, of applying the rough material rates on a shipment which was complete within itself. They could only be used in connection with some subsequent movement upon which the Commission's rate would again be applied, that is, the rough material rates would be applied on the material coming into the milling point and when the shipment went out the Commission's rate applying on lumber and its products would be applied, so these are not rates
3798 of themselves. They are only rates representing part of a movement.

Q. If the line of road so physically situated that the rate applicable to the haul that it would make out of the outbound tonnage would bring a return of only two cents on the finished product you would say that that rate combined with the two cent rate in on rough material would not be compensatory for the movement of the rough material alone from point of shipment, or a distance of fifty miles and under, to the point of milling?

A. That is a state movement. There is no two cent rate on outbound movement under the Commission's tariff for Arkansas.

Q. The question is based upon the assumption that the proportion of revenue that the Jonesboro, Lake City & Eastern Railroad Company would get on the outward movement would be two cents on the finished product.

A. You could not get that under any tariff or tariff arrangement of the Arkansas Commission. I mean there is no tariff of the Arkansas Commission and there is no joint arrangement authorized by the Arkansas Commission that will give you as little as two cents. If you are going to apply the rough material rates in view of the outbound movement, that outbound movement must give you the lowest rate that the Commission makes. That may be their rate for fifty miles and less or it may be the proportion which would accrue to your line of a joint rate which is authorized by the Commission, and the joint rate authorized by the Commission represents about eighty five per cent of the local rates.

Q. Mr. Johnson, in your experience as a traffic and freight man, have you studied the cost of movement of the different classes
3799 of freight, different kinds of tonnage, in determining what would be reasonable rates in the handling of different classes of traffic, and are railroad rates not based on the assumption that they make fair return on cost of movement of that freight?

A. It is not very difficult to determine the cost of moving any particular commodity any particular distance. In fact, it might be said to be impossible to do it. We can only figure in a very general way. We know about what it costs to move a ton of freight one mile at the end of the year and we know what we have received for moving a ton one mile. Now, that is on the business as a whole, which, of course, is made up of hundred- of thousands of different shipments. It is impossible to know the exact cost of moving one ton of any particular class of freight for any particular distance.

Q. But in making the rates, is the general average of cost of moving a commodity taken into consideration in fixing a rate that will be compensatory in the moving of any particular commodity? I refer to the general average of cost you have spoken of as shown by your records at the end of the year.

A. No, rates are not made that way. By experience, we have some knowledge of about what we ought to have for the service in question. Rate making as a general proposition is largely a guess and the railroad people claim by experience they are very much better able to guess correctly than the other fellow. There are so very many factors entering into the cost that it is impossible to determine the cost of moving the different classes of freight, and we can only determine in a general way from experience about what is fair and compensatory.

3800 Q. Now when you say that a two cent rate for the hauling of rough material a distance of fifty miles and under is not compensatory, do you speak with reference to your general experience in freight matters through the period of years that you say you have been directly connected with the traffic departments of railroads?

A. I do. Let me explain there a little bit. A haul of that character represents in the first place a movement of the empty car from some point to the loading point. The car is switched into the train to be moved to the loading point, then it is set out at the loading point, then picked up again when loaded, then taken into point of destination and set out again. There are four terminal moves besides the haul. Those terminal moves are just the same whether the car moves fifty miles or whether it moves one hundred miles or two hundred miles, and those movements are really the expensive movements, especially in a large terminal. I do not know how expensive your terminals are at Jonesboro, but in a place like St. Louis or Little Rock we would figure on a terminal movement of that kind costing something like two dollars. There would be eight dollars right there for terminal movements so these short hauls, we figure, can not be performed at anything like the rate per ton per mile that we could perform a long haul.

Q. You have likewise, Mr. Johnson, entered into that the free time for loading and unloading those cars and the train expense, which is considered, of course, in all those items?

A. That is the time when the car is out of service, you might say?

3801 Q. It is just as long for a short haul as it is for a long haul?

A. Just the same.

Q. In other words, you mention the terminal moves, free time, etc., as some of the elements that enter into the item cost?

A. All of those.

Cross-examination by Mr. ALLEN HUGHES:

Q. I understand you to say, Mr. Johnson, that you cannot tell us what would make the actual cost for hauling a carload of lumber fifty miles, or a less distance, to Jonesboro. Am I correct about that?

A. I cannot tell what would be the actual cost of moving a carload of lumber to Jonesboro.

Q. You spoke of rates in force in Arkansas. If you have a Missouri Pacific or Iron Mountain tariff accessible that contains the rough material rates in force on that road, I would be glad to have you get it and let us know how those rates compare with these.

(It is agreed that the witness may read from these tariffs as if the tariffs themselves were placed in evidence.)

You have, Mr. Johnson, a tariff in Arkansas, something like the one set out in the complaint, with reference to which you have already testified, which pertains to rough material rates. That is the particular rate about which I desire you to speak now. The particular question I asked you with respect to that rate was: How does it compare with the rate on the Jonesboro, Lake City &

3802 Eastern Railroad about which you have spoken? How do your rough material rates compare with rough material rates on the Lake City Road, I mean rough material rates on lumber and

forest products? By this I mean the tariff in complaint now before you. You can assume that to be correct as both sides agree that it is.

A. I understand this is the tariff in effect today on the Jonesboro, Lake City & Eastern Railroad. It is somewhat different from the tariff we are using. Our tariff provides for rate of twenty five miles and under two cents, over twenty five miles and up to fifty miles two and one half cents, while the Lake City tariff provides for a rate of two cents for fifty miles and less.

Q. Are there other differences that you note?

A. The Lake City tariff provides for a rate of two and one half cents for fifty miles to one hundred miles, while our tariff provides for a rate of three cents for fifty to seventy five miles and three and a half cents for seventy five to one hundred miles.

Q. You need not pursue that comparison further for there are no distances in controversy in this cause exceeding fifty miles. Your rough material rates contemplate a certain amount of the tonnage of manufactured product after it is manufactured for outbound haul as all rough material rates do. Now suppose two lines participate in the outbound haul, how is the amount to which each of those lines is entitled determined? Suppose you haul the rough material into Nettleton and it was determined to ship this manufactured product, after being manufacured at Jonesboro, over the Frisco to Hoxie and thence to some other point on your line,
3803 either north or south of Hoxie, say to Newport or to Corning, how would the proportion which the Frisco and the Iron Mountain would have *be* determined?

A. That is not a supposable case.

Q. Suppose it did have to move over that route?

A. It would have to pay us the full tariff rate on lumber. The rough material rates can only apply on rough material going into the manufacturing point when the same line receives an outbound haul.

Q. I understand that perfectly, but suppose the same line receives the outbound haul?

A. There is no such case in the State of Arkansas and you can not have one. There is no such arrangement made. We would not arrange to give our product from rough material to the Frisco to hand back to us some place to continue the haul when we could take the haul direct ourselves.

Q. I think you do not understand me. Suppose, for instance, the Lake City road hauls rough material into Jonesboro, to be manufactured. Suppose it hauls that manufactured product, reshipped, as the shipper is bound to do, over the Lake City Road and say it is going to St. Louis. The Lake City road would handle it to Nettleton for delivery to the Iron Mountain or to Osceola or Blytheville and give to the Frisco. How would that re-haul be figured. It must come in somewhere. It must pass over two lines, either over the Lake City and the Iron Mountain or over the Lake City and the Frisco. This is the question that I am asking you, suppose that a gross sum of so many cents per hundred pounds

is charged for that haul, how is it divided between the two
3804 carriers?

A. An arrangement of that kind could be entered into, I presume, but it would have to all be made a matter of agreement and arrangement before hand. Today the manufacturer of lumber in Arkansas understands that when he brings in rough material that he can only have rough material rates applied when he ships the product out over the line which brings it in. If there is any diversion from that rule it must be pre-arranged.

Q. You do not understand. These rates only apply when it is to be re-shipped to some other point on carrier's line?

A. Yes.

Q. Have no application when shipped on some other carrier's line?

A. They all understand that. In that way the inbound carrier has a lien, you might say, on the outbound product.

Q. Do I understand you to say that if this shipment is hauled into Jonesboro the shipper is bound to give forty per cent outbound or pay the local rate? If it elects not to pay the lumber rate and does give a shipment to St. Louis and bills it over the Lake City road, you say the rough material rate has no application?

A. Not unless pre-arranged.

Q. Why not?

A. Because the rules do not permit it.

You have moved up state and interstate traffic. You have been talking about the rules of the Arkansas Commission. That is why I say the rules do not permit such movement. The rule of the Arkansas Commission says that rough material rates can only be applied in connection with the carrier that brought the ma-
3805 terial in. If the manufacturer elects to forward that product by some other line then he must pay the full inbound local rate, the lumber rate, that is the lumber tariff rate. He knows it, and we have no trouble with our shippers because they all understand it. They understand that if they want to divert the product from our line on an outbound movement that they have to pay the local rate in. It would be possible for the Lake City road to arrange with the Iron Mountain for the movement of the product from Jonesboro to St. Louis and some consideration be given to an inbound rough material rate but that would have to all be pre-arranged and the line as a whole from Jonesboro to St. Louis would have to take care of the absorption.

Q. I understand the full tariff rate must be charged to St. Louis. I am not questioning that. I understand that the full tariff rate must be charged, but when the whole tariff rate is charged and two carriers have assisted in the transportation, one carrying it a part of the way and one carrying it the balance, is there any fixed rule by which the compensation is divided or is it a matter of agreement?

A. It is a matter of agreement solely and there is no fixed rule. The general rule between all carriers is a mileage pro-rate but with

1609

a short line that is not followed. They frequently allow a short line a much larger division than a mileage pro-rate.

Q. Has the Iron Mountain an agreement of that kind with the Lake City during the last two years?

A. I could not say, I am not familiar with it.

Q. Who is familiar with it?

3806 A. Mr. Perkins.

Q. What is his official title?

A. Assistant General Freight Agent.

Q. Where does he live?

A. His office is in this building.

Redirect examination.

By Mr. SMITH:

Q. We have been questioning you about rough lumber shipments when the finished product is shipped out over the line that brought in the rough material, and you indicate the Arkansas Commission tariff, the provision of which is before you in the complaint in this case, to apply on the outward shipment when it passes over the line that brought it in and is delivered to a connecting line, the connecting line taking it either to a point in the state or to a point out of the State.

A. There are two rough material tariffs. While the rates may be the same in both tariffs their application is somewhat different. One applies on state traffic and one on interstate traffic. We do not have the same arrangement for joint rates between carriers on state traffic that we have on interstate traffic. Therefore, as a rule, the outbound movement of the product must be by the road which brings it in, the only arrangement we have for joint rates in the State being eighty five per cent of the locals. The manufacturer could not well afford to ship his product onto the second road, but would look for his rough material on the line of that road. On interstate traffic it is smewhat different. There is, as a rule, a general arrangement for through rates and divisions, and there are arrangements where a rough material rate applies on the rough

3807 material in, the product of which passes out over two or more roads.

Q. The tariff that you read the rates from in Missouri Pacific and Iron Mountain Tariff I. C. C. A-1127, and the rates you read were conditioned on the shipment out of the mill product over your line of road. Will you attach this tariff to your deposition as Exhibit "A"?

A. Yes.

Recross examination.

By Mr. ALLEN HUGHES:

Q. Under the tariff of the Arkansas Commission, when you haul inbound shipments of rough lumber twenty five miles and under the rate is two cents. Now what is the outbound rate on the manu-

factured product, box shooks, for instance, for this outbound haul, say from Jonesboro to St. Louis?

A. Twelve cents per hundred pounds.

3808 F. P. JOHNSON, being recalled for cross-examination, testified as follows:

By Mr. HILL:

Q. Mr. Johnson, have you your Ft. Smith terminal valuation, requested sometime since?

A. Yes, sir.

Q. Please explain what you have?

A. I have here a statement showing the property of the St. Louis Iron Mountain & Southern Railroad, embraced in our Ft. Smith terminals, showing the mileage, value per mile, total assessed value for the years, 1907 and 1909, and the differences between the two periods.

I also have a statement covering the property within the limits of the City of Ft. Smith, that is not covered by the State Board of Assessors.

Q. That is all shown on your statement?

A. Yes, sir.

I also have a blue print, if you want that as an exhibit, of the Ft. Smith terminals, located within the City of Ft. Smith.

Q. Yes, sir, I want that; they also show the terminals adjacent to the City that wasn't within the limits of the Ft. Smith terminals.

A. The statement of property does, but the blue print doesn't; it merely shows the line within the city of Ft. Smith.

3809 Q. I understand there is a connection between the Ft. Smith Suburban with your line, but that connection is outside the city limits, but there is now a physical connection?

A. Yes, sir.

Mr. MOORE:

Q. When was that made?

A. I don't know when the date was; my testimony was sometime ago, that they were not connected in 1907.

Q. You attach those as exhibits?

A. Yes, sir, the same are marked for identification as Exhibit "J-1" and are as follows:

For Exhibit "J-1" see Volume 9, page 5880.

3810 Q. You have prepared exhibits for your company in the Oklahoma rate case, have you not?

A. I made up the statement that accompanied the affidavit.

Q. What disposition did you make of the Ft. Smith Terminals in the Oklahoma rate case?

A. We didn't make any disposition of them in the Oklahoma case, they are not included there at all.

Q. Aren't included in any way?

A. No, ir.

Q. What do you do with this expense growing out of that trackage between Van Buren & Ft. Smith in the Oklahoma case?

A. Any expense that is incurred on the line that enters into the State of Oklahoma, is charged to the State of Oklahoma, but the terminal expense at Ft. Smith, this station and yard service, is all charged to the state of Arkansas.

Q. You have not treated that as if Ft. Smith were Memphis to Oklahoma?

A. No, sir.

Witness excused.

It is stipulated, that the statements of the Rock Island Railroad, under the court tariff may be introduced by the state up to the time of final submission, just as the statements are received by the state, and when all are in up to the final hearing, that they may be compiled together to make one statement, which may be filed, subject to objection as incompetent, irrelevant and immaterial.

3811 The State rests.

Mr. MOORE: Mr. Laing, the Passenger Agent of the Cotton Belt, is here and I would like to have him state what was done in regard to increasing the passenger rates.

Mr. HILL: He will be your witness.

R. H. LAING, a witness of lawful age, being duly produced, sworn and examined, testified in behalf of the plaintiff in rebuttal as follows:

Direct examination.

By Mr. MOORE.

Q. State your name.

A. R. H. Laing.

Q. Are you connected with The St. Louis Southwestern Railway Co.?

A. Yes, sir.

Q. In what capacity?

A. Assistant General Passenger Agent.

Q. How long have you held that position?

A. About seven years.

Q. Mr. Laing, I wish you would state if any change or readjustment of interstate passenger rates was made at the time the rates in the State of Arkansas were reduced from three to two cents.

A. Yes, sir.

Q. Just state what the facts were as to the readjustment
3812 of passenger rates at that time, and again the readjustment when the passenger rates were restored to three cents.

A. Our through interstate passenger fares are all combinations of the local fares, and wherever a state fare is reduced it reduces all interstate fares in which it is a factor. For example: the fare from

St. Louis to Texarkana is practially a combination of the fare from each station to the next station all the way down. You add all of those local fares between the different towns from St. Louis to Texarkana, together, and you have practically the through fare from St. Louis to Texarkana.

So, if you reduce the fares between the stations in Arkansas, from three cents to two cents, you make a corresponding reduction in the fare—the interstate fare, from St. Louis to Texarkana. At the time the Arkansas state fares were reduced all intrastate fares to and from Arkansas were reduced, and almost all interstate fares through Arkansas—that is, originating in some State this side of Arkansas destined to a point beyond, were reduced. When the fares were restored to a three cent basis in Arkansas, corresponding increases were made in the interstate fares.

Q. Were the interstate passenger rates in January 1909 on the same basis as the state rates?

A. Not from all territory.

Q. I mean, in the State of Arkansas.

A. The interstate?

3813 Q. Yes, I mean assume, now, Arkansas, and we will say Missouri—from Missouri to Arkansas: were the interstate rates on the same basis as the state rates?

A. From Missouri to Arkansas, yes.

Q. Was that generally the case—I just mentioned Missouri to Arkansas to illustrate.

A. That was to a large extent the case everywhere with the exception of the fares from Texas to Arkansas. They were not increased until August, 1909.

Q. With the exception of that the changes were—

A. The fares had all been adjusted practically in January 1909.

Cross-examination.

By Mr. HILL:

Q. Mr. Laing, would the reduction of the state passenger rates in Arkansas affect your Texas excursions or your homeseekers' rates from St. Louis or Memphis?

A. Not the rate per mile——

Q. That is what I mean.

A. —to any extent.

Q. Did the reduction of that Arkansas rate affect your California rates from St. Louis or Memphis to California?

A. The Arkansas did not, but the Missouri reduction did.

Q. We are talking about Arkansas; the Arkansas did not affect it?

3814 A. No, sir.

Q. Were the rates prevailing to Texas points, dominated by the M. K. & T., were they affected from St. Louis to Texas points?

A. On account of the Arkansas?

Q. Yes.

A. Yes, sir, they were—that is, in all my remarks here prior

to your questions I referred to the one way fares, which are always considered the standard basis in speaking of fares, and not of excursions.

Q. That did not affect the return trip, the round trip and excursion trip?

A. The change in the Arkansas fares affected the one way fares from St. Louis to Texas.

Q. Not to all of Texas, did it?

A. Practically the entire State.

Q. Take points that were reached by the M. K. & T. in Northern Texas from St. Louis—I do not remember the points—you probably know all the towns there.

A. It affected Dallas, Ft. Worth, Waco—caused a decided reduction.

Q. And did it not cause a reduction in the rest?

A. No, it caused a reduction in—I would say every point in southern Texas with the possible exception of Denison and a small territory surrounding Denison.

Q. The same thing would be true of other roads that have a shorter mileage to Texas, the country dominated by them
3815 would not be affected by it?

A. The short line mileage to 75 percent of Texas is through Arkansas, from St. Louis.

Q. Well, what about the other 25 per cent?

A. The difference, the reduction in Arkansas fares from three to two cents, with no corresponding reduction in Oklahoma, Arkansas would still be the rate making—

Q. You are running into another factor now. We are not trying Oklahoma. It is enough for us to try one at a time. I am asking about the Arkansas rate.

A. All fares from St. Louis to Texas naturally make through Arkansas with the exception of a small territory in the central Northern part of the State.

Q. You just stated about the 25 per cent: I want to know what effect the Arkansas rate has—

A. I did not say that 25 percent was the exception. I said that the rates to at least 75 percent would go through Arkansas.

Q. According to my arithmetic that would leave 25 percent that would not be—

A. In doubt?

Q. —in doubt?

A. Yes, sir.

Q. Did the Arkansas two cent rate affect that 25 per cent which is in doubt?

A. A portion of it, yes sir. I would not undertake to say
3816 the exact territory without having some tariffs at hand.

Q. Now, how about your rates to El Paso and Mexico?

A. The Mexican rates were affected, the one fare rates to Mexico.

Q. Are there any one fare rates to Mexico from St. Louis?

A. Yes, sir.

Q. You occasionally find a fellow who buys a straight ticket to the City of Mexico?

A. Yes, and we have a lot of fares that may possibly not be used, but they are in print.

Q. One of these paper tariffs?

A. Well, they are printed to be used.

Q. We have had a good deal of acquaintance with paper tariffs in this case. I do not believe we have been introduced to one on the passenger side before.

A. There is considerable one way business from the States to Mexico.

Q. From St. Louis to Mexico?

A. Yes, sir.

Q. One way?

A. Yes, sir.

Q. Practically all of that is a return trip, is it not?

A. Well, our line does a comparatively little Mexican bus-

3817 iness. I would not say what the proportion would be.

Q. I suppose you are an expert on passenger rates and you know what the other lines did?

A. The rate question is somewhat different from the question as to the amount of business handled to or from particular sections

Q. Don't you keep a reduced rate on Mexico at all seasons of the year, or does not the Iron Mountain road, if your road does not?

A. One way or round trip?

Q. Either way.

A. Twice a month there are comparatively low round trip rates in effect.

Q. How many months?

A. Two days a month.

Q. Is that not where nearly all of the traffic is handled, on those rates?

A. I do not think so, no, sir.

Q. How much of it is handled on those rates?

A. I would not undertake to say without——

Q. Mr. Stone promised to give us some figures on that, but he has not done it yet.

Q. What is your rate from St. Louis to the City of Mexico?

A. I would not undertake to say, without the tariffs.

Q. What is your straight rate and what is your excursion rate?

3818 A. That is another question I would not undertake to answer.

Q. Have you not seen a big advertisement of the Iron Mountain, forty seven dollars and some cents from St. Louis to the City of Mexico?

A. They frequently have rates.

Q. Have you seen that advertisement down here on Olive, and what is it, Sixth Street?

A. They have an office there at Olive and Sixth Street.

Q. You do not know the rates that they are running to Mexico?

A. I would not undertake to state that without a tariff.

Q. If they have a forty-seven dollar rate to the City of Mexico and return, about how much per mile would that be?

A. I would not care to answer that off hand. The Mexican business is a very small business; the volume of it does not amount to anything.

Q. Does not your Texas rate vary from twenty five to fifteen dollars, sometimes as low as fifteen dollars a round trip?

A. I do not think as low as fifteen dollars. There is considerable Texas territory to which twenty five dollars——

Q. How much per mile is that?

A. That depends on the destination.

Q. You are an expert on these matters?

3819 A. Well, it is a very easy matter to figure out. That will vary anywhere from close on to two cents a mile down to under one and one-half cent a mile.

Q. Do you mean that they have a variation in the passenger rate down there?

A. It depends on the destination.

Q. Is that rate based on the cost of service?

A. No, sir, it is not.

Q. It is not on the cost of service?

A. No, sir.

Q. Is not that California rate based on the cost of the service?

A. I do not think so.

Q. What is it based on?

A. It is simply an agreed rate.

Q. What?

A. It is simply an agreed rate.

Q. An agreed rate?

A. Yes, there is no basis for it.

Q. No basis for it?

A. Some one thought that was the right figure and put it there.

Q. Is that the sum of the locals between here and California.

A. No, sir.

Q. These gentlemen have been teaching me that is the

3820 way rates are made.

A. That is the rule, yes, sir, but there are a few exceptions to the rule.

Q. Several in Texas, are there not?

A. As I said before, my evidence on the construction of rates related to one way fares. The excursion fares are only a comparatively small part of the business.

Q. Do you know the cost per passenger mile for carrying passengers in Arkansas?

A. No, sir.

Q. Do you know what it is in Texas?

A. No, sir.

Q. Do you know what it is in Missouri?

A. No, I am not familiar as to the cost of doing business.

Q. The cost of doing business?

A. The cost of handling business.
Q. You make the rates generally?
A. No, the State Legislators have been making them for us.
Q. Did they make the interstate rates for you?
A. Practically, yes sir.
Q. They did? How did they do it, on the sum of the locals, is that the way?
A. The State Legislature says the rates shall not exceed so much per mile and that is our maximum; then we build combinations from that.

3821 Q. Do you think that the State Legislature makes them on the cost of the service?

A. I do not know, sir.
Q. Does your office make them on the cost of the service?
A. No, sir, we do not.
Q. What do you make them on?
A. We make them so much per mile as a rule.
Q. What determines it, how do you figure that out?
A. Well, in the State of Arkansas we figure our rates three cents per mile.
Q. Not all of them, do you?
A. 98 per cent of them.
Q. Well, let us see about that; don't you have a lot of books to sell down there at two cents——
A. No, sir.
Q. —or two and one-half cents?
A. No, sir, we honor an interchangeable mileage credential.
Q. Don't you issue them?
A. We are a party to the arrangement under which travelers get a net two cent per mile.
Q. Do you not sell a good many of those books, or honor a good many of them?
A. We honor quite a number, yes, sir.

3822 Q. Do you not sell two and one-half cent rate tickets there where the Rock Island and these other roads come in competition with you?

A. We meet competition, but there are very few points between which their fares affect us.
Q. The Iron Mountain meets them at a good many points, does it not?
A. The Iron Mountain will meet them probably more than we do.
Q. You think that 98 per cent of your rates in Arkansas are three cent?
A. Our one way fares, yes, sir.
Q. I am not talking about one way: I am talking about the whole business. We are not taking it piecemeal.
A. One way fare is really the basis for everything and that is the standard.
Q. I am asking you about what your fares are in Arkansas and you said 98 per cent are three cent: after calling your attention to this——

A. I would not say that on 98 per cent of our business we got three cents per mile.

Q. I did not think you would when you thought about it.

A. But you take our tariffs and the figures there, or 98 per cent, are three cents a mile.

Q. I have no doubt the tariffs would probably show 99.99 per cent——

3823 A. 98 per cent I think is about right.

Q. You have a good many paper tariffs on your passenger business?

A. You must remember there is quite a difference between our way fares and the excursion business and the commutation business, under which the mileage credential business would come.

Q. That is a very considerable business is it not?

A. It amounts to a great deal more than any Mexican business would amount to with us. Off-hand I would say that possibly five per cent of our business—local business in Arkansas, is done on the credential plan.

Q. How much of it would you say was excursion?

A. I could not answer that without getting figures from the accounting department.

Q. How much do you think would be affected by meeting competition of these two and one-half cent railroads?

A. Very little of it is affected by that.

Q. How much do you think would be affected on the Iron Mountain by that?

A. Well, any evidence I might give as to the Iron Mountain would be merely a guess, but I would say that I do not think there is over five per cent of their business that is competition with the Rock Island and Frisco two and one-half cent lines.

Q. Are these credential books good for interstate business as well as state?

3824 A. Yes, sir.

Q. What per cent of your business is handled on those, interstate?

A. I would say about the same percentage as handled on the state.

Q. Is it not more than that?

A. No, sir, I do not think so. They are largely used by drummers who make comparatively short trips, as a rule.

Q. When you start out to make an interstate rate you do not have to bother with the state legislature then. I do not suppose: what consideration moves you in fixing that rate?

A. Our one way fares are all combinations, using the local fares as factors. If our through fare is higher than the combinations it results in the passengers buying and rebuying and all we get anyhow is the actual combination, so we prefer to make the fare the combination of the two locals, as it may be, and handle the passenger through.

Q. Is that the way you actually do it? I understand why you prefer to do it and why you would not make it higher than that; but as a matter of fact, is that the way you generally make rates?

A. On one way fares, yes, sir.
Q. How about your other fares?
A. Excursion fares?
Q. Whatever else you want to call them, round trip, excursion, home-seekers, tourists.
3825 A. The round trip excursion fares depend largely on the occasion for which they are authorized.
Q. There are chronic occasions for it, are there not?
A. Twice a month in Texas.
Q. How about your rate to Hot Springs; is not that chronic—don't you have low rates there from all over the country?
A. There are round trip fares into Hot Springs all the year.
Q. And your line to California goes through Arkansas, does it not?
A. Yes sir.
Q. Is it the cost of the service that you consider when you fix those Hot Springs rates and California rates?
A. Well, the Passenger Department, as a rule, does not figure on the cost of the service.
Q. It does not? Are you sure of that, Mr. Laing?
A. They figure on the amount of business that can be secured.

Redirect examination.

By Mr. MOORE:

Q. You said your state tickets are made on a combination of the locals?
A. That is the standard one way fares are, yes, sir.
Q. Which represents the larger part of your business, the one way fare or the round trip fare?
3826 A. The one way fare represents by far the greater part of our business.

3827 C. E. PERKINS, recalled, being duly sworn to testify in behalf of the complainant in rebuttal, testified as follows:

Direct examination.

By Mr. MOORE:

Q. You have been on the stand before in this case?
A. Yes, sir.
Q. You are the General Freight Agent of the St. Louis Iron Mountain & Southern Railway, I believe, are you not?
A. I am.
Q. Mr. Ludlam, a witness on behalf of the state, testified in thic case that many interstate rates were made to govern large zones and the fluctuation of movement would affect the revenue materially; whereas it would not affect the expense in any sense; and, therefore, would destroy any connection or relation between the revenue and the expense:
I wish you would state if that is a correct view of the effect of zones rates which are illustrated in some of the exhibits filed by the State in this case.

A. In my testimony, on direct examination, I have admitted, as has also Mr. Watson, the fact that numerous elements other than the cost of the service entered into our rate adjustments to a greater or smaller degree. In other words, in offering transportation for sale we are not always able to obtain the same amount of profit over and above the cost. There are two elements which enter into
3828 our rate making other than the cost of service; one is commercial conditions and the other is competitive conditions.

In Exhibit 42, offered to show that the rates from the so-called "Defined territories" to what are generally termed "Texas common points" are on a blanket basis we have a condition in which the principles mentioned enter into our rate making to a considerable degree.

In establishing rates to this territory from St. Louis and the East we have a peculiar condition in that the Texas territory is entered by the transportation lines from three sides out of a possible four: the M. K. & T., the Santa Fe and the Frisco enter the State from the north; the St .L. I. M. & S., the Cotton Belt, the V. S. & P., and the T. & P. from the east; the Southern Pacific and also the Steamer Lines from the Atlantic Coast, enter from the south.

Dennison, Texas, a point in the extreme northern part of the state, and reached by the M. K. & T. and the Frisco, would produce the minimum haul for those two lines on shipments from St. Louis or the East. While a similar shipment to the same point of destination handled by the Illinois Central and the Southern Pacific through New Orleans, Houston and thence north, would offer the maximum service for that route.

A shipment to Houston, Texas, routed via the M. K. & T. the Santa Fe or the Frisco would offer nearly the maximum haul for shipments handled by either of these routes; while if routed via the Illinois Central or the Southern Pacific would yield the mini-
3829 mum haul via that route.

This is true in nearly all parts of the State, and indicates very largely why a blanket zone in the state of Texas is necessary.

If the Cotton Belt or the Iron Mountain Railroads were the only routes to reach the State of Texas, the condition would be entirely different. We could then, and no doubt would, make our rates on a graded scale, making them higher as we proceeded south or southeast through the State.

Attention has been drawn to the rates from St. Louis to Texas, but it should be borne in mind that St. Louis is used as a basing point for the rates from other so-called "defined territories." In the exhibit mentioned Territory "A" represents Pittsburgh Territory, from which rates are made by adding the following differentials to the rates from St. Louis:

| | |
|---|---|
| First class | Fifty cents |
| Second class | Firty-five cents |
| Third class | Thirty-two cents |
| Fourth class | Twenty-three cents |
| Fifth class | Nineteen cents |
| A | Twenty cents |

B.....Sixteen cents
C.....Sixteen cents
D.....Fifteen cents
E.....

Territory "B" indicates Chicago Territory——

Q. You are now marking out a zone marked "B" on Exhibit 42?

A. Yes, sir. Territory "B" indicates Chicago Territory, the rates from which are made the following differentials higher than

3830 from St. Louis.

First class.....Twenty cents
Second class.....Sixteen cents
Third class.....Twelve cents
Fourth class.....Ten cents
Fifth class.....Seven cents
A.....Nine cents
B.....Eight cents
C.....Seven cents
D.....Six cents
E.....Five cents

all of which indicates that as our distances and consequently the cost of service increases, our rates increase.

The rates to Texas Common Points are not made entirely from St. Louis. In many cases the rates are made from the territories east, and rates are then fixed from St. Louis on differentials under the rates so fixed from Eastern Territory.

This is due to the fact that the further East we go the more keenly do we feel the Water Competition of the Steamer Lines from New York to Galveston and Texas City. In adjusting our rates to Texas we attempt to arrive at a rate which will yield an average return. In other words, we do not figure on the trains to Paris, in the northern part of the state of Texas, nor on the rates to San Antonio, in the southern part of the State, but a rate which applied to the entire territory would yield an average return.

In the case of the "Lumber Zone," which has been referred to, commercial conditions govern to a large extent. It must be admitted that our profits vary as to individual shipments. A shipment, for instance, from Little Rock to Kansas City yielding larger

3831 profit than a shipment from Lake Charles; still our rates are adjusted so as to meet these conditions and yield a fair profit on our entire lumber business.

The zone basis in this instance has been largely the result of evolution. Without it, it would have been practically impossible to have built up and established the Lumber traffic as it exists today. When our lumber rates on yellow pine from the south were first established they were made entirely to meet the competition of the white pine from the north. At that time there was little or no pine shipped from southern Arkansas, Louisiana, or Texas, for the reason that that territory was then undeveloped. The competition was entirely from southern Missouri and northern Arkansas. The Grandin District

on what was then the Kansas City, Fort Scott and Gulf Railway, now the Frisco, and the Leeper District on the Iron Mountain Railway was the principal producing territory for southern yellow pine and rates were fixed to the Missouri River by arbitration, after a long rate war, on the basis of 15 cents from Chicago on the White Pine and the same figure from the Leeper-Grandin District on the yellow pine.

From the territory further south, which was then just beginning to develop, a differential of seven cents per 100 pounds was fixed; in other words, a rate of 22 cents per 100 pounds.

3832 It was found that this higher rate from the Southern territory could be maintained for the reason that the Pine was more prolific and easier to log than the Missouri Pine, the Missouri Pine cutting not to exceed 3000 feet to the acre while the Southern Pine ran from 10,000 to 15,000 feet to the acre. When the Southern territory developed it was found it would be impracticable to charge a higher freight rate as we went south, as practically all of the Pine in Louisiana and in Texas was of the same nature, and if we increased our rates as we went south the manufacturer in the southern portion of the State would be at such a disadvantage that he could not compete with the northern manufacturer. Therefore, as our rates have from — to time been re-adjusted we have been obliged to consider a scale of rates, not from Little Rock nor from Lake Charles, but from an average point of shipment. It is conceded that our rates from Little Rock, in and of themselves are high; while from Lake Charles they are low; and while, as a matter of fact, they do not yet represent (taken as a whole) what we feel we are entitled to, they are as high as conditions seem to justify.

This statement applies only to the points of origin. So far as the destinations are concerned our rates increase as the distances increase showing that while they are on the zone basis so far as the points of origin are concerned, they still are made to comply with our fundamental principle—cost of service.

3833 In this connection let us examine Mr. Hamilton's testimony with reference to the rate and movement from this zone. That is, the lumber zone. He states "Out of 584 stations in this zone 319 are located on 36 other lines which connect with the St. L. I. M. & S. Railway and which would receive for their haul a varying proportion of the rate."

There does not seem to be anything particularly remarkable in this statement, nor anything which would lead one familiar with conditions to say that these rates do not reflect cost of service, as has been stated. The Iron Mountain, in conjunction with other Trunk Lines leading from this zone, and reaching the consuming territory, fix the rates for application from their stations. These rates we have been permitted to average and so adjust as to receive a fair profit over and above all expenses.

If our lumber adjustment ended here, I take it the State could not make any serious objections to our theory or our basis, but there remains, as has been stated, some thirty-six short lines, varying in length from 25 to 300 miles, which do not reach the consuming territory, but which produce lumber in large quantities. What,

then, is to become of this tonnage? The rates have been fixed, as has been stated, by the Trunk Lines and the manufacturer on the short line cannot pay the local of the Short line plus the rate of the Trunk line and compete with his neighbor who is located on the trunk line. Therefore, as a necessity, the same rate
3834 is applied from the Short Line producing the tonnage and it is allowed a division of such rate for its service. This traffic, from its nature, can be and is handled at a less margin of profit and tends to greatly increase our tonnage, thereby reducing the general cost of handling all business.

Q. Your remark as to "short lines" there refers to the testimony of Mr. Hamilton with regard to certain rates on lumber—I mean a comparison of certain rates on lumber from Little Rock to points south and east thereof.

A. It refers to the testimony which Mr. Hamilton gave. I read one statement which he made. He goes on to pick out individual cases where we shipped so many cars of lumber from Alexandria proper and received a certain number of cars from the St. Louis Watkins and Gulf Railroad and certain others from the Louisiana Railway and Navigation Company.

Q. He refers, for instance, to a car from Malvern at 18 cents per hundred and from Saginaw, which is a greater distance at 14 cents per hundred and from the same point at 18 cents per hundred, growing out of allowances made to other connecting short lines. That is the condition he referred to in the statement you have made just now?

A. Yes, sir.

Q. That is brought about by the necessity of protecting the industries located on those short lines, is it not?

A. Yes, sir.

3835 Q. Proceed, Mr. Perkins?

A. Mr. Bee, in his testimony, states that the necessities for these zones do not at present exist. In this he is testifying to a condition of affairs with which he is evidently not familiar, as any one who is familiar with the freight rate adjustment in the South-west knows that these are conditions which the railroads cannot abolish without disaster to the shipping public. As a matter of fact, the Interstate Commerce Commission after a thorough investigation have approved this zone basis of making lumber rates.

I refer to the case of the Chicago Lumber & Coal Company vs. Tioga Southeastern Railway Company, reported in the 16th Interstate Commerce Commission reports at page 323.

While I do not feel that the zone basis of rates mentioned detracts to any great extent from the statements already made with respect to the cost of service, that element being present in a somewhat modified form, it is true that this basis is used only where commercial conditions fixes it, or in cases where the mileage is great and the zone rate will yield approximately the same rate per ton per mile on account of the length of the haul. Our general basis of rates is to a large extent on a mileage scale, that is, the rates increase with

the mileage, the increment being smaller as the distance increases.

3836 Our rates, as an example, from St. Louis to Arkansas, are 70 cents per 100 pounds, on First Class, at Moark, the first station in Arkansas, and grade up as the distance increases to $1.22 on First Class at Fulton, in Southern Arkansas.

This is also true in Louisiana, the rate to Jones Spur, the first station being $1.15 on First Class and grading up to $1.37 at Fenton, in the Southern portion of the State.

In Oklahoma the same conditions is found and while this Compony does not operate to any great extent in that State, the rates to points in the Eastern section, Sallisaw as an example, are $1.10 on First Class, while to the Western part of the State, Mangum as an example, the First Class rate is $1.30.

In Missouri our rates naturally increase from the East to the West, being on the Missouri mileage scale.

In Kansas rates grade from the Eastern portion of the State from 89 cents at Topeka on First Class to $1.46 at Scott City, in the extreme Western portion of the State, all of which indicates that the State is attempting to prove a rule by its exception.

3837 Q. Mr. Ludlam made some reference to the commodity rates:

I wish you would give some attention to the statement made by Mr. Ludlam that the same condition prevails with respect to the commodity ratings.

A. The same condition prevails with respect to the commodity ratings as mentioned in Mr. Ludlam's testimony. That is, he has attempted to prove by a few exceptions that the general rule which we have testified to does not hold good.

The Western Classification, concerning which testimony has already been given, governs on Texas traffic, as well as on all other traffic west of the Mississippi River.

There are, of course, exceptions to this Classification applicable on Texas interstate traffic, which exceptions change to some extent the rating or minimum weights as the case may be. These exceptions are issued as a convenience more than a necessity.

In other words, the Classification provides for no commodity ratings, only the ten classes, with the possible addition of a few high grade articles which are classed as "double first-class" and "three times first-class," and where conditions demand a special or commodity rating on a given article we attempt where possible to adjust this by an exception to the Classification, rather than by burdening the individual tariff with commodity ratings. This is not always possible, however, and in such cases commodity

3838 ratings are prescribed.

In these Classification rates, as well as in the exceptions, the same fundamental principles with respect to the cost of service as previously testified to, exists; that is, the light and bulky articles and the more expensive articles are given the higher ratings, while the heavier and more compact and less expensive, the lower ratings.

To this, as to all rules, there are exceptions and when we find

peculiar conditions which warrant a change, it is necessary that that change be made.

On page 1264 of Mr. Ludlam's testimony he states:

"I find that that tariff (referring to Southwestern Lines Tariff No. 1-DD) names a rate on beer in glass, at 48 cents per 100 pounds, with minimum of 30,000 pounds, and that the same tariff names a rate on bar iron of 55 cents per 100 pounds, with a minimum weight of 36,000 pounds."

and calls attention to the fact that the casualty risk on beer in glass would certainly be very much higher than it would be on bar iron.

Beer is an article which is manufactured very largely in the state of Texas, large breweries being located at Fort Worth, Houston and San Antonio, and in shipping beer from interstate points it must necessarily be at a rate which will permit it to compete with that manufactured within the state; and while the rate on bar iron represents probably a fair and reasonable rate, we are obliged to accept a lower rate on beer. In other words, accept a smaller profit or prohibit its movement.

3839 With respect to rate on excelsior, this is more or less of a paper adjustment, as I doubt whether on the rate mentioned there can be any material amount of business moved. This is well known as a very cheap commodity and one which is manufactured in the south as well as in the north.

Potatoes, with a minimum weight of 30,000 pounds at 54 cents per 100 pounds, are compared with a rate on horse shoes, of 62 cents, with a minimum of 36,000 pounds.

Shipments of potatoes represent relatively a large movement, while horse shoes a small movement. Potatoes are a necessity of life which, regardless of their perishable nature, will not stand as high a rate as horse shoes or other articles of that nature.

Poultry netting is not, as testimony would indicate, given a special commodity rating, but is one of the list of articles which is known as the "wire and nail mixture", that commodity providing for a rating on nails, spikes, staples, wire poultry netting and other like commodities in straight or mixed carloads.

There is no question but this rate was too low, and, as a matter of fact, correction has been made in our tariffs so that at the present time the rating on this list is 56 cents per 100 pounds.

Some history as to how this rate was originally established may be of interest, as it will show how many of our rates are limited

3840 and how the state rates have a direct bearing on our interstate adjustment.

The rate was originally fixed from Memphis to Texarkana basing on Little Rock, using from Little Rock to Texarkana the Arkansas state rate.

The rate to Texas common points was based on the combination through Texarkana using the Texas Commission rate from Texarkana to Texas common points, of 25 cents per 100 pounds, as provided for in Railroad Commission of Texas Circular No. 2013, effective March 24, 1904.

In other words, this particular rate was made absolutely on the

state rates, two factors being present—one, the Arkansas state rate, and the other the Texas state rate.

Compared with this commodity is iron or steel chain, which represent relatively a very small movement as compared with the wire and nail commodity list, and on which the conditions just explained do not exist.

In other words, were it not for the fact that our rates on wire and nails and that mixture were held down and limited by the state rates, they would be on a higher level than at present.

Hollow building tile is compared with pig iron. The former commodity, as it is well known, competes direct with common brick in the construction of buildings. Common brick, as is well known, is manufactured all through the state of Texas, and we are therefore compelled to haul the hollow building tile at an exceedingly low rate in order to permit its movement.

3841 Attention is called to iron pipe coils for refrigerating machines, as compared with bar iron. If we were not limited to factors beyond our control, the rate on the iron pipe would undoubtedly be higher than on the bar iron. However, the Texas Commission, on account of pipe being manufactured at the Penitentiary at Rusk, have established an extremely low rate locally in the state, which forces corresponding low rates from interstate points. This fact only emphasizes what has heretofore been said with respect to the effect of state rates upon interstate rates.

In regard to the comparison as between sheet iron pipe 36 inches in diameter, as compared with sheet iron, flat, I am unable to determine why the difference in favor of the former rate was carried. The fact, however, that these rates were corrected so that the current issue makes sheet iron pipe 62 cents as against sheet iron, flat, 60 cents, would indicate that there was an error in the original publication.

A comparison is made of the rate on matches of 71.5 cents from St. Louis, with the rates on wooden tooth-picks, of 80 cents from St. Louis.

This looks on its face as an unfavorable comparison but the facts are not fully set forth in Mr. Ludlam's testimony. Matches are shipped in straight carloads. In fact, that is the only commodity rating which is provided for in our tariffs while wooden tooth-picks are shipped in mixed carloads and are included in our

3842 woodenware mixture, which includes forty-eight different commodities of woodenware; so as a matter of fact, the tooth-pick rating is in reality an L. C. L. rate, and to make a proper comparison should be compared with the L. C. L. rate on matches which is the second-class rate, or $1.21 per 100 pounds.

In the case of wooden kegs as against saddlery and hardware, we have to a market degree the higher priced commodity taking the higher rate and I can see nothing particularly faulty in this adjustment.

The balance of the commodities mentioned are practically a repetition of those already covered as applied to Atlanta, Alama and Marshall, all of these rates basing on combination of locals through

Texarkana, Texas, by use of the Texas Commission local rate beyond that point, thus further emphasizing the relation between state and interstate rates.

In other words, the Texas state rates make the rates on the articles mentioned to these points.

Q. Are there a large number of commodities embraced in the tariff in which Mr. Ludlam found the articles cited by him, which I believe he designated as "Texas Tariff #1-DD"?

A. This tariff covers all the articles, or practically all the articles which can be shipped, thousands of them in number. The tariff is governed by the Western Classification, a copy of which I believe is already in evidence.

This Classification covers, as is known, all commodities which are shipped and assigns them to one of ten classes. So that as a
3843 matter of fact, this tariff with its ten classes and its commodities description covers practically all the articles which are ever shipped.

Q. Mr. Hamilton stated in his testimony, referring to what he said was a statement on the part of a witness of the railroads in this case, that the Arkansas Commission tariff denominated the Memphis rate, filed an exhibit (being Exhibit C-1), for the purpose of making a comparison between state and interstate rates in certain territory south of Little Rock:

I wish you would take that up now and explain it.

A. Our testimony has not been confined to the statement that the interstate rates from Memphis and other points are made on the rate from Bridge Junction, plus the bridge toll higher, although reference has been made, I believe, to this fact, and this condition of affairs existed on the St. L. I. M. & S. in 1907 and has continued to the present time to a very marked degree.

The rates to practically all points on our Memphis Branch are made bridge toll higher than state rates to Memphis Bridge Junction, which was on the west bank of the river.

As an example, the rate from Memphis Bridge Junction to McCrory are:

3844

| | | | | | | |
|---|---|---|---|---|---|---|
| 1st | class, | 40 | Cents | per | 100 | pounds |
| 2nd | " | 35 | " | " | " | " |
| 3rd | " | 31 | " | " | " | " |
| 4th | " | 26 | " | " | " | " |
| 5th | " | 18 | " | " | " | " |
| A | " | 19 | " | " | " | " |
| B | " | 14 | " | " | " | " |
| C | " | 12 | " | " | " | " |
| D | " | 10 | " | " | " | " |
| E | " | 8 | " | " | " | " |

and from Memphis:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1st | class, | 42 | cents | per | 100 | pounds |
| 2nd | " | 37 | " | " | " | " |
| 3rd | " | 33 | " | " | " | " |
| 4th | " | 28 | " | " | " | " |
| 5th | " | 20 | " | " | " | " |
| A | " | 21 | " | " | " | " |
| B | " | 16 | " | " | " | " |
| C | " | 14 | " | " | " | " |
| D | " | 12 | " | " | " | " |
| E | " | 10 | " | " | " | " |

a difference of two cents per 100 pounds on each of these classes The rates from Memphis to New Augusta are:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1st | class, | 45 | cents | per | 100 | pounds |
| 2nd | " | 41 | " | " | " | " |
| 3rd | " | 35 | " | " | " | " |
| 4th | " | 30 | " | " | " | " |
| 5th | " | 21 | " | " | " | " |
| A | " | 22 | " | " | " | " |
| B | " | 18 | " | " | " | " |
| C | " | 15 | " | " | " | " |
| D | " | 12 | " | " | " | " |
| E | " | 10 | " | " | " | " |

and from Memphis Bridge Junction:

| | | | | | | |
|---|---|---|---|---|---|---|
| 1st | class, | 43 | cents | per | 100 | pounds |
| 2nd | " | 39 | " | " | " | " |
| 3rd | " | 33 | " | " | " | " |
| 4th | " | 28 | " | " | " | " |
| 5th | " | 19 | " | " | " | " |
| A | " | 20 | " | " | " | " |
| B | " | 16 | " | " | " | " |
| C | " | 13 | " | " | " | " |
| D | " | 10 | " | " | " | " |
| E | " | 8 | " | " | " | " |

a difference of two cents per 100 pounds on each.

3845 From a casual glance at the exhibit (C-1) mentioned, it would not appear that there was any relation whatever as between the state and interstate adjustment.

As a matter of fact, however, our rates from Memphis to all points in Arkansas, were made by using three factors, one of which was the Arkansas Commission's local rates.

At the time these rates were in effect, the St. Louis, Iron Mountain & Southern had an agreement with the city of Memphis as to the rates which we would carry from that point to Arkansas as compared with rates in effect locally in Arkansas. That agreement provided that to points in Arkansas on the main line and branches south and west of Little Rock, except Fort Smith, Van Buren, the Greenwood branch and the K. & A. V. Division, rates from Memphis would be published the same number of cents per hundred pounds higher than the local state rates from Little Rock to destination, as the rate

from St. Louis was higher than the rate from Memphis to Little Rock, or the following figures in cents, per hundred pounds:

| | | | | | |
|---|---|---|---|---|---|
| 1st class, | 30 | cents | per | 100 | pounds |
| 2nd " | 25 | " | " | " | " |
| 3rd " | 20 | " | " | " | " |
| 4th " | 13 | " | " | " | " |
| 5th " | 10 | " | " | " | " |
| A " | 10 | " | " | " | " |
| B " | 10 | " | " | " | " |
| C " | 8 | " | " | " | " |
| D " | 6 | " | " | " | " |
| E " | 5 | " | " | " | " |

with the further provision that the rates from Memphis to Little Rock would apply as minimum figures.

3846 To illustrate this basis we will check the adjustment at Gum Springs, seventy miles south of Little Rock (that is one point mentioned in the exhibit).

The first-class rate under the Commission's tariff is forty cents, adding the differential for first-class mentioned, namely, 30 cents, produces the rate as shown in the chart, or 70 cents.

Second-class—the rate from Little Rock is 35 cents, plus second-class differential of 25 cents, or through rate of 60 cents.

Third-class local rate from Little Rock is 31 cents, plus differential of 20 cents, or 51 cents, and so on down through the entire list.

In cases where the interstate rates are shown to be the same to the points mentioned in the chart the Memphis to Little Rock rate has been applied as a minimum, these minimum figures applying only to the stations directly south and west of Little Rock, which it will be seen were selected by the state to disprove our basis.

Q. Is Gum Springs the most southerly point to which it applies?

A. Yes, sir, Gum Springs is the most southerly point to which it applies. That is the most southerly point at which any of the rates apply on that basis. All of the rates are not blanketed even as far as Gum Springs.

As we go south from Gum Springs, the Memphis-Little Rock rate does not affect the situation and it only affects it at all of the

3847 points mentioned on first-class, second-class and Class A, as shown by the chart.

Q. That is on three classes?

A. Yes, sir. In other words, the state has picked out a comparatively small territory in Arkansas where this condition exists, to try to prove that there is no relation between our state and interstate rates, while as a matter of fact, that comparatively small territory is an exception to the rule, although in that territory there is the relation between state and interstate rates, as I have explained.

Q. A similar chart has been filed as Exhibit D-1, illustrating the rates from St. Louis to certain points in Arkansas and containing a comparison of those rates to the Commission's rates: I want to call your attention to that.

A. The same condition exactly exists in the chart you mention, it containing a comparison of the rates from St. Louis as compared with

the state rates, for the reason that, as has been previously testified to, the rates from St. Louis are made on a differential over the rates from Memphis, and whatever the adjustment is at Memphis naturally the same adjustment prevails at St. Louis.

Q. That produces the condition as shown in the chart referred to?

A. Yes, sir. In other words, the explanation made of the Memphis adjustment explains the adjustment from St. Louis, the conditions being the same with different figures.

3848 Q. Go on with your statement, Mr. Perkins.

A. To stations in Arkansas in the vicinity of Arkansas City and Helena, the rates from Memphis are based on full combination of locals to and from Arkansas City and Helena, using the Commission's scale from those points.

All this will indicate how closely allied are the state and interstate rates. In some cases they are, as has been stated, made directly by using the bridge toll over the Commission's scale from West Memphis and in other cases a differential over the Commission's scale from Little Rock, while in still others on combinations using the Commission's scale and with Memphis fixed on this basis our St. Louis rates are, as has been testified to, adjusted differentially higher, which in turn affects practically the entire interstate adjustment.

Q. Now, Mr. Perkins, is there any condition which forces the Company to adopt that combination of state rates between Memphis and points near Arkansas City, any conditions competitive or otherwise? Explain what the underlying conditions are?

A. I can explain it better, probably, by citing the conditions at Helena.

The rates from Memphis to Helena are, of course, on a low scale on account of the river competition; the Illinois Central
3849 reaches Helena from Memphis by a direct line: if we should maintain a higher basis of rates (which we would if it were not for this competition), it would have the result of forcing shipments into Helena and from there they would be reshipped to the interior. The same condition, of course, would prevail at Arkansas City.

Now, at Helena we have the competition of the river and of the Illinois Central Railroad. We might get the business into Helena and we might not.

Further, it gives the shipper at Helena a very decided advantage. So, in order to adjust our rates so as to permit of direct shipment—which, by the way, is naturally cheaper for the railroad, we are obliged to recognize these combinations.

3850 Cross-examination.

By Judge HILL:

Q. You have used the term "relation between state and interstate rates" quite frequently in your testimony here, Mr. Perkins: I wish you would explain just what you mean by that.

A. By "relation between state and interstate rates" I mean that our interstate rates are dependent upon the rates as fixed on state traffic.

Q. I do not believe I quite catch that, Mr. Perkins: do you mean in all your remarks in your preceding testimony as to the relation between the state and interstate rates the effect that the state rate has upon the interstate rate?

A. By saying that there is a relation between the state and interstate rates I mean that the state rates, as I have said, affect to a greater or smaller degree the interstate rates. In that way the relation exists.

Q. Just what is that relation?

A. That relation varies. It is the subject of practically all of the testimony I have just given with respect to our rates from Memphis to Arkansas points.

Q. As I understood your testimony on that, it was to the effect that the Arkansas Commission rates had, in a measure, con-
3851 trolled the interstate rates to and from Memphis: is that correct?

A. That is correct.

Q. You mean by "relation between state and interstate rates" the controlling effect of the state rate upon the interstate rate?

A. I mean by the relation between state and interstate rates, as an example, where the state rates are reduced it will invariably cause a reduction in our interstate rates, possibly not to exactly the same degree; and where they are advanced it will permit of a smaller advance in the interstate rates.

Q. You say "probably not in the same degree": to what degree would that advance be?

A. That would depend entirely upon conditions.

Q. It is in evidence here that on the Cotton Belt Railway in the month of January 1909, following the promulgation of rates by the railroads, after Judge Vandavanter's injunction, that the interstate revenue increased nine per cent and the intrastate revenue increased ninety six per cent—I am speaking in round numbers of course. Is that such a degree of increase as you would expect when the interstate revenue is increased nine per cent that the intrastate revenue should be increased ninety six per cent?

A. I do not think, Judge Hill, that an increase or decrease in revenue can be taken as a criterion of a difference in rates A
3852 difference in the movement of commodities will have a very large bearing on that subject.

Q. Well, if you take the movement in a given month of state and interstate traffic, there is not any material difference between state and interstate movement, is there?

A. There may be a very marked difference.

Q. There may be, but I am asking as a general rule is that a fact?

A. I cannot say off-hand whether that is true or not.

Q. You have heard a great deal of testimony here, I presume, from witnesses largely on the railroad's side in this case, that state and interstate traffic moves hand in hand, that they move right together, haven't you?

A. I do not know that I recall that testimony.

Q. You know that to be a fact, whether or not you heard that testimony, don't you?

A. I would say, generally, yes, that is true.

Q. If you take a given month, or a given six months' period, or a given year, and you take all the revenue, state and interstate, for that given period, wouldn't it ordinarily reflect the same movement of the same classes of freight, state and interstate?

A. For a given time?

Q. Yes.

A. As between state and interstate, I should say it
3853 ought to.

Q. That is coming back to the proposition we started with on the Cotton Belt, where in one given month when the railroad made both tariffs, state and interstate, there was an increase in revenue of nine per cent on the interstate and ninety six per cent on the state: you say where the state rates are increased that they will permit an increase in some degree of the interstate rates: now, what I am trying to get at, was this revenue produced on the Cotton Belt for that month the proper degree of increase?

A. I cannot tell you anything about what was the result from revenue or what causes made that. I would say if it caused an advance of ninety six per cent in our rates it would not be correct; but what the controlling factors were for the increase in revenue I do not know, and for that reason I do not feel I could answer the question.

Q. From your knowledge of traffic in Arkansas during the month of January, 1909, would there be any reason why there should be any great difference in the movement between state and interstate traffic?

Col. MOORE: Do you remember what month it was compared with?

Judge HILL: It was compared with a six months' period.

Col. MOORE: It was compared with a period from July to December.

3854 Judge HILL: It was the six months' period for which you prepared your statistics in this case.

A. For the one month as compared with the six months?

Judge HILL: No, just comparing the movement of state and interstate traffic during one month.

A. No, sir, I do not know that there is any reason for any great difference in the movement between state and interstate traffic for that same month.

Q. That is what my question is.

A. But I cannot say as to what the conditions were on the Cotton Belt. I hardly feel competent to testify as to those conditions.

Q. You know something about freight traffic in the state of Arkansas, don't you?

A. Yes, sir.

Q. You have been making freight rates in Arkansas for two railroads for a number of years past, haven't you?

A. Yes, sir.

Q. Assuming (it is a fact) that just two months prior to this increase in showing, the state rates were put under an injunction and the railroads put in their own rates; and that they increased their interstate rates; and immediately following that there was an increase in revenue for that month of nine per cent on interstate and ninety six per cent on state business, wouldn't you assume that these increases had been made by the railroads in what it regarded
3855 as a proper relation between state and interstate rates?

A. You refer to the increase in revenue?

Q. Yes.

A. I would say from my knowledge of railroading and the movement of traffic, that the increase in revenue may not have had any relation whatever to either an increase or a decrease in rates. In otner words, we can and often do increase our revenue without any change whatever being made in our rates. We could as a matter of fact, increase our revenue with a decrease in certain of our rates. That depends altogether on the class of business which we handle.

Q. I understand that, Mr. Perkins. That has been fully explained and you stated it a while ago. But I ask you if, as a matter of fact, from your knowledge of conditions in Arkansas during January, 1909, there were any such conditions as would explain that.

A. Without going back and analyzing the movement for that month I could not answer the question.

Q. You know that the railroads increased their rates, both state and interstate, very much, and that immediately after that increase their revenue shows these percentages I have given you: don't you know, as a matter of fact, that most, if not all, of that increase was due to the increase in rates?

A. No, sir, I do not and I do not think it was.

3856 Q. You do not think it was?

A. No, sir.

Q. That is your opinion, is it?

A. Yes, sir, that is my opinion. My opinion is, Judge Hill, that you could not get, without any other controlling factors, an increase of 96% out of an increase we made in our rates, to save your life. In other words, if the movement had been identical for the two periods, you could not, to save your life, get an increase in revenue of ninety six per cent.

Q. Well, how about the increase of nine per cent on the interstate rates?

A. That may or may not have been due to the increase in rates.

Q. What do you think about it?

A. I do not know, without examining the movement. I would have to do that before making any answer whatever.

Q. When you increase your rates don't you look for a corresponding increase in revenue?

A. We hope to get it, yes.

Q. Don't you look for it?

A. Yes, I should say we do. In other words, that is why we increased our rates. And with the same movement we would get it,

but we do not always get the same movement. In other words, in one period of the year we will move cotton, while in another period we will not have any movement of cotton.

3857 Q. But that is getting into comparing one period with another, while the question I am putting to you is comparing the movement of state and interstate freight during the same period.

A. If I understand your question correctly, you stated there was an increase of ninety six per cent in the period you mention as compared with the six months previous, and on interstate movement an increase of nine per cent.

Q. Yes, as compared with the same period.

A. What I say is that in my opinion that fact would have absolutely no bearing on the increase or decrease in the rates. In other words, on the change in rates, because in other words if it were due to a change of rates and we had moved the same commodities and the same number of tons of the commodities, you could not get an increase of ninety six per cent to save your life; because we have never made any such change in rates, state or interstate.

Q. You increased your rates after you got your injunction from Judge Vandevanter, didn't you?

A. Yes, we increased our rates, but it did not look anything like ninety six per cent.

Q. It didn't to you perhaps, but it did to some of the shippers, didn't it?

A. I do not think it did.

Q. Didn't a great many of the shippers file affidavits showing that you had increased the rates two hundred per cent?

3858 A. It might have on some particular commodity, but take our rate adjustment as a whole and I would say off-hand the increase was not over ten per cent.

Q. That is all you think the increase was on state rates?

A. I am talking about interstate rates.

Q. I am talking about state rates. Your ten per cent about agrees with these figures of nine per cent increase in revenue on the Cotton Belt during January 1907. You seem to have made a pretty accurate guess on that. Now, how much was the increase in state rates?

A. I do not know what it was in percentage, but it was not ninety six per cent by a long ways.

Q. Didn't you increase the lumber rates over one hundred per cent?

A. No, sir.

Q. On the St. Louis, Iron Mountain & Southern how much did you increase the lumber rates?

A. I cannot tell you that without comparing them.

Q. Didn't you increase a great many commodities over one hundred per cent?

A. No, sir, I would not say a great many commodities. We may have increased a few, principally where the state had provided for an abnormally low commodity rate on less than car load movement we made increases.

3859 Q. You did not make a big increase on the lumber rate?
A. We made an increase on lumber, yes, sir, but it was not one hundred per cent.
Q. It was pretty close to it, wasn't it?
A. I do not think so.
Q. My recollection is that the increase on lumber was over one hundred per cent. Don't you remember that? Did you take part in that rate hearing down there before Judge Trieber?
A. At what time?
Q. As to the fact that your rates were unreasonable?
A. No, sir.
Q. Would a violent or large increase in rates cause a large increase in the volume of traffic?
A. I should say not.
Q. When there had been a large increase of state rates, which took place first before January 1909, would you expect a large increase of state traffic during January, 1909, to account for this ninety six per cent increase in revenue?
A. There might not be a large increase in tonnage, but there might be a decided change in the character of the tonnage.
Q. Do you know of any great change in the character of the tonnage in January, 1909, which would mark it as abnormal and strange?
A. I know this: at some season of the year in every year
3860 there is a great difference in the class of commodities we handle.
Q. January 1909 must have been a very strange and abnormal month on the Cotton Belt.
A. I don't know. It might have been. I am not competent to testify as to that fact. Mr. Watson may possibly be able to testify as to that.
Q. Coming back to your definition of the relation between state and interstate rates: you were speaking of the effect of the Arkansas Commission's rates on the Memphis rate, and as I understand you, that was by agreement between the Iron Mountain Railway and some officials representing the City of Memphis, wasn't it?
A. The actual conditions were, yes. That is, in this particular territory that Mr. Hamilton filed as exhibits C-1. In other words, there were seventy miles in there where that agreement fixed the rates.
Q. Didn't that agreement affect more than seventy miles?
A. That agreement did not affect more than seventy miles in that particular respect. It did affect the other territory in what we might call a normal way; in other words, the same way it is affected today. That is to say, where the rates are held down by a combination of the locals through Arkansas City or Helena. That is not a peculiar condition and it would not take an agreement to
3861 bring about that result.
Q. It was an agreement which brought about this Memphis relation between state and interstate rates, wasn't it?

Col. MOORE:

Q. Do you mean generally?

Judge HILL: I mean generally.

A. No, sir, I would not say generally. There was this agreement, which was made on what we considered at that time sound business principles, which necessitated a certain adjustment from Memphis as compared with the state rates.

Q. That was to enable the Memphis jobbers to compete with the Little Rock jobbers in Little Rock territory, wasn't it?

A. Yes, sir.

Q. Was that a commercial or a cost relation in the adjustment of state and interstate rates?

A. That was a commercial condition.

Q. That was a concession conceded by your road to the shippers of Memphis in consideration of receiving some terminal facilities in the City of Memphis, wasn't it?

A. I could not say Judge what the concession—it was not a concession—but what the arrangement was made for or what the conditions were. I was not with the road at that time. I understand in a general way there was such an understanding, but I really do not know what it was. I haven't found anybody connected with the road now who does know.

3862 Q. You still preserve those rates though, don't you?

A. No, sir, we do not.

Q. When did they go out?

A. I could not give you the exact date. They have not been in effect for some time.

Q. They were in effect during the period under inquiry in this law suit?

A. Yes, sir.

Q. Take Helena and Arkansas City: was that a cost or freight relation that affects adjustment between the state and interstate rates in those communities?

A. It was an adjustment which was forced on us by two factors, one of which was the low water competition rate into Helena and Arkansas City, and the other factor was the local rates fixed by the State out of those points.

Q. Those were commercial and competitive conditions which fixed that adjustment of rates between state and interstate, weren't they?

A. I do not know that you could call them commercial or competitive conditions. They were competitive so far as the adjustment of rates to Arkansas City and Helena were concerned, but they were forced by the state adjustment beyond there.

Q You might call that a political adjustment between state and interstate rates: would that convey your idea?

3863 A. That is a new term to apply to freight rates, but it might fit it pretty well.

Q. When you refer to the relation between state and interstate rates you mean the relation politically in such instances as that;

and commercially where commercial conditions bring it about, and by competition when competitive conditions bring it about, don't you?

A. All forces which tend to make our interstate adjustment depend on the state adjustment, yes.

Q. You say all these forces make it depend on the state adjustment?

A. No, sir, I say all those forces which do.

Q. Do you mean competitive and commercial conditions make interstate rates depend on state rates?

A. To some extent, yes.

Q. Just the other way I understand you in your main testimony. I thought you said commercial and competitive conditions, where they existed, accounted for an absence of adjustment between state and interstate rates.

A. I do not think so.

Q. Isn't it a fact that many interstate rates are made for you by conditions beyond your control at all?

A. Some of them are, yes.

Q. Many of them are, are they not?

A. It depends on what you mean by "many."

Q. State what you mean by many.

3864 A. I would say that these conditions as they apply to our entire rate adjustment would not be many. They are present, however, to a larger or smaller degree.

Q. Isn't it also a fact that the state rates not only in Arkansas but in other States in the Southwest are made by legislatures direct, or by a Railroad Commission, when the rates are not under your control at all?

A. That is true.

Q. And in some of the other States in this Southwestern country there is no control and you have a free hand to make your own rates there.

A. I do not know where they are.

Q. How long have you been in the business?

A. I have been in the business about twenty years.

Q. Has Louisiana any legislative control over rates?

A. Yes, it has a State Commission which controls every rate we have.

Q. How about Tennessee?

A. We do not operate in Tennessee.

Q. How about Mississippi?

A. They have a fierce one there. We do not operate there but I have heard of it.

COL. MOORE: You have heard the thunder of it?

A. Yes, sir.

Judge HILL:

Q. There is a Commission now in Oklahoma, but formerly there was none in that State?

3865 A. I believe in every State in which we operate the rates are controlled by State Commissions.

Q. In 1907, the period of our inquiry here, there was no commission in Oklahoma, was there?

A. I do not recall just when the Oklahoma Commission did take effect, but it seems to me it was before that, wasn't it?

Q. I don't know. You have referred frequently to an adjustment between state and interstate rates, using the term "adjustment of interstate rates": I wish you would define what you mean by "adjustment of interstate rates."

A. By "adjustment of interstate rates" I mean our interstate rate fabric, if you please.

Q. You mean your whole system of interstate rates?

A. Yes, sir; that is it.

Q. You do not mean the adjustment of an interstate rate from St. Louis to Little Rock, for instance, but of the entire interstate rates on a given commodity over your entire system; is that what you refer to when you speak of the adjustment of interstate rates?

A. The adjustment of interstate rates as spoken of in railroad parlance means our entire rate fabric; as I have stated, that is our ten classes and the various commodities.

Q. It just means rate schedules?

A. That is it.

3866 Q. You do not mean you adjust it to Missouri or Oklahoma, or to an Arkansas rate, or to a Missouri rate?

A. Not necessarily. In other words, instead of saying "rate adjustment" I might have said "rate scale," or any other term of that kind.

Q. I rather thought that was what you meant, but you kept using the term "adjustment" and I thought perhaps you were adjusting it into one of these other rates.

A. Adjustment is a common term in railroad parlance to designate our rate fabric.

Q. Mr. Perkins, in the testimony you gave in chief I notice you were reading from a paper: you have prepared your testimony very carefully upon matters, haven't you?

A. I have tried to go into the matter carefully, yes.

Q. The testimony you gave in your direct examination a while ago was in the main reading a very carefully prepared paper, in answer to questions Mr. Moore put to you, wasn't it?

A. Yes, sir.

Q. And you feel reasonably certain that the testimony you have given there is accurate?

A. I do.

Q. You have not given it off-hand, but have given it a great deal of time, thought and consideration, haven't you?

A. Yes, sir.

3867 Mr. HILL: I cannot proceed further with the examination of this witness before reading the transcript of his direct examination.

3868 Cross-examination of Mr. C. E. PERKINS, continued.

By Judge HILL:

Q. Mr. Perkins, I notice at page six of your testimony you say "Territory B indicates Chicago territory the rates from which are made the following differentials higher than from St. Louis" and you give the differentials. "All of which indicates that as our distances and consequently the cost of service increases, our rates increase." That you regard as a correct statement, do you, Mr. Perkins?

A. Yes, sir.

Q. Suppose you had a shipment of first class goods from Chicago to a Texas common point: that would be a differential of twenty cents over the St. Louis rate, applied to that shipment, to make the rate from Chicago to the Texas common point, wouldn't it?

A. That is correct, yes, sir.

Q. Suppose that shipment came over the Chicago & Alton from Chicago to St. Louis and was here delivered to your road: what division of that rate would the Chicago & Alton get?

3869 A. Twenty per cent.

Q. That would be how much?

A. 33.4 cents.

Q. What is the first class rate from St. Louis to Texas Common points?

A. $1.47.

Q. You give the Chicago & Alton, then, 33 cents of that rate?

A. Yes, sir.

Q. Your revenue would decrease on account of the increased distance of the shipment from Chicago, wouldn't it?

A. Our individual revenue would decrease to some extent for the reason that we are obliged to divide with another line.

Q. Then what do you mean by saying here:

"Adding this differential as your distances increases and consequently the cost of service increases, your rates increase."

A. I speak there of the total distance the shipment travels, not over our line particularly but over all our lines, that the distance increases and, therefore, the rates increase. Now the division of that rate is a different proposition.

Q. As a matter of fact your revenue, when you are speaking of the revenue you get, decreases instead of increasing from the fact that that haul is from Chicago instead of from St. Louis?

A. That statement taken by itself is a fact, yes.

3870 But our haul does not increase. I said that the haul for the entire shipment increases, for the entire length of the haul. That haul increases and, consequently, the rate increases. In other words, as the haul increases we did not apply the St. Louis rate up to Chicago. We applied the higher rate for the reason that the haul is increased.

Q. Your cost of service on that haul from Chicago as compared with the haul from St. Louis to some Texas common point is the same, is it not?

A. The cost of the service probably would be the same, or substantially the same. The value of the service would be somewhat less.

Q. The cost of the service would be the same?

A. Yes, sir; substantially the same.

Q. And yet, from the fact that that haul comes from Chicago, as compared to a haul that originates at St. Louis, your revenue is less?

A. Somewhat, yes, sir.

Q. To the shipper the rate is increased, but your revenue is decreased?

A. The rate for the entire service is increased.

Q. But your revenue is decreased?

A. Our individual revenue is, yes, sir.

Q. In this case your revenue is divided upon a track mileage basis, your interstate revenue, is it not?

A. No, sir.

3871 Q. How is it divided?

A. It is divided on an arbitrary basis, an agreed basis you might say.

Q. In making up the statistics in this case on your interstate revenue how is it divided?

A. To what statistics do you have reference?

Q. The statistics on your interstate revenue that you put into this case, showing what your interstate revenue is in the State of Arkansas for a given period?

A. I don't know. I did not have anything to do with those statistics.

HUBERT ROTH, recalled.

JUDGE HILL:

Q. Mr. Roth, how is your interstate revenue divided in these statistics?

A. On a straight track mileage.

JUDGE HILL:

Q. Then, Mr. Perkins, taking for illustration two shipments, one from St. Louis and one from Chicago, going over your line to the same Texas common point, your revenue being divided on a track mileage basis in this case, would put a different revenue for the same service into the statistics of this case, would it not?

A. Well, I do not feel competent to answer that question, Judge. I have not had anything to do with statistics which were com-

3872 piled or applied in this case. I do not know what they were.

Q. You accept Mr. Roth's statement as true?

A. Yes, sir, but outside of that statement I have no knowledge of that.

Q. In my question I am assuming Mr. Roth has testified to the truth and I ask you to assume that he has. Taking that as assumed to be true then I will ask you to answer my question.

A. I have no information as to whether we have any statistics

governing shipments from Chicago, for the division of the revenue on shipments from Chicago, filed in this case.

Q. You are not willing to take Mr. Roth's statement then as a fact and answer the question?

A. Not as you ask it, no, sir, because I do not know. But so far as I know we have not any statement of that kind in evidence.

Q. You know that you have exhibits in this case showing your interstate revenue in Arkansas, do you not?

A. Yes, sir.

Q. You have heard Mr. Roth state that that revenue was arrived at on a track mileage basis?

A. As between state and interstate?

Q. No. He said that the interstate revenue was arrived at on a track mileage basis.

3873 A. I do not understand from that there is any evidence in this case that our shipments from Chicago, for instance, have been divided on a track mileage basis, or that shipments from Pittsburg have been divided on a track mileage basis, as between our line and our connections. That is what you are trying to get me to testify to now?

Q. No, I am not trying to get you to testify to anything except as to the effect of what Mr. Roth stated as a fact.

A. I do not know that what Mr. Roth stated has any relation to the fact you are trying to get me to testify to. I cannot see it if it is there. I cannot see the relation at all.

Q. You know you have statistics in this case that set forth the interstate revenue derived from traffic on your road for a period of six months, do you not?

A. I think there is. I am not fully familiar with the statistics but I understand that is in evidence.

Q. Mr. Roth has here stated, in your hearing, that the interstate revenue is apportioned on a track mileage basis. That is, Arkansas is given credit for so much of the interstate shipments as are represented by the mileage of those shipments in Arkansas: you understand that, do you not?

A. Yes, sir.

Q. Now my question is this: assuming this statement to be true, that in a shipment from Chicago of first class merchandise to a common point in Texas, and a similar shipment from St. Louis to the same common point in Texas, the revenue derived from

3874 these two shipments being divided on a track mileage basis would make the revenue for those two shipments different, although the cost of the service was the same.

Mr. MOORE: Do you mean by that question the total revenue derived, from that particular shipment, or the revenue that accrues to the St. Louis Iron Mountain Railway from that shipment.

Judge HILL: My whole question is confined to the revenue of the Iron Mountain road.

Mr. MOORE: I did not know that the witness would understand that.

A. Let me see if I understand your question: It is, that the proportion of the through rate from Chicago, which accrues to the Iron Mountain south of St. Louis, in the case of a through shipment is apportioned as between state and interstate on a track mileage basis; and in the case of a shipment from St. Louis, the entire rate from St. Louis proper is apportioned between state and interstate on a track mileage basis?

Q. Not between state and interstate; but the rate itself between Missouri and Arkansas, or whatever state it runs through, is apportioned on the track mileage basis. In this instance it is between Missouri and Arkansas because your line runs only in Missouri and Arkansas.

A. In other words, your question in regard to the through shipment from Chicago relates to the proportion of the rate
3875 which accrues south of St. Louis.

Q. Which accrues in the State of Arkansas?

A. I think I understand your question now.

Previous question is here read to the witness.

A. The revenue would be somewhat different on the two shipments. In other words, we would not be in a position to earn the same amount of profit on the two shipments; our profits would be different, in other words.

Q. You would not get the same amount of revenue, whether there was a profit in the revenue or not?

A. No, sir, we would not get the same amount of profit either.

Q. You do not know whether you ever made any profit on it, do you?

A. Yes, sir, I would say if it was first class we would make a profit.

Q. That would be pure guess, that you made a profit?

A. If we do not make a profit on first class goods we would be bankrupt right now.

Q. You have no data to know that you make a profit on that $1.47 rate, have you?

A. $1.47 is the highest rate we have got, and if we do not make a profit on that we would be in the hands of a Receiver long ago.

Q. I understand your argument, Mr. Perkins, but have you any data to show the cost of carrying that $1.47 per hundred shipment?

3876 A. Not that particular shipment.

Q. Your judgment is, that your rates on first class goods are high enough to make you a profit?

A. Yes, sir. If we had no other rates we would be doing fine.

Q. I have used first class on those two shipments, as an illustration. That same thing is true of all other shipments that come from Chicago to Texas common points, compared to shipments from St. Louis to Texas common points, is it?

A. Yes, sir, that is true.

Q. You set forth here tables on the classes of differentials, and without going into the detail of them, I assume this illustration

which I have worked out of twenty cents on first class would apply, differing of course in detail as to all the others; is that true?

A. That is true.

Q. I have used this illustration merely for Chicago: would not that also be true of all of what you have termed "Defined territory" differing, of course, as to amounts and degree?

A. Yes, sir, it would. In some instances we would obtain fully our local rates; in other cases we would not. In other words, the differentials which are mentioned there are made to approximate as near as practical the locals up to the Mississippi River. In many cases, on account of certain conditions they are lower. We
3877 have, therefore, in some conditions under which we would get our local rates and under other conditions we would get less than our local rates. We do not have a percentage division of the rates after we get east of the Illinois-Indiana state line.

Q. Your revenue would be in varying proportions as the shipments would differ from different defined territories?

A. Slightly varying. They would not vary to any great degree.

Q. This illustration which we have used, of first class from Chicago to St. Louis, generally would apply to the balance of the traffic, Texas common points coming from defined territory north and east of St. Louis?

A. As to actual results in the figures, you mean?

Q. Proportions, I mean. I do not mean actual figures.

A. I would say it would come pretty close to it. It might vary one way or the other.

Q. That would be a fair illustration, of the principle, is the point I am getting at: isn't that true?

A. That is true.

Q. Take the other end of the line: what did you say was the furthest Texas common point?

A. I mentioned San Antonio; that is one of the furthest southern Texas points.

Q. Well, take San Antonio and take that shipment from St. Louis first class to San Antonio it would be $1.47: How
3878 much of that rate would the Iron Mountain get?

A. It would get a division of it.

Q. Yes, but I am asking you how much it would get.

A. I could not tell you offhand.

Q. Could you tell me approximately?

A. Its approximate mileage pro rate between our line and the I. & G. N.

Q. Is that the usual rule you have with all the shipments to Texas common points a mileage pro rate?

A. No, sir.

Q. What is the rule?

A. It is a varying rule. We have arrangements with each different line. They are made sometimes on actual mileage and sometimes on constructive mileage and sometimes on an arbitrary basis.

Q. They vary, however, I presume with the length of the haul in Texas?

A. Yes, sir, the longer the haul the more the line in Texas gets.

Q. Approximate that shipment to use it as an illustration—say a shipment of shoes from St. Louis to San Antonio, Texas: You get $1.47 per hundred as the gross revenue: how much of that $1.47 per hundred pounds would the Iron Mountain road get?

A. Well, I should say, roughly speaking, 55%.

Q. Something like 70 cents: it would be between seventy-
3879 five and eighty cents; that is right, is it not?

A. Yes, sir.

Q. Take a similar shipment to the next Texas common point: what would that be?

A. Our proportion?

Q. Give me first the nearest common point in Texas?

A. I would say Marshall, Texas, is a nearby point.

Q. What would you get on that shipment of shoes to Marshall, Texas?

A. 70 per cent.

Q. Seventy per cent?

A. I am speaking from memory now.

Q. I am not asking you to be accurate, but speaking simply as to the proportion, that would be $1.03 that you would get on that shipment?

A. Very close to it—$1.02.

Q. It would be about twenty-five cents difference, in round figures, on the revenue received from the shipment to Marshall and the shipment to San Antonio?

A. That is about correct, yes, sir.

Q. The services that your road would perform for those two shipments would be indentical?

A. Yes, sir.

Q. There would be no difference in the cost of the service?

A. No, sir.

3880 Q. There is heavy traffic on your road to Texas common points, isn't there?

A. As compared with our entire traffic, no, sir.

Q. What do you mean by "as compared with your entire traffic": you mean the entire traffic of the Iron Mountain System?

A. Yes, sir

Q. I believe it is in evidence here that 51% of your traffic passes through the state—what is known as trans-state"?

A. Through Arkansas?

Q. Yes.

A. That does not necessarily mean it goes to Texas, though.

Q. I was going to ask you, what is your judgment as to what proportion of that 51% would go to Texas common points?

A. You mean what proportion of that proportion?

Q. Yes.

A. Necessarily the Texas common point shipments are included in that 51%.

Q. I want to get an estimate as to what proportion of that 51% would be represented by shipments to Texas common points?

A. Less than ten per cent.

Q. How much less than ten per cent?

3881 A. Less than 10% of the 51%. In other words, it would be a rough estimate but it would be somewhere between five and ten per cent I should say of that 51%

Q. The same situation exists on business from Texas common points, does it not?

A. Yes, sir.

Q. That is heavy traffic, isn't it?

A. I included in my estimate the business to and from Texas.

Q. You would put that from five to ten per cent of the 51%, would you?

A. Yes, sir.

Q. The same situation would exist in regard to these divisions of the rates from the Texas points as we have been illustrating to the Texas common points, would it not?

A. Yes, sir.

Mr. MOORE:

Q. Would the divisions be the same?

A. Yes, on the same basis.

Mr. HILL:

Q. The shipments then, say from San Antonio to St. Louis, the division of the rate going to the I. & G. N. would be on a track mileage basis, would it?

A. Practically on a track mileage basis. It is not an absolute mileage pro rate.

Q. What is it, if it is not that?

A. It is a constructive mileage, to a certain extent—from San Antonio proper I think it is actual mileage.

3882 Q. Well, take the other Texas common points: the general system I am trying to get at and not any isolated case.

A. With the I. & G. N. and the T. & P., who are our closest connections, generally the mileage basis is used. That is as near as you can come to it, without taking a record and taking the division to each point.

Q. Suppose your shipment goes to some other road than the I. & G. N. or the T. & P.?

A. Then the basis of division is altogether different.

Q. What is that basis?

A. There is not any set basis applied to all lines. It is a matter of agreement between the interested lines, entirely.

Q. And that would be a varying proportion you would get from each?

A. It would be a proportion which would be on some general theory; that is, as the Texas local mileage increases their proportion would increase, as a general proposition.

Q. Your service would be the same on all of that, would it?

A. Yes, sir.

Q. But your revenue would vary for this same service, then, upon

the lines on which the shipment originated, and also upon the distance it was hauled by that other road?

A. There is not any question about that.

Q. There is not any question about it?

3883 A. None in the world.

Q. I do not know but I believe you have heretofore answered the question but to be certain I will ask it again:

That would be the same proportion whether the shipment originated in Texas or whether it was destined to the same point in Texas?

A. The same principles are applied.

Q. I understand the same principles, but I ask if it would be the same amount?

A. It would not be necessarily the same amount. In some cases the northbound and the southbound amounts are different.

Q. That is what I am asking about.

A. As a general proposition they are the same, but in some cases on the same lines the northbound and the southbound amounts are different.

Q. That again would make a variation in your revenue, depending on whether it was a northbound or a southbound shipment?

A. Yes, sir, that would make a small difference, yes.

Q. Do you remember the first class rate from St. Louis to Texarkana?

A. $1.37 per hundred pounds, I think it is.

Q. What is it to Little Rock?

A. $1.00 per hundred pounds.

Q. Does not that $1.00 rate extend south from Little Rock a considerable distance?

3884 A. It extends to Gum Springs,—that is, it did in 1907.

Q. That is what we are talking about now, 1907.

A. Yes, sir.

Q. It did not extend to Texarkana?

A. No, sir.

Q. How far is Gum Springs from Little Rock?

A. 68 miles.

Q. Then your shipment from St. Louis to Little Rock would be $1.00 and the same rate would apply down about seventy miles south of Little Rock?

A. Yes, sir.

Q. Of course it would cost you more to haul that freight from St. Louis to Gum Springs than to haul that same freight to Little Rock?

A. I should say it would, to some extent, yes, sir.

Q. In speaking of the lumber shipment from the zones you stated at page 9, so far as destinations are concerned the rates increase as the distance increases; showing that while they are on a zone basis so far as the points of origin are concerned, they are still made to comply with our fundamental principle—cost of service.

Do you not have delivery zones where lumber is delivered as well as zones where the lumber originates?

A. As a necessity we do not make a different rate to each different station. The same rate will probably extend to a number

of different stations on our line. As a general proposition,
3885 as the distance increases those rates increase. In other words, our rate, quoting now as an example the present rate because I cannot recall just what the rates were that were in effect in 1907—but for example our rate on lumber today to Kansas City is 24 cents and to Omaha it is now 25 cents (it was 26½ cents per hundred pounds). And as you go further west from Omaha our rates grade up, on the Nebraska State rate higher than the Omaha rate, straight along.

Q. I understand that——

A. (Continued.) And as we go further away our rates increase. The same is true into Iowa. As we go further from Missouri River our rates increase steadily until they get up to St. Paul and that territory. If we go east of the Mississippi River our rates increase the amount of the local beyond Cairo or Thebes. Now naturally on our rails there will be certain groups of stations which will take the same rates.

Q. That is the point I am getting at.

A. You will find in those groups they increase as you go further away. In 1907, the rate to the Missouri River was 23 cents. You get further west and it is shown on the exhibit filed that the rate is 28½ cents.

Q. If you will permit me to interrupt you, Mr. Perkins, I am not questioning that at all and you are getting away from my question.

Mr. MOORE: I would rather he finished that answer.

3886 A. (Continuing:) As you go further west we reach the maximum rate which we can apply this 34 cents to Colorado common points. That rate applies to quite a number—to a large number, in fact, of stations on our lines, for the reason that it is the maximum rate.

Mr. HILL:

Q. My question was, was it not a fact that the lumber moved on the zone rate to other zone territory—or whatever you term it?

A. There are not supposed to be a zone, no, sir. We do not make a zone. Zone means there is a blanket territory from or to which the rates are the same, conditions making it necessary that they should be the same.

Now, we do apply some rates to a number of different stations. Those stations change. As an example, we have changed the rates now to Colorado common points. The rate is 37½ cents per hundred pounds and that has changed to a very marked degree the group of stations to which that Colorado common point rate heretofore applied.

Q. You are getting entirely away from my question.

A. I am trying to answer it to the best of my ability, Judge.

Q. It is simply this: Isn't is a fact that your lumber rates in Texas on zones in their origin or destination—and we have used the term "zone" in this testimony as meaning a defined territory in which the same rates prevail?

A. We never use that in railroading as a fixed territory—a zone.

If you say a group of stations where the rates are the same, I will agree with you.

3887 Q. That is just a different use of terms. Then it is a fact that from a group of stations south of the Arkansas River say to the Gulf of Mexico the lumber moves on the same rate. And going to destination it moves into points wherein there is varying distances from that point and take the same rate to a given defined territory?

A. That is true.

Q. Take this Exhibit No. 40, which you have heretofore approved, which shows that lumber moved from the zone rate in south Arkansas, Louisiana and Texas, goes to Zone A at 23 cents, which I believe is the Kansas City trade center, isn't it?

A. Missouri River group, yes, sir.

Q. That extends from Coffeyville, Kansas, to Omaha, Nebraska?

A. It did at that time.

Q. That is what we are talking about and not the present rate situation. And which extended as far east as Washington, Missouri and as far northwest as Douglas, Nebraska; and as far southwest as Carthage. I have correctly stated that, have I not?

A. Omaha is the farthest point west.

Q. That is correct, is it?

A. Yes, sir.

Q. All those shipments from any point in that zone region, south Arkansas, Louisiana and Texas, went to that zone A at 23

3888 cents per hundred pounds. Then the next zone here I see is Zone C where it took a 28½ cent rate. That seems to extend from Anthony, Kansas, as the south point to Salina, Kansas, as the north point; and from a point just west of Wichita to a point just east of Olcutt: that is correct, is it not?

A. Yes, sir. There are a few stations right in that vicinity that take the 28½ cent rate.

Q. And there is another zone rate from near Hoisington, Kansas and extends to Pueblo, Colorado.

A. That is as far as our line runs.

Q. And then on the Denver & Rio Grande as far south as Trinidad and as far north as Denver which took a 34 cent rate.

A. Yes, sir.

Q. That is a correct statement of the lumber rate situation, is it not?

A. That is a partial statement of the lumber rate situation. If you say that is the lumber rate situation you have not entirely stated it, because you have neglected to include in there the adjustments between those points where the rates grade up. In other words, you pick out two or three rates and say that is a correct statement of the lumber rate adjustment. It is partial only, so far as you have shown it.

Q. It is a correct statement so far as it is shown?

A. Yes, sir, so far as it is shown; but you have not shown

3889 the intermediate grades between the various points, showing that the rates grade up as the distance increases.

Q. We will take up some of those:
I wish you would explain your system where your lumber is not shipped to these zones, which have been indicated on the map which you have approved, but which is shipped say through those zones.

Mr. MOORE: You mean the points between the zones?
Mr. HILL: No, I said through the zones.

A. I do not understand what you mean by "explain our system."

Mr. HILL:

Q. You have just stated you had a different system of grading shipments by distance.
A. No, sir, I said you had not mentioned any intermediate points between those zones, which naturally are on a different basis. I cannot say what they are or what they were in 1907 without taking a tariff and going through it.
Q. You mean a system of grading according to distance applied except in these zones?
A. I mean to say a graduation, yes, as you go further west, which would run all the way up from 23 to 28 cents, for instance. I cannot say offhand what they were or to what stations they applied. It is too far back and it is a detail which I have not in my head.
Q. When this lumber goes off your rails at Kansas City or Omaha from any of those trade centers out there, the blanket rate
3890 would apply to Kansas City or to Omaha, I presume, would it not—say it was going beyond Kansas City or Omaha?
A. I do not understand that.
Q. Would it apply, so far as you haul it, or do you get a proportion of it? I want to know your system?
A. On business destined to connecting lines the through rates are published, naturally. That through rate is divided between our line and the connecting line. In other words, we would not get our local up to Kansas City.
Q. That is what I am asking.
A. No, sir.
Q. You would get a varying proportion according to the distance although your haul was only to Kansas City?
A. That is right.
Q. In other words, it is the situation in regard to Texas common points applied to lumber?
A. Yes, sir, very largely. It is the same thing I testified to as to the points of origin. If the origin is off our line we do not get the same amount of revenue that we do if it is on our line.
Q. You take a case where two shipments are made from Malvern, where there would be a twenty-three cent per hundred pound rate to Kansas City; if that were delivered to you at Malvern by a tap line would you get say six cents off, or whatever your division would be; it would be 17 cents for one and 23 cents for the other?
3891 A. That is assuming that the tap line division is six cents.
Q. Some of yours are, and I am taking that simply as an illustra-

tion. You would get 23 cents per hundred pounds on one shipment and 17 cents per hundred pounds on the other shipment for identically the same service?

A. That is as between a shipment originating at Malvern proper?

Q. Yes, and one which was delivered to you by a tap line there.

A. We have no tap lines which get six cents at Malvern.

Q. I am using that as an illustration merely. You have plenty of tap lines, which do get six cents?

A. No, sir, we have not. Because Mr. Hamilton mentioned certain lines but they were railroads two or three hundred miles in length.

Q. Call them what you please. Instead of tap lines call them connecting lines.

A. The point I want to make is, that the example you are giving is an impossible one, from Malvern. That is all.

Q. You do have a connecting line or a tap line at Malvern, have you not?

A. Yes, sir.

Q. And you have also a line at Malvern where you get shipments direct, have you not?

A. No, sir, so far as I know all shipments we get at Mal-
3892 vern are from the Malvern and Freco Valley.

Q. Have you any other points on your line? I happened to think of Malvern but take any point where you have a connecting line and also saw mills?

A. That would be possible.

Q. I may have been wrong in using Malvern but the point is the same using Gurdon or some other point.

A. As an illustration it is all right.

Q. Take for illustration that you have hauled two cars of lumber, on one of which you get 17 cents per hundred pounds and on the other 23 cents per hundred for the same service.

A. Yes, sir.

Q. And carrying that illustration a point further, if one of those cars, say the one which originated on the connecting line went to another carrier beyond Kansas City, and it would get 6 cents per hundred pounds say for illustration, you would get eleven cents out of that shipment whereas you would get 23 cents out of another shipment.

A. That would be impossible.

Q. And the service would be identical.

A. That I say would be an impossible—I know it would be an impossible proposition.

Q. Why?

A. Because if the division was as much as six cents the rate would have increased beyond Kansas City. In other words, the
3893 rate to Kansas City is not the rate to connecting lines necessarily, but it is the higher rate. That rate might have been 28 cents instead of 23 cents.

Q. On the connecting lines?

A. Yes, sir, on connecting line business.

Q. How much would you make on that, say it was to some point beyond Kansas City where your rate was 28 cents: how much would the Iron Mountain get out of that shipment?

A. I would say, roughly speaking, our proportion up to Kansas City would be twenty cents.

Q. And if you had already taken out six cents to give to connecting carriers down there in the woods, that would leave you 14 cents for that shipment?

A. Yes, sir.

Q. And on one shipment originating at the imagined point you would get 14 cents and on the other shipment from the same point you would get 23 cents, for identically the same service?

A. No, sir, not for the same service.

Q. What would be the difference?

A. The difference would be that on business going to a connecting line, for instance, our service would be through and when we got it to Kansas City we would simply set it on the transfer track while business delivered to Kansas City we would probably have to switch it or perhaps have to absorb—in nine cases out of ten we would have to absorb the varying switching charge of five to six dollars there at Kansas City. All our deliveries at Kansas
3894 City provide for "Kansas City delivery". That car may have been intended for an industry and it probably would be on the belt line; most of the lumber dealers are on the belt line. We would have to pay the belt line the switching charge. The way-bill would have to go through our office and be revised and collection of freight charges made. While all of that additional service and additional charge would be eliminated on business going to a connecting line at Kansas City.

Q. That is, if they made through billing?

A. We do have through billing with all our connections.

Q. Then it would be more expensive to you to deliver that to an industry at Kansas City than it would to deliver it to a connecting line?

A. Yes, sir.

Q. In this mileage pro rate of the revenue on that, that would not be taken into consideration, would it?

A. The mileage pro rate? Those facts would not be present because the mileage pro rate is applied only to through shipments.

Q. Your expenses on that shipment in Missouri would be greater than it would be in Arkansas per mile, and yet you have divided the revenue on a mileage pro rate that does not properly reflect that: is not that true

A. No, sir, I do not think it is true. That is, one would offset the other. A shipment from a mill point proper in Arkansas
3895 we have to handle the car to the mill. We switch it in and then go and get it and put it in the train and take it up to the junction point, say Little Rock, and put it into a train and take it on.

Q. I am assuming, for the purposes of this question, that two cars originating at the same place, say Freeo Valley, your connect-

ing road at Malvern and one destined to Kansas City proper the other destined to a point beyond Kansas City. On the car destined to Kansas City proper your haul is the same but your terminal expenses at Kansas City are more expensive than the terminal expenses on the one going to the connecting line: that is correct, is it not?

A. Yes, sir.

Q. Making a mileage pro rate of those two rates, you have not reflected in that that difference in the terminal cost at Kansas City, have you?

A. I presume I have. In other words, while I have not divided any of that expense which does not come under my jurisdiction, I would understand that the terminal expense would be deducted before pro rating.

Q. You think that would be the correct way, do you not?

A. I think that would be done, yes, sir. It would need to be done in both directions, however, to make it correct. Perhaps on a similar shipment going to Arkansas the expense would be on the Arkansas end. So to make it correct, of course, they would have to deduct the terminal expense at both ends.

3896 Q. A mileage pro rate would not be correct unless the terminal expenses were deducted, would it?

A. If it were applied in both directions it would probably equalize itself.

Q. Do you think that is an answer to my question?

A. Yes, sir. We very often equalize those. We have arrangements with some line, for example some connecting line, where the terminal expense and where the bridge arbitrary are deducted before pro rating. We have other arrangements where they are not; but where each one takes care of its own terminal expense, on the theory that one equalizes the other.

Q. Have you any such expenses in Arkansas as they have at Kansas City?

A. Not as expensive; I should say not.

Q. It would not be fair to equalize such things as Kansas City or Chicago terminal expense with the expense at the terminals in Arkansas, would it?

A. The expense of a particular shipment might be as heavy, yes, and they might equalize themselves.

Q. You put it as a general proposition that in your opinion the expenses on a shipment going through Kansas City and Chicago equal the terminal expenses on a shipment to Arkansas?

A. Our shipments from Arkansas to our stations on the Missouri Pacific do not go through Kansas City to any appreciable extent. In other words, our lumber route is through Coffeyville.

3897 Q. That is getting away from the proposition. You do have shipments through Kansas City and you do have them through Chicago and through New York, do you not?

A. Yes, sir.

Q. The proposition you laid down a while ago was, that there might be a general evening up of those terminal expenses and I am

asking you if there are any terminal expenses in Arkansas that could be equal or could even up with the terminal expenses in Kansas City, Chicago, or New York.

A. Yes, sir, I would say yes, the general expense of delivery. A shipment say from Little Rock would be probably as expensive as in Kansas City. We have the same clerical work exactly. And in case of a shipment destined to an industry on a connecting line we have practically the same switching charge to pay that line.

Q. Then you would even up Little Rock with one of those terminals?

A. I would say that would be practically so.

Q. Are there any other termina's in Arkansas that are anything like comparable to St. Louis, Kansas City, Chicago or New York?

A. Every competitive point would illustrate that same fact. We would have exactly the same clerical work to perform. We would have the switching charge to pay the connecting line at Forest City or Malvern or at Pine Bluff or in fact any competitive point,
3898 $2.00 or $3.00 a car, which is just as much money in Arkansas as it is at Kansas City.

Q. Are you going to even up all of the terminal expenses in Arkansas against all the terminal expenses out of Arkansas?

A. I am not trying to even up anything, Judge, I did not even know about that revenue as divided on an accounting basis. I am simply trying to answer your question.

Q. I understood you to say you would even them up.

A. I simply said they might be evened up that way. I do not know even what they are. The dividing of expenses between States is not a matter that comes before the Traffic Department at all. We do not attempt to do that.

Mr. MOORE:

Q. Mr. Perkins are you speaking now of terminal expenses in Arkansas or other States as applied to individual shipments, or the total of the general expenses say at Little Rock, and the total of the general expenses at Kansas City, and the shipments collectively that originate and are delivered at those points?

A. I am speaking of the individual shipments that Judge Hill has named.

Judge HILL:

Q. Come back to the individual shipments if you prefer to take it that way, you instanced some individual shipments to Kansas City, one of which would be more expensive on account of the terminals there, and the other shipments passing through would be less
3899 expensive on account of the less use of terminals: is that correct?

A. Yes.

Q. Do you say it would be fair to divide those two individual rates on a mileage pro-rate without taking into consideration the extra expense of your terminal at Kansas City?

A. I cannot say without I know how the whole matter is handled.

Q. I am not asking you how the matter is handled, but I am asking you what you think of the fairness of it.

A. I say I cannot answer that without I know how it balances. You cannot take one end of a proposition and say whether or not that is fair, without knowing the other differences.

Q. To what other conditions are you referring?

A. As to whether or not a similar action is taken at the other end of the run.

Q. I am taking your illustration here.

A. I would say that in dividing the revenue between States on a mileage basis, if the expenses at Kansas City were deducted before pro-rating, then the same character of expense at the other end should be deducted. But if the expense at Kansas City were not deducted then Arkansas should take care of her terminal expense.

3900 Q. In reply to Col. Moore's question I understood you to say this: the individual shipments you are referring to, and I am going back to, from the original shipments we were discussing —that is, the two cars of lumber shipped from the Freeo Valley Railway Co. at Malvern and carried to Kansas City on your road, the one delivered to an industry on the Belt Line at Kansas City, and the other delivered to a connecting carrier: you said it would be more expensive to the Road to deliver to the industry on the Belt Line than to deliver to the connecting line.

A. At the same rate?

Q. I am asking you if it is a fact that to divide those rates representing those shipments from the Freeo Valley Railway Co., which were carried to Kansas City, on a track mileage basis, is fair.

A. It might or might not be.

Q. Is that the only answer you can make to the question?

A. I stated before I could not take that end of it without taking the other end.

Q. But I have taken the other end; both of them originating at the Freeo Valley Railway Co. at Malvern.

A. You do not say what the practice is with relation to taking care of the expenses, whatever they may be in Arkansas.

3901 Q. Taking the individual shipments, I do not see that that would make any difference. The terminal expenses in Arkansas are exactly the same on those two shipments, aren't they?

A. As a matter of fact you cannot fix a rate that would pay you on all shipments by taking two individual shipments.

Q. You said you were speaking of individual cases and not general ones. I am taking the individual cases in reply to that suggestion. Now, take those two individual cases, the shipments from Arkansas where the terminal expenses are bound to be the same, so there is no difference at that end of the line, is there?

A. No, sir.

Q. You have pointed out the difference in Kansas City, and there being no difference in Arkansas I bring the question home to you again, would it be fair to make that division on the mileage basis?

A. I cannot say just from those two individual shipments whether it would be fair or not as a general rule.

Q. I am not asking for a general rule. I am asking about these two individual cases. You said you were speaking of individual cases, and I am trying to hold you down to those two individual cases and not asking you to apply a general rule.

A. You cannot apply a general rule to an individual shipment.

3902 Q. What is the general rule?

A. I do not know.

Q. You have heard a good deal of the testimony in this case, haven't you?

A. I have heard a good deal of it, yes.

Q. Did you hear Mr. Doddridge and Mr| McPherson testify to shipments passing through Arkansas as if on a bridge?

Q. Did you hear Mr. Doddridge testify at all, and I did not hear Mr. McPherson on that portion. I do not think I have heard Mr. McPherson on the stand and I know I did not hear Mr. Doddridge testify.

Q. Assuming that these gentlemen did testify that this trans-state traffic (which amounts to 51 per cent) passed through the State of Arkansas as if upon a bridge—and by that I assume they mean without terminal expense: say, take for illustration there were the same shipments from Chicago and St. Louis to Texas common points, or from Texas common points to Chicago or St. Louis; or take it there were lumber shipments from Louisiana through to St. Louis or Kansas City: shipments of that grade I am referring to, which would have no terminal expense in the State of Arkansas, excepting division terminal expenses: or terminal expenses on that business not being in Arkansas, would make the expense of that business in Arkansas much less than it would be in Missouri or Texas, or the other points on either side of Arkansas, wouldn't it?

3903 A. I would say it would be less, yes, sir.

Q. Then, would it be fair to divide the rates on that business on a track mileage basis while the expenses had been heavier in Texas and Missouri and Louisiana than they had been in Arkansas?

A. I would say that would depend somewhat on the exact nature of the shipment, as to whether it would be fair or not.

Q. Take the entire lumber traffic, as an illustration.

A. Well, I would say as a general proposition the expense would be somewhat greater, but just how much I am not prepared to state, outside of Arkansas than it would be in Arkansas. There would be some terminal expense outside of Arkansas to be considered. I am not prepared to say, however, what basis would or would not be fair to divide that business on as between state and interstate.

Q. I am not asking you for a general basis, but I am asking you if this track mileage basis would be a fair basis on which to divide say the lumber traffic which passes through Arkansas from Texas to Kansas City and St. Louis: is the track mileage basis a fair one to divide that on?

A. As applied to that particular business I would say probably the

track mileage would not be altogether fair. That might be the nearest basis that could be arrived at for dividing it, however.

3904 Q. That is lumber you are referring to, where you say it would not be fair?

A. Yes.

Q. Take shipments to Texas common points and from Texas common points passing through Arkansas on the Iron Mountain Railway: would a track mileage basis of division on that be fair?

A. It would depend on the shipment. Take the shipment from the East for instance that you have mentioned as coming to us at St. Louis from the East, I would say it would be fair, yes.

Q. It would depend on where it would originate, as to whether it would be a fair basis or not, wouldn't it?

A. The same conditions would not necessarily prevail on a through shipment as on a local shipment originating in the State of Missouri.

Q. For illustration take all the traffic that goes direct from St. Louis to Texas common points, or terminal expense here in St. Louis, and the terminal expense for delivering it in the various cities of Texas: Is the traffic mileage basis of division on that fair, when it passes through Arkansas as on a bridge?

A. I do not feel that I am competent to testify on that. I have not given that feature of it any study. As a matter of fact I

3905 have not given any attention to the subject of how they divide it, or if it is divided on track mileage, as to the factors that are considered.

Q. I am not asking you how these gentlemen divide it. You have brought that into the case yourself by calling attention to the difference in the terminal expenses at Kansas City.

A. I have not brought the track mileage basis into it.

Q. No, but you brought into it the difference in the terminal expenses at Kansas City, which naturally led to the inquiry. If you have introduced a subject you are not competent to answer, you have introduced it yourself.

A. You are asking me about an entirely different subject. You are asking me if track mileage is a fair basis of division as between States.

Q. As between States on either side of Arkansas, where the heavy terminal expenses are, and not in Arkansas.

A. I simply explained that on a shipment to Kansas City the terminal expense would be heavier than on a shipment delivered to a connecting line at Kansas City.

Q. I understand that, and I have taken that and followed it a step further and developed these matters about which I am now asking you.

A. You are trying to make me testify about something I

3906 do not know anything about.

Q. Isn't it a part of your business to make these divisions?

A. No, sir.

Q. Between the different connecting carriers?

A. Yes, sir, between the different connecting carriers but the

apportionment of earnings or expenses to the different parts of the system, no.

Q. I understand that. But the basis of division between the different lines in Texas coming to your line at St. Louis, it falls within your jurisdiction to make those divisions, doesn't it?

A. Yes, sir.

Q. You have testified that in fixing these various divisions you have tried to consider the cost of the divisions service, as I understand you: is that correct?

A. The cost of the service enters into all of our rates and division making, yes.

Q. Take the grain traffic: Mr. McPherson testified, as I recall it, that there was a very heavy grain traffic going from the Northwest to New Orleans, and I think it went through the State of Arkansas as if upon a bridge—according to their theory: now I will ask you if it would be a fair basis of division of the revenue from that grain traffic coming from the Northwest, to divide that on a track

3907 mileage basis.

A. I have tried, Judge, to explain to you that I do not know anything about the divisions as between the different parts of the line. I do not know the first thing about it.

Q. I am assuming now that it was divided on a track mileage basis. Assuming that to be true, I will ask you if that is a fair division of that revenue.

A. I would not like to answer that off-hand.

Q. You do not know whether it is or not?

A. No, sir.

Q. How do you think that grain would compare with the lumber? Which would have the most terminal expense outside of Arkansas, grain or lumber?

A. That would be a pretty hard comparison to make. I would say the terminal expenses would probably run about the same. That is, there would not be very much difference. In some cases one would be heavier than the other, or vice versa.

Q. If the terminal expense would be about the same and that would not be fair for lumber, would it be fairer for grain?

A. I do not know enough about the divisions as between the different parts of the system to enable me to answer you intelligently.

Q. You stated at page 7 of your testimony:

3908 "In the case of the lumber zone which has been referred to, commercial conditions govern to a large extent. It must be admitted that our profits vary as to individual shipments. A shipment, for instance, from Little Rock to Kansas City yielding a larger profit than a shipment from Lake Charles: still our rates are adjusted so as to meet these conditions and yield a fair profit on our entire lumber business."

I wish you would explain just what you mean by that Mr. Perkins?

A. I mean that the rates on lumber as applied from the lumber zone which has been referred to, not taking into consideration necessarily the rate from the most Northern point or from the most South-

ern point, is fixed so as to yield a fair average profit from the entire zone.

Q. What do you mean by "an average profit"?

A. I mean taking the earnings which we will receive from shipments from the North end of the zone, and the earnings which we will receive on shipments which will originate in the central part of the zone, averaged together will yield a fair return.

Q. Wouldn't you have to know the cost of carrying this lumber traffic in order to determine whether or not you have earned a fair profit on it as a whole?

A. Not absolutely necessary.

Q. I did not ask you absolutely. But you have to know it, either absolutely or some other way, wouldn't you?

A. No, sir, not necessarily.

3909 Q. How would you find it out?

A. We would find it out by a comparison of our earnings on lumber with our total earnings.

Q. Those are the only statistics they have, the average cost per ton mile on all your business?

A. Yes, sir.

Q. You have no statistics as to the cost of your lumber business?

A. We have no statistics, no, sir.

Q. You have no statistics as to the revenue as a whole from the lumber business?

A. Yes, sir.

Q. You have that?

A. Yes, sir.

Q. Do you know just what it is?

A. Yes, sir.

Q. Do you know what that is per ton per mile?

A. Yes, sir.

Q. What is it?

A. I could not tell you off-hand just exactly what it is, but it is in the neighborhood of six mills.

Q. What is the average cost per ton per mile for all your business?

A. The total cost is in the neighborhood of between five and six mills.

Q. Now that is the way you have figured that there would

3910 be a profit on that: you have taken your total cost of all your business as being somewhere between five and six mills and you found that the revenue on all your lumber business was about six mills; and, therefore, you figure that you have made a small profit on the entire business.

A. Yes, sir.

Q. Is that the process of reasoning?

A. That is about it.

Q. That is what you mean by this statement I have just quoted from your testimony: is that true?

A. To what statement do you refer?

Q. The one I have just read you that rates are adjusted to meet these conditions and yield a fair profit on the entire lumber traffic?

A. Yes, sir.

Q. That zone extends from the Arkansas River South to the Gulf of Mexico and includes all of Louisana and a part of Texas, doesn't it?

A. Yes, sir.

Q. Do you know what volume of that lumber traffic originates in Arkansas—I mean what proportion of it?

A. No, sir.

Q. Could you make an estimate?

A. No, sir, I would not like to make an estimate without going into the figures some. I would say, however, it is small as compared with the volume from further South.

3911 Q. It would probably not be over twenty per cent, would it?

A. It would not be that much.

Q. About what would it be? I do not mean any close accurate estimate, but I want to get the result of your best judgment.

A. I would say between ten and twenty per cent or somewhere around there.

Q. And somewhere from eighty to ninety per cent of the lumber originates South of Arkansas?

A. Yes, sir.

Q. I mean South of the State line.

A. Yes, sir.

Q. Rates on lumber shipped from Arkansas of this ten to twenty per cent are much higher—that is, the proportion your line gets is much higher than on the bulk of the shipments that come from places outside of Arkansas?

A. No, sir.

Q. Why not?

A. We get the same proportion whether it comes from Arkansas or Louisiana.

Q. You get the same proportion?

A. Yes, sir.

Q. On a track mileage division?

A. There is not any track mileage division about it. We have our rails in Arkansas and we have our rails in Louisiana:

3912 if the rate is 23 cents from Arkansas to Kansas City, and the rate is twenty-three cents from Louisiana to Kansas City, we get the same proportion.

Q. You heard Mr. Roth testify that when you come to divide that revenue between Arkansas and other States you divide on a track mileage basis?

A. You said "your line."

Q. I should have said "your line in Arkansas."

A. Then what is your question now?

(Previous question read to the witness.)

Q. Now answer my corrected question.

A. If what you mean—and that is what I am trying to get at, what you mean,—do you mean, do we get more per ton per mile for handling traffic from Arkansas than from Louisiana?

Q. Yes.
A. Yes.
Q. The service is the same. For the same service you get more per ton per mile for shipments from Arkansas than you do for shipments from Louisiana and Texas.
A. The service is greater.
Q. From Louisiana and Texas?
A. Yes, sir, the service is greater from Louisiana and Texas to some extent than from Arkansas.
Q. When you are speaking of average profit on this entire lumber traffic you did not have in mind that the revenue derived
3913 from the traffic in Arkansas would be apportioned on a track mileage basis, did you?
A. I did not have any such facts in mind, no sir.
Q. Mr. Perkins, the rate per ton per mile on the lumber, ascertained on the track mileage basis, taking the lumber traffic of Arkansas, would be much higher than six mills, wouldn't it?
A. You mean the lumber traffic originating in Arkansas?
Q. Yes.
A. Probably it would be higher, yes.
Q. You stated at page R-11 of your testimony, speaking of the division of the rate with the connecting carriers,

"This traffic from its nature can be and is handled at a less margin of profit and tends to greatly increase our tonnage, thereby reducing the general cost of handling all business."

Do you think the lumber delivered to your road by connecting carriers is handled at a less cost than the lumber delivered to you by a saw mill on your tracks?
A. I did not say it was handled at a less cost. I said it was handled at a less margin of profit. The cost would be very nearly the same. We do not expect and cannot get the same amount of profit, even though the cost may be substantially the same, out of all traffic.
Q. I do not think you made it very clear here (indicating page R 11). It would rather indicate the opposite in this testimony.
A. I did not say anything about cost in that testimony;
3914 I said profit.
Q. That is handled at the same cost but with less revenue: that is what you mean, isn't it?
A. I would say it is handled at substantially the same cost, but with a different degree of profit.
Q. That is less revenue, isn't it?
A. Yes, you can call it that if you want to.
Q. That is what it is, isn't it?
A. We are dealing in profits.
Q. We are not in this case, but we are dealing in revenue.
A. You are speaking to me as a freight man, and a freight man is looking after profits.
Q. He is looking after revenue primarily, isn't he?
A. Revenue is profit.

Q. It is not always profit, is it?
A. We try to make it so.
Q. You are referring to gross or net revenue?
A. To gross revenue.
Q. Then it is handled for less gross revenue but at the same cost?
A. That is not what I said exactly.
Q. Substantially the same cost, I believe, is your exact language.
A. I would rather stick to what I testified to.

Q. Didn't you testify it was handled at substantially the
3915 same cost with less gross revenue?

A. I testified it was handled at substantially the same cost and less profit.
Q. Where did you get the profit?
A. The profit over and above expenses. We do not necessarily figure on the same expenses.
Q. You deal with just two elements: you pay out so much money for expenses and you get so much money from the shippers as gross revenue?
A. Yes, sir.
Q. That is all you deal in?
A. Yes, sir.
Q. And the difference between that is profit or loss as the case may be?
A. No, sir, it is not.
Q. What is it?
A. There are varying costs. We have our gross cost. That is the cost figured on all the expenses of the road. Now, on everything we haul we do not make a profit over and above that figure. For example, our gross expenses may be between five and six mills per ton per mile and we may on some particular commodities handle business for as low as four mills per ton per mile. We are making a profit, nevertheless, over and above our transportation cost in that particular instance.

Q. You are making it on the whole business and not
3916 on those particular shipments you are carrying for a loss?

A. No, sir, we are making it on those particular shipments.
Q. How do you know that?
A. Because we know about what our transportation cost is. It is something like a man in the grocery business: he may not be making on sugar an amount that will pay him a profit over and above all his fixed charges, but it will pay him a profit over and above the cost on that particular item.
Q. What do you mean by "cost" in this regard?
A. Cost may be two things, so far as a freight man is concerned: cost can be and is the total cost of operation which figures all of the items that enter into the operation of a railroad from beginning to end. Now, in the nature of our business we cannot always handle all shipments so as to make a profit over and above those entire charges. If we did we would be getting to your tonnage theory en-

tirely. But we do not and we cannot. Some commodities are very cheap and would not stand charges which would pay us a profit over and above our entire expenses. Some business we have to haul as low as four mills per ton per mile, but if we handled all our business at four mills per ton per mile we would be handling all our business at a figure which would be below our general cost and we would be bankrupt.

Q. As I understand you then it is this: some commodities
3917 you haul for less than cost—for instance, four mills?

A. No, sir.

Q. What do you mean by that?

Mr. MOORE: You did not distinguish between general cost and capitalization cost.

Mr. HILL:

Q. I have not understood you, Mr. Perkins, if that is not what you mean.

A. I stated there were some commodities which we had to handle at a figure which would yield us a profit over our transportation cost.

Q. You are distinguishing between transportation cost and general cost, are you?

A. Yes, sir.

Q. Have you any statistics of your transportation cost?

A. Only in a general way.

Q. On all of your commodities as a whole, isn't it?

A. Yes.

Q. You have no statistics on the transportation cost of lumber or grain, have you?

A. No, sir, any more than we have actual statistics on any given commodity for our entire cost.

Q. I believe you stated that the Interstate Commerce Commission after a thorough investigation had approved of this zone basis on lumber rates?

3918 A. Yes, sir.

Q. Isn't it a fact that the Interstate Commerce Commission has recently directed your road to cancel all of its division sheets on lumber with all connecting roads, and then temporarily held up that order to enable each road to appear before the Commission and ask for a division?

A. We do not know exactly what they have done, to be perfectly frank with you.

Q. You know they did order you to cancel all of them?

A. No, sir, they did not.

Q. Didn't they order you to cancel all of them?

A. No, sir.

Q. And then suspend that order until January?

A. No. sir

Q. What did they do, Mr. Perkins?

A. They issued an opinion. The Commission has never made an order in the case; we have no order at all from the Commission

for the cancellation of the tap line division. But they did deliver an opinion that the giving of divisions to tap lines was in the nature of rebates, and that tap lines, although they had incorporated themselves as common carriers, were not in fact common carriers.

Q. Didn't they order a cancellation of all those divisions in the Southwest?

A. No, sir. They simply made an opinion. If you read that opinion you will find there is no order in it at all. They
3919 have simply given this opinion, that that was an illegal practice. And they have indicated that unless the roads did cancel them there would probably be some prosecutions. And the roads have felt it necessary to cancel them, to get in the clear.

Q. Have they done so?

A. We canceled them and then under order of the Commission they have been reinstated until January 5th next.

Q. Mr. Perkins, this bridge toll paid at Memphis goes to the road that owns that bridge, doesn't it?

A. It goes to the Bridge Company.

Q. You get no part of it?

A. Not that I know of.

Q. When you fixed the Arkansas rates out of Memphis on the Commission's tariff you fixed it on the Commission's tariff plus the bridge toll; you fixed it on the Commission's rate itself so far as the revenue to your Company was concerned?

A. We fixed it on what we were obliged to fix it on. We did not have very much voice in the fixing in that case.

Q. That is not an answer to my question. It is a fact that you fixed it so far as revenue was concerned on the Commission's rate, didn't you?

A. I do not think that is a fair statement of the facts. We fixed it without any relation to revenue or anything else. We fixed it on the tariffs made by the Commission. If the Commission fixed
3920 a rate that did not pay revenue it would have been fixed on that same basis, probably because we could not get higher.

Q. That Commission tariff was in effect at the time you fixed it, wasn't it?

A. No, sir.

Q. When was it fixed?

A. It was fixed before there was any Commission in Arkansas.

Q. And continued after there was one?

A. Yes, sir.

Q. When you adapted it to the Commission rate, so far as revenue was concerned, you fixed your Memphis rates on the Commission rates, didn't you?

A. No so far as revenue was concerned, no, sir. We fixed it on the bare facts that that was the rate. Those were the conditions that made it, regardless of what the revenue was.

Q. The result would be that so far as revenue was concerned you fixed it on the Arkansas Commission rate?

A. The result so far as anything was concerned was that we fixed it on the Commission's rate, revenue or lack of revenue, either one.

Q. This is the point. The amount of revenue you receive from that Memphis rate was the amount of revenue which was fixed by the Commission's tariff, wasn't it?

3921 A. That was the result, but that was not the basis.

Q. It is the result I am asking about. That is what you did?

A. That was the result of it, yes.

Q. Did you consider that was paying you a profit, or were you making those shipments at a loss?

A. I do not know that that has ever been figured out.

Q. You do not know?

A. I never figured on that.

Q. You did not consider a profit on that at all?

A. We could not.

Q. You just put those rates in there regardless of whether they made a profit or a loss?

A. Just the same as we operate in Arkansas, whether we make a profit or a loss. The rates control the situation.

Q. Isn't it a fact you made some rates out of Memphis into Arkansas at less than the Commission's rates?

A. Less than the Commission's mileage?

Q. Yes.

A. I think that is correct, yes.

Q. Did you make those regardless of whether you would make a profit or loss upon them?

A. We made those subject to the understanding which was had with the City of Memphis as applied to the Arkansas local adjustment.

Q. That does not answer the question. Did you put in

3922 those rates regardless of whether there was a profit or a loss on them?

A. Well, I should say not. I was not with the road at that time, but I would say not.

Q. Why not?

A. I could not answer why not.

Q. Mr. Perkins, I do not quite understand this statement in your testimony at page R 23:

"In cases where the interstate rates are shown to be the same to the points mentioned in the chart, the Memphis to Little Rock rate has been applied as a minimum, these minimum figures applying only to the stations directly South and West of Little Rock, which it will be seen were selected by the State to disprove our basis."

What do you mean by that?

A. I mean that you have selected a group of stations to which, on account of the conditions which I have mentioned, we have in one or two cases a blanket basis of rates; and you picked out that as about the only place you could find in Arkansas to prove or disprove our general theory.

Q. What do you mean by your "general theory"?

A. The relation as between state and interstate rates.

Q. What relation? Cost relation, trade relation, or political relation?

A. The relation of the rates in and of themselves.

Q. What do you mean by the relation of the rates in and of themselves?

A. The relation of one rate to another rate.

3923 Q. Do you mean the proportion that one rate will bear to another one?

A. I mean the bearing which one rate has on another rate, as a matter of fact.

Q. Control, you would be more apt to say—the control of one rate over another one, rather than the relation?

A. Yes, sir.

Q. That is what you mean by that statement?

A. I think the word relation defines it better.

Q. You are discussing there the relation of the effect of one rate on another.

A. The effect of the relation of one rate to another naturally affects the two, yes.

Q. You take the rates in Arkansas that are less than the Commission's rates and what would you say as to that relation or control of the Commission's rate as to them?

A. The basis which I outlined yesterday as governing that part of our line as applied to state rates brought about that result at that time.

Q. That might bring it to the State level, but how could that bring it below the State level?

A. For the reason that in that particular case we used a minimum figure, which was the Memphis to Little Rock rate, 70 cents first class.

Q. On account of commercial conditions?

A. Yes.

3924 Q. I believe Mr. Bragg gave instances of the Memphis interstate rate being less than the state rate to points on the White River Branch and probably other points: do you recall that testimony?

A. Yes, sir.

Q. It was commercial conditions on that line that brought those rates down under the Commission's rates?

A. No, sir.

Q. What was it?

A. Competitive conditions.

Q. What is the distinction you make between commercial and competitive conditions?

A. A competitive condition is one that is generally brought about by meeting the competition of some other line, say a long line meeting the competition of a short line. A commercial condition is more of a trade condition.

Q. And this was a commercial condition in Memphis that fixed that scale; and it was a competitive condition on the White River Branch that brought those rates to the Arkansas Commission's scale?

A. Yes, sir. I can explain it if you wish the explanation of it.

Q. I do not care anything about it, but I just want the facts. However, I have no objection to the explanation if you wish to make one.

3925 A. Our White River Division runs in a roundabout way from Memphis through Arkansas to Springfield and thence North. The Frisco has a direct line to Springfield. The Frisco for some reason, I do not know just what, have applied low rates to Springfield and that immediate territory. Of course they are very much shorter than we are and we have to meet that condition and that has brought our rates to a very much lower basis in that particular territory than we would apply if those conditions were not there.

Q. Then you had to bring your cost, reflected in your rate, to the level of the Frisco's cost, reflected in its rate from Springfield to those points?

A. We probably had to take a less profit then the Frisco did, as they had a shorter route to that territory.

Q. You think you made a profit on those shipments to the White River Branch?

A. Probably.

Q. You think you can make a profit on shipping goods at less than the Arkansas Commission's rates?

A. We made a profit over and above our transportation cost, but I do not say what we made a profit over and above our entire cost. I do not think we did.

Q. At page R 19 of your testimony you were speaking of the shipments to Texas points, and you said:

"In other words, the Texas State rates make the rates on the articles mentioned to these points."

3926 Then the relation, as you used the term relation, between state and interstate rates would be the relation between the Texas State rates and your interstate rates, wouldn't it?

A. In that particular case, yes.

Redirect examination.

By Mr. MOORE:

Q. While on that subject I wish you would take Exhibit F, Mr. Perkins, and point out those conditions. That is to say, where the Commission's rate is less and where it is higher than the interstate rate from Memphis to White River points, and explain the reasons for the interstate rates being lower in the instances where they are.

A. This Exhibit F seems to be a comparison of rates to Memphis from points on the White River Branch on the Iron Mountain, as against rates for an equal distance under the Commission's tariff No. 3, where on a distance of 172 miles the rate from Memphis is 69 cents as against the Commission's tariff 66 cents on first class.

Q. And second class the same?

A. Yes sir, on second class the rates are the same.

On third class the rate from Memphis is 47 cents as against 51 cents, or 4 cents lower.

3927 On fourth class they are the same.

On fifth class they are the same.

Making only one class, and that the third class, where they are lower.

For 184 miles the interstate rate is 70 cents as against 68 cents for the state rate.

Second class is 59 cents as against 61 cents for the state rate, or 2 cents lower.

Third class is 47 cents as against 52 cents, or 5 cents lower.

Fourth class is 40 cents as against 41 cents, or 1 cent lower.

Fifth class is 30 cents as against 31 cents, or 1 cent lower.

For 201 miles the first class rate is 70 cents as against 74 cents.

Second class rate is 59 cents, as against 66 cents.

Third class rate is 47 cents as against 50 cents.

Fourth class rate is 40 cents, as against 43 cents.

Fifth class rate is 30 cents, as against 32 cents.

For 241 miles the rate is 70 cents, as against 79 cents.

Second class is 59 cents, as against 72 cents.

Third class 47 cents, as against 60 cents.

Fourth class is 40 cents as against 44 cents.

Fifth class is 30 cents as against 34 cents.

3928 Q. In those instances where the interstate rate is higher than the Commission rate it is because of the Frisco being a shorter line and having a shorter haul?

A. It will be noticed that the maximum rate interstate is 70 cents first class,

59 cents second class,

47 cents third class,

44 cents fourth class,

50 cents fifth class.

Those are maximum rates to any of those points from Memphis. That is the Frisco scale, being the short and direct line from Memphis to that territory, which held down our rates at intermediate points via our longer and more roundabout route.

Mr. HILL:

Q. To save coming back to this point, Mr. Perkins, I will ask you one or two questions:

Of those rates you have just quoted, seventy-five per cent of them are lower than the commission rates, are they not?

A. Yes, I should say they are, out of the rates that were mentioned, to a certain degree. Some of them only one cent. Some of them more than one cent.

Q. The Frisco does not reach any of those points.

3929 A. No, not these particular points, but these points are directly intermediate with the territory just beyond that the Frisco does reach.

Q. Springfield is the only town it reaches?

A. No, sir; Springfield, Aurora and Carthage are all right in that same territory. It fixes the entire adjustment in that territory.

Redirect examination.

By Mr. MOORE:

Q. Kansas City is a very large terminal point, is it not, and has a very large terminal service and provisions to meet a large terminal service?

A. Yes, sir.

Q. Is not the cost, per unit, for handling traffic in Kansas City, as low or lower than it would be in smaller terminals like we have in Little Rock, on account of the increased volume of that kind of business at Kansas City and at large terminals of that kind?

A. There is no doubt about that.

Q. You started making a comparison, a while ago, with reference to the cost of transporting low grade commodities that move from zone to zone, such as lumber, between the effect of the rates including all costs inclusive of transportation costs—that is to say, overhead costs, general expenses and things of that sort—with the transportation cost itself:

3930 That is the cost of moving and handling the article, keeping out these overhead expenses?

A. Yes, sir.

Q. You did not quite complete your comparison before some other question was asked you. I wanted to see if I understood your meaning:

While in some of the low grade commodities there may be a rate that would not produce a profit on the entire cost, including that overhead, it would with reference to the cost of transporting that commodity, produce something over the expense of handling it?

A. Yes, sir.

Q. That is what you meant, was it not?

A. Yes, sir, that was what I was trying to explain.

Q. You did not quite complete it. That is why I called your attention to it.

Now, referring to shipments to Texas via St. Louis, from points east, such as Chicago:

I want you to state if there is any difference between the handling of freights that are received from connecting lines and the terminal service that is rendered to shipments to Texas of goods originating at St. Louis?

A. There is a difference, yes, sir.

Q. A shipment of shoes from Chicago, over the Chicago and Alton, to a point in Texas was cited:

Taking that illustration, where would that—what line
3931 would that go on south of St. Louis? Would it cross the river and go on the main line or go down to Thebes and that line east of Mississippi River?

A. It would probably go down to the east side line.

Q. Can you state what the difference in the terminal expense of a shipment originating in St. Louis and the handling of that shipment that is delivered to your company from a connecting line would be?

A. In a general way, yes, sir. It will depend, of course, as to whether you refer to less than carload or to carload shipments.

Q. Take it both ways, then.

A. In the case of a carload shipment the car is sent to us, delivered to us on our transfer track by the connecting line. Picked up there and switched into a through train and goes on on a through waybill from point of origin to destination.

In other words, the waybill is made in Chicago and that document carries it through to destination.

In case of a carload originating in St. Louis proper, a car must be sent to the industry by our switch engine, if the industry is on our line. If it is on the connecting line we pay for that service.

Take an example where the industry is on our line: We set in the car. When that car is loaded we send our switch engine
3932 back and get it. It is taken into our yard and made up into a through train. The shipment is waybilled in the office of our local agent. That clerical service is done which is not done in the case of a through shipment although that, of course, being considerably more expensive from every standpoint than the case of a through shipment.

Practically the same thing is true to a different degree in the case of a less than carload shipment. A package of shoes coming from Chicago would be handled in one of our through package cars from Chicago to Texas. That car would be delivered to us on our transfer and the car goes right through and with it the package of shoes, on the through way-bill; whereas in the case of a package of shoes delivered to us for shipment at St. Louis, the shipment is delivered at our freight station; handled by our truckers and put into the proper car at the proper place for unloading, all of which, of course, is an expense. That car then is switched out and put into our through train. The waybill is made in our local office in St. Louis in the same manner that the waybill for the carload shipment was made.

Recross-examination.

By Mr. HILL:

Q. Did you ever have any experience in the terminal yards here in St. Louis?

A. No, sir.

3933 Q. Are the conditions you have just explained actual or ideal?

A. What conditions do you refer to, as to the handling of shipments?

Q. Yes.

A. Those are actual conditions, regardless of to what points they go through.

Q. Those are rather ideal conditions, those that should be, rather than those that are?

A. No, those are necessary conditions.

Q. You have had no experience: you don't know whether they are practiced according to that theory or not, do you?

A. That is the way shipments are handled generally at all terminals.

Q. It seems, then, it would be more expensive here than it would be in East St. Louis?

A. In what way? I did not testify to any facts that St. Louis was any more expensive than East St. Louis.

Q. Would not that be the result of your testimony about that?

A. No, sir.

Q. I would not make any difference whether it went down the east side line or on the main line this side, so far as the expense of terminal is concerned?

A. Only so far as the terminal expense going across the bridge is concerned.

3934 Q. You have to cross the river down at Thebes Bridge too, don't you?

A. Yes. We are part owner in the Thebes Bridge.

Q. But you are supposed to earn some interest on your investment, are you not?

A. Certainly.

Q. That has to be taken care of as well as pay the other bridge here, has it not?

A. It has to be taken care of, yes, but then, naturally we can operate cheaper over our own property than we can over somebody else's property.

Q. You have an interest in the bridge here, have you not?

A. I don't know whether we have or not, to tell you the truth, Judge.

Q. You don't know whether you can operate cheaper over a bridge which you have an interest in already, than a bridge where you have none?

A. I know there is a tax here, but whether we get any of it back here, I don't know.

Q. Do you think the terminal cost in Little Rock is as great as it is in St. Louis?

A. I should say it is greater.

Q. Per ton?

A. Yes, sir.

Q. How about the terminal cost at some little station say

3935 Newport or Malvern?

A. I should say that would be greater.

Q. Greater than it would in St. Louis?

A. Yes, sir.

Q. You explained that you have two ideas of cost, one the cost of transportation and another of the investment also: which are you referring to when you are comparing St. Louis terminal with the Malvern terminal?

Mr. MOORE: What do you mean by "investment"? Do you mean different between the transportation cost and total general cost?

Mr. HILL: That is the way I understood his remark.

Mr. MOORE: I do not see how you can apply the term "investment" to either one of them.

Mr. HILL (Previous question read; to which counsel adds): I mean by that the total cost in the one instance, including your investment in the terminal, expense of maintaining those terminals, and on the other hand merely the expense of handling a given commodity in the terminal: which are you referring to?

A. I was referring to the actual expense of handling the commodity.

In other words, we handle a very much larger volume of business in St. Louis or Kansas City terminals, of course, than we do in the smaller terminals. Naturally, it costs more per ton to handle them in the smaller terminal.

3936 Q. When you consider the value of the property invested in the terminal in St. Louis, compared with Malvern, you would not say that it costs more to handle a ton of freight in Malvern than it would in St. Louis, would you?

A. I would not say it, perhaps, referring to cost. If I were referring to that feature, I would say that that would be a question of profits there.

Q. You never write in your lexicon the word "losses," do you? It is always a question of profits?

A. We try not to write "losses," Judge.

Q. It seems you have written it rather largely in regard to state business, have you not, in the state case?

A. Probably those are rates beyond our control. I am talking about rates we control.

Q. You control these Memphis rates that you based on——

A. No, sir.

Q. Why not?

A. Because they are controlled by the state rates.

Q. You adopted them voluntarily, did you not?

A. We had to.

Q. Who compelled you to?

A. The rates in themselves.

Q. I thought you said that was due to an agreement with the city of Memphis?

A. To a certain extent it was, yes, sir.

3937 Q. Memphis did not compel you to do it in the sense that the Interstate Commerce Commission would compel you to cancel a tap line or the Arkansas Commission would compel you to haul at a given rate?

A. Yes, as a matter of fact, the Interstate Commerce Commission says—the law now says you cannot exceed a combination of locals. That is one of the controlling facts that make our rates from Memphis to Arkansas as they are.

Q. You say the law says you cannot exceed a combination of locals?

A. Yes, sir.

Q. Where is that?

A. It is in the new law.

Q. That was not the law when we were out here in the winter?

A. No, but it is now, although the same theory was in effect

then as it is today. They made it stronger and put it in the law now.

Mr. HILL: That is all.

J. D. WATSON, a witness of lawful age being duly produced,
3938 sworn and examined testified on behalf of the complainant as follows:

Direct examination.

By Mr. MOORE:

Q. You have been on the stand before?

A. Yes, sir.

Q. You are Assistant General Freight Agent of the St. Louis Southwestern Railroad, I believe?

A. Yes, sir.

Q. Mr. Bragg, a witness on the part of the state, in speaking of the differentials in favor of St. Louis and other points over St. Louis testified that the same basis was closely followed in making interstate rates to interior or local points in Arkansas, using Little Rock as the hub or basing point in that system of rates:

I wish you would state if the length of haul affected that system of rates and if so in what way?

A. The length of haul affected all the rates to Arkansas, whether they were based upon differentials; upon arbitrary over the state rate; upon a combination through the junction point within the state, or upon a differential basis as to destination.

3939 The method of arriving at the rates from the point of origin was an arbitrary adjustment over Memphis, and in order to make that clear as to the rates to Little Rock and Pine Bluff, I have prepared a small exhibit which will clearly show the difference as between Memphis, Cairo, St. Louis and Kansas City, to Little Rock and Pine Bluff.

These differentials were used in making the rates to Little Rock and Pine Bluff and points based thereon; the rates to the points beyond Little Rock and Pine Bluff being adjusted either by combination or differential over the Little Rock rates, thus preserving the length of haul both as to origin and destination as a controlling factor in making the rate.

The exhibit just referred to is marked "Complainant's Exhibit 50, J. D. Watson, 10/7/10 M. J. C." and is in the words and figures following to-wit:

Exhibit 50, see Volume 8, page 5679.

3940 Q. Go ahead with your statement.

A. I have completed that statement in connection with that exhibit.

Q. Mr. Bee, a witness introduced by the state, stated that there is no relation whatever between state and interstate rates because of the difference in the haul of the two classes of business:

I wish you would state what you think about that and if the difference in the length of haul destroys that relation?

A. The difference in the length of haul could not destroy the relation as between state and interstate rates for the reason that the state rate in Arkansas to a controlling extent bases the interstate rate.

In the case of the distance referred to in Mr. Bee's testimony, St. Louis 500 and some odd miles, as against 50 miles within the state, the relation was still there, but it would require a rate man to check that relation to show what the relation really was and how the one rate affected the other, or would affect the other, but the difference in the distance as stated by Mr. Bee, would make it difficult for him to understand from the railroad's record just where the relation lies.

There is a very clear relation as between all state rates and all interstate rates operating into the same territory. That is pretty well shown in the testimony in regard to the sugar rate in Arkansas.

The sugar rate from Helena to various points in the state of
3941 Arkansas was fixed upon a maximum basis of 13 cents. That added to the rate to Helena from New Orleans, made the rate from New Orleans to the various points in Arkansas, the maximum rate being 25c., which was the exact Helena combination.

That is also shown to a very marked extent in all of the adjustments in the state of Arkansas.

Our adjustments in the territory south of Pine Bluff is probably one of the best examples of this.

We had no rails of our own into Memphis and the rate from West Memphis to our territory did not necessarily force us to apply the West Memphis rate plus the bridge, but the reduction in the rate from Pine Bluff—taking the rate that was then in effect to Pine Bluff—made it necessary for us to reduce the rate from Memphis to the stations involved south of Pine Bluff, and I have prepared an exhibit which will show without an endless amount of detail these differences and the reductions which were caused in our rates from Memphis by the Arkansas Commission adjustment.

In making this exhibit I have selected the commodities that are moving commodities, ones that amount to something, and have shown in the column numbered one, the rates that were in effect from Memphis to these stations when the Arkansas Commission Standard Distance Tariff was made effective.

In column numbered two I have shown the rates as readjusted to the Arkansas Commission basis, which became effective
3942 September 6, 1900.

In the column numbered three I have shown the reductions which were caused by this readjustment.

In referring to the commodities I have selected such commodities as wire and nails, canned goods, packing house products, salt, and the commodity rate on mattresses, less than carload, and spring beds set up, less than carload.

A glaring example of this reduction would be the rate to say Stephens, Arkansas, on the spring beds set up.

The rate in effect prior to the Arkansas Commission basis was $1.96 per hundred pounds. Effective with the readjustment incident to the Arkansas State rate, the rate becomes 93½ cents or a reduction of $1.02½ per hundred pounds, cutting the rate more than one-half in two.

The exhibit last referred to is marked "Complainants Exhibit 51, J. D. Watson, 10/7/10 M. J. C." and is in the words and figures as follows to-wit:

For Exhibit 51, see Volume —, page —.

3943 Q. Did the rate put into effect by the Arkansas Commission render it necessary to make these reductions that are shown in Exhibit 51?

A. It was necessary to do that in order to prevent the movement of the commodities into Pine Bluff and reshipped from Pine Bluff to destination.

I might make a further statement in connection with that exhibit, which will make it probably more clear.

The rates from Memphis to these stations south of Pine Bluff were not compiled in our interstate adjustment on the basis of the Arkansas Commission scale. Had they been the reductions would have been much more severe than is shown.

For example, take canned goods: the maximum rate within the state of Arkansas—which would, of course, cover those distances from Memphis, plus the bridge—would have been 24 cents per hundred pounds.

The rate on canned goods, less than carload, would have been 30 cents per hundred pounds; where, you will find by referring to the statement that our rates on canned goods, carload, under the new adjustment, to Louisville, in the southern portion of the state, was 33 cents per hundred pounds, and less than carload, 41 cents per hundred pounds.

I make that statement so as to indicate to you that we did not observe the Arkansas Commission scale, either one line or two lines, in adjusting our rates into that territory, but were forced on account of the Arkansas Commission scale operated from Pine Bluff
3944 and the low rates into Pine Bluff to adjust our rates to a basis which would approximate the combination of locals.

Q. Were any changes made in the case of the commodity rates that had an influence on that adjustment by the Arkansas Commission scale?

A. The commodity rates that were established by the Arkansas Commission, both carload and less than carload, were a larger list than was operated under the Interstate adjustments and forced the addition of commodity rates, both carload and less than carload, to our commodity list as follows:

Beer, less than carload; barrels, carload; canned goods, carload and less than carload; excelsior, carload; fire-brick, carload; furniture—first, second, and third and fourth classes, Classes A, B and C, with special description for each.

Ice, carload and less than carload; mattresses, carload and less

than carload; spring bed, carload and less than carload; pottery and stoneware, carload.

In addition to establishing these commodities which took the rates out of the class rates and established a special commodity rate thereon, the Commission very materially reduced the then existing commodity rates, both carload and less than carload, by their very low scale within the state.

Q. Independent of the reduction mentioned in your last statement, what effect did the change from class rates to commodity rates have, on the commodities you have enumerated?

3945 A. It reduced the rates very materially.

Q. Do you remember the testimony of Judge Wallace, who was the Chairman of the Commission at the time the first Commission Tariff was put into effect, in which he stated:

"Interstate rates on the Frisco from Missouri and Arkansas points north of Fort Smith and out of Fort Smith were lower (that is, prior to the Commission rates) than Arkansas rates from Fort Smith and north of Fort Smith, and the Fort Smith jobbers could not compete for the business; and a tariff was put in effect by the Commission for the purpose of reversing that order of things."

Do you remember his testimony in that respect?

A. I do.

Q. Do you know anything about that tariff and its effect? Say what you know about it?

A. The knowledge that I have of it is based upon the information I received from the line that was involved, the Frisco, at that particular time, at hearing the discussions before Judge Wallace.

Q. Now, Judge Wallace stated it had that effect: that is to say, that it transferred that trade from Missouri points north of Fort Smith into Fort Smith to enable that town to compete with other points north:

How did it have that effect?

A. That would be the natural effect.

Q. How?

A. For the reason that the rate into Fort Smith plus the rate out, under the very low Arkansas Commission scale covering all the commodities that would necessarily move from Fort Smith

3946 into that territory, would make a lower through rate than the rate into Springfield, which was the point involved, or Joplin, any of the jobbing points in that district, plus the rate from Springfield or Joplin into this territory.

Q. A good deal has been said in this case in regard to certain zones in connection with trans-state business and the rates applicable between points embraced in the territory covered by the zones.

I wish you would state what effect, in your judgment, the development of that character of trans-state business had upon other classes of business and rates that obtained in respect of other classes of business.

A. The more trans-state business you can secure, the larger your volume and the less the cost per unit, trans-state business on account of its length of haul being probably the cheapest traffic you handle.

The rates on the trans-state traffic are usually fixed for you. They are rates in which you have no control, as a general proposition, and it is a question with the carrier in soliciting and securing trans-state traffic to increase that particular class of traffic on the line so as to increase the total tonnage, secure the long haul freight and by that means reduce the cost of handling all other freight within the state, as long as you do not go beyond the capacity of your railroad. Until you do get to the capacity of your railroad that appears to be the proper principle.

3947 Q. Mr. Watson, the state introduced evidence for the purpose of showing that the revenue per ton per mile on your road was 96 per cent more in the month of January, 1909, than it was during a period, comprising the last six months in 1907:

Was this assumed increase brought about by the increase in the state rates?

A. I should say not. The increase in the revenue per ton per mile, which I understand that statement shows can be brought about by various conditions, only one of which is increase in rates. There might be a shifting of tonnage, change in the character of traffic that you handle during this month of January, as compared with the average for the preceding six months. That would be true of both state and interstate.

Q. Is a change in the revenue per ton per mile indicative of a corresponding change in the revenue received for the same period?

A. No, there could be an increase in the revenue per ton per mile and a decrease in the revenue received.

Q. One of the exhibits introduced in this case (filed I think, by Mr. Kimbell) indicates an increase as between the last one-half of the year 1907 and January 1909, of 96% of the revenue per ton per mile:

I wish you would state if, in your judgment, there was that increase in the revenues as compared with the business done in those two periods.

3948 A. I don't believe it could possibly be. I might explain why I think that.

The revenue per ton per mile does not necessarily indicate anything as to the revenue one way or the other.

The higher class of traffic that you handle the more your revenue per ton per mile would be, but if you can increase your tonnage and reduce the character of it—that is, make it a lower character, your revenue per ton per mile would necessarily decrease, while the volume that you would handle at the decrease revenue per ton per mile would still increase your revenue very materially.

Now, I don't believe it would be possible, on the Cotton Belt, for a difference of 96% in the revenue to occur between any two months or between one month and the average for any period, because I don't believe it changes or shifts that much.

3949 Cross-examination.

By Mr. HILL:

Q. I don't know that I got your last answer: Are you questioning the accuracy of Mr. Kimbell's figures, is that the idea?

A. No, sir.

Q. Mr. Kimbell is one of my witnesses and I didn't know whether you were questioning the accuracy of his calculations or not.

A. No, sir, I was not.

Q. But you think that it was the shifting of traffic and not a shifting of rates that produced that strange, abnormal result: is that it?

A. I do, yes sir.

Q. The rates did not have anything to do with it?

A. The rates would not necessarily affect the revenue per ton per mile, to that extent.

Q. I am not saying "necessarily," but did they actually?

A. I can most positively say that it did not, to that extent.

Q. To what extent did it?

A. At the outside, I should say to the extent of fifty per cent. That is, I mean in revenue; not revenue per ton per mile. I am talking about the actual dollars and cents we received for transporting the traffic.

3950 Mr. MOORE:

Q. You mean it would be fifty per cent, or not to exceed fifty per cent?

A. Not to exceed fifty per cent.

Mr. HILL:

Q. Then these rate increases, in your judgment, did not exceed fifty per cent?

A. No; the revenue.

Q. That the revenue produced from your rate increase on state rates did not exceed fifty per cent: is that your answer?

A. No, that is not the answer. You were talking about revenue and now you are talking about rates.

Q. I am talking about revenue produced from that increase of rates.

A. The revenue produced from that increase of rates would be very hard to say unless we had the actual tonnage. I am only comparing actual figures, as I recall them, covering the revenue derived from traffic in January 1909, as compared with revenue derived from the same traffic in 1907 rates, and my recollection is that it is somewhere in the neighborhood of forty-five or fifty per cent; not to exceed fifty per cent.

Q. You mean by that what I mean: that your revenue was increased forty-five or fifty per cent by reason of that increase in state rates?

A. Yes. I will admit it just as you say it.

Q. No, I don't want you to do that, but I want to know whether you believe that to be a fact?

3951 A. That is what I believe to be the fact, as far as applying the increased rates——

Q. From forty-five to fifty per cent, you say?

A. Yes, sir.

Q. How much do you think the revenue was increased in your interstate rates, by reason of having the increased interstate rates that you put in a short time after you increased your state rates?

A. The interstate rates were not adjusted a short time after the state rates were put in. It required some eight or nine months to make the majority of the changes. Some of them are still being made.

Q. I understand that. But you put in a new tariff in December increasing your interstate rates: when did you increase your state rates—the 2nd of November?

A. Yes, sir.

Q. Now, that is the tariff I am talking about. You have changed that after that and are still changing but I think you herctofore testified that the changes after that were not material: do I recall correctly?

A. I don't recall making that statement, because I don't believe I would have made that statement. The rates that you have reference to are to the common points.

Q. What I am talking about is your increase of interstate rates which you made in December, following your increase in your state rates in November, 1908:

3952 How much increase of revenue did that produce, compared with 1907?

A. It would be very difficult to say that, Judge, without an analysis of the movement during that particular period.

Q. Mr. Kimbell's figures showed nine per cent—in round figures; I have forgotten the fraction—on revenue, in interstate, in January.

A. That is revenue per ton per mile.

Q. Yes, on interstate, in January 1909?

A. That condition could have been very readily obtained—

Q. I am not asking that: what I am trying to get at is what was done: how much of that nine per cent per ton, per mile, was due to the increase of interstate rates?

A. I don't believe you can get that information without an analysis of the interstate tonnage handled during that period.

Q. Really you cannot do anything about that increase of revenue per ton, per mile, without that analysis on both sides?

A. I don't think so.

Q. You are only guessing?

A. We are not guessing on that state proposition, for the reason that we got those figures. The State required us to keep them and we know.

Q. You have what figures?

A. The difference between the revenue derived from the

3953 state rates and the revenue derived from the court tariff, and the revenue before the voluntary——

Q. This was before the court tariff went into effect in 1909. The court tariff did not go into effect until the first of June. Have you any figures on that? If you have, I would like to have them.

A. I don't know that we have any figures.

Q. Has your office any figures?

A. I think we can look that up.

Q. Will you undertake to get that for us?

A. I will undertake to ask Mr. Kimbell to get them for you.

Q. I would like to have those very much.

You have not made an estimate on your increased revenue for January, due to an increase of your interstate rates. I would like to have your best estimate on that. You have estimated the state to be from forty-five to fifty per cent. Now, I want to know what you think the interstate was.

A. I have estimated the state from my recollection of the results. I cannot remember the interstate because I haven't any recollection of the results, because we haven't any results.

Q. What do you think it would be——

A. I don't think there is any appreciable increase in the state rates that would appear in the revenue in January 1909.

3954 Q. I am talking about the interstate?

A. I should have said interstate. I don't believe there is any appreciable change in the interstate rates that would show in the revenue for January, 1909.

Q. Then you made an increase, according to your estimates, in the state rate of from forty-five to fifty per cent, without any appreciable increase in your interstate rates?

A. During January, 1909, you mean?

Q. Yes.

A. During January, 1909, the new state rates were in effect; the new rates established by the railroads and the Commission for application in the state, were in effect, and there had not been sufficient time allowed to permit the railroads to re-adjust their interstate rates.

Q. Why not? You got your injunction from Judge Van Devanter about the 1st of September and you required only thirty days in which to put in a new tariff?

A. It requires somewhat longer than that to put in a tariff. We tried to put in the state tariff effective October 15——

Q. You put in your tariff on the interstate rates in January?

A. Not all of the interstate rates; Arkansas common points, and only a portion of the rates to the Arkansas common points. You cannot adjust them all together. The rate fabric is one that you cannot possibly re-adjust from one end of the state to the other, at one time.

3955 Q. How long does it usually take to do that?

A. A pretty fair example was this. Here is a case where we had to reduce our rates, shown by that exhibit (indicating), which required from April to September to prepare those figures and put them into shape.

Q. During such period as that, what would you say was the relation between your state and interstate rates?

A. During what period?

Q. Such a period as you are describing: when you put your state rates in and it takes a long time to put in your interstate rates?

A. They are in a very bad condition; as far as the relation is concerned, there is no relation. You have destroyed the relation.

Q. There is no relation there at all?

A. Not until such time as the rates are adjusted.

Q. What do you mean by "relation"?

A. I mean that the state rates base the interstate rates.

Q. Control them, in other words?

A. Yes, sir, control them.

Q. When you have been referring in your testimony to relation between state and interstate rates, you are not referring to the cost relation of carrying those commodities, state and interstate, but you are referring, as I understand you, to the effect that the state rate has on the interstate rate: is not that true?

3956 A. That is true; yes. Both sections of the question are true.

Q. Both of them?

A. Yes. There is a cost relation always, regardless of what the scale rates may be.

Q. What is that cost relation?

A. That is brought about by the adjustment produced by the classification.

Q. Do you know the cost of carrying any commodity, Mr. Watson?

A. The actual cost of carrying any one commodity?

Q. Yes.

A. No. I don't think anyone does.

Q. You cannot very well adjust the cost relation without having any statistics?

A. Yes; that is what we prepare the Classification for. That is exactly the object of the classification.

Q. The classification is the only cost relation that there is in fixing the adjustment between state and interstate, is it not?

A. I don't believe I quite catch the object of your question.

Q. Well, no matter what the object of it is, if you understand the question.

A. I only want to answer it properly. I can answer it two ways.

3957 Q. Answer it both ways.

A. The cost relation as between state and interstate rates is the classification. That is the cost relation.

Now, there is another cost relation as between state and interstate rates and that is where your state rate becomes so low that the railroads do not feel they can meet that low rates and carry the traffic.

Q. Then they just go out of business?

A. Yes; as the Cotton Belt has done in quite a number of cases.

There is quite a little business to Little Rock based on state rates, that they don't handle.

Q. The only way you can adjust any cost relation between state and interstate rates, so far as you know, is through the classification of the various commodities and classes?

A. That is the method of arriving at the cost relation.

Q. So far as you know, that is the only method?

A. It is the only method so far as the class rates are concerned, yes, but there is quite a large list of commodity rates.

Q. How do you adjust them?

A. Those are adjusted as near as we can do so.

Q. Just by intuition?

A. And judgment—"guess" I believe you call it.

Q. Mr. J. M. Johnson called it "guess." I did not call it that.

You have the average cost per ton per mile on all your
3958 commodities, and then when you have that, in fixing rates you exercise your judgment (or, as Mr. J. M. Johnson says, exercise your Guessing power) to determine what the rate ought to be?

A. No, not altogether. To determine what the minimum rate ought to be, but not what the rate ought to be, because there are a great many other conditions that fix that rate.

Q. But that is the only way you get at a cost relation—the way in which I have indicated?

A. That is the only way you prevent yourself from handling traffic which you should not handle.

Q. Your first exhibit, number 50, gives the class rates to Little Rock and Pine Bluff from Memphis, Cairo; Memphis-St. Louis; and Memphis-Kansas City——

A. Maybe I can make a statement that will explain.

The exhibit only shows the difference between the rate from Memphis to Little Rock and Pine Bluff, and the rate from Cairo, St. Louis and Kansas City to Little Rock and Pine Bluff, showing the "differential" that has been so often used in the discussions in regard to this matter.

Q. This (indicating on exhibit) should be "differential" here, instead of "difference"?

A. No, that is actual difference. Those are the differences in rates——

Q. Is the "difference" and "differential" the same thing?

3959 A. The "difference" and "differentials" are the same.

Q. Do I understand you to say that you put this in to show that so far as the rates are concerned, that the length of haul was observed?

A. That the length of haul is observed. That the differential which is used in making the relation, has a relation to the length of haul. The further you go from Little Rock the higher the rate becomes.

Q. You have got Little Rock and Pine Bluff down here at the same rate: is that true?

A. They do take the same rate.

Q. There is a difference in the haul there?
A. Yes, sir.
Q. You did not observe the difference in the length of haul?
A. It is not so great.
Q. It may be little, but it is there.
A. The difference in the haul, between Little Rock and Pine Bluff, I would say, taking the average Iron Mountain one way and the Cotton Belt the other, is probably fifteen miles.
Q. What is the rate on first-class goods, from Memphis to Cairo?
A. From Memphis to Cairo?
Q. Yes.

A. I couldn't tell you, offhanded. It is something about
3960 fifty cents per hundred pounds.

Q. You make a difference on this of twenty cents, running from Cairo, through Memphis, to Little Rock and Pine Bluff?
A. We haul it direct from Cairo to Pine Bluff, not through Memphis.
Q. Take it from St. Louis?
A. We would not haul it from Memphis to St. Louis.
Q. No; I mean, take the St. Louis rate instead of the Memphis rate. You have the St. Louis rate here, to Little Rock and Pine Bluff:
What would be the difference on that haul to Pine Bluff? Forty-five miles, would it not?
A. The difference between St. Louis and Cairo to Pine Bluff and Little Rock?
Q. No; St. Louis to Little Rock and Pine Bluff; same rate; on a difference of forty-five miles?
A. That is one of the conditions brought about by something else besides cost of service——
Q. I am not talking about that: I am trying to find out the difference.
A. The Iron Mountain distance from St. Louis to Little Rock is 345 miles.
Q. And what is it to Pine Bluff?
A. Forty-two miles further, on the Iron Mountain. Our distance would be 402 miles.

Q. How much distance is disregarded, then, in those
3961 rates?

A. How much is distance disregarded in those rates?
Q. Yes.
A. The rate to Little Rock and to Pine Bluff being the same from Memphis, the rate from St. Louis is differentially adjusted to the Memphis rate.
Q. I am trying to get at how much distance is disregarded on the same rate from St. Louis to Little Rock and Pine Bluff?
A. You mean by the Cotton Belt?
Q. By both of them.
A. By the Iron Mountain the difference in distance is 42 miles. Via the Cotton Belt the difference in distance is in favor of Pine Bluff about 30 miles.

Q. One road disregards 30 miles and the other disregards 32 miles?

A. One road disregards 30 miles to meet the competition of the other road at Little Rock, and the other road disregards 42 miles to meet the competition at Pine Bluff.

Q. This table, then, does not prove that you have regarded distance very strongly in fixing these rates, does it?

A. It proves that the difference in the distance is a factor in making the rate from St. Louis, Cairo and Kansas City to Arkansas points, as compared with rates from Memphis upon which they base.

3962 Q. I believe you gave us some examples the last time you were on the stand, about rates from St. Louis to Paragould, and carrying the stuff right on through Paragould to Memphis:

Distance was disregarded in that, was it not?

A. Yes, sir.

Q. Did you not also give some examples of traffic being carried right through Arkansas to New Orleans for less than if that same traffic was stopped in Arkansas and delivered there?

A. Yes, sir.

Q. Also to Helena and Arkansas City?

A. Yes, sir.

Q. In all those cases distance was disregarded, was it not?

A. Distance would not be the controlling factor. It is not disregarded entirely.

Q. Would you not say it was disregarded when you charge more to take some stuff to Pine Bluff than you would to take it to New Orleans, carrying it several miles further?

A. The same competitive conditions did not exist at Paragould that existed at Memphis. That is what caused that difference in adjustment.

Q. The facts are that distance was disregarded in all those New Orleans rates as compared with hauling the same stuff in Arkansas?

A. I can't agree with you.

Q. How much of a lopping off of distance would you re-

3963 quire, before you would say distance was disregarded?

A. If you will select rates that are governed by the same conditions in other respects, you will find that the distance feature is always borne in mind.

Q. I am not arguing that you have committed a sin in doing that, but I am just trying to get at the basis.

Take pianos, from St. Louis, on the Iron Mountain to Little Rock, and then on through Little Rock to New Orleans; what is the difference in the rates?

A. I don't recall the figures now. I understand the rate to Little Rock is higher than the rate to New Orleans. It is probably about the same on pianos.

Q. Then you would have to haul them all the way from Little Rock to New Orleans, and get less money for hauling them to New Orleans than you would for delivering them at Little Rock?

A. Or stay out of the business entirely.

Q. That is the situation?

A. Yes, sir.

Q. You say you do not regard a rate like as disregarding distance?

A. I don't, no; for the reason that that particular traffic is traffic that you must participate in on the basis that you can get it or do without it entirely, and I don't believe that the difference in the cost of handling that particular traffic would justify staying out of it.

3964 Q. That is a very good reason for going into it and I would agree with you if you would say that distance ought to be disregarded.

A. Maybe I can understand you better now. It is disregarded to that extent.

Q. As a matter of fact, it is disregarded and you think it ought to be under such circumstances as you have stated?

A. Yes, but you are comparing one rate governed by one condition, with another rate governed by another condition, and in regard to those particular rates you must disregard——

Q. I would not for a moment attempt to argue with you, but I am trying to show that it was disregarded.

A. It is disregarded.

Q. Now, take the citrus fruit rates from California to Arkansas, and on through Arkansas to New York and Boston:

Distance is disregarded in those rates, is it not?

A. That is a blanket or zone rate, yes.

Q. In which distance is absolutely disregarded, carrying the same thing, for varying distances of more than one thousand miles in the zone?

A. Yes, sir.

Q. Now, Mr. Watson, I want a little explanation of this exhibit number 51:

Take your first column and first item, which is "Canned goods, carload":

3965 The rate in effect on April 10, 1900, to the first station was 30 cents. Then after the Commission tariff went into effect you reduced that to 24 cents:

What does that prove?

A. It proves that if the Commission tariff had not been made effective we would still be making six cents per 100 pounds more than we were after the Commission tariff became effective.

Q. Then your Commission tariff reduced all your interstate rates to the amounts shown in the third column of this exhibit?

Mr. MOORE: Not to the amount; by the amount.

A. By the amount.

Mr. HILL:

Q. Yes, that is right. Shown in the third column of each one of these separate——

A. Yes, sir.

Q. You do not mean that your interstate rates became the same

as your commission rates, but this was the effect that the Commission rates had on it: is not that true?

A. Yes, sir.

Q. What was the Commission rate on that first item you have?

A. The distance from Memphis to Sorrels is 160 miles. The Commission rate on canned goods, carload, for 160 miles, would have been 16 cents.

Q. You made it 24 cents?

3966 A. We made it 24 cents.

Q. Now, is that a fair example of the way everything runs in this Exhibit number 51?

A. That would not be a fair example because it does not show a sufficient amount of difference. By going down that column you will find some places where it reduced the rate sixty per cent.

Q. Let us take some other. I want the actual situation about this.

A. If you will not use the first distance, but the distance down about Eagle Mills, for example——

Q. I see Fordyce down here and I know Fordyce is a pretty good size town.

A. That is a fair example, but I just wanted to get the average distance.

Fordyce is 40 miles south of Pine Bluff. Eagle Mills is quite a little town.

Q. I don't know Eagle Mills, but let us take Fordyce: the old rate was 44 cents, but after the Commission rate went into effect it was 28 cents:

What was the Commission rate for that corresponding haul?

A. The distance from Memphis to Fordyce is 195 miles, and the rate for 195 miles, under the Commission tariff, would be 16 cents.

Q. And you reduced it to 28 cents?

3967 A. We reduced it to 28 cents.

Q. As against 44 cents?

A. Yes, sir.

Q. Now take your Eagle Mills that you want to compare with.

A. Sixty miles, and the rate shown here, prior to the Commission tariff, was fifty cents; subsequent to the Commission tariff, thirty cents.

The distance from Memphis to Eagle Mills is 215 miles, and the Commission tariff rate for that distance, on canned goods, carload, would have been 17 cents per hundred pounds.

Q. Now, is that a fair example of the rates which prevailed, interstate, as against prevailing Commission rates?

A. Yes, that is a fair example to that particular territory.

Now, if you will go down to Lewisville, further down——

Q. Wait a moment.

Your interstate rate on that canned goods movement there was 30 cents: for a similar movement of canned goods, under the Commission rate, a state movement, the rate was 17 cents?

A. Yes, sir.

Q. Going back to Fordyce: your interstate rate was 28 cents and the Commission rate 16 cents?

A. Yes, sir.

Q. Going back to Sorrell: your interstate revenue was 24 cents, and your Commission rate, I believe, was 16 cents?

A. Yes, 16 cents.

3968 Q. Is that about the proportion that your interstate rates will hold to your state rates?

A. On canned goods, yes.

Q. Well, does that proportion hold good as to these other commodities?

A. No, sir, it does not.

Q. About what proportion?

A. It would be necessary to take each and every rate in order to get that proportion. We could not get a general average on account of the peculiar manner in which this state tariff was constructed. It is different from any other tariff we have got. It was placed on a different basis than any other rate adjustment we had ever seen, or have seen since.

Q. It was a strange and abnormal being?

A. Yes, sir; absolutely. Some of the rates were really ridiculous.

Q. Now take some of these other things as an example: I want something where there is considerable movement.

A. Take the wire and nail movement. There is a pretty good movement of that in carload and less than carload.

Q. Is this wire and nail example taken on the commodity?

A. It is taken upon the commodity description of wire and nails, yes, sir.

Q. Take some point there that you think is fairly representative of the situation we are trying to get at.

3969 A. That is what I tried to explain. There is no point that is fairly representative, for the reason that the scale in the Commission tariff is one that does not follow any regular basis. You have a maximum for three hundred miles which applies, regardless of the distance you handle the shipment over the three hundred miles.

Q. Then you cannot keep up a very good parity between the interstate and the state rate?

A. We did not attempt to do so. The only parity is to prevent the business being consigned to one point and reconsigned from that point at a rate less than our through rate.

Q. You did not attempt to preserve any parity during the existence of the Commission tariff between your interstate rates and the Commission rates themselves?

A. For distance, no.

Q. To illustrate that fact take some point, on wire and nails, where there is considerable movement: You will know best what will illustrate your point.

A. Take Fordyce, the same point you selected before.

Q. There ought to be considerable movement from Memphis to Fordyce on wire and nails.

A. I will say for your information that the American Steel & Wire Company store their wire and nails at Memphis and make their carload and less than carload shipments from that point.

3970 At Fordyce, prior to the Commission tariff, the rate was 36 cents (column 1); subsequent to the Commission tariff it was 20 cents. The reduction was 16 cents.

Q. What would the Commission rate have been on that?

A. The Commission rate from Memphis to Fordyce, on wire and nails, would have been 14 cents; distance, 195 miles.

Q. Then your interstate rate was six cents above the Commission rate?

A. Yes, sir.

Q. Now, take it on wire and nails, less than carload, at the same places: I reckon there is a good movement of that, is there not?

A. Yes, sir.

From Memphis to Fordyce, the rate on wire and nails prior to the Commission rate, was 45 cents; subsequent to the Commission rate it was 31 cents; a reduction of 14 cents per hundred pounds.

The rate from Memphis to Fordyce, a distance of 195 miles, would have been under the Commission tariff, 20 cents.

Q. There is a difference of 11 cents, then, between your interstate rate and the Commission rate on that same movement?

A. Yes, sir.

Q. Those are pretty long hauls for the Commission rate. Take some point of about an average state movement, say fifty miles, and make some comparisons there.

3971 A. The Commission rate on wire and nails, for a distance of fifty miles, carload, was eight cents; less than carload, 14 cents.

Q. Pick out some station here that would be covered by that rate.

A. You cannot, because the distance from Memphis to——Sorrells is the first station, a distance of 165 miles.

Q. Have you anything in this table that you can make a comparison with—I believe it is in evidence here that on your road the average state haul is something like fifty miles: I have forgotten the exact figures.

A. Thirty-four miles.

Q. If you are certain about that we will go ahead.

A. No, I am not certain, but that is my recollection of the January, 1909, exhibit.

Q. I was thinking of the six months' exhibit. (After examining record.) Well, it is about 41 miles. That seems to be the average haul on your road for state business. Take a distance of about forty-one miles.

A. Say forty-one miles. That is approximate. From Pine Bluff to Fordyce the rate would be the forty-mile rate on wire and nails, carload, eight cents; less than carload, fourteen cents.

Q. That is the Commission rate?

A. Yes. The Commission rate would be, for 155 miles, the distance from Memphis to Pine Bluff, on wire and nails, carload, 14

cents; less than carload, 20 cents. That would make your
3972 through rate from Memphis to Fordyce based on a combination of locals through Pine Bluff, using the Arkansas distance tariff rate for both factors, 22 cents, carload; less than carload, 34 cents.

Q. I thought you said eight and twenty, did you not?

A. Eight and fourteen was the first, and fourteen and twenty is the second; it would be twenty and thirty-four——

Q. That would be the Commission rate?

A. That would be using the Commission rate as a basis to Pine Bluff, and Pine Bluff to Fordyce a combination of locals; using the Commission tariff for both factors would produce that result.

Our rate from Memphis to that particular point, Fordyce, subsequent to the Commission tariffff was: carloads, 20 cents; less than carloads, 31 cents.

Q. Still that does not get at the point I am asking about: What I want to get at is this:

The evidence here shows that the average movement on your road would be about forty-one miles, and on the Iron Mountain about seventy-two miles:

There is where the real test of the Commission rate would be, on the average state movement. There were not many movements for these long distances, under the Commission rate.

Have you any case where your interstate rates compare with 41 and 72 miles?

A. No, for the reason that the distance from Memphis to our junction point with the lines operating out of Memphis, is
3973 sixty miles. Therefore we have no rates for a distance from Memphis less than sixty miles.

Q. Then your table is comparing actual interstate movements with comparatively few, if any, state movements?

A. No, our table is actually showing the result of the Arkansas standard freight distance tariff upon our interstate rate adjustment.

Q. But when I asked you to compare it, as you have been doing with the Commission rate, it really had no basis to compare the real movement.

The real movement under the Commission rate would not be for these distances that you have been giving?

A. No, it would not.

Q. So these tables would not serve to compare your interstate rate, under which your interstate stuff actually goes, with the state rate, under which the stuff actually goes?

A. No, sir.

Q. This is really illustrating what we might call the practical effect of the Standard Distance Tariff on your interstate rates?

A. I cannot agree with you on that work "practical". It illustrates the actual effect of the Standard Distance Tariff on our adjustment.

In other words, had we not changed that adjustment as we did change it, there would have been no movement from Memphis to

Fordyce at all. The movement would have been from
3974 Memphis to Pine Bluff, at the interstate rate, and from Pine Bluff to Fordyce at the state rate, and the result would have been that instead of handling through traffic from Memphis to stations south of Pine Bluff, we would have handled it out of Pine Bluff.

Q. You had to meet a condition where a combination of other rates would let the stuff in cheaper than what your existing rates were?

A. Not a combination of other rates. A combination of the rates to Pine Bluffff, plus the Commission rates beyond.

Q. That is a combination of other rates.

A. I don't know just how you can call it that——

Q. I thought you were talking about both the Commission rates and your interstate rates; that would be a factor of both. It would be an interstate rate from Memphis to Pine Bluff.

A. Yes, from Memphis to Pine Bluff.

Q. And a state rate from Pine Bluff to Fordyce?

A. Yes, from Pine Bluff to Fordyce.

Q. I believe you stated a while ago that you did not have any control over these trans-state rates?

A. Over a majority of the trans-state rates, I think I said.

Q. That is heavy traffic, like lumber and grain. Your road has no control over——

A. No, we are the intermediate carrier.

Q. You are the intermediate carrier. You have to take
3975 what the other fellows give you, or not take the stuff?

A. Exactly.

Q. That is a pretty large traffic on your road, too, is it not?

A. It is and we hope to increase it.

Q. I don't know whether you have a "bridge" on your road or not; have you?

A. I don't know anything about that "bridge", Judge. I didn't have anything to do with that "bridge".

Q. By having no control, you mean by that having no voice in fixing that rate: You do not mean that there is any interstate Commission—or State Commission?

It is fixed by other carriers, and you being the intermediate line, have to take what the other carriers choose to give you?

A. No; what we feel we can afford to haul; not what the other carriers can afford to give us.

Q. You either put in that rate or stay out of the business?

A. That is it.

Q. They cannot compel you to haul it, but they can name the rate for which you will haul it?

A. For which we must haul it.

Q. And then it is up to you whether you will haul it?

A. Yes, sir.

Q. Those rates are very varying, too, are they not?

3976 A. That is a peculiar term to use, Judge. The rates differ.

Q. They fluctuate?

A. No, they don't fluctuate. They are stable.

Q. I did not know any of the rates were stable. I thought that you were changing them.

A. We are, wherever the conditions change; we have to have a new rate or go out of business.

Q. That is fluctuating, is it not?

A. The fluctuations are not as great as that word would indicate.

Q. You say they differ. Probably that is a better word. Your division sheets with the other roads will differ, too, will they not?

A. There is a competition in divisions just the same as in rates, you will understand.

Q. How is that division usually made?

A. That is a very difficult question, because they are not usually made on any fixed scale. There are just as many varying conditions that enter into fixing the divisions as enter into the fixing the rates.

Q. What are the usual bases for fixing the division.

A. I can name some of them to you:

Mileage pro rate; constructive mileage pro rate; rate pro rate; revenue of locals—I could name them to you by the hour.

3977 Q. Those are the principal ones you have named?

A. Yes, sir.

Q. That will make differences as to what your trans-state revenue amounts to, as the different basis is adopted for each rate?

A. That would indicate that you understood my former answer to mean that we had different bases for the same service between different carriers offering the business at the same junction, which is not true.

Q. I did not mean that. I meant the whole body of your trans-state business.

You have different bases to reach your trans-state revenue and they will differ. That is what I mean.

A. It may differ as to service in different directions, but it does not materially differ for the same service, under the same conditions and on the same traffic. But if we were to take a shipment, as an example and to indicate why I am trying to differentiate—if a shipment was offered to us on a point on the Southern Pacific, we would be forced to allow a division that would compensate that line for turning it over to us.

If the same shipment were to originate on the I. & G. N., who have not this long line to New Orleans, the revenue for that line for this service would probably be somewhat less than we would have to allow the Southern Pacific.

Therefore, on the same traffic, from two different points, on two different lines, our revenue from the junction point to
3978 destination or as far as we would handle the traffic, would be different.

Q. Your service would be the same but your revenue would differ: that is the point I am trying to get at, and which I understand is a fact.

A. That as a general statement would not serve, but would have to be confined to the various kinds of traffic.

Q. Have the examples which you have taken up about that in Exhibit 51, fairly indicated the situation which you intend to represent, without going into further detail about it?

A. I don't know what you mean by "fairly" used in that connection, Judge.

The statement as it stands is indicative of the adjustment to the territory covered, and the questions you have asked in connection with the individual stations would indicate the differences at those particular stations, but would indicate the principle to all the stations.

Q. That is what I want to get at: have I asked you enough detail in bringing out these questions about Fordyce and Eagle Mills and these other points that you have taken in detail, to fairly represent, not in dollars and cents, but the principles you are seeking to show by this?

A. Yes, sir.

Q. There is a word that you used there, that I was questioning Mr. Perkins about yesterday: I want to know if you
3979 use it in the same sense that he does, and that is the word "adjustment": what do you mean by rate "adjustment"?

A. That is a term that is used in connection with any body of rates. It is the method of making them; the method of arriving at the figures.

Q. As I understood it, Mr. Perkins said it was a scale; it was the rate itself. It was a term used for the rate itself, or the system of rates.

Is that the way you have used the term?

A. I have used in both senses.

Q. What other sense?

A. Both the senses you have just referred to. One as to the scale itself, which indicates that that is the rate adjustment, meaning handing you a statement of rates or tariff and indicating that is the rate adjustment in that tariff.

The other use of the word "adjustment"—as will be indicated by the verbiage in connection with it, is adjusting one rate to another.

Q. Fitting one to the other.

A. Yes. In other words, this adjustment as a scale is adjusted to the Arkansas rates.

Q. I believe I understand the term now. That is all.

3980 Redirect examination.

By Mr. MOORE:

Q. From what line of road do you reach Memphis?

A. We use the Iron Mountain rails between Fair Oaks and Memphis.

Q. I mean at the time Exhibit 51 was prepared?

A. When Exhibit 51 was made we used the Iron Mountain rails between Fair Oaks and Memphis, under contract.

Q. These rates you set out here in Exhibit 51, represent the rates from Memphis to the points that are mentioned on the two lines of road.

A. No, the points that are mentioned on our line, but they represent the rate from Memphis over the route, via Fair Oaks.

Q. Your Company handles that business in and out of Memphis by using these leased rails?

A. Yes, of the Iron Mountain.

Q. Is there a bridge charge?

A. Yes, there is a bridge charge.

Q. What is that?

A. That varies according to the class commodity.

Q. What is it on Class 1?

A. According to my recollection it is two cents. I would not be sure of that. You mean first-class?

Q. Yes.

A. Five cents.

Mr. HILL:

Q. Has not that been changed? Was it not two cents?

A. My recollection is that it is five cents, less than carload;
3981 and two cents for carload. I only testify from recollection. I cannot state as a fact.

Q. Does your road get any part of that bridge toll or does that go to the bridge Company?

A. It all goes to the bridge Company.

Mr. MOORE:

Q. Are the factors that you referred to a while ago as affecting the rate division between connecting lines, applied to varying conditions that exist on different hauls on different roads?

A. The lengths of the haul and competitive conditions——

Q. You were asked what figured in the division and you spoke of mileage and other factors, a number of which you enumerated:

What I want to know is if those factors operate and apply to the varying conditions as they may arise in different territories, or on different lines, or on all different commodities?

A. They do. Sometimes you will find several of the rules that I have shown in one set of divisions between two carriers.

In other words, the division on one rate will probably be on a mileage pro rate. On another rate, with the same carrier, a constructive pro rate; and another, a revenue pro rate or a rate pro rate.

Q. It depends upon the particular condition that exists as to the subject matter of the arrangement; but those factors are ap-
3982 plied to the varying conditions that may arise: that is what I want to understand?

A. Yes, sir.

Q. You spoke about the increase in revenue on interstate business, as between two periods—January, I believe, and the last half of 1907, and you were asked what the increase in interstate revenue was:

Mr. Bragg testified that there had been some increase in interstate revenue before the increase of the state revenue following the injunctions in these cases in 1907 and again in September, 1908:

Did that affect the ratio of the increase any?

A. It affected the revenue in January, 1909, yes, but to what extent it would be impracticable to say.

Q. I understand that, and you are not attempting to say whether the increase between January, 1909, and the period in 1907 was, either? You don't know?

A. I couldn't possibly say. I might add there, in connection with the testimony of Mr. Bragg, that the changes in rates that were made in the time referred to by Mr. Bragg, are not in any way based upon the state conditions. Those were readjustments of interstate rates which were not materially affected by the state rates.

Q. I want to call your attention to another matter in connection with the relative rates from St. Louis to Pine Bluff and Little
3983 Rock on the Cotton Belt and on the Iron Mountain lines: I believe business from St. Louis to Pine Bluff, on the Iron Mountain, goes through Little Rock, does it not?

A. Yes, sir.

Q. And business to Little Rock, on your line, practically goes through Pine Bluff?

A. It goes to Altheimer, twelve miles north of Pine Bluff.

Q. You, therefore, have the short line from St. Louis to Pine Bluff?

A. No, we haven't a short line from St. Louis to Pine Bluff. On the Iron Mountain the distance to Little Rock is 345 miles, and Little Rock to Pine Bluff is 42 miles, making 387 miles with them, and with us it is 402 miles, the difference being very small—387 miles as against 402.

Q. What affect do those conditions have upon the relation of the rates as fixed on the two roads?

A. The Iron Mountain fixing the rate to Little Rock would make it necessary for us to make the same rate or go out of business.

The distance from Memphis to Pine Bluff, via our line, and Memphis to Little Rock, via the Iron Mountain, is practically the same and the same rates will apply, and the adjustment to Little Rock and Pine Bluff and points taking the same rates from St. Louis, is differentially fixed on Memphis, which would make the rate from St. Louis to Little Rock and Pine Bluff the same.

3984 Q. Comment was made by counsel on this exhibit 51, in regard to its showing no mileage:

The effect that that does have is to show the effect (and that I understand is your purpose in introducing it), that the Commission state rates have upon the interstate rates that were in force on your road at the time the Commission rates were put into effect?

A. That shows the actual effect of the Arkansas state rates upon our interstate rates from Memphis.

In other words, we could not get, after the Arkansas tariff was made effective, the same through rates as were in effect prior to its effective date, for the reasons explained. That is, that the busi-

ness would be consigned to Pine Bluff and re-shipped at a lower through rate.

Recross-examination.

By Mr. HILL:

Q. Mr. Watson, I wish you would take this testimony of Mr. Perkins, which he put in yesterday, setting forth the table of rates from Memphis, on page R-21: that table wherein Mr. Perkins has shown that the rate from Memphis Bridge Junction to various points in Arkansas, is a Memphis rate, plus the bridge toll, and in giving those rates he has put the bridge toll at two cents, which fits his theory that those rates were made on the Arkansas Commission rate, plus the bridge toll:

3985 Now, if the bridge toll is five cents that would not fit with those rates very well, would it?

A. He does not say the bridge toll is two cents. He says the difference is two cents, but it may be possible that the bridge toll is two cents on all classes. My recollection is that it is five cents on less than carloads and two cents on carloads.

Mr. MOORE:

Q. It has been changed since the Commission tariff went into effect?

A. That is my recollection of what it is now. I won't be sure, because it does not figure in our rate adjustment.

Mr. HILL (to Mr. Perkins):

Q. This table, I assume, was intended to represent the situation in 1907, was it not, Mr. Perkins?

Mr. PERKINS:

A. Yes, sir.

Mr. HILL (to the witness, Mr. Watson):

Q. This table shows both carload and less than carload?

A. Yes, it shows the difference to be two cents on all classes.

Q. Mr. Perkins has explained that as being due to the two cents bridge arbitrary: if the bridge arbitrary is five cents on L. C. L., then his theory would not work on this table?

A. Yes, except on the first four classes.

Q. You say on that class it would not work?

A. On the first four classes.

Q. Have you anything that you can turn to, to find out

3986 whether your recollection or his is correct?

A. Not here, but I can get the information and supply it later.

Q. I wish you would.

A. I will do so.

3987 M. L. BYERS, a witness of lawful age, being duly produced, sworn and examined on behalf of the complainants, in rebuttal, testified as follows:

Direct examination.

By Col. J. M. MOORE:

Q. Please state your residence and occupation.

A. I am a resident of St. Louis and my occupation is Chief Engineer, Maintenance of way, of the Missouri Pacific and Iron Mountain System.

Q. How long have you been connected with that system?

A. About six years.

Q. I wish you would state what experience you have had in railroad work?

A. I graduated from the Lehigh University as Civil Engineer in '88 and immediately entered the service of the Pennsylvania Lines west of Pittsburg, as Assistant Engineer in the maintenance of way department; I remained in that capacity on various divisions and in the office of Chief Engineer for about five years.

3988 I was then promoted to be Engineer maintenance of way and served on various divisions of the Pennsylvania Lines west of Pittsburg, in that capacity, until 1901.

I was transferred to the General Manager's office on special work, principally connected with transportation matters, as General Investigator.

Afterwards I resigned from the Pennsylvania service to accept the position of Assistant Manager of erection of the American Bridge Company, a subsidiary of the United States Steel Corporation. I was on the Pittsburg district where I had charge of the erection of steel bridges and buildings in Ohio, Indiana, West Virginia and several other states and a portion of Canada.

I resigned from that position to accept the position of engineer of maintenance of way of the Baltimore and Ohio and the Baltimore & Ohio Southwestern system.

After about a year in that position I was promoted to be assistant to the General Manager, where my duties were principally connected with the reorganization of the accounting and reports in the Mechanical Department.

After about a year in that position I was promoted to be Assistant General Superintendent of Transportation in charge of local and through freight service.

I left the Baltimore & Ohio to accept a position as Assistant to the Chairman of the—I have forgotten now whether of the Board or the Executive Committee of the Rock Island Company, which at that time controlled the Chicago Rock Island & Pacific, the Frisco,

3989 the C. & E. I., and the E. & T. H. railway systems.

On taking that position I was assigned as Chairman of two committees, first on disbursement accounting and, second, on revenue accounting. The duties of those two committees were to reorganize the accounting and reporting structures of the four companies, to

secure uniformity so that a comparison of results could be more accurately obtained.

After Mr. Loree left the service of the Rock Island as its Chairman, I entered the service of the Missouri Pacific Railway System, and have been with it since then in my present capacity.

During the time I was connected with the Baltimore & Ohio Railroad I was selected by the President as Chairman of a committee on accounting, for the purpose of attempting to improve on the system of revenue accounting at that time in use.

The Baltimore & Ohio at that time was controlled by the Pennsylvania Lines, and Pennsylvania officials were in charge of the property; but instead of installing the system of accounting which was in use on the Pennsylvania Lines at that time, and which they considered obsolete, and entirely unsatisfactory for the purposes of the operating officials in studying results of operation and securing more accurate operation and more economical operation, they decided to endeavor to devise an improved system. That was worked
3990 out after examining into the systems in use on various railroads, and was installed on the Baltimore & Ohio System.

Shortly after Mr. Cassatt, then President of the Pennsylvania Railroad appointed a committee consisting of representatives from the allied lines of the Pennsylvania, the Pennsylvania Railroad, the Pennsylvania Lines west of Pittsburg, the Baltimore & Ohio, the Chesapeake & Ohio, and the Norfolk & Western, to take up the question of working out a better system of disbursement accounting, which should be uniform on all of those lines.

I was a member of that committee as one of the representatives of the Baltimore & Ohio System; and after considerable investigation the Pennsylvania Lines through this committee, adopted practically the system that had been adopted by the Baltimore & Ohio.

Later, when I entered the service of the Rock Island Company one of my duties was to install a revised system of disbursement accounting; and practically the same system as that adopted by the Pennsylvania Line was installed on the Rock Island, being modified slightly because of the difference in the organization of the two companies.

After entering the service of the Missouri Pacific System the difficulties in regard to the system of disbursement accounting in use, brought about a request for me to assist in the installing of a system of disbursement accounting on those lines.

3991 And practically the same system was installed there.

Later the Interstate Commerce Commission took up the question of revising their system of disbursement accounts, because they had been found to be out of date, and after considerable study of the question, in which the Commission, principally through Professor Adams, consulted very freely with various railroad organizations among others the American Railway Association Committee on Statistical Inquiry, of which I was a member for a number of years, they adopted their present system of disbursement accounting, which is, except in minor particulars, the system which was installed origi-

nally on the Baltimore & Ohio Railway by the committee of which I was Chairman.

Q. Can you state what changes were made in the system of accounting, under the method adopted by the Baltimore & Ohio Committee, and particularly with reference to that branch of accounting which related to the disbursement of operating expenses?

A. The changes were such as to produce an entirely different distribution of the charges; and the principal object of the new system of accounting was to avoid the placing of two items of expense in one account, which two items were brought about by two entirely different characters of operation; and which, consequently, could not be measured with any reasonable degree of accuracy by a com-
3992 mon unit.

The old systems of accounting in a general way were apparently based on the idea of attempting to get at the cost of a particular class of service. As, for example, the cost of passenger service, or the cost of a class of freight service. But for operating purposes this was entirely unnecessary, and defeated the purposes for which operating statistics are needed, namely, analysis of the operations, with a view to determining where the operations are abnormal, and with a view of promptly correcting the operations so as to secure economy operations.

Q. The question has arisen in this case, Mr. Byars, as to the qualifications of various officials for the purpose of determining operating expenses and determining which expense should be divided between branches or classes of operation: some testimony has been given that accounting officials were better qualified to judge of the proper distribution of that kind of expense—say expense of maintenance of way and structures, or equipment, than the operating officials. I wish you would state in your own way what your views are on the subject as to the relative opportunities and ability of the two classes of officials—that is, the operating officials and the accounting officials, to determine the relative expense or the distribution of expense of the two branches of service?

A. My opinion is that, other things being equal, the experience of the operating officials is of a character which makes it much
3993 better for them not only to design such systems of accounting but to interpret the results that are obtained.

There has been a very great change in the line of thought in railway service in regard to that particular thing in recent years, and to my mind it has been caused very largely by the growth of the systems themselves.

In former days of railroading the systems were comparatively small and it was possible for the operating officials to get over the property so frequently and to be so intimately in touch with the details of operation that they did not feel the need, especially, of operating statistics to aid them in securing economical results. But with the growth of railway systems, that condition has changed and today the systems are so large that it is necessary to have something to direct their attention to operations which seem abnormal, and where their immediate personal attention is probably most needed.

In other words, having very much more extended duties, it is necessary to devise means for economizing their time in the performance of those duties.

I think, perhaps, I can illustrate what I have in mind by a resort to historical circumstances that are probably very well known to nearly everyone. In ancient times the Battle of Ivry was one of the celebrated battles, and King Henry of Navarre was personally in charge of one of the armies engaged in that battle. According to accounts he not only was personally in charge but he actually
3994 personaly led the attack that was made by his army on the enemy. That illustrates the old style of railroading, where the units were so small that the man in charge could be actually in charge of practically all operations, and be immediately on the ground to see them performed.

On the other hand, a few years ago there was the Battle of Mukden and Marshal Oyama at that time had nearly half a million men on the battle field that extended over several hundred miles. The accounts of that battle seem to indicate that he was probably forty miles away from it. He did not in any way attempt to lead the charges of the various portions of his army but he was informed by means of telegraph or telephone service of the progress of affairs from time to time, and directed them through that knowledge. If he had attempted to lead any one army he would not have known what was going on elsewhere and probably would have been defeated. That illustrates the method of operation of the large railroad systems today. It is necessary to use statistics to secure economical operation and the operating officials of today have been gradually trained to the use of such statistics. They have the great advantage of those not familiar with operations, that they have a better knowledge of what the figures actually mean.

Q. Mr. Byars, where does the primary information that is the basis of those figures or compilations that are prepared by the accounting officers come from?

3995 A. The primary figures must of necessity be furnished by the operating employes. The compilation of those figures is from one point of view a matter of no importance. That is, they can be compiled by the accounting employes or by the operating employes, or they can even be compiled, as has been done for a number of years, by the New York Central Lines, by an electrical machine which was designed for the purpose.

The main feature of importance is as to where they can be compiled in order to place the information most quickly in the hands of the operating officials for their use in securing economy of operation.

The actual interpretation of those results can only be satisfactorily made by persons who have gained a knowledge of what the figures really mean. It may be that the accounting officers have gained that knowledge through their study of operations, or it may be that the operating officers are the ones who use the figures. But in individual cases, in order to interpret the figures successfully, it is

necessary to have knowledge of operation, and, consequently, of what the figures signify.

For example, if I received a statement of sales of various kinds of cloth, some of them silk, others cotton, and that statement showed the price at which those kinds of cloth were sold, I would have very little idea from looking at those figures whether they were correct or not, because I do not know the values of those different kinds of cloth. If those figures, however, were submitted to a merchant who was entirely familiar with the value of fabrics of that character, and if in those figures there was an error whereby one of the fabrics was shown at two or three times the cost it ought to have sold for, the probability is that he would at once notice it, whereas one who was not familiar with the meaning of the figures would have passed the error by without detection.

3996

Q. The primary information, then, that is, the information as to the practical operation, is collected by the operating officials and goes from them to the accounting department: is that correct?

A. The primary information is collected by the operating employes and in some cases it is transmitted to the accounting department for compilation, and in other cases it is transmitted to the operating department for compilation; and in still other cases it is compiled partly by the operating department and finally is completed by the accounting department.

The New York Central System, several years ago, when I investigated it, used to send this primary information very largely to the accounting department, where it was compiled by the use of electrical machines of the same type that were then used in the compilation of census information.

On the Pennsylvania Lines west of Pittsburg, at the time I was connected with them, the information in regard to the operations was largely compiled by the operating officers. Some of it was compiled by the accounting officers.

3997

On the line with which I am connected today—

Q. You mean the Missouri Pacific?

A. Yes, sir, the Missouri Pacific System. The compilation of maintenance of way operations, for example, is made almost entirely by the operating officials, and the interpretation of those figures is also made by the operating officials.

The method of compilation and system of figures was designed entirely by the operating officials.

Q. You are directly connected with, I believe, and have charge of maintenance of way department of the Iron Mountain and Missouri Pacific System?

A. Yes, sir.

Q. The defendants in this case have presented a method of division of expenses of operation between state and interstate business, by dividing expenses between passenger and freight service on a basis assumed by them; and then they undertake to make a division of expense of operation between each of those branches. For instance, on freight the expense of conducting freight traffic seems to have been ascertained by them by dividing into certain groups,

beginning with maintenance of way and structures, and dividing that between two classes of trains that operate on the road, through trains and local trains. After having ascertained the expense of each class of train then they proceed in the manner adopted
3998 by them to divide that between state and interstate traffic respectively carried on those two classes of trains.

Now, in their scheme they divide the expense of maintenance of way and structures on the basis of expense of car mileage and engine mileage, allowing two and one-half times as much, I believe, for engines as they do for cars. In arriving at the number of engine and car miles they have added 50% of the engine miles to local trains for station switching.

As I said a moment ago, each engine mile is equivalent to 2½ car miles.

That is the system of division introduced in this case by the State.

Do you think that is a proper method of separating and dividing the expense of operation of maintenance of way and structures as between the varous branches of the service, including local and through trains and through and local traffic carried on those through trains, for the purpose of ultimately dividing those expenses between state and interstate business?

A. It seems to me that method of division could be accurate only by accident. It does not take into consideration, that is, the method of division between local and through trains does not take into consideration a number of the factors which affect the cost of
3999 operation of those two classes of service. And further, it fails to consider that there is at least 75% of the maintenance of way and structure expense that does not vary with the changes in the amount or character of traffic at all. Of the remaining 25% of maintenance of way and structure expense there is a very large proportion that while it varies more or less with changes in the amount and character of the traffic, yet these expenses are not necessarily incurred at the time the traffic is handled, but it may be incurred a great many years after that, so long after as to apparently destroy the value of the data obtained in the method proposed.

For example, the renewal of steel rail is brought about by the wear and tear of passing trains. That steel rail stays in the track five, ten, fifteen, twenty, or thirty years before it is renewed, and the expense incident to the wear and tear on that rail today may not be actually incurred by the railroad company until a great many years afterwards, when the rail is actually renewed.

A separation between local and through trains of maintenance of way and structures expenses on a car mile basis does not take into consideration the variations in the size of the locomotive. It does not take into consideration the variations in the amount of the lading in the car. Consequently, it would be possible to take a given condition of service, where a certain per cent of car mileage and
4000 engine mileage went to local service and a certain per cent to through service and by changing the character of one of the services in items which the formula was in no wise influenced by,

the actual expense incurred by that class of service would be decreased or increased.

For instance, placing a very much heavier locomotive on the through freight service would not in any way change the per cent of car mileage as figured out by this proposed formula; and yet it would change the amount of expense for maintenance of way and structures which would be brought about by this through service, and would change the proportion of the total expense of maintenance of way and structures which would properly be apportioned between the through and local service, as the result; yet, the formula would not bring about any such change.

Q. Would differences in the loading of cars and in the speed of the train have any influence in the distribution of this character of expense, as between local and through trains?

A. It would have an influence in the 25% approximately of expense which varies to a certain extent with the amount and character of the traffic. But it seems to me it is necessary to keep particularly in mind the fact that by far the greater proportion of the expense for maintenance of way and structures is not affected by these variations, and the small proportion that is affected is much of it affected in such a remote way that it would be much more accurate to con-
4001 sider the maintenance of way and structures expense in the same way as the general expenses are considered and distributed.

For instance, one of the items of expense for maintenance of way and structures is the repair of fences. There is no relation between fence repairs and the amount of traffic handled or the character of the traffic. It has nothing to do with this traffic and that expense, as well as other items, which must total at least 75% of the total. The expenditures are brought about by the necessity for correcting the destruction by the elements, of the property, and they are necessary and the expense must be incurred, simply for the purpose of maintaining the property in condition to be ready to handle the traffic, even were there no traffic handled over the property.

The remaining 25% due to its character and due to the relatively small per cent of it, it seems to me should be handled in the same way—that is the entire distribution of maintenance of way and structure expense, to state and interstate, should be handled the same way as general expenses, rather than through a system of complicated formulas which cannot possibly be accurate in themselves, and which apparently introduce an unnecessary amount of complication in the obtaining of the desired data.

Q. Mr. Byers, if lighter engines are used in one or other of the branches of service, say in the hauling of local trains, what effect would that have upon the state's method of dividing the expense of maintenance of way as between local and through trains?

4002 It would bring about error in the figures obtained, because in certain portions of the maintenance of way and structure expense the weight of the engine has an appreciable effect on modifying the total amount of expense. If one class of service were equipped with heavy engines and the other class with light engines,

there would be a change in the relative expense brought about by the two classes of service, that would not be reflected in the distribution as carried out by the formulas proposed.

Q. What is the practice on the Iron Mountain road as to the character and weight of engines, say in the two branches of freight service, local and through, or are you prepared to state that?

A. I can state that only in a general way, because that is a branch of the service which is not connected in any way with my present duties, and it would be only by very casual observation.

The ordinary practice of railroads, however, is to use their lighter engines on the local freight service, and the heavier engines on the through freight service, where the mileage obtained by the engine is usually greater, and where the trains are usually much heavier.

Q. There is a reason for that, isn't there, in the fact that you wish to use the engines up to their capacity or potentiality and that heavier loads and longer trains would necessitate the use of
4003 heavier engines on through trains?

A. It is usually considered economical to use the engines in that way and for that reason among others.

Q. This basis of division of car mileage also disregards the loading of the two classes of trains. The evidence in this case shows that the cars on the through trains carry heavier loads than in the local trains: what effect would that have upon the state's method of dividing on a car mileage basis in the two branches of service?

A. The wear and tear produced in the items under Maintenance of Way and Structures that is brought about by the traffic is of course a matter of gross traffic rather than net traffic. In other words, it is a matter of the total weight on the rails rather than the amount of freight which happens to be in the car, disregarding the weight of the car. And if there is a difference in the amount of freight which is to be put into the car, of course, the total amount of weight of the car is changed and it will apparently make some difference in the division of the expense. But it seems to me it should always be borne in mind in connection with the maintenance of way expenses there is a very small proportion of that expense which varies in any way whatever with the amount or character of the traffic.

Q. That is the principal objection to it, you think, that it is a character of expense which is not incident to operation, but it grows out of other causes, and therefore, it cannot be properly divided
4004 on the assumption adopted by the state in this case?

A. That is the primary objection so far as the greater portion of the expense is concerned. And, so far as the smaller portion of the expense is concerned the incurring of the expense by the railroad is so long deferred in the very great proportion of it as to make such figures almost entirely meaningless.

Q. Does not the inequality in the loading of the cars, that is to say, if one car is loaded heavily, say forty tons, and another car has light loading, say five tons, result in a large proportion of what you call dead weight in the lighter loaded car?

A. Yes, sir.

Q. What effect would that condition have upon the fairness of

dividing the expense of operating these two classes of trains as between the contents or the traffic carried in them? You take two cars now, one heavily loaded and one lightly loaded: you say there is a larger proportion of dead weight in the lightly loaded cars: now if you are going to divide the expense of operating those cars by the contents, would that properly be held to be considered?

A. In regard to that portion of the maintenance of way and structure expense which is affected by the traffic, the fact that a certain portion of the freight carried is accompanied by a greater amount per ton of dead weight than another proportion, would cer-
4005 tainly very much interfere with the accuracy of the formula proposed, because the wear and tear is produced partly by the amount of weight which the track has to carry and the formula does not establish any relation between this amount of weight and the amount of the revenue tonnage.

Q. Assume a through train carries state and interstate cars, that one class of those cars is more heavily loaded as a rule than the other class: now, I understand from the views you have just expressed that it would not be fair in your judgment to divide the expense of operating that train as between the two classes of freight carried on it, state and interstate, on an equal basis—that is to say, dividing it by the number of tons carried on the train, without discriminating as between the tonnage of the lighter loaded and the more heavily loaded cars?

A. I do not think it would be fair.

Q. And the same would be true of the loads on the local trains, wouldn't it?

A. The same condition exactly would apply on the local as on the through trains, under those circumstances.

The damage to the track would be brought about by the weight on the track, and if it was not considered in the formula, and the formula considered only a portion of the weight on the track, the formula would evidently be in error except under exceptional conditions when it happened to produce correct results.

4006 Q. You are speaking now of the distribution as between the trains.

A. Yes, sir.

Q. Mr. Byars, your statements have been made with reference to the freight branch of the service up to this time. The state attempts also to divide the expense of maintenance of way and structures in passenger service between the different branches of the car mileage basis: what do you think about that method of division?

A. I think there is about 75% of the maintenance of way and structures expense that are not affected by the car mileage, to start with; and, consequently, a division on a car mileage basis would seem illogical.

Q. Do the views you have expressed heretofore as to the freight service apply equally to the passenger?

A. On that basis, yes, sir.

Q. Is there anything further you wish to say in regard to passenger service?

A. No, sir, I think not.

4007 Cross-examination of Mr. M. L. Byers.

By Judge HILL:

Q. Mr. Byers, in the question Mr. Moore put to you as to the division of expense made by the State Accountants he has referred to both a division between state and interstate and between local and through trains: I want to call your attention to the fact that in the division of expenses between local and through trains, where the car mile is used as the unit, there is no division between state and interstate, using the car mile as a unit; the division between state and interstate is not made in any way upon the car mile. But it is made in the way explained in those exhibits and the only use of the car mile, so far as maintenance of way is concerned, is the division between local and through trains. I want to state those facts to you in order to see if you so understood it in giving the answers you did to Mr. Moore.

A. That was my understanding.

Q. Your answers seemed to indicate that was your understanding, although the question seemed to be calling for your opinion as to using the car mile as the basis of division between state and interstate—although there is no such use of the car mile in mak-

4008 ing such division.

A. I so understood it.

Q. You have studied the exhibits in this case?

A. Not all of them.

Q. The general principles you have studied and are familiar with?

A. Yes, sir, so far as maintenance of way and structures is concerned.

Q. I understood you to say that the constant expenses for maintenance of way, by which I assume you mean those due to weather and natural decay, and things of that kind, is about 75%?

A. I should say it was at least 75%.

Q. Which is usually estimated higher than that, isn't it, Mr. Byers?

A. I cannot say as to that. It would vary with the conditions. I should say it was at least 75%.

Q. Mr. Parker, who has had considerable experience as an engineer of maintenance of way and is now engineer for the Texas Railroad Commission, estimated it as high as 90%: would you consider that out of the way at all?

A. It might be as high as 90% in some cases.

Q. I am speaking of the general rule and I do not want any exceptional cases.

A. I think that is rather high, as a general rule. I purposely put my figures at what I thought was a conservative figure.

4009 Q. You put it at at least 75%?

A. Yes, sir..

Q. Then I would infer from what you say of that and what you say about Mr. Parker's estimate, it would be a varied quantity, somewhere between 75 and 90 per cent.

A. I should judge that would be a fair way to express it.

Q. As I understand it, your chief objection to using the car mile for dividing maintenance of way expenses between local and through trains, is that this constant factor is there, and that the car mile would not represent that factor: is that correct?

A. That is one objection but not necessarily the chief objection.

Q. Would not that objection be present in any method of dividing expenses?

A. I cannot answer that. I cannot keep in mind all possible methods for dividing such expenses.

Q. By "methods" I mean approved methods that are used as factors for dividing expenses in railroad accounting, the subject which we are discussing here?

A. I do not know.

Q. I believe you stated in your testimony that these expenses should be divided as the general expenses are divided?

A. I think the character of the expense is similar to that
4010 of the general expense and whatever method is proper and fair for the division of general expenses would be proper and fair for the division of that expense as a result?

Q. What would you say of the train mile basis for the division of general expenses between freight and passenger traffic? Would that be a fair method?

A. It has been so long since I have had anything to do with expenses other than maintenance of way and structures that I do not consider myself at the present time as being qualified to pass upon it.

Q. Mr. Byers, you stated in your testimony that it should be so divided as general expenses are divided, and you are familiar with the expense of maintenance of way, if you can find a unit for it it seems to me you would be competent to state what unit would be a fair one?

A. For what?

Q. For dividing expenses between local and through trains for maintenance of way expenses.

A. I presumed there would be found a fair basis and a proper basis for the division of the general expenses of different classes of service, and I have studied this question of the division of maintenance of way expenses far enough to make up my mind that it is practically on the same basis as general expenses; and on that assumption it did not seem to me to be necessary to go further. I am not at the present time qualified to pass upon the division of general
expenses, but whatever is fair for that would seem to me to be
4011 fair as to the division of the greater portion of maintenance of way expense, if not all of it.

Q. I will state for your information if you do not already know it, that the railroads in this case in dividing expense of maintenance of way between freight and passenger traffic have divided it upon the train mile basis, which is shown in Statement 5 of Exhibit 3 of the St. Louis Iron Mountain & Southern Railway Company exhibit in this case.

I will ask you if it is not a fact that all of the reasons which you gave in your testimony yesterday against the car mile division of

1705

expense between local and through trains would be equally applicable to the train mile division of maintenance of way expense between freight and passenger?

A. I think not.

Q. It would not be?

A. I think the train mile as a general condition in making a division between freight and passenger of the maintenance of way expense is somewhat less in error than the use of the car mile statistics would be for the same purpose.

Q. Let us take up those reasons: the first you gave as I recall it, against the use of the car mile between local and through, was the fact that at least 75% of the expense was constant and that would not measure it: is not that same objection true as to the train mile?

A. There is at least 75% of course that are constant and that would be present whether you divided by the train mile or by the car mile.

4012 Q. Either factor would be equally objectionable for that reason, would it not?

A. There are so many factors that enter in to that question that I hardly feel qualified to say that the two factors are exactly the same in all particulars as producing error.

Q. The objection you raise to the car mile, however, upon this ground is true of the train mile, on the ground on which the railroads use it, is it not?

A. The objection to using any unit of actual operation which does not consider all features of the problem would apply, I should think.

Q. Does the train mile consider all the features of the problem any more than the car mile does, in regard to this constant expense I am talking of?

A. I cannot say whether it considers all features as well or not.

Q. The next objection, as I understand, that you make to the car mile division is this: you say "of the remaining 25% of maintenance of way and structures expense there is a very large proportion which while it varies more or less with changes in the amount and character of the traffic, yet these expenses are not necessarily incurred at the time that the traffic is handled but it may be incurred a great many years after that, so many years after as to apparently destroy the value of the data obtained in the method proposed."

4013 Would not that objection be equally true to using the train mile as a basis for dividing expense of traffic?

A. I cannot say whether that would be equally true or not.

Q. It would be true ?

A. There would be that objection to the use of the train mile as a means of division of maintenance of way expense between freight and passenger.

Q. You mean by that, the replacement of rails and ties and things of that kind. That is what you are referring to, isn't it?

A. I mean the division of the cost of replacement.

Q. That is what I mean. Cost of replacement.

A. As one of the items the cost of which is incurred long before.

Q. Mr. Byers, if you take the statistics of a road for any given

period, say six months, and attempt to divide the expense of operation between any classes of traffic, this objection which you make would be applicable to any basis of division, would it not?

A. To which objection do you refer?

Q. This objection we were last discussing, that the expense of renewal would be incurred long after the actual use which caused the expense?

A. I cannot say it would be true of any basis.

Q. "By any basis" of course I mean any basis in use in
4014 railroad accounting for the division of expenses between any classes of traffic?

A. That question is almost too general to be answered without the possibility of not knowing some of the bases that are used.

Q. What bases are used in railroad accounting for the division of expenses: what are the factors in common use?

A. For what purpose?

Q. I am asking generally, now.

A. We use different bases for different purposes. Now I am familiar more or less, with the bases that are used for the purpose of studying the cost of operation with a view of securing more accurate operation. I am not familiar with the bases used for the purpose of distributing, as you are endeavoring to do, between one class of service and another.

Q. With what bases are you familiar?

A. The ton mile basis is used for certain purposes for applying to certain figures. The train mile basis is used and in some cases the tonnage is used. In other cases the number of passengers handled, the passenger mileage. And in other cases an adjusted tonnage figure is used.

Q. What do you mean by "an adjusted tonnage" figure?

A. Adjusted for the resistance of the car, for example. But while those figures are used and give fairly useful results in the study of the economy of railroad operation, it does not necessarily
4015 follow that it can be used in determining how much expense is produced by one class of service and how much can be produced by another class of service.

Q. But if you use any basis to divide expenses that were paid out during a given period, that basis, no matter what it was, would be open to this objection you make here, would it not?

A. Any basis I know of would be open to that objection.

Q. Is it not a fact that in economical railroad management estimates are made of these maintenance of way expenses in advance, and that they can be intelligently forecasted and kept practically uniform one year with another and one period with another?

A. Estimates of expense?

Q. Estimates of expense of maintenance of way?

A. The estimates of expense of maintenance of way are made and sometimes they are actually followed and at other times they are not followed at all closely because the conditions have changed.

Q. You are speaking of estimates for work, but I am speaking of estimated charge to operation for maintenance of way.

A. That is what I am speaking of, estimated charge to maintenance of way and not new work. That varies from time to time.

Q. Does it vary materially on account of the volume of traffic?

4016 A. I do not think it does directly on account of the volume of traffic.

Q. That is not really a factor in determining the amount of expense incurred for maintenance of way, is it?

A. Not directly and yet, indirectly, it has very frequently very considerable to do with it. The volume of traffic of course effects the net earnings of the railroad and the net earnings of the railroad determine very considerably what is possible for the railroad, the same as for an individual, to expend.

Q. That would be largely a question of improvement, would it not?

A. I should not say so. It applies to improvement as well as operation, but it applies to operation.

Q. That is the financial side of the problem more than the operating side, is it not?

A. The financial side of the problem is somewhat connected with the operating side of the problem with a railroad as with an individual.

Q. More or less?

A. More or less.

Q. That would not affect, however, a division of past expenses?

A. No, sir, not at all. The future earnings would not affect the division of present expenses.

Q. If you were given a problem that for a certain period

4017 the expense for maintenance of way was so much, you would find a basis of division between the different classes of traffic?

A. Which would be fair?

Q. Yes, which would be fair. That is the problem we have here. I ask you if the objections you have urged against the car mile division, based upon the objection that the replacement would take place at some later period, would not be applicable to any division of those expenses?

A. I do not say whether it would be applicable to any division or not, but it would be applicable to any division I know of. But it would be applicable to one division probably on a different basis than would apply to another division. In other words, there is a relative amount of error. Some divisions might be more in error than others.

Q. There would not be any question of being more error in one division than the other on account of this reason you are suggesting, namely, that the replacement takes place years afterwards?

A. I think not.

Q. I can readily see where there would be a question of how great is the error on other propositions, but I cannot see how it would be on that proposition. You agree to that, do you not?

A. That would seem to be correct.

Q. You state here "The separation between local and
4018 through trains on the Missouri Pacific on a car mile basis, does not take into consideration the variation in the size of the locomotives. It does not take into consideration the variation in the amount of the lading of the car."

That would be equally applicable to a train mile division of those expenses, would it not, between any classes of traffic?

A. Between local and through trains?

Q. No, I say between any classes of traffic, say freight and passenger.

A. I cannot say whether it would be equally applicable or not, but there would be that objection to a greater or less extent with any other basis I know of.

Q. The train mile would be open to this objection, whether open to the same degree or not would depend upon the conditions on the road, I presume.

A. It would depend upon the conditions of the particular property.

Q. Of the particular road and the condition of traffic on that particular road: that is what I mean.

A. Yes, sir.

Q. Do you consider the variation in the lading of the car a matter of any moment in the division of maintenance of way expenses between each class of traffic?

A. It has some effect but just how much I think it would be im-
possible to determine. It does not affect the 75% or there-
4019 abouts that is not affected by the traffic. But it does have some effect on the 25%. But just what effect it is very difficult or impossible to exactly determine.

Q. The reason for that, I presume, would be the greater weight of load would cause more wear on the rails and ties and roadbed, etc.

A. The greater weight would not only cause more wear and tear but disturbs the relations of the different portions of the track structure to each other to a greater extent.

Q. There would have to be a material difference in the weight, however, would it not?

A. Well, the greater the difference in the weight the greater the difference in the result would be. The difference, however, which actually exists on a railroad is sufficient to make a very considerable difference in those elements of cost that vary with the traffic.

Q. Take two cars where there is a difference of say five or six tons in the loading of those two cars, would that have any appreciable difference on account of the five or six tons difference in the loading, in this maintenance of way expense?

A. Under some conditions it would but under other conditions it would not, depending upon the stability of the track very largely. For instance, on a bridge, that would have practically no difference. On a track which was less stable than a bridge it might cause an appreciable difference in some cases.

4020 Q. On the good tracks that the Iron Mountain Railroad Company maintain in Arkansas—and I believe you maintain good tracks down there, don't you?

A. We try to, so far as the "powers that be" will let us get money enough to do it with.

Q. You have pretty good track down there, haven't you?

A. Here and there.

Q. On such tracks as you maintain in Arkansas, Mr. Byers, would a difference of four or five tons in the loading of two cars—taking two as an illustration—make any appreciable difference in the maintenance of way expense?

A. There would be a difference, but how much it would be I would be entirely unable to tell you.

Q. Wouldn't that be very well defined by a word which has been much used in this case, as one of the "negligible" quantities?

A. It might or it might not.

Q. What do you think about it? Might it or might it not?

A. For the two cars?

Q. Yes, taking those two cars. I am taking those two cars simply as an illustration.

A. I think the effect of two cars would be negligible. But if there was that difference between all of the cars in all classes of service, and you are endeavoring to obtain the amount which should be charged to the two classes of service on account
4021 of expenditures produced by wear and tear, I am not sure that it would be negligible.

Q. The next point I wish to take up here is, using heavier locomotives on through freight service than they usually operate on local service, you think that would make a difference, do you?

A. The application of a heavy locomotive instead of a light locomotive would in some cases make a material difference in the cost of maintenance on those items which are affected by the traffic.

Q. I understand that. You are confining these objections, as I understood you, to what you assume to be twenty five per cent.

A. Yes, sir, twenty five per cent approximately.

Q. I believe you made the very general answer that you did not know whether it was a fact that they were using lighter engines on the local trains in Arkansas, than on the through trains; but you assume that from your general knowledge of railroading; isn't that a fact?

A. Yes, sir, and from my general knowledge of the Iron Mountain.

Q. Assuming that would be true, that would place a somewhat greater burden on the local train than should be placed upon it—that is, the engine mile basis of division would place a somewhat heavier burden on the local train than it was entitled to.

4022 A. If the local train had a smaller locomotive than the through train, and you are dividing that cost on an engine mile basis, it would then be unfair to the local train, on account of throwing too much expense on the local train, so far as the damage produced by the locomotive is concerned.

Q. I understand. Would that be an appreciable quantity or does that belong to one of those negligible matters?

A. In some cases it would be a very serious matter, and in other cases it would be negligible. It would depend upon the extent of variation in the size of the locomotive and again on the condition of the road-bed. Again, to illustrate, the effect on a bridge would be comparatively small, because it would be confined principally to wear and tear on the rail. It would be very difficult to figure that for one locomotive. Whereas on the road-bed, such as we have in considerable portions of Arkansas, it would be quite a serious matter—that is, the use of a heavier engine as against the use of a lighter engine.

Q. Would that be as appreciable an element as the one we have just been referring to, the difference of four or five tons in the loading of the cars?

A. I think the effect of the application of the heavier locomotive would probably be more damaging to the track than the difference in the loading.

Q. I am speaking of conditions in Arkansas as you understand them and not a general condition; the character of the loco-
4023 motive used on the local and through trains in Arkansas, and the character of the track in Arkansas.

A. I think the effect of the use of a heavy locomotive on our tracks in Arkansas would be more seriously felt as compared with the effect of a light locomotive, than the effect of a lightly loaded car as compared with the heavily loaded car, as I understand the conditions to be in Arkansas.

Q. Then you are speaking in the foregoing answer, when you refer to light locomotives, of such as are used on the local trains in Arkansas as compared with the heavy locomotives used on the through trains in Arkansas, are you?

A. I am considering the light locomotives we have on the Iron Mountain System as compared with the heavy locomotives, which I know are in use there, without attempting to say that one or the other is used entirely in one or the other of the two classes of service.

Q. But you are using your judgment based on what you know of the locomotives that are used in the two classes of service, are you?

A. I do not think my statement requires any judgment to be used in that direction. I am simply stating that the heavy locomotives would produce per locomotive mile a much greater amount of disturbance and expense as compared with the light locomotive, than would be produced by the heavily loaded cars as compared with the lightly loaded cars, as I understand the difference
4024 between a heavy locomotive and a light locomotive, or a heavily loaded car and a lightly loaded car, to be in Arkansas on our lines.

Q. As between through and local trains you are referring to?

A. No, sir, I am not referring to them as between through and local trains, because I do not know accurately what the conditions

are as to specific differences in the use of light and heavy locomotives in Arkansas.

Q. You stated "The ordinary practice of railroads, however, is to use their lighter engines on the local freight service, and the heavier engines on the through freight service, where the mileage obtained by the engine is usually greater, and where the trains are usually much heavier."

A. Yes, sir, and I am assuming that is being used on our line in Arkansas, but I do not know it.

Q. In answering the preceding questions on that subject you have been bearing in mind, or rather, the application has been to this condition of affairs as stated in your testimony on Saturday, hasn't it?

A. I understand your questions have been with reference to the effect of lightly loaded cars as compared with heavily loaded cars; and the effect of a light engine as compared with a heavy engine.

Q. Let me interrupt you there just a moment, please. The
4025 only point of difference between us is that you are using the terms lightly loaded car and heavily loaded car, and light engine and heavy engine, in a general sense, and I am trying to find out from you in a concrete sense, taking the cars used on the local train- and the cars used on the through trains, with a difference of four or five tons in loading between the through freight trains and the local freight trains.

A. I think the point of difference as I understand it is that not being entirely familiar with the local as compared with the through service, I am confining my remarks to the difference between the cars regardless of the service, and to the engines regardless of the service, whereas you are asking me to state them with reference to the service.

Q. That is what we are trying to do, to find out something about the service in this case; and I am trying to test your knowledge of it as developed in your testimony on Saturday, to find out just how to compare them.

To bring it down to a concrete case, take such engines as are usually used on the local trains, and such engines as are usually used on the through trains, and assuming the variation in loading between the local and through trains of say four to five tons, which would be the more appreciable element of expense for maintenance of way *than* heavier locomotive on the through train or the heavier loading on the through train?

A. As between the two I do not know. The difficulties in
4026 ascertaining effects of the character are so great that while it is possible to say that differences in the effect exist, and that in some cases they are great and in some cases they are small, yet when you attempt to make a comparison of that sort it seems to me impossible to make it accurately, or even reasonably accurately.

Q. But your general impression is that the heavy locomotive would cause more damage than the heavier loaded car?

A. For one locomotive, or one car?

Q. Yes.

A. Of course, we have fewer locomotives than cars—or, rather, whether the greater number of cars will over-balance the effect of each car or not I cannot say.

Q. That is not my question. I am trying to get at the unit to measure by: you would say the unit of the locomotive would do more damage than the unit of the car?

A. That is not due entirely to the greater weight of the locomotive as compared to the greater weight of the car. It is due to the fact that the locomotive has reciprocating parts which the car does not have, and these reciprocating parts do very much more injury for the same weight than the car. They act very much as a hammer upon the rail. That is not produced to any such extent by the car.

Q. You have gotten away out of my jurisdiction. What do you mean by "reciprocating parts of the locomotive?"

A. The parts that go backward and forward, instead of
4027 round and round.

Q. Mr. Byers we have been using one car and one locomotive as an example; suppose the heavier loaded car were pulled by the heavier locomotive, and the lighter loaded car were pulled by the lighter locomotive, what would be the difference in the wear and tear on the track?

A. That would depend again on the speed at which they are pulled, as another factor.

Q. There would be no other difference between those than the question of speed?

A. I am not so sure of that.

Q. There would be no other appreciable difference would there?

A. As you state the problem, that is the thing that immediately occurs to me, that speed would be the material factor.

Q. You regard speed as a material factor in the wear and tear on tracks, do you?

A. If you include the labor of keeping the parts in their relative position to each other, yes.

Q. You mean the parts of the track?

A. Doing the surfacing, that is an appreciable expense which varies to a certain extent with the amount of traffic.

Q. The train which makes the faster speed on the track entails the heaviest expense on the track, does it?

A. Yes, sir, other things being equal. If the trains had
4028 had the same size of locomotive and the same number of cars—in other words, all other things being equal.

Q. I believe it is agreed between all the witnesses in this case that the local trains run faster between stations: is that your observation?

A. It seems to me at certain points the local may run faster than the through train, but the average speed of the local while actually running is not necessarily greater than the speed of the through train while actually running.

Q. I believe that most of the witnesses agreed it is.

A. My judgment is that the witnesses referred to maximum speed rather than average speed.

Q. No they referred to ordinary practice. It takes more time to make its run, but the actual running time from start to finish I believe they have all agreed is faster on the local than on the through.

A. I do not know whether that is true or not. It seems to me you have got to consider that the local train stops at practically every station and it gets a very long distance from that station before it acquires its maximum speed; whereas the through train goes through that station at pretty nearly maximum speed.

Q. I would like you and Mr. McPherson to debate that question.

A. I am simply stating that I do not know which is the greater of those two factors.

4029 Q. Mr. McPherson has testified to that and most of the experts for the State have agreed with him, and I think Mr. Doddridge also stated it.

I believe these matters I have asked you about are all of the elements you have pointed out. I do not recall any others in your testimony.

A. I think so. I do not recall any others.

Q. Isn't it a fact Mr. Byers that the car mile is the common factor among railroads for dividing maintenance of way expenses?

A. For what purpose?

Q. Between railroads.

A. I should say not. I should say the mile of track is the usual basis of comparison of maintenance of way expenses between railroads.

Q. For the use of joint track?

A. When I am studying, for example, the economy of maintenance of our lines as compared with some other railroad I take their expense——

Q. That is not what my question aimed to get at: what I mean is this: among railroads themselves when they come to use each other's track and make a joint use of track, in which the ownership may be joint, the question of division of maintenance expense between themselves is the point to which I am aiming to direct your attention.

4030 A. I do not know whether that is the general practice or not. That division of expense, so far as track is concerned, is a matter with which I do not come very much in contact and am really not prepared to say whether it is or is not. My work is in connection with the actual maintenance rather than with the revenue features.

Q. Mr. Byers are you acquainted with the litigation that originated here in St. Louis over the use of some tracks out about Forest Park?

A. No, sir.

Q. St. Louis, Kansas City & Colorado and the City of St. Louis and the Wabash R. R., commonly known as the Wabash track?

A. No, sir, I am not familiar with it.

Q. It is the track from Forsythe Junction at Forest Park to the Union Station in St. Louis; you are familiar with the joint use of that track and what they pay for it?

A. I am familiar with the fact that there was such litigation and that is about all I know of it.

Q. Don't you know that the car mile or wheelage basis was used for the purpose of determining what one road should pay the other?

Mr. MOORE: That is objected to as not material or applicable in this case. What is done by other people is not binding upon us.

Mr. HILL: What I am trying to establish is not a single, individual instance, but a common practice, and think a common
4031 practice in regard to this subject is clearly competent. This is a mere foundation to lead up to the question of common practice.

Mr. MOORE: He says he does not know.

Mr. HILL:

Q. You say you are not familiar with that case?

A. No, sir, I am not.

Q. I mentioned that simply to get a foundation for basing my questions and that is all.

A. I do not know about it.

Q. Do you know S. T. Emerson, a Civil Engineer of thirty six years' experience, Chief Engineer for the St. Louis, Kansas City and Colorado road?

A. No, sir.

Q. Do you know him by reputation?

A. I do not.

Q. I want to read you a question propounded to him and his answer to it and ask you your opinion from your knowledge of those matters.

Mr. MOORE: We object to the reading of the questions and the answer and the introduction of evidence in another case into this case.

Mr. HILL: This is all expert testimony and not facts.

Mr. MOORE: You cannot introduce expert evidence in this case without producing the expert here.

4032 Mr. HILL: I do not want to prove any particular fact in any other litigation or anything of that kind, but I just want to try to prove the opinion of experts along the same line as this witness and ask his opinion of those hypothetical questions.

Mr. MOORE: I do not think it is competent.

Mr. HILL:

Q. The witness was asked these questions and gave the following answers:

"Q. I want to state to you a hypothetical case; suppose that one railroad has a right under a contract to use the track of another railroad for a fair and equitable compensation, between certain points, can you tell me what would be a proper basis to arrive at such fair and equitable compensation?

A. Well, I should think it ought to be arrived at in proportion to the use.

Q. Explain to the Master how you would arrive at it.

A. On a wheelage basis.

Q. What would the wheelage basis be on?

A. On the interest of the cost of the property first, and the cost of maintenance.

Q. What do you mean by a wheelage basis?

A. I mean on the proportionate number of cars run over the road by the different railroads using it. Take the total of cars used on it and get the percentage."

(And then he takes up an example and illustrates the point with his example.)

What do you think of the use of that as a method of reaching an accurate proportion for each of the roads using it?

A. I do not think it could bring the correct results acci-
4033 dentally.

Q. You do not think it would be fair?

A. It might be, accidentally.

Q. Do you know James C. Vandyne?

A. No, sir.

Q. He is Superindendent of the Unoin Depot at St. Louis.

A. I may have met him, but I am not sufficiently well acquainted with him to remember the fact if I have.

Q. I will call your attention to this testimony he gave and ask you what you think about it:

"Q. Suppose there is a contract by which one railroad has agreed to let the cars of another pass over its tracks for a fair and equitable compensation, on what basis or how would the amount of such fair and equitable compensation be arrived at?

A. The wheelage basis is the one ordinarily selected.

Q. What do you mean by wheelage basis, how would you arrive at the amount of that basis, what would you do first?

A. I would take the cost of the road.

Q. Between the points to be used?

A. Yes, sir.

Q. What would you do next?

A. Take the maintenance of the way, the superintendence, etc.

Q. Suppose you had to arrive at the cost, what would you do next in order to arrive at the cost per annum?

A. I would keep a correct account of the number of cars and engines passing over it.

Q. Railroads usually do that?

A. Yes, sir.

4034 Q. How would you arrive at the gross amount per annum that ought to be paid?

A. Take the number of cars and engines each road would run over it, and then divide the sum of expenses and interest account by the numbers of cars and engines the roads handle, and then having a separate statement of each road we could allot each its proportion to pay."

And then he takes up the question of interest.

Is your opinion of that the same as your opinion of the testimony of Mr. Emerson?

A. I think the locomotive proportion there could be accurate only by accident, so far as maintenance of way and structures expenses are concerned.

Q. Did you ever know Mr. A. A. Talmage, General Manager for the Receivers of the Wabash and Missouri Pacific Railway?

A. No, sir.

Q. You knew him by reputation very well, didn't you?

A. I have heard of him.

Q. He was a railroad operator of great ability and distinction was he not?

A. I cannot answer as to that.

Q. I want to call your attention to this testimony given by Col. Talmage in that case:

"By the MASTER:

Q. What are the usual arrangements where one road uses a portion of a track of another, as to the basis of compensation?

4035 A. It is generally based on a rental based on valuation of the property, and for repairs of track and other necessary expenses connected with the operation, it is on the basis of wheelage which represents the percentage that the tenant line bears to the other, represents the percentage that it bears to the total number of cars passed over the line.

Q. If the renting line passed one-tenth of the number of cars that the owning line passed over the track, it would pay one-tenth of this?

A. It would generally pay one-tenth of the repairs, but the custom in regard to the fixed charges, as we term it, is one-half. Another road is allowed to use the track, a foreign road is allowed to use the track of the parent road, by paying one-half of the value of the track, the rental, the interest on one-half of the value of the property."

Now, if that question were asked you Mr. Byers, just as it was asked Col. Talmage, I will ask you what your opinion would be and I will repeat the question put by the Master there:

What are the usual arrangements where one road uses a portion of a track of another, as to the basis of compensation?

A. I would say I do not know.

Q. What would you consider to be a fair division of the maintenance of way expenses between two railroads jointly using the same track?

A. I do not believe I could give you a basis which I would consider fair, but I presume that a fair basis will be found for the distribution of general expenses and that that same basis should be applied to the division of maintenance of way expense as being fair, because the great bulk of the maintenance of way expenses are, in my opinion, of the same character as the general expenses.

4036 Q. Mr. Talmage was then asked this question:

"Q. These arrangements of which you have spoken, these cases in which one company desiring to use the tracks of another has agreed to pay one-half the interest on the valuation, and then pay the cost of maintenance according to the wheelage—those arrangements are considered fair and equitable, are they?"

to which he answered:

"Yes, sir."

You would not agree to that, would you?

A. I think that so far as maintenance is concerned, such division should produce correct results only by accident.

Q. Do you know James T. How, who was General Agent for the Receivers of the Wabash and Missouri Pacific Railways?

A. I don't think I ever met Mr. How.

Q. Did you know him by reputation?

A. No, sir.

Q. I want to call your attention to this testimony given by him:

"Q. Have you got any arrangement with the Pittsburg or Pennsylvania Company?

A. We have an arrangement with the Pennsylvania Company by which they run over our track for fifty-five miles from Kokomo Junction to Indianapolis. They pay six percent on one-half
4037 of the valuation and they pay for the maintenance in accordance with the wheelage."

Are you familiar with any such agreement the Pennsylvania Company made? I believe you testified you were in its service for a good many years.

A. I am not familiar with any such arrangement on the Pennsylvania Road, although it might or might not have existed, my work not being along such lines as would necessarily bring me in contact with such classes of information.

Q. I want to call your attention to this testimony given by Mr. James How:

"Q. All arrangements such as you have mentioned as having been made and having existed between the Wabash and its connecting lines, are they about such as are generally made between railroad companies, under such circumstances, and are they such as are considered fair and equitable?

A. Yes, sir; I think those arrangements are so common that it is almost a rule to adopt that as a standard."

4038 You are not familiar with this wheelage basis for the division of maintenance of way expenses between railroads in the maintenance of joint tracks, although these witnesses testify to it as a standard.

A. Not enough to know it is a standard or even that it is the general practice. And whether or not it is the standard, or the general practice does not in any way affect whether it is accurate or not.

Q. Are you familiar with the fact your road has leased a track from the Cotton Belt from Paragould North over which it sends only through freight trains?

A. In a very general way, yes.

Q. Do you know what basis of division is agreed upon between the Iron Mountain and the Cotton Belt as to maintenance of way of that track?

A. No, sir.

Q. You do not know that the car mile is used as the basis of division between those two roads?

A. No sir, my work does not bring me in contact personally with matters of that kind, or make it necessary for me to be very familiar with them. My work is in connection with the economical maintenance of the property and not property division between railroads.

Q. After accounting?

A. After accounting.

Q. You testified about the capacity of the operating man to design a system of accounting as against the accounting man,
4039 as I understand your testimony. I do not know whether I exactly caught your idea in this testimony. I wish you would re-state it for me, will you?

A. The purpose of accounting, as usually considered by the operating officers of a railroad, and one of the most important purposes in general, is to enable economy of operation to be obtained. Economy of operation can be obtained only by preventing waste and the operating officials have the best opportunity to see in what manner this occurs. They desire the records of the cost of operation to be so compiled and so prepared as to call their attention as quickly and as accurately as feasible, to the places where this possible waste is going on. The difficulty with any one who is entirely unfamiliar with operations compiling such a set of figures would be apparent almost on the face of it.

It has been found, in my experience, that the operating officials have been able to make a very great improvement in the system of accounting which has been in effect in the past, in order to make these accounts more useful in securing economy of operation. That is due to their great familiarity with the operations themselves and with what is necessary to be done to call their attention to these conditions.

Perhaps I can illustrate that: one of the old accounting systems, which I understand was prepared by accounting officials, sub-
divided the apportionment of maintenance of way expense
4040 into two accounts—repairs to road-bed and repairs to track.
Now, in an endeavor to secure economy of maintenance of roadway and track it was found that combining the expenses in this way did not produce information that was of any material value to the operating officials, and that partly because it did not separate the apportionment of expense which does not in any way vary with the traffic from the portion which does vary with the traffic.

The result of the operating officials taking hold of this subdivision of disbursements of maintenance accounts was to make a very decided difference in sub-dividing the expenses and to subdivide them on some-what different lines; the result is that the information obtained as a result of that re-arrangement is very

much more useful to the maintenance of way officials in their endeavor to secure economy of maintenance of way than it was before.

That improvement was brought about solely by the ability of the operating officials, through their knowledge of operation to tell in what way the old distribution was not satisfactory and in what way they needed the distribution of these expenses to be made so as to give them the information necessary to call attention to operations which were not normal.

Q. I believe, Mr. Byers, after hearing your explanation of that, there is less difference between you and the State's witnesses on that point than I had supposed.

4041 Have you read the testimony of Mr. Ludlam, given in this case?

A. I have read some of it, but I am not sure I have read all of it.

Q. I want to call your attention to this testimony given by Mr. Ludlam on page 1173 of the record in this case:

"My judgment is that the operating man, as a general proposition, is the last man who is able to figure out his own cost; that is done by the accounting department and by the various cost departments of the different manufacturing concerns.

Naturally, in installing a system of cost, we would confer with the operating man and familiarize ourselves with the operating transactions sufficiently to be able to devise forms and install systems that would take care of all the operating transactions, but we would never depend upon the operating man's opinion of what it would cost him."

Do you agree to those propositions?

A. No, sir.

Q. Wherein do you disagree with them?

A. I disagree with the statement that the operating man is the man who is least able to figure out his own cost, for one thing. I do not think that is true. It may be true of some operating men and it probably is true to a very considerable extent of the old type of operating men, as I explained in my direct testimony, because he was operating with such small units that he did not need statistics in order to assist him in studying his operations.

Q. Mr. Ludlam develops that very thought a little further, to which I will call your attention. He testified:

4042 "There is nothing that is more generally recognized, I think, and coming to be recognized more and more every day, than the absolute importance of separating the operating and the accounting departments, particularly in railroads."

You agree to that, don't you?

A. I think it is necessary to separate the operating and the auditing departments.

Q. I presume he is using those terms synonomously?

A. I think there is a distinction between the accounting and the auditing departments. The duty of an auditing department is the same as the duty of a bank examiner, to go through the bank and examine the operations of that bank.

Q. I see your distinction, but in practical railroad operation the accounting and auditing departments are the same department, are they not?

A. They have that title, but their duties are by no means the same.

Q. They have both duties.

A. To a certain extent they have both duties.

Q. To go a little further on this point I will read you from Mr. Ludlam's testimony where he says:

"I can remember back in my day when the General Manager would instruct the Auditor how to charge certain expenses, but the financial interests, insofar as they control railroad accounting and railroad investments, have learned that it is imperative that the accounting officer should act exclusively on his own responsibility and be accountable only to the Board of Directors of the corporation, if you want to know the actual facts as to the result of operating the property.

Any operating man could make a very fine showing for his property if he was allowed to direct how the different items should be charged."

4043 Do you agree with this statement of Mr. Ludlam?

A. I think it misrepresents the situation. In my opinion it would be more proper to regard the accounting department as a branch of the operating department. The accounting, in my opinion, is simply a portion of the work of the operating department. But it is also, in my opinion, and I think in the opinion of the witness whose testimony you have read, absolutely necessary to have an independent auditing department. That independent auditing department should not in any way be an operating department; but its primary function is that of auditing and not of operating or otherwise managing the accounts. It is simply there for the purpose of seeing that things are done in the way they should be done, and not for the purpose of doing them. So far as it undertakes to do the work then it is destroying its own value as an auditing department, because then there is no department of the railroad to audit the accurate compiling of the accounting, which is just as necessary in one case as in another.

They are frequently combined as a matter of convenience, but when you deal with the principles involved, it is, in my opinion, wrong.

4044 Q. I want to read from this one authority and see if you agree with it:

"The objects sought by accounting reports are three-fold:

First, to enable owners of the property to judge as to its value and as to the efficiency of management.

Second, to enable officers of all grades to secure economical results in that portion of the Company's operations entrusted to their charge.

Third, to prevent dishonesty."

You agree with that?

Mr. MOORE: From what are you reading?

Mr. HILL: You know what I am reading from, Mr. Byers?

A. I think you are reading from the very first draft of some data which I dictated for the purpose of clarifying my own thoughts on the subject, and not with the idea that when they were written they would be either right or wrong.

Q. Do you agree to those propositions?

A. Read it again, please.

Q. (Counsel reads).

"The objects sought by accounting reports are three-fold:

First, to enable the owners of the property to judge as to its value and as to the efficiency of the management."

A. That is one object of the accounting.

Q. Counsel reads.) "Second, to enable the officials of all grades to secure economical results in that portion of the Company's operations entrusted to their charge."

A. That is another portion and a very important portion.

4045 Q. (Counsel reads.) "Third, to prevent dishonesty."

A. That is still another portion.

Q. You agree with all that statement, then, do you not?

A. I think that is in error in one way. Further consideration brings to my mind the distinction between accounting and auditing.

The object of a system of accounts is to cover all of those features and possibly some others. But the object of an accounting department is not necessarily to do that. The object of the auditing department is very largely the last—to prevent dishonesty in accounting and to a certain extent otherwise.

In a general way, I think that is correct.

Q. I want to read you the following paragraph which I believe is much in the line of what Mr. Ludlam says and I do not know it is out of line with what you say:

"In the day of the small railroad the general official in charge of operation was able to personally see to and regulate most matters of detail and required but few reports to enable him to keep closely in touch with the situation. Today, with from 5,000 to 10,000 miles of road under his control, he is helpless to personally regulate operations. He employs superintendents of divisions and general superintendents of grand divisions, to attend to the details of active operation; and his own time is taken up with the regulation of the general policy and with the study of the results obtained by his subordinate officials.

To guide him therein he must have statements of the amounts of cost of work done—not the individual items (which he could not possibly find the time to consider) but the amounts of cost of great groups of items—and on the skill with which such data is made depends the value of the deductions therefrom."

4046 A. That represents my present ideas on the subject.

Q. Do you think that the operating man whom you have pictured there very accurately has the skill with which to make selection of such data as would enable him to obtain results from his subordinate officials, when he has devoted his whole lifetime to the matter of direct railroad instead of to the matter of accounting?

A. The question is so worded that I am not quite sure as to its meaning. Whom do you mean by the man who has devoted his whole lifetime to such matters? Do you mean the minor officials?

Q. I am using this general official whom you have pictured in this book of yours.

A. And not his subordinate?

Q. No, sir.

A. Oh, I think he should certainly be able to determine with greater or less degree of accuracy the things he needs. But about all that this information which he will obtain does, is to call his attention to abnormal conditions, instead of his being obliged to examine into every operation of a railroad, which it would be impossible for him to do, he is able to confine his attention to investigating personally or through his subordinates the abnormal operations.

Q. You have explained that. There is no difference between us on that. But the question is, who should install the system? Not the benefit it would be to the operating man. We are all agreed on that.

4047 A. You wish me to say who should install it?

Q. Yes, who should install such a cost system for a great railroad.

A. I think the system should be designed by a committee representing every branch of the railroad service, in order that all phases of the question might be considered.

That means they must be men with expert knowledge of the question, of bookkeeping and must be men with expert knowledge of the theory of accounting, and must be men with expert knowledge of every branch of operation.

When you work out a system of accounting that is criticised by that sort of intelligence, then you get a system that is about as successfully designed as can be. No one man can do it.

Q. I agree with you. If any one man did it he would have to get his information from all these departments of which you have spoken?

A. Yes, sir, and he would not live long enough to get that perfect knowledge.

Q. For himself?

A. Yes, sir, and the different men get it through their individual specialties.

Q. If you left it to anyone man you would not leave it to a general superintendent or a general manager?

A. I think then I would study the individual. In some cases I would leave it to the operating man. I would consider

4048 his general knowledge of operations and his knowledge of accounting, and as against that I would consider the accountant's knowledge of at least his own work and his knowledge of operations.

But my own experience with systems which have been designed by accountants has been so entirely unsatisfactory, and I found the information I could obtain in that way has been so worthless, that I

cannot help leaning a little bit—and I am probably prejudiced a little bit, in the other direction.

Q. You say on page 565 of this book "In addition to auditing accounts, the auditing department is usually required to prepare most of the statements required by the Traffic Department, these statements being made up from the information contained on the revenue waybills.

In some cases, also, the work of the Freight Claim Department, which usually is under the direction of the Traffic Department, is performed by the Auditing Department."

That is another branch of work placed upon the Auditing Department, is it not, which would familiarize them in a measure with that branch of the subject?

A. Yes, sir, it would familiarize them to an extent to enable them to compile the information. But the compilation in one case has been turned over to an electrical machine, as I have stated, which indicates it is not a very important matter.

Q. That is the work of compilation but not the work of installing or designing a system?

A. Of course, the system was not designed by a machine.

4049 Q. Your testimony of Saturday would rather leave the impression that the electrical machine had designed the system. Of course, I do not so understand it.

A. That would be almost as absurd as the testimony here, which would indicate that an operating man does not know anything about his operation.

Q. No, it does not indicate that, but it indicates that he should not be left to determine his method of accounting of his operation.

A. I think that would be about as absurd as entrusting a machine to do it.

Q. Do you know on the Wabash Railroad that the Auditor reports directly to the President, and the General Manager has nothing to do with that?

A. I do not know anything about that. I do not question it.

Q. At page 99 I find this statement:

"Sometime after the Interstate Commerce Commission was established, it, for the purpose of making possible the comparison of the operating expenses of the different railroads, issued instructions that annual reports of earnings and expenditures be made to it by each corporation in certain form, which it laid down. This form was the result of the meeting of a number of the representative railway accounting officers of this country, and their work marked the first great advance in the art of railroad accounting."

Do you subscribe to the statement there?

A. That is a statement as of what period of time?

Q. I don't know. I am reading from page 99 of a work called "Economies of Railroad Operation" published in 1908. I

4050 presume you are familiar with the work?

A. I am familiar with it and it refers to a period of some twenty odd years ago. At that time the whole system of accounting was in a state of chaos and also at that time the railroads were very much smaller than they are now; and at that time the operating

officials were as a rule of rather a different character from the rule of operating officials of the present time.

Now, as to the extent to which the accounting officials were operating officials before they were accounting officials, I am not prepared to say but I think as a rule that they were.

Q. You do not think very highly of the ability of the accounting officials to devise an accounting system, do you, Mr. Byers?

A. Not unless the accounting officer has very thorough knowledge of operation, acquired how it may be—in other words, the position does not mean anything. It is a question of what the man knows.

Q. Do you know Professor Adams of the Interstate Commerce Commission?

A. Yes, sir.

Q. Do you know whether he has ever had any operating experience?

A. I don't know whether he has or not, but I do know that in the discussion of our revision of accounting, Professor Adams indicated to my mind that if he were alone to devise a system of accounting for railroads it would not be a very satisfactory system.

4051 Q. I suppose any accountant would have to do that, lean upon an operating man in all branches to make any intelligent division?

A. May I continue my statement?

Q. Yes.

A. In fact, Professor Adams has forced the injection of certain data into the system of accounting which the railroads are compelled to follow, which has met with universal criticism by railroad officials.

Q. I do not think there is any doubt about that.

A. And it has been found very unsatisfactory for the purpose of analyzing and securing economical operations.

Q. I will rest the case of the operator against the accountant here. You are the author of the book I have been reading from, Mr. Byers?

A. Yes, sir.

Redirect examination.

By Mr. MOORE:

Q. Mr. Byers, who is the author of "Economics of Railroad Operation" from which counsel has read extracts on your cross examination?

A. I believe I am guilty.

Q. If you have sufficient knowledge of that branch of the business of railroads and the basis upon which contracts for trackage rights owned by one railroad and leased to another to testify upon

4052 the subject, I would be glad if you would state if it is not a fact that in contractual arrangements of that sort a profit over and above the actual expense may be involved to the leasing line, is usually provided to be paid for by the line which leases it.

If you are not sufficiently familiar to go into the subject I do not

care to have you do so but if you are competent please give us your opinion.

A. My experience with that branch of railroad work is so limited I hardly feel competent to go into it.

Q. Mr. Byers, I suppose there is such a thing, is there not, as "primary accounts" which reflect, you might say, with reference to expenditures the facts of operation: Am I correct in that statement?

A. The statistics of operation as represented by accounts are usually divided into various divisions of greater or less importance. The more important ones are sometimes termed "primary accounts."

Q. The point I want to get at is this: Accounts are intended to and do reflect facts, do they not?

A. Yes, sir.

Q. And the facts reflected, intended to be shown by the accounts, are the cost of operation in the various branches in the accounts in which they are kept, are they not?

A. Yes, sir.

4053 Q. If it is true that the accounts are intended to represent facts and those facts are the various items of cost of operation, it is essential that the man who prepares the accounts should know what the different elements of cost are, and what the cost involved in the various branches of the service as shown in the accounts, to the extent that the cost is kept separately and shown separately in his accounts: is that not true?

A. I think that is true of the man who designs the accounts.

Q. I am not speaking of the designing but of the practical keeping of the accounts: If the accounts represent facts, the accounting man must know or obtain from someone else the information which would reflect the facts they are intended to represent: that is true, is it not?

A. Yes, sir, that is true.

Q. If an accounting official has no knowledge of operation where does he get the information as to the facts represented in his accounts?

A. He must take the facts as they are presented to him by the operating employés.

4054 WILLIAM H. V. ROSING, a witness of lawful age, being duly produced, sworn and examined on behalf of the complainant, in rebuttal, testified as follows:

Direct examination.

By Mr. MOORE:

Q. State your name, residence and occupation?

A. William H. V. Rosing, Mechanical Engineer Missouri Pacific Railway, at St. Louis.

Q. You live in St. Louis, I suppose?

A. Yes, sir, my headquarters are in St. Louis.

Q. What experience have you had in railroad operation and work?

A. I commenced in 1880, on the Illinois Central as machinist's

helper. I left the shop in 1883 to take the position of draftsman. From 1884 to about 1887 I was chief clerk in the machinery department.

From 1887 to 1891 I was chief draftsman in the Machinery Department.

From 1891 to 1892 I was Assistant Master Mechanic of the Chicago Division.

From 1892 to 1893 I was Mechanical Engineer of the Grant Locomotive Works at Chicago.

4055 From November 1893 to 1894, Mechanical Engineer of the Illinois Central, again.

From 1894 to 1898, Master Mechanic of the Denver & Rio Grande Railway at Denver.

From 1898 to 1899 I returned as Mechanical Engineer to the Illinois Central.

From 1899 to 1904, Assistant Superintendent of motive power on the Illinois Central.

1904 to 1910, and at the present time, Mechanical Engineer of the Missouri Pacific.

Q. You have been engaged, then, for thirty years in the character of work mentioned?

A. Yes, sir.

Q. You seem to have been in pretty much all the departments of that character of work?

A. Yes, sir, all branches of the machinery department.

Q. Mr. Rosing, the defendants have filed an exhibit in this case (Exhibit K) in which, among other things, they attempt to divide expense of maintaining freight cars as between local and through trains, and in dividing those expenses between those two classes of trains they have taken into consideration the element of repairs due to stopping and starting trains at way stations and repairs due to terminal handling of through trains and trains in local service.

Following the formula set out by Mr. A. M. Wellington, in a book written by him, bearing the title of "Railroad Location" they have divided expense of maintenance of freight cars on this

4056 basis:

Stopping and starting, 21.5% of the total expense on that account.

Terminal handling 13.5%.

Other expenses 65%.

And those elements of cost have been divided on that basis by the State on this exhibit.

Have you examined the exhibit so you are familiar with the method of division to which I have called your attention?

A. Yes, sir.

Q. Will you state if the percent of allowance for stopping and starting and other terminal handling adopted by the State is correct?

A. I do not agree with the percentages given in Mr. Wellington's book, a copy of the edition of 1887 of which I have here before me.

Q. That is the edition of 1887: when was the book written?

A. There is reference in the preface here to the book having been written ten years before.

Q. That preface refers to a book written ten years before in 1877?

A. Yes, sir.

Q. State in what you disagree and your reason for your difference in view to that adopted by the State?

4057 A. This claim in table 86 on page 203 of A. M. Wellington's book in the 1887 edition gives the total cost of items and divides the items into various parts of railway cars and gives the percentage of cost of repairs, and the percentage of cost to the total cost of each of the items.

There are some of these items that so far as my observations go should be combined. For instance, he shows an item of drawbars as separate from sills and attachments. In figuring our cost or in judging of the cost of these items we combine them in one item because they are parts of an integral portion of the car forming the draft gear equipment of which the drawbar is only a portion.

Q. You are reading now from the edition of 1887?

A. Yes, sir, on page 203 table 86. The table is "Distribution of cost of freight car repairs to its various contributing causes."

The item of brakes shows that 5% of the total cost of repairing cars is on account of repairs to brakes.

At the time this book was written, say in 1877—or take this edition in 1887—freight cars during that period had brakes only on one truck, and the brake operated by hand. Since then all of the brake rigging has been changed and none of that old brake rigging is applicable to any car today. We are obliged to apply brakes on both trucks, and we are obliged to operate them by air pressure.

So the entire brake arrangement is quite different and the maintenance of it is very much more than is referred to in Mr. Wellington's table.

4058 The item of drawbars and sills and attachments is shown at 15% in the table here (indicating book). Today that will amount to at least 35%, in my opinion.

The drawbar arrangement is entirely different from the cars referred to, as well as the attachment to the sills; and on account of the heavier equipment it is practically between two and three to one of what was in those days. And the engines increase in still larger proportion. We have more repairs to do on those items than is shown in the table of 1877.

There is a foot note on page 203 under table 86 which states that the "proportionate cost of wheels, axles and brasses, which are the first two items in the table, is perhaps large, and that the brakes and drawbars are small, but it is in accordance with the best obtainable information."

I think that is a fact and that would be a fact today, on a proportionate basis.

The wheels which he quotes at 30%, I think 18% would be perhaps nearer right.

The axles, brasses and boxes, which he also quotes at 30%, I should say 22% would be nearer correct.

Springs are also high. He quotes springs at 10% and I think perhaps half of that would be sufficient.

The truck frames and fittings 5%, I think is about correct.

Drawbar sills and attachments instead of 15% I should say should be 35%.

4059 Q. State what you would say would be a fair proportion of that element of expense to attribute to stopping and starting?

A. I should say that the stopping and starting would amount to between 30 and 32%—well, I should say about 32%.

Q. That is your best judgment?

A. Yes, sir, as near as I can judge the proportion.

Q. What percent of the expense should be charged to terminal handling?

A. About 25%.

Q. I wish you would describe somewhat in detail the new appliances and devices which have been introduced since the time Mr. Wellington wrote that book and which you think affect the percent applicable to this cost. State it in some detail. Give some description of what it is and how it operates that way.

A. In general the details of the cars as we build them today are quite different from even fifteen or twenty years ago. Take the cars say in 1880 when I commenced and am familiar with—the largest car I knew of at that time was 40,000 pounds capacity and that was a special coal car for special service at one mine. There may have been some other 40,000 pound cars at that time but I do not recall them.

Those cars were all of wood construction and the brakes were operated by hand, and ordinary wooden brake beam, and with brakes on only one truck of the car and cars were equipped
4060 with cast iron link and pin coupler.

The greatest change in cars today is their draft appliances, air brakes and master car builders couplers.

In order to resist the increasing capacity of locomotives and greater loads of present cars these parts underwent numerous changes in design and construction, depending largely upon the different views of the mechanical men handling matters, and finally culminated in the adoption of one kind of coupler which is known as the "Master Car Builders Coupler" or a coupler designed to be uniformly interchangeable for freight cars, and the adoption of air brakes instead of hand brakes, for all freight cars.

The car body, while made larger, is in principle much the same as the old cars. The trucks are somewhat different and somewhat simplified, and of course, are made heavier and of different materials than they were in 1880.

Q. In what way has all this difference in construction and the use of these devices increased this element of expense for repairs?

A. The application of the air brake has added all our present air brake equipment, including the air brake cylinders, valves, pipes, levers, brake beams, etc. This is all additional equipment to be

maintained because we are still obliged to maintain the hand brake connected with this air brake apparatus.

The air brake, of course, is applied whenever the train slows down, while formerly a brakeman who rode in the engine and was known as the head man, when the train was brought to a stop, would
4061 probably go back and set the brakes of four or five cars, to set the hand brakes, and if this was not sufficient to stop, the engineer would probably do the rest by reversing his engine, regardless of the number of cars in the train. With air, the engineer sets the brakes on all the cars in the train at one time. Therefore, the use of the air brakes is a complete addition to what we formerly had.

The change to automatic draw-bar, which couples by impact, without employés or operatives going in between the cars to make the coupling, has been the source of a great deal of expense, on account of carelessness, resulting in damage in handling the cars in stopping and starting and switching.

Q. Speaking now of stopping and starting: That is an element which you say amounts to thirty-five per cent?

A. Yes, sir, stopping and starting and coupling, in making up and breaking up trains. The damage is very much greater. I don't know that I can give the exact percentage, but it is very much greater. It became manifest right away; just as soon as the cars were equipped with draw-bars the damage commenced immediately, and was very perceptible.

Q. Do the brakemen have occasion now to go in between the cars in stopping and starting, to couple them?

A. No, sir.

4062 Q. What effect did that change from the draw bar to the automatic air brake have?

A. Just the change which came about from the general carelessness of the operatives or employés where they are not in danger. They let the cars come together faster than they did before, all contributing to shocks, the result of which finally is damage to the cars.

Q. You mean in handling the trains the engineers would not exercise that degree of care that was necessary to protect the lives of brakemen when they did the coupling?

A. It would not be particularly the engineer. The engineer is the man handling the engine, but he handles it on signal from the trainmen or switchmen and he works according to the signals he receives. Naturally if the brakeman was going to couple up cars automatically, he would signal the engineer to move and perhaps not be quite as active in signalling him to stop but let them come together at no matter what speed, because he does not have to go between the cars to make the coupling.

Q. Is that carelessness or only the result of the substitution of a machine for human help?

A. It is carelessness to some degree, but the heavy equipment also contributes to damage to a certain extent. Two heavy cars coming together at what is known as ordinary switching speed

would ordinarily do more damage than two lighter cars coming together at the same speed.

4063 Q. The impact is greater, I suppose, in the heavier cars?

A. Yes, sir.

Q. Is there any difference in the strength of the material of which the cars are made now, that enters into this increased element of cost of stopping and starting?

A. The materials in the cars have been improved in our present cars. We have substituted stronger material than what was used in the lighter cars.

I don't know as there is anything in the character of the materials that would contribute one way or the other.

Q. You spoke of the weight of the car. Is the weight of the car affected by the increased size or being constructed of heavier material?

A. Both. But particularly in the increased capacity for carrying the load. Where we had a 30,000 pound coal car in 1877 we now have 100,000 pound cars.

Q. Does that increased weight have any effect on the impact?

A. Just in proportion to the increased load, yes.

Q. You have been speaking now with reference to the per cent of cost of stopping and starting:

I believe you stated that the terminal handling would constitute about twenty-five per cent of this element of maintenance: will you please state in what way that has increased?

4064 A. In the handling of cars, switching and making up trains.

Q. What you have said in regard to starting and stopping applies with equal force to the handling of them in the yards, does it not?

A. Yes, only that the air brakes would not be applied so frequently in terminal switching as in the local work at stations or the running of trains, and the starting and stopping.

Q. Your ideas in that respect are about the same as Mr. Wellington's, are they not?

A. I think in a general way the ratio of starting and stopping would be 60 per cent and terminal switching 40 per cent of the sum of those two items; and Mr. Wellington's figures give it within one-half of one per cent of that. That is, so far as the ratio is concerned.

Q. State how much of the expense that should be charged to starting and stopping and how much to terminal handling. That is the point I am trying to get at.

A. Taking starting and stopping here, it is 21.5 per cent (indicating Mr. Wellington's book).

Q. I am not speaking of that. What I want to know is what percentage you say should be charged on account of this stopping and starting, and what per cent should be charged on account of terminal handling?

A. I think about 32 or 33 per cent for stopping and starting and about 24 or 25 per cent, say, for terminal handling.

4065 Q. And the changes in the weight and character of the cars as you describe, the changes in the devices and appliances for handling them and the change in the manner of handling them, that has grown out of the change in these devices and the manner of handling them, is what has brought about this change in cost?

A. Yes, sir.

Q. Have you made a careful investigation of this and are you satisfied that your estimate is correct?

A. They are what we use in our estimating. We keep in touch with all the performance of work on our car repair work, make trips over the road and see about what work is being regularly performed on our cars, and we think we have the percentages about correct. We repair about three thousand cars every day.

Q. And that is the per cent that obtains on the Iron Mountain road?

A. I should say so, yes, sir.

Q. Is that the condition that existed three years ago, in the year 1907?

A. Yes, sir, just about. There was a change not long ago of where we were obliged to couple up the air on about fifty per cent of the cars in a train. I think that was recently changed to seventy-five per cent of the cars. However, since the air brake rule first went into effect by order of the Interstate Commerce Com-
4066 mission, we have been applying air brakes, just as many as we could, and trying to get them on all cars.

Q. So your percentage that you speak of now is about the same as existed in the year 1907?

A. Just about.

Q. The remaining expense, then, would be forty-three per cent, excluding stopping and starting and terminal handling?

A. Yes, whatever that difference would be.

Q. Starting and stopping you state was thirty-two per cent and terminal expenses would be how much? Did you say twenty-four or twenty-five per cent?

A. Twenty-four per cent.

Q. Then that would leave forty-four per cent chargeable to other causes?

A. Yes, sir.

Q. You spoke a while ago about the manner of handling the trains and you used the word "carelessness"—on account of, perhaps, carelessness in handling or the signalling of the brakemen: Do you refer to carelessness on the Iron Mountain road or just that general carelessness inseparable from the use of the present kind of appliances on railroads everywhere?

A. Perhaps carelessness does not just explain it. A man does not deliberately go to work and smash cars together. But in view of the fact that a man does not have to go between the cars
4067 to couple them, he would probably be more liable to let the cars come together with a little more force than if he had to go between those cars.

Q. You speak now of the brakemen as giving the signals?
A. Yes, sir. That, together with the heavier car equipment, creates a greater expense.
Q. And the increased expense of keeping up the new appliances and devices?
A. Yes, sir.
Q. It does with the three elements?
A. Yes, sir.
Q. Is there a considerable outlay necessary to keep up these later devices which you say have been adopted since 1880?
A. Yes, it has increased the cost of repairs to cars right along on account of the added parts requiring attention.
Q. There being more parts to keep in repair?
A. Yes, additional parts as compared to the parts on the old cars.
Q. Mr. Rosing, how does the expenses of repairs on passenger coaches and on mail and express cars compare?
A. I should say that a mail car would perhaps cost fifteen to twenty per cent more to repair than an express car; and that a coach would cost at least 100 per cent more.
Q. More than the express car?
A. Yes, sir.
Q. The state, in Exhibit M filed in this case, has divided the expense of car repairs on passenger train cars between coach,
4068 mail and express service, upon a car mileage basis: is that a fair method of division?
A. No, sir.
Q. Why is not fair?
A. Because it costs twice as much to repair a coach as it does to repair an express car for the same mileage.
Q. Under the head of "Yard and train expenses" the state has divided between coach, Pullman, mail and express service, on a car mile basis:
Is it proper to divide that character of expense on that basis—car mile basis? I will assume that that item includes cleaning the cars.
A. Terminal expense?
Q. The "yard and train expenses" are divided between coach, Pullman, mail and express cars and that includes cleaning?
A. That would be just as far off as this other.
Q. Do you know about what per cent of that class of expense the cleaning would amount to?
A. The cleaning of a coach with reference to the other cars?
Q. With reference to that element of expense, yard train expense?
A. We clean cars at a passenger terminal whenever a train arrives, regardless of where it comes from; whether it came one mile or one hundred miles it makes no difference; we go through a regular performance and put that train in condition to go out
4069 again. We don't go by the condition in which the car came in, to prepare it to go out, and the same amount of work is done regardless of how many miles it has traveled.
To clean an express car there is nothing to do but sweep it out;

but to clean a coach, as we have on all coaches double windows and we have all those to clean——

Q. I will come to that in a moment. For several reasons you do not regard the car mile basis as the best method of dividing yard and train expense on passenger trains?

A. No, sir.

Q. What proportion of the total yard and train expense on passenger trains would the cleaning amount to?

A. The total percentage?

Q. Yes, of the cleaning of all classes of cars. What percent would it come to of the entire yard and train expense?

A. I cannot say what percentage of the yard and train expense.

Q. I want you to take up these different kinds of cars now, and state what the relative cost of cleaning them is: coach, Pullman, mail and express cars?

A. In the express car we only sweep them and what washing up would be necessary to make them presentable in appearance, because the express car consists merely of four walls and the roof and floor and there is no other equipment in it.

4070 In the case of a mail car we have the bag racks and letter boxes, which require some attention but not very much. It probably cost- ten or twelve per cent more than it would cost to clean an express car.

In the case of a coach we have the exterior as well as the interior to clean, and in addition the windows, seats, curtains and all the deck appliances, sash, etc., which amounts to probably 150 per cent more expense than to clean an express car.

Q. I wish you would give us the figures as to what you estimate it costs for cleaning each kind of car. Take a coach first.

A. To clean a coach every time it arrives at a passenger terminal would amount to probably $1.45 per car.

To clean a mail car would be about 65 cents. To clean an express car about 55 cents.

I think that is about our average cost.

Q. How does cleaning a baggage car compare with cleaning an express car?

A. A baggage car is about the same as an express car. That is to say, the car may be used for either class of service or for both.

Q. In the same exhibit referred to, the state has charged and divided the expense of repairing passenger locomotives between coach and Pullman, mail and express service, on the car mile basis:

4071 Is that a correct basis of division?

This is done without any attempt at separation as between the two classes of service—that is, the local and through passenger service; but the expense of repairing all locomotives without regard to whether they pull a through or a local passenger train is divided in the way I have mentioned: what do you think about that?

A. I do not think that is correct.

Q. State your views about that, Mr. Rosing.

A. The repairs to a locomotive should be apportioned to the work

done by the engine and unless all those cars were exactly alike then the division cannot be made on a mileage basis with reference to these cars.

Q. What is the weight, relatively, of those classes of cars?

A. Take an express car: it will weigh about 35 tons, while the coach would weigh perhaps 45 tons. A chair car would probably weigh 50 tons. A sleeper will weigh from 60 to 70 tons.

The repairs of an engine depend entirely upon the work done by the engine, and the work done by the engine depends upon the load it hauls.

Q. Do you include baggage cars?

A. Yes, sir, they will weigh 35 tons.

Q. Do you include express cars?

A. Yes, sir. The express car would be the same.

4072 Q. That expense should be apportioned among those classes of cars in relation to their respective weights: is that your view?

A. Yes, sir; and the mileage.

Q. Mr. Parker, a witness on the part of the state in this case, testified that the report of the American Railway Engineers & Maintenance of Way Association of 1904, shows a statement of cost of locomotive repairs on the Union Pacific Railway and that the cost of freight and work engines on account of getting up steam in terminal work was 7.35 per cent.

Cost of switch engine, 12.47 per cent.

This he says refers to locomotives, while Mr. Wellington refers to freight cars.

He says further:

"Mr. Wellington shows 21.5 per cent of this expense is on account of stopping and starting at way stations, while this report shows twenty per cent. Mr. Wellington shows 12.5 per cent for terminal handling and this report 16 per cent."

Are you acquainted with that report? You have seen it, have you?

A. Yes, sir.

Q. Will you state what that report is and what the real facts in regard to it are?

A. I should say that the report (which was made by the Maintenance of Way Association not Mechanical or Operating Association) evidently applied the Wellington formula for a divis-

4073 ion of the expense, because it was practically the same thing as the Wellington formula. In addition, however, they show certain figures relating to passenger equipment, and that table shows that the cost to repair passenger cars on account of stopping and starting is just as much as for freight cars. But I don't see how it can possibly be one-fourth of the cost of repairing freight cars, so I do not see they are any nearer right on their passenger than on their freight cars. It certainly costs a great deal more to repair the draft rigging on the freight cars, relatively, than on the passenger cars.

Q. You say it is evident that the report is based on Mr. Wellington's figures because they are the same:

I wish you would state whether the report states on what it is based and that they adopt Mr. Wellington's formula.

A. I think there is a note in the report that it was based on Mr. Wellington's formula.

Q. Do they discuss in there the correctness of that formula, or do they adopt it without discussion?

A. I do not recall any discussion of it. There might have been some. I only used the table to make a comparison with the Wellington formula. It seems to me it was the same thing only they added passenger cars, and in my opinion that is further wrong than on the freight cars.

4074 Cross-examination of W. H. V. ROSING:

By Mr. HILL:

Q. Mr. Rosing, have you your copy of Mr. Wellington's work before you?

A. No, sir, I did not bring my copy but I think I have some memorandum of the table.

Q. Have you a copy of his table 86?

A. Yes, sir, I have a copy of that.

Q. I wish if you have that copy you would read that into the record.

A.—

| Item. | Total cost of item. | Distribution. Effect of time and age, independent of work and mileage. | Stopping and starting. | Terminal making up trains, etc. | Curvature and grades. | Distance only between stations on straight track. |
|---|---|---|---|---|---|---|
| | p. c. | p. c. | p. c. | p. c. | p. c. | p. c. |
| Wheels..... | 30 | | 5 | 2 | 13 | 10 |
| Axles, brasses and boxes.. | 30 | | 5 | 2 | 5 | 18 |
| Springs..... | 10 | | 2 | 1 | 1 | 6 |
| Truckframe and fittings.. | 5 | 2 | 1 | 1 | | 1 |
| Brakes..... | 5 | | 2 | 1 | 2 | |
| Drawbars.... | 10 | | 4 | 4 | 2 | |
| Sills and attachments.. | 5 | 1 | 2 | 2 | | |
| Car body, painting, etc..... | 5 | 3 | 0.5 | 0.5 | | 1 |
| Total..... | 100 | 6.0 | 21.5 | 13.5 | 23.0 | 36.0 |

4075 Q. Mr. Rosing, referring to table 86 which has just been read, as I understand your testimony yesterday, you differ with Mr. Wellington as to the percentages in the first column, which is the total cost of each of the various items therein set forth aggregating the total distribution of the cost for freight cars repairs to these various contributing causes?

A. Yes, sir.

Q. But if I understood you correctly you do not disagree with Mr. Wellington as to the proportion which he distributes to starting and stopping, on each item; is that correct?

For instance, you take wheels, which Mr. Wellington gives as 30% and which you say should be 18%: in getting the percentage of expense of starting and stopping for that cause, as I understood, you would agree with Mr. Wellington's proportion except you apply it to 18% instead of to 30%: is that right?

A. What I understand you to mean is, that Mr. Wellington names certain items to which he distributes the cost. Of course, if you want to distribute it among those items you would have to use those same ones now for comparison. But in the distribution of items I do not think those headings are at all applicable to our present car construction, but for the sake of the division we will accept those headings as they are.

Q. That is not exactly the point I am asking you about. The point I am asking you about is this: this first column gives
4076 the distribution as Mr. Wellington sees fit and proper to distribute it: now you disagree with him as to the percentages which should go into that column?

A. Yes, sir.

Q. And as stated in your testimony yesterday?

A. Yes, sir.

Q. I understood you to say that the relative proportion assigned to starting and stopping you did not disagree with?

A. He shows 21.13% and I show 32.23%. Those are relative.

Q. I am speaking now of the individual items, Mr. Rosing. I understand your total. I am coming to that in a few minutes.

Take wheels, now, to illustrate my point.

Mr. Wellington puts that at 30% and you put it at 18%?

A. Yes, relatively. I think I understand you now.

Q. You understand that?

A. I think so.

Q. As to these various items he has given under "Stopping and starting" you disagree with the result, but agree with the relative proportion as assigned to starting and stopping: is that right?

A. No, sir; that is not right. Take the two percentages he gives for stopping and starting as 21.5 and 13.5 or a total of 35%——

Q. You are going to the question of totals but——

4077 A. (continued). Now, the relation of 21.5 to 35 and of 13.5 to 35 is about as my 32 is to 55 and my 23 is to 55. That is the relation I referred to in my remarks yesterday.

Q. I understand your difference with him as to results. But I am talking now about the apportionment of your given percentage as to starting and stopping.

Take the first item, wheels. Mr. Wellington gives that as 30% and you say that is too much and that it should be 18%?

A. Yes.

Q. Mr. Wellington gives 5% of the percent apportioned to wheels as due to starting and stopping?

A. Oh, I see now.

My figures do not agree with him in respect to that. My arrangement is different from his.

Q. He gives 5%, which is 1/6 of that cause: what percent do you give?

A. I should say 2%, or 1/9.

Q. Take the next item, "Axles, brasses and boxes." Mr. Wellington gives 30%, one-sixth of which he assigns to cause for stopping and starting: what do you assign it?

A. I should say 22% and 1/11 due to stopping or starting, or 2%.

Q. In the item of "Springs" Mr. Wellington assigns 10% and I believe you assign 5%?

A. Four I have it in my table now.

Q. 5% you gave in your testimony yesterday?

A. I may have said 5% but after figuring this out I fig-

4078 ured it out as 4%.

Q. You want to correct that and make it 4%, do you?

A. Yes, sir.

Q. What per cent of that 4% do you assign to stopping and starting?

A. 1% or ¼. And Mr. Wellington shows 2% or 1/5.

Q. The next item is "Truck frames and fittings": Mr. Wellington assigns 5% and I believe you agree with it?

A. I assign 6%. I have changed the equal per cent due to truck frames and springs from 5% for each to 4% for trucks and 6% for springs. I think that would be nearer right.

Q. You change that from your testimony of yesterday from 5% to 6%, do you?

A. Yes, sir.

Q. Did you give me the percentage of that 6% which you assign to starting and stopping?

A. Yes, sir, one-third or two per cent.

Q. The next heading is "Drawbars, sills and attachments":

A. You omitted brakes, if you wish to take them up separately?

A. Thank you, yes, I want to take them up in their order.

Brakes, 5%.

A. Yes, sir, and I have that down as 10%.

Q. You change that now to 10%?

A. Yes, sir.

4079 Q. You did not refer to that yesterday?

A. I think I made the remark "about double." I did not have any detailed figures then.

Q. You put that at 10% now: what per cent do you assign of that to starting and stopping?

A. 6%.

Q. 6% of the 10%?

A. Yes, sir. He had two per cent out of five per cent and I have 6% out of 10%.

Q. The next item is "Drawbars, sills and attachements"; Mr. Wellington makes 10% for drawbars and 5% for sills and attachments; what change do you make on that?

A. I make it 35% on that and 19% assigned to stopping and starting.

Q. Next is "Car body, painting, etc.": what do you make that?

A. Yes, sir.

Q. What does Mr. Wellington make it?

A. 5%.

Q. And you make it the same?

A. Yes, sir.

Q. Mr. Wellington assigns 1% of that as due to starting and stopping: what do you assign to starting and stopping?

A. I did not assign any of that to starting and stopping.

Q. What does that make your total percentage assigned to starting and stopping?

A. 32%.

4080 Q. In making this calculation what data have you used to compile it?

A. Principally my judgment of the case from experience and from supervising the work of that character for a number of years.

Q. This is just a matter of opinion with you?

A. And also in connection with the work done by what is known as the standardization of Equipment Committee of the Gould Lines, in which is represented nine railroads, which committee meets at certain intervals and discusses the standardization of equipment, for the betterment of our equipment and in a general way the improvement of our rolling stock. We discuss matters as to individual parts of the equipment, and take into consideration the service and the cost and in that way make the changes or otherwise in our specifications for engines or cars with a view of bettering the service and for the betterment of the efficiency of the equipment.

Mr. MOORE:

Q. Are you a member of that committee of which you speak?

A. Yes, sir, I am the chairman of it.

Mr. HILL:

Q. Has that committee ever worked out this table before?

A. No, sir.

Q. This is your first effort you have made to locate these expenses?

A. Yes, sir.

4081 Q. The first time has been in this litigation?

A. Yes, sir.

Q. And since you read the testimony of witnesses in this case?

A. Yes, sir.

Q. How long have you been engaged in this work?

A. You mean on this case?

Q. No, I mean this kind of work, in the mechanical departments of various railroads?

A. About thirty years.

Q. After thirty years' experience your first effort to locate these expenses has been since the introduction of the testimony in this case?

A. That is, the percentage of expense of this character. We have hundreds of items of which there are only four or five here. I do not see, exactly, at the time this table was made how they arrived at these things, except by judgment of some one person, who divided it up and made the comparisons of the percentages.

Q. Aren't you sufficiently familiar with Mr. Wellington's work to know that he states in the body of it somewhere that this work is the result of many years' experience on the Pennsylvania Railroad?

A. That is stated there.

Q. Mr. Wellington is regarded as an accepted authority on the subject, is he not?

4082 A. I think it is a very good book?

Q. And this table was made up from years of experience along these lines on the Pennsylvania Railroad: that is your understanding?

A. Yes, sir. But the table is so very different from our practice in these days that I do not see why it should have been so very different in those days.

Q. Are you acquainted with Mr. J. B. Berry?

A. I know Mr. Berry, the Chief Engineer of the Union Pacific Railroad.

Q. Formerly, but I believe he is now chief engineer of the Rock Island Railroad.

A. Well, I have met Mr. Berry on several occasions. I happened to be engaged with him at one time on some committee work.

Q. Is not Mr. Berry considered a man of large attainments in the line of his profession?

A. Well, I would not want to criticize a man in his profession, because his is an entirely different branch of engineering from mine. He is a civil engineer and I am a mechanical engineer. I do not know anything about his business.

Q. I was not seeking to draw a comparison between yourself and Mr. Berry.

A. No, but I do not like to speak of the qualifications of a

4083 man in another line of business—that is, of a civil engineer. I understand that Mr. Berry has a very high reputation in his business. I have always heard him spoken of as such.

Q. Mr. Moore questioned you yesterday about a report, which he called a report but I believe you did not call it a report, of the Maintenance of Way Association when in fact, it was a paper read before the Railroad Engineers and Maintenance of Way Association. Do you know that the report you were referring to was the work of Mr. Berry?

A. No, sir.

Q. You did not read his article containing that table?

A. No, sir, I just read that table that was spoken of in this testimony here.

Q. I will hand you volume 5 of the proceedings of the Railroad Engineers and Maintenance of Way Association.

A. I did see the table but I only noticed the figures in it and compared them with this testimony.

Q. I will offer you volume five of the report of the Railroad Engineers and Maintenance of Way Association of 1904 and call your attention to this article printed in the appendix, entitled "Reduction of Gradient, and Elimination of Distance, Curvature, and Rise and Fall on Union Pacific Railroad," by J. B. Berry, Chief Engineer of the Union Pacific Railroad, which you will find commencing on page 689. And therein I will call your attention to table three on page 695 which you see is a part of that article, and I will ask you if that is the table you referred to in your testimony yesterday?

4084 A. (After examining book:) Yes, sir.

Q. You examined the table but not the article containing it? Is that so?

A. Yes, sir.

Q. Now I see in your testimony yesterday you said,

"I should say that the report which was made by the Maintenance of Way Association or the Mechanical or Operating Association evidently applied the Wellington formula for the division of expense, because it was practically the same thing as the Wellington formula."

A. That should not be the Mechanical or Operating Association.

Q. You say you want to make a correction in that statement?

A. I wish the word "or" to be changed to the word "not." Making reference to practically the same thing I referred to that part of it relating to freight cars.

Q. Mr. Rosing, I want to read you what Mr. Berry says of the way in which these tables were compiled.

On page 692 he says:

"In order to determine the relative merits of different locations, values must be ascertained for each detail affecting operating expenses. "The Economic Theory of Railway Location", by Mr. A. M. Wellington, treats the entire subject fully. In this work Mr. Wellington has given to engineers a logical method of obtaining the values for distance, curvature, rise and fall and gradients, but the modern classification of operating expenses as adopted by the Interstate Commerce Commission gives these expenses in greater detail than could be obtained during the life of Mr. Wellington. This detail is of material assistance in following out Mr. Wellington's general method, as it lessens the chance for error in judgment as to the proportion of each item of expense which will be affected by changes in the details of location.

4085 Prof. W. L. Webb in his recent work on "Railroad Construction", has developed values for the various details, following the general method given by Mr. Wellington, but using the classification and figures given in the Reports of the Interstate Commerce Commission for the entire railway system of the United States. A study of these reports shows that the average cost per train mile in the more populous states is less than in the states west of the Missouri River.

In order to obtain a value of these details of location for the use of engineers in the Western states, the general methods of both Mr.

Wellington and Prof. Webb are applied in this paper to the operating expenses of the Union Pacific Railroad Company.

Table No. 1 is deduced from statements of operating expenses for the four years ending June 30th, 1902, and shows the percentage that each item of the table bears to the whole. The average cost per train mile is also shown, and this cost is divided between the items of the table according to the percentages shown.

Before proceeding to consider the value of gradients, distance, etc., it is necessary to obtain some basis for arriving at the proportional percentages of the more important items that are affected by changes in location. In many of the smaller items judgment alone has to be used, and in most of such cases a wide variation in judgment will produce but a slight change in the final figures. In the larger items of Maintenance of Way, Maintenance of Equipment and Conducting Transportation, the reports of the various departments for the four years covered by Table No. 1 have been studied and the conditions as they exist on the Union Pacific have been considered. The reasons for adopting these percentages are given in detail in Wellingtons' "Economic Theory of Railway Location." Tables Nos. 2, 3, and 4, together with the following notes, give some additional reasons and also explain those points wherein percentages different from Wellington's have been used."

Now after hearing that statement Mr. Berry made as to how he arrived at the percentages given in his Table No. 3, you find you are mistaken in assuming that he merely adopted the Wellington percentages, do you not?

A. Well, I don't know. I simply took it for what it 4086 reads.

He speaks specifically there of applying Wellington's methods. I did not know what Wellington's method was for making his table.

The manner of arriving at the expense of maintenance of an article, surely the percentages of the various parts would be changed at the time the entire article is changed in all its details.

Q. But Mr. Berry says he has made up his table No. 3 from the result of four years operation on the Union Pacific Railroad.

A. That may be. I do not know what the details of his operation were; and I do not know whether they are these individual items. (Indicating table). He says "in individual cases they are matters of judgment."

Q. He said when they are slight, but in large items like equipment, he has taken four years experience?

A. In speaking of maintenance of equipment he speaks of it as a whole. How they divide maintenance of equipment I do not know. So far as taking it from Wellington's, it looks to me they are nearly alike, he has 20% and Wellington has 21.5%, for starting and stopping.

Q. I wish to call attention to the fact that he says he has used Professor Webb's method of classification which is adopted by the Interstate Commerce Commission items for maintenance of work and other equipment.

4087 A. I do not know whether these items are according to the Interstate Commerce Commission classification, and I am not familiar with Mr. Webb's work.

Q. At any rate, you see Mr. Berry's table No. 3 is made up from four years statistics on the Union Pacific as to these particular items, do you not?

A. Yes, sir.

Mr. HILL: I wish to introduce this table No. 3 in full here.

The paper referred to is in the words and figures following to-wit:

| Class of service. | Total cost, percent. | Distribution of contributing causes, in percent. | | |
|---|---|---|---|---|
| | | Time and exposure. | Stopping and starting. | Switching. |
| Passenger | 100 | 11 | 20 | 11 |
| Freight and work | 100 | 6 | 20 | 16 |

| Class of service. | Curvature. | Grades. | Distance. |
|---|---|---|---|
| Passenger | 2 | 20 | 36 |
| Freight and work | 2 | 20 | 36 |

4088 Mr. HILL:

Q. Mr. Rosing, this shows that this report was made in 1904, and applying four years work there he gives the years shortly before that time, during that period, and working out practically the same result that Mr. Wellington made some ten or fifteen years earlier—wouldn't it indicate that the Wellington proportions were practically right as applied to modern railroad management?

A. No, sir, I don't think so. I think the percentages given here are just as authentic, so to speak, as the ones in that report.

Q. You are basing that upon the judgment of yourself and your associates, and these authors have based theirs upon many years' experiments and tests.

A. Our observations are of course from experiments and from actual work done. We repair cars daily all the year around, and a great many a day on the system—in the neighborhood of 3,000 cars a day. And in associating with the men who do this work, and from my personal observation, and in connection with the designing and construction of new equipment, in which we always take into consideration the service of the old equipment, is what I base my figures on.

Q. That is your opinion based upon your experience?

A. Yes, sir.

Q. And you do not agree with these two gentlemen who have made these experiments and tests over many years' work?

A. Well, mine has been over many years of work.

4089 Q. Another case of "Doctors disagreeing."

A. Perhaps so.

Q. You explained at some length yesterday that the improvements in automatic air brakes, and trucks, and various things of that kind,

had in your judgment, increased the expense of starting and stopping trains, for the reasons which you gave: isn't it also a fact that the resisting power to stand the trains have likewise improved?

A. Yes, sir.

Q. If the resisting power had not been improved, and in a measure kept pace with the other, your line would be strewn with wrecks from one end to the other, would it not?

A. I do not think so. Of course, that resisting power refers only to new cars of modern construction. There are a great many old cars in service and probably will be for a great many years, which we are obliged to operate in connection with the newer and heavier equipment. Of course, their structural parts are not as well prepared for resisting the handling as that of the newer equipment.

Q. Yesterday Mr. Moore asked you if you thought the division of car repairs on passenger trains between coach, mail and express on a car mileage basis was fair and you said you thought it was not: that is correct, is it not?

A. Yes. I do not remember saying "The division of car repairs." I thought it was a division of locomotive expense on car mileage.

4090 Q. The testimony reads:

"The state, in Exhibit M filed in this case, has divided the expense of car repairs on passenger train cars between coach, mail and express service, upon a car mileage basis: is that a fair method of division? and you say:

"No, sir."

A. No, sir.

Q. You maintain that position, do you, that it is not a fair division?

A. Yes, sir.

Q. Now is it a fair division to apportion the expense of these items between states on a car mileage basis?

A. No, sir, it should be apportioned in accordance with the work done on the different classes of cars?

One kind of car may need two or three times the work because it has two or three times the parts on it which to work with. While the other cars do not have those parts at all.

Q. You are speaking of locomotives, now?

A. No, sir, of cars. The difference between an express car and a Pullman car and between a Pullman and a coach.

Q. You do not repair Pullman cars, do you?

A. No, sir, but I am showing the difference between the construction of the different kinds of cars. Take a chair car or a dining car and cars of that character. They are entirely different kinds of cars.

4091 Q. On the Missouri Pacific System are not all the cars put into a pool and their repairs divided on a car mileage basis?

A. I do not know how they handle those accounts.

Q. Would not that be a fair way of dividing it?

A. The percentage of total expense divided among the different classes of cars on their mileage basis?

Q. Yes.

A. I do not think that would be fair.

Q. You do not think that would be fair?

A. No, sir, I do not.

Q. Bring that down to this point: Arkansas, of course, obtains a part of the mileage of the St. Louis, Iron Mountain & Southern and the Missouri Pacific Systems: would it be fair to divide the expense of maintenance of equipment, of cars that were apportioned to Arkansas, on a car mileage basis, arrived at by taking the whole pool of the Missouri Pacific System, taking all of them together?

A. I do not see how you can divide the total expense on a car mileage basis, when the work on the different classes of cars varies. That is, cars moving varying distances, costing various amounts to do that work.

Q. I wish to read you statement 5 of Exhibit 3 filed in this case, which explains one method of apportioning the expenses: it reads as follows:

"Maintenance of equipment. This account includes
4092 all kinds of repairs, renewals, depreciation of cars and locomotives; also shop machinery and tools. The cost of repairs, renewals and depreciation of equipment being of a general nature and not applicable to any particular state is divided among all states upon the basis of the mileage in each state of each class of service."

I will ask you if that is a fair division of that item of expense?

A. It does not seem to me it should be divided on a mileage basis. It may be relatively the correct or the most convenient way for obtaining figures, or something of that sort.

Q. The same thing would be true, if it is true——

A. (continued). I do not see how you can take the different cars making the same mileage, and apportion the total expense of those cars equally on a mileage basis, when the different cars require different amounts to repair them, in making the same mileage.

Q. Your objection to this point would go, if I understand you, as well to a division between states as it would to a division between the classes of service?

A. There is only the passenger service. There is no difference in the classes of service; it is all passenger service. You said "different classes of service."

Q. I did not state my question properly. I meant the different cars—I mean coaches, mail and express cars.

A. You mean "classes of equipment"?

Q. Yes, that is the word I should have used—equipment.
4093 As I understand you, your objection would go equally to dividing it between states on this basis as to dividing it between different classes of equipment: you do not think that is a proper factor in either instance, do you?

A. No, sir, I do not.

Q. Speaking of units for dividing expenses of the cost of maintenance of track, it is usually reduced to the cost per mile, is it not?

A. I am not at all familiar with the track part of it.

Q. Is not the cost of the locomotives measured by the cost per mile run of the locomotives?

A. That is frequently done that way as a matter of comparison.

Q. But you do not regard it as a good method?

A. That is one that has been generally adopted, but it is not correct. It does not give the engine any credit for the work it does.

Q. You know Mr. M. L. Byers, do you not?

A. Yes, sir.

Q. What position does he occupy on your railroad?

A. Chief Engineer Maintenance of Way.

Q. You regard him as a typical man in his work?

A. Yes, sir.

Q. Are you familiar with a book he has written called "Economics of Railroad Operation"?

4094 A. No, sir.

Q. You know he is the author of that work?

A. Yes, sir, I know he is the author of that work.

Q. I wish to read you from page 97 of that work and see if it agrees with your ideas on that subject:

"The common measure of track is the foot or mile, and, in comparing the cost on different territories, the cost of maintenance of track is usually reduced to the cost per mile. The cost of maintenance of locomotives however, is measured, not by the cost per mile of locomotive, but by the cost per mile run, so that, if we should combine the cost of locomotive repairs with the cost of track repairs, we would be unable to apply any unit of measure which would be reasonable for the entire expense."

Do you agree with his statement in there as to the proper unit for dividing those two items?

A. I never thought of that (examining book). What he means there is that you have not a locomotive a mile long to compare with a track a mile long. I do not see that one has any relation to the other.

Q. He points that out. He is right, isn't he?

A. I do not see that that has anything to do with it. That is merely a statement of facts that there are two individual things to be compared.

Q. The point I am calling your attention to is that in developing that point Mr. Byers states that the locomotive mile is the proper measure of expense of equipment of the locomotive, and I ask you if you agree to that proposition?

A. There are no repairs to a locomotive standing still. The engine must move to cause repairs, and in moving it makes
4095 mileage. That is one basis. But that is only one part of the duty of the locomotive and it is a convenient measure for dividing up expenses.

I do not know the origin of that but I know it has been going on many years, while I have been railroading.

But there are many improved methods of measuring the operation of the locomotive and the work done, than by the ton mile basis.

Q. You think that is more efficient?

A. That is the only way. You can only gauge the work a man

does in a given time. And you can only measure the work the locomotive does in a given time.

Q. How would you measure it?

A. On the ton mile basis.

Q. You approve that?

A. Yes, sir. That entails a great deal of work and it is doubtful if that refinement of measuring the operation of the locomotive is of sufficient value to pay for the expense of maintaining it.

Q. This would be gross?

A. Either gross or net. The two go together. You cannot have one without the other.

Q. You think the ton mile is an efficient measure of expense?

A. Yes, sir.

Q. A great many of these doctors learned in railroading have been trying to educate me to believe that was not the case:
4096 they have not educated you to believe it, have they?

A. Maybe I am a poor doctor. I know I advocated it a great many years ago, when I was first engaged in engineering statistics.

Q. Has your experience strengthened your views on the subject?

A. It has not changed them any.

Q. I believe you stated that in your judgment the car mile is not a proper factor for dividing the expenses between mail, express and passenger coaches? I believe you said that was not proper: is that correct?

A. Yes, sir.

Q. Do you know S. C. Johnson, the General Auditor of the Cotton Belt?

A. No, sir.

Q. Do you know him by reputation?

A. I do not know that I have ever met him.

Q. I understand he is a very expert accountant and that he has been Auditor of the Cotton Belt Railroad a great many years. I have not the pleasure of his personal acquaintance but I understand he is very expert?

A. I grant that.

Q. I wish to read you a statement he submitted to a committee of Congress which is published in a volume entitled "Railway mail pay, testimony taken by the Commission to investigate the postal service," part two, at page 563.

He says: "I submit herewith a few facts relating to the railway mail service on this line, which will show why the compensation for such service should not be reduced."

4097 Then he gives a table of receipts from the various mail routes on the Cotton Belt road, which I will omit.

Then he gives the expenses for the year, which I will also omit.

Then he says:

"The proportion of operating expenses and fixed charges chargeable to mail traffic given above are arrived at on a car mileage basis as follows".

Then he takes up the actual figures, which I will omit reading unless you wish to hear them, to show how he gets his percentage, and in giving those figures he says:

"The basis used in arriving at the expenses chargeable to mail traffic seems to be an equitable one, and if any criticism could be offered against it it would be that the proportion allotted to mail traffic is too small, because the mail cars are more expensive than the ordinary passenger cars, and the apartments of the mail and express cars allotted to mail service are fitted up with racks, cases, etc., while the express apartments are simply left bare."

What do you think of that statement of Mr. Johnson?

A. That depends. On the ordinary passenger cars, if he repairs the coaches I should say that the coach costs more than the mail car. A chair car will cost more than a mail car: and an express car will cost less than a mail car.

Q. He just gives that as one of his reasons. What he says is "the car mileage is an equitable basis to apportion the operating expenses between coaches, mail and express cars".

I am asking you if you agree with Mr. Johnson's views as to that?

4098 A. It simply reverts back to the question of the mileage basis. It seems to me a more equitable way would be——

Mr. MOORE: Before that question is answered I want the witness to understand and I want to understand just exactly what Mr. Johnson is testifying or talking about.

Mr. HILL: I will read the statement from the book.

Counsel here reads.

Q. The whole question is divided on a car mileage basis and I ask you if you agree with Mr. Johnson's statement that that is an equitable way of dividing the expense?

A. Between the different classes of cars?

Q. Yes.

A. No, sir, I do not think so. I will make an illustration of what I am trying to tell you. What I am trying to get at is this: suppose you have an express car in a train and a coach in a train and they go one mile. At the end of the mile the work required on the express car costs $1.00 and that on the coach costs $5.00. Then the two cars together to go two miles would cost $6.00 and I do not think it would be fair to say that because they went one mile each of the cars should be charged up with $3.00 a piece.

Q. Do you know Mr. Stewart R. Knott?

A. No, sir.

Q. Formerly Vice-President of the Louisville & Nashville Railroad and recently president of the Kansas City Southern Railroad?

4099 A. No, sir.

Q. You know him by reputation, do you not?

A. I know he is a railroad officer and that is all.

Q. I want to call your attention to a statement from him made

in this same hearing, which is found on page 604 of the same volume I have just quoted from. It is as follows:

"The operating expenses, as divided between "passenger" and "mails" are arrived at by taking the total operating expenses chargeable against "passenger train earnings" and dividing same on the basis of car mileage. The "passenger expenses" were charged with the total mileage of all coaches, parlor and sleeping cars, together with the total mileage of all baggage cars and one third of the mileage of "combination" baggage, mail and express cars". The "expenses of conducting mail" were arrived at in like manner by charging to that account the total mileage of the railway post-office cars and one-third of the mileage of the "combination" baggage, postal and express cars. This is clearly not an unfair basis of division, so far as the transportation of mail is concerned, when we bear in mind that the postal cars are more expensive both to construct and maintain and to operate than the ordinary baggage or express cars; and same is true with regard to the postal apartment in the combination baggage, mail, and express cars—i. e., such apartments are provided with special facilities for the handling of mails not provided or required in the express or baggage apartments."

A. I say that is just right.

Q. You agree with that?

A. Yes, sir. That speaks of a coach and mail car as compared with an express car.

Furthermore, all those mail car statistics you have read on a mileage basis I say would be nearly correct so far as it relates to a coach, because a mail car will weigh nearly as much as a coach.

4100 Q. He speaks of it as a comparison,——

A. His last remark you read referred to comparison of a mail car and an express car.

Q. He thinks it is fair.

A. What you read now is correct, but that is different from the other question.

Q. Mr. Knott answered a question from Senator Allison, during this same hearing, and which appears at page 599 of this same book. It reads as follows:

"Senator ALLISON: Do you regard that as a fair basis of approximate cost and approximate earnings?

Mr. KNOTT: I do not, sir. I think a committee of expert would find that that is a partial statement in favor of the Government's side of the question, because we have assumed that the transportation of the mail is handled only with the same expense and under the same conditions as the transportation of our freight and passengers, and that is not the case."

Do you agree with that, that the transportation of the mail is more expensive than the transportation of freight and passenger?

A. I don't know about that.

Q. You spoke of cleaning cars, as if that were a maintenance of

equipment expense: that expense does not belong to the maintenance of equipment in the classification of accounts, does it?

A. I am not familiar with the details of distribution.

Q. You are not familiar with the method of classifying the various accounts?

A. No, sir, I do not follow that.

Mr. MOORE:

Q. That class of expense, yard and train expense, is an
4101 expense incurred by the mechancial department?

A. What expense?

Q. Expense of cleaning cars.

A. We handle the work of cleaning the cars almost exclusively.

Mr. HILL:

Q. Mr. Rosing, I see that this item 63 on exhibit 3 "passenger cars, cleaning of", which I understand is a cleaning proposition, shows that $50,600.32 is charged to Arkansas on that account out of a total expense charged to Arkansas of $4,931,224.75.

If there are any errors in distributing that cost on a car mileage basis, the total cost is fifty thousand out of nearly five million: whatever error that would be, would be a negligible quantity on the total results, wouldn't it?

A. I don't know. It would be whatever the figures will show. I would not be the one to determine whether it is negligible or not.

Redirect examination.

By Mr. MOORE:

Q. Mr. Rosing, the yard and train expenses are set out in Exhibit M, to which reference has been made in your examination, amounting to $549,069.

The expense of the car- of passenger cars is $50,600 or about 10% of the total of yard and train expense; that is, on ten percent of the items divided on that basis we have been making that division.

4102 A. Yes, sir.

Q. I want to know if that 10% out of an item that amounts to over half a million dollars would not make some difference in the result?

A. Yes, sir.

Q. Counsel called your attention to the fact that there were some four million dollars of total expenses involved in operation during the period mentioned. That includes freight and passenger. The passenger end of that amounts to $1,678,000. Nearly one-third of that, that is something over half a million dollars, is involved in the yard and train expense, and 10% of that is involved in this cleaning.

That expresses, if my figures are correct, and they are taken from the exhibits in this case, the important or lack of importance of this item of car cleaning?

A. I should say so.

Q. Your attention was called to your statement that the expense of car repairs on passenger train cars should not properly be divided on a car mileage basis: you were asked why that was not true and you said because it costs twice as much to repair a coach in one class of cars than in another class of cars: it was because of the want of quality in the labor and expense between the different classes of cars engaged in that service, was it not, that caused you to say it could not be divided on a car mileage basis?

A. Yes, sir, the different classes of cars making the same mileage.

4103 Q. If you were going to divide this between the same classes of cars, a different rule would prevail, would it not?

A. Yes, sir.

Q. The Missouri Pacific System, of which the St. Louis Iron Mountain & Southern is a part, operates in more than one state, operated in Missouri and Arkansas?

A. Yes, sir.

Q. The Iron Mountain is a part of the Missouri Pacific System, which embraces more than one state, in dividing the expense of the several branches of service, including maintenance of equipment, and ascertaining that which belongs to any one of the states in which the system is operated, it is necessary to make an apportionment or division between the states in which the property is operated? Is there any other basis than the mileage upon which a division between states of the expense of the various kinds of service can be made, than an apportionment with reference to the mileage in each territory: is there any other way to make it?

A. I think the mileage would be the only basis on which you could divide that, because there would be just as much variation in the different kinds of trains in one state as in another, on an average, during a month or a year or whatever period you wanted to arrive at.

Q. When you come to divide this car expense we will say we are treating of now, keeping the passenger cars in repair, for the

4104 purpose of ascertaining correctly or as closely as is possible to obtain it correctly, you have already said you could not take the total mileage of all the different classes of cars, mail, baggage, express, coaches, and divide it by the car miles. In that case what would be the proper method of making a division of the cost between these different class- of cars?

A. That would be very difficult to do, I should judge. I would have to take the actual cost for each different car, and the mileage that each separate car made during a given time.

Q. In other words, you would have to ascertain the expense of each class of car used and divide that between the members of that class, on a mileage basis?

A. Yes, sir.

Q. That would attain as near perfection as is possible?

A. You would have to get the expense of each individual car and the mileage of that car.

Q. What I mean is this: If you wanted to divide it on a mileage

basis you would approach approximate correctness by confining your division to the various classes of cars?

A. Yes, sir.

Q. That is to say, coaches, mail and express cars and so on?

A. Yes, sir.

Q. But when you come to group them and take the total cost of all classes of cars, and then divide it on the mileage basis,

4105 you are just as far wrong as the difference that exists in the cost of repairing each class of cars, are you not?

A. Yes, sir.

Q. If it costs twice as much to repair one class of car as another you would be just as far off from being correct in dividing on that basis?

A. Yes, sir.

Q. That is what you meant by your statement that the car mileage was not the proper basis for division, is it?

A. Yes, sir.

Q. Your attention was called to the work of Mr. Byers, who testified in this case yesterday, on economics of railroad operation and particularly to page 97 of that book where in discussing the subdivision of expenses he states some principles to which your attention was called:

Mr. Byers says:

"It is important that two points be kept in mind:

First, that the subject of expenses have a common unit of measure.

Second, that the expenditure be brought about by similar causes."

And the reason you have just given that the basis of apportionment adopted by the state in this case, as to the expenditures we have been talking about is wrong, is because of those two principles, is it not?

4106 In other words, is there a common unit of measure as between actual expense of keeping coaches and express cars in repair, or is there a different unit or measure of cost applicable to each one?

A. You might apply the same unit of cost, but the cost per unit would vary greatly.

Q. He says "the expenditures must be brought about by similar causes."

Isn't it also essential that there should be a measure of quality in that expenditure as between the two classes which you propose to divide in common, in order to make that division proper?

A. I should say yes.

Q. What do you understand in its application to this division of the cost of repairs to passenger cars to be the unit of measure? Or what is your understand- is the unit of measure?

A. You must have a unit of measure.

Q. You mean that is your view?

A. That is my view.

Q. Does that unit of measure exist as between the different classes of vehicles? Is it a common unit by which you can measure the ex-

pense incident to a coach and the expense incident to an express car?

A. I say, you must have a unit of measure for the car. Now, the cost per mile to run them is on a mileage basis. But you cannot take the sum of those two and divide by the mileage and
4107 get the relative cost. That cannot be done. It may be done for convenience, but it is not a fact in the case.

Q. There is a difference between getting a unit of cost to compare with as between two territories and two periods of time, and getting that cost actually in dollars and cents for the purpose of dividing between the two branches of the service.

A. I do not understand that.

Q. I will read you what Mr. Byers says:

"The common measure of work is the foot or mile and in comparing the cost on different territories"

that is what I am calling your attention to, different states—

"in comparing the cost on different territories the cost of maintenance of track is usually reduced to the cost per mile."

Why is that done and why is it done that way?

A. Because that is the actual amount of money spent on that mile of track.

Q. Why do you do that? I understand when you apply that to one mile, but when you apply it for the purpose of comparison to ten miles for the purpose of ascertaining relatively the cost, say in Arkansas and Missouri, why do you adopt that measure then?

A. I would not say to take the total cost and divide it by mileage in two states would be the relative cost, because there might be twice as much mileage in one as in the other. Take the mileage of
4108 a baggage car here and in another place. The mileage of track in one state and in another state would be just the same on the two cars in the same state, but it would not be the same in comparing a baggage car and a coach. That would be a different thing. But a mile of track and a mile of track is the same thing.

Q. But your attention was called to a statement made by Mr. S. C. Johnson in a hearing by the Mail Department at Washington in connection with the Postal Cars on his road, in which he is quoted as saying that mail cars are more expensive than ordinary passenger cars to keep in repair.

Do you think he is correct in that statement?

A. I don't know what he means by "ordinary passenger cars." That is very indefinite, indeed.

Q. His language is:

"The mail cars are more expensive than the ordinary passenger cars, and the apartments of the mail and express cars allotted to mail service are fitted up with racks, cases, etc., while the express apartments are simply left bare."

A. You see there he refers simply to express cars. The ordinary passenger cars against the ordinary express cars and all the cars that ordinarily make up a passenger train. He is correct so far as express cars are concerned but not coaches. He also apportions them on passenger trains.

Q. Your attention on cross examination was called to a statement made by Mr. Knott before the Congressional Committee that the mail was not transported at the same expense as freight and passenger but at a higher expense:

4109 I ask you if you agreed to that and you said you did not. I want to call your attention to the entire statement made by Mr. Knott.

Mr. Knott did not put his statement that the mail service was more expensive because the care of mail cars was higher than the cost of the care of passenger cars, but here is what he says:

"The government has the right, and exercises it, of designating on what trains the mail shall be carried.

It is frequently the case that we schedule a passenger train at a certain rate between terminal points to carry a certain number of cars. Assuming that it is a fast train to which we are referring, the Government begins to add mail on to that train and take it off of other trains—the slow trains. The first thing we know, having scheduled that train up to its maximum of speed with the number of cars assigned to the engine, the Government comes and says, "The mail on that train is so heavy that we will require an additional postal car," and it will order, without any further question on our part, that that train, although scheduled, we will say, for five cars at a maximum of speed, shall carry the additional postal car."

Then he goes on to show that as the preference is that will perhaps result in an entire rearrangement of the whole passenger schedule for that division. Then he says:

"The result is not infrequent, therefore, that the placing of that additional car upon a train already scheduled will require an entire rearrangement of the passenger train schedules for that division, either by changing the time of arrival and departure of the train, slowing it down so as to carry the additional car, or, as is sometimes the case, actually putting on an additional train in order that the original train may continue to carry the excess Government mail matter at the original schedule rate. Now, those are incidents arising in the business to which we have given no consideration in the analysis to which I have heretofore referred."

4110 That is a very different proposition from the relative expense of maintaining a coach and a mail car, is it not?

A. Why, yes, quite so. You might have to buy a new locomotive to do it.

Q. Your attention was also called to a statement of Mr. Knott at page 604 of the report from which counsel read: Mr. Knott said here, making this comparison—he first says:

"The operating expenses, as divided between "passenger" and "mails," are arrived at by taking the total operating expenses chargeable against "passenger train earnings" and dividing same on the basis of car mileage. The "passenger expenses" were charged with the total mileage of all coaches, parlor and sleeping cars, together with the total mileage of all baggage cars and one-third of the mileage of "combination" baggage, mail and express cars. The "expenses of conducting mail" were arrived at in like manner by charg-

ing to that account the total mileage of the railway post-office cars and one-third of the mileage of the "combination" baggage, postal and express cars. This is clearly not an unfair basis of division, so far as the transportation of mail is concerned, when we bear in mind that the postal cars are more expensive both to construct and maintain and to operate than the ordinary baggage or express cars."

Don't you say the same thing?

A. Yes, sir, and further that the mail car is heavier.

Q. You were asked on cross examination if this was the first time in all your experience that you had ever attempted to locate the expense of car repairs: do you mean to say you had never given any attention to that subject for the purpose of ascertaining the relative parts of a car—what it would cost to keep the rela-

4111 tive parts of a car in repair?

A. I think I said it was the first time I had ever tried to divide it on a percentage basis in comparison with Mr. Wellington's tables. So far as the relative repairs to cars or engines is concerned, that is a matter of daily consideration, study and observation.

Q. It has been a matter of study with you for years?

A. Always. That is my business.

Q. Mr. Berry, who is referred to by counsel, is a civil engineer, is he not?

A. Yes, sir.

Q. He is not engaged in the same line of work that you are engaged in, mechanical engineering?

A. Not that I know of.

Q. And he was chief engineer of the Union Pacific Railway?

A. Yes, sir.

Q. Would his duties bring him into contact with and give him the experience you have had as a mechanical engineer, in acquiring information as to the cost of keeping machinery in proper order?

A. I do not think so.

Q. Basing his judgment upon the information he would acquire in actual experience in the position he holds as chief engineer, as compared with the man on his road who is engineer of the

4112 Mechanical Department, which would be able to form the better judgment as to the cost of repairs in any particular branch of the service, say the maintenance of a locomotive or maintenance of a car?

A. I should say the engineer of the Mechanical Department. I would think Mr. Berry would get his figures from the Mechanical Department.

Q. I want to call your attention to a table which contains a classification of the expenses used in preparing the formula in statement No. 3 at page 695 of this volume: That formula which seems to be a formula for the distribution of contributing causes of expense, gives the total cost, etc.: I want you to look at that table under Maintenance of Equipment and see if there is any division there or any item by which the expense of starting and stopping freight cars

can be ascertained and separated, or which would be of any service in the preparation of the formula for apportioning that class of expense?

A. You mean if there is any basis here for arriving at the distribution shown in that table?

Q. That is the classification of expense which is used in the formula on the table shown on the preceding page: Is there anything that would afford the means of dividing the cost of starting and stopping freight trains?

A. No, sir.

Q. That table gives the percent that each item contained in it is of the total expense: but it does not give, or purport to
4113 give, does it, any information which would enable one to determine the relation of the different items of expense in the different classes?

A. No, sir.

Q. Under "Maintenance of Equipment" is "Superintendents" "Repairs and renewals" "locomotive and passenger freight cars," and so on. That means the total expenditure in connection with freight cars; repairs and renewals is 5.32% of the total cost of maintenance of equipment. But that does not undertake to divide that 5.32% between the different kinds of service and repairs that are necessary to keep freight cars up?

A. No, sir.

Q. That is the point to which I wish to call your attention.

A. It does not.

Q. This engineer is discussing the effect that the proper location of the line of railroad will have upon operating expenses. He says in the beginning of his treatment of the subject in which these tables are embraced:

"In order to intelligently locate a line for a railroad, it is essential that a study be made to determine what effect the location and construction cost of different routes would have on the operating expenses and fixed charges of the road."

In discussing that subject he is dealing with a matter that comes within his profession, is he not, the location and construction of a railroad?

A. Yes, sir.

4114 Q. And there is no man so competent to deal with that subject as a civil engineer, is there?

A. I do not think there is.

Q. In outlining his purpose with reference to the relation between the location of the road and operating expenses he says:

"The details of location affecting operating expenses are Gradients, Distance, Curvature and Rise and Fall."

Then he says:

"As the effect of these details on operating expenses varies most directly with the number of trains operated, the "train mile" is used as the general operating unit."

A. Yes, sir.

Q. Then he says:

"In order to determine the relative merits of different locations, values must be ascertained for each detail affecting operating expenses."

Now it is for that purpose he is making this division of these expenses and when he comes to divide it he says:

"In order to obtain a value of these details of location for the use of engineers in the Western states, the general methods of both Mr. Wellington and Prof. Webb are applied in this paper to the operating expenses of the Union Pacific Railroad Company."

He does not say what his opinion is as to the merit or demerit of Mr. Wellington's plan, but he simply adopts it. I presume he thinks it is all right. But there is nothing there to indicate, is there, that he has made any investigation of it or that he is
4115 familiar with that division? Do you see anything there that would indicate that?

A. No, sir.

Q. He is trying to apply the best knowledge he can obtain from other sources—that is, from authorities that deal with other matters with which he is not familiar to the proper location of railroads, for the purpose of determining and demonstrating the relation between location and operating expenses. But do you understand from reading that, that this engineer had made any investigation of the merits of the methods of division and details of expense at all?

A. I do not think he did. I do not think he says he did. He just used this formula, as they call it, of Mr. Wellington.

Q. It is a "ready made suit" he bought for himself.

A. Yes, sir, and at that time it may have answered his purpose. But when you are dealing with cars today the cars that were not in existence when the table was made cars of different type, cars used for different purpose, that were not known in those days, then this whole table changes.

Q. Do you understand from this, that this engineer's discussion involves any consideration of correctness or incorrectness of Mr. Wellington's rule?

A. No, sir, I do not see that it does there.

Q. Then follows a table No. 1, to which I will call your attention, in which he enumerates the per cent of the various items of maintenance of equipment; and then on page 695 is table
4116 No. 3, wherein he applies Mr. Wellington's formula for the purpose of ascertaining the cost of starting and stopping trains. He practically follows Mr. Wellington in that. That is all there is to Mr. Berry's report.

A. I would say if he follows Mr. Wellington's formula he would probably get the same relative answer as was given in Mr. Wellington's table.

Q. In referring to this report to the Maintenance of Way Association yesterday, you counted upon the division of expense for starting and stopping trains that applies to passenger cars, which is the same?

A. Yes, sir.

Q. You said "It certainly cost a little more to repair the draft rigging on a freight car relatively than on a passenger car?"

A. Yes, sir.

Q. You did not explain, although I intended to ask you about it, why it costs less on a passenger car than on a freight car?

A. The manner of coupling passenger cars together relieves a great deal of the shock in starting and stopping the train, by reason of the buffing attachment. This attachment is not applied to freight cars.

Furthermore, the starting and stopping of passenger trains is usually performed with from three to six or eight cars while with freight trains it may run up as high as 50 or more cars.

4117 The amount of effort required to operate the drawbar to start a passenger train is much less than that on a freight train, on account of the increased weight of the freight train.

Therefore, the strain on the two classes of equipment is very different, being very much less on the passenger train. And the actual performance of work in freight and passenger yards would demonstrate that the repairs to freight cars on starting and stopping far exceeds that on passenger cars.

Q. In the table prepared by Mr. Berry in the report which has been referred to in connection with him, in making his distribution of cost of car repairs he charges the same per cent, 20 per cent, to passenger and freight cars. There is nothing in the book that indicates why he did it or that he had any reason for it.

I want to ask you if in the absence of any explanation which does not appear that he simply followed Mr. Wellington's form and applied it to passenger and freight cars alike, without regarding the distances to which you have called attention, in the difference in cost?

A. That may be the case. Mr. Wellington does not refer to any passenger car repairs at all.

Q. He did make a different application of the expenses in some other matters—that is, time and exposure of passenger and freight cars.

4118 A. I beg your pardon. I would like to ask Mr. Johnson a question.

Mr. Johnson is that what we call "depreciation?"

Mr. JOHNSON: No, sir, that is an entirely different item from depreciation as we understand it now.

Recross-examination.

By Mr. HILL:

Q. Mr. Wellington's formula did not work up any passenger statistics, did it?

A. No, sir.

Q. Then Mr. Berry was not following Mr. Wellington on his passenger statistics?

A. I don't know anything about what Mr. Berry was doing.

Q. You don't know anything about Mr. Berry's article except what appears on the face of it, as read here this morning?

A. No, sir.

Q. I suggest then that instead of making comments on it the three pages referred to be copied into the record.

The paper referred to is in the words and figures following, to-wit:

4119 *Economic Basis of Revision Work.*

In order to intelligently locate a line for a railroad, it is essential that a study be made to determine what effect the location and construction cost of different routes would have on the operating expenses and fixed charges of the road. Any expenditure in construction which reduces operating expenses by an amount greater than the interest charges on such expenditure will be an economy. The volume of traffic being equal, the most economical location is that which will require the least expenditure to cover the combined cost of interest and operating expenses.

The details of location affecting operating expenses are Gradients, Distance, Curvature and Rise and Fall. As the effect of these details on operating expenses varies most directly with the number of trains operated, the "train mile" is used as the general operating unit.

In order to determine the relative merits of different locations, values must be ascertained for each detail affecting operating expenses. "The Economic Theory of Railway Location" by Mr. A. M. Wellington, treats the entire subject fully. In this work Mr. Wellington has given to engineers a logical method of obtaining the values for distance, curvature, rise and fall and gradients, but the modern classification of operating expenses as adopted by the Interstate Commerce Commission gives these expenses in greater detail than could be obtained during the life of Mr. Wellington. This detail is of material assistance in following out Mr. Wellington's general method, as it lessens the chance for error in judgment as to the proportion of each item of expenses which will be affected by changes in the details of location.

Prof. W. L. Webb, in his recent work on "Railroad Construction" has developed values for the various details, following the general method given by Mr. Wellington, but using the classification and figures given in the Reports of the Interstate Commerce Commission for the entire railway system of the United States. A study of these reports shows that the average cost per train mile in the more populous states is less than in the states west of the Missouri River.

In order to obtain a value of these details of location for the use of engineers in the Western states, the general methods of both Mr. Wellington and Prof. Webb are applied in this paper to the operating expenses of the Union Pacific Railroad Company.

Table No. 1 is deduced from statements of operating expenses for the four years ending June 30th, 1902, and shows the percentage that each item of the table bears to the whole. The average cost

per train mile is also shown, and this cost is divided between the items of the table according to the percentages shown.

4120 Before proceeding to consider the value of gradients, distance, etc., it is necessary to obtain some basis for arriving at the proportional percentages of the more important items that are affected by changes in location. In many of the smaller items judgment alone has to be used, and in most of such cases a wide variation in judgment will produce but a slight change in the final figures. In the larger items of Maintenance of Way, Maintenance of Equipment and Conducting Transportation, the reports of the various departments for the four years covered by Table No. 1 have been studied and the conditions as they exist on the Union Pacific have been considered. The reasons for adopting these percentages are given in detail in Wellington's "Economic Theory of Railway Location." Tables Nos. 2, 3, and 4, together with the following notes, give some additional reasons, and also explain those points wherein percentages different from Wellington's have been used.

Maintenance of Way.—Total side track mileage is about 34 per cent of mileage of main track. One-half of side track mileage is in large yards and terminals, the balance being side tracks at intermediate stations. There is probably about one-third as much labor spent on repairs of side tracks as on the same length of main track. The same is assumed to be true of material; hence, in these calculations it will be assumed that labor and material in repairs of roadbed and track are distributed as follows:

| | |
|---|---|
| Main track | 90 per cent. |
| Large yards and terminals | 5 per cent. |
| Smaller stations | 5 per cent. |
| Total | 100 per cent. |

Maintenance of Equipment.—From the annual locomotive performance sheets and statistics of train service it is found that total train mileage is but 75% of total locomotive mileage. Table No. 2 is similar to a table given by Wellington, the total cost of locomotive repairs being prorated between the different classes of service according to mileage. The distribution with reference to contributing causes is changed somewhat to fit the conditions on the Union Pacific, curvature on the Union Pacific averaging 17 degrees per mile, whereas Wellington assumed 30 degrees per mile.

Conducting Transportation.—As only 75 per cent of engine mileage enters into total train mileage, the wages of engine and roundhouse men due directly to hauling trains with single engine are assumed as 75 per cent of the whole.

In train service only about 75 per cent of the crews are paid on a mileage basis, the balance being on monthly wages, and any increase of distance, unless it be great, would affect only 75 per cent of this item.

4121 Fuel, water, oil and waste are covered by Table No. 4.

General Explanation.—It must be thoroughly understood

that the total train mileage includes the mileage of all passenger, freight, work and special trains, whether revenue or non-revenue. In the calculations as to the effect of the various details of location on operating expenses a single train is considered with a single locomotive. Therefore, none of the expense connected with helper, switch or light engine enters into the calculation, and only that proportion of the remainder of each item of operating expenses which is affected by gradient, distance, curvature, etc., is considered.

4122 TABLE NUMBER ONE.

*Statement Showing the Average Proportion That Each Item of Operating Expenses Bears to the Whole on Union Pacific Railroad for the Four Years Ending June 30, 1902.*

| Item No. | Item. | Per cent of whole. |
|---|---|---|
| | Maintenance of Way and Structures: | |
| 1. | Ballast | 0.28 |
| 2. | Frogs and Switches | 0.35 |
| 3. | Protection of River Banks | 0.03 |
| 4. | Repairs of Roadbed and Track | 8.33 |
| 5. | Repairs of Snow Fences and Sheds | 0.10 |
| 6. | Spikes and Rail Fastenings | 0.86 |
| 7. | Superintendence | 0.55 |
| 8. | Renewals of Rails | 2.28 |
| 9. | Renewals of Ties | 3.01 |
| 10. | Repairs and Renewals, Bridges and Cluberts | 1.81 |
| 11. | " " " Road Crossings, Signs, Cattle Guards, etc. | 0.32 |
| 12. | " " " Buildings and Fixtures | 1.99 |
| 13. | " " " Telegraph | 0.15 |
| 14. | Stationery and Printing | 0.01 |
| | | 20.07 |
| | Maintenance of Equipment: | |
| 15. | Superintendence | 0.63 |
| 16. | Repairs and Renewals, Locomotives | 10.19 |
| 17. | " " " Passenger and Sleeping Cars | 2.07 |
| 18. | " " " Freight Cars | 5.32 |
| 19. | " " " Work Cars | 0.51 |
| 20. | " " " Shop Machinery and Tools | 1.03 |
| 21. | Stationery, Printing and Other Expenses | 0.80 |
| | | 20.55 |
| | Conducting Transportation: | |
| 22. | Superintendence | 1.50 |
| 23. | Engine and Roundhouse Men | 10.10 |
| 24. | Fuel for Locomotives | 10.80 |
| 25. | Water, Oil, Waste and Other Supplies for Locomotives | 1.36 |

| | |
|---|---|
| 26. Train Service | 5.55 |
| 27. Train Supplies and Expenses | 1.91 |
| 28. Switchmen, Flagmen, Watchmen and Switching Charges | 2.36 |
| 29. Telegraph Expenses | 2.44 |
| 30. Station Service and Supplies | 5.62 |
| 31. Car Mileage | 0.61 |
| 32. Hire of Equipment | 0.04 |
| 33. Loss and Damage to Freight, Property, Stock; Injury to Persons and Clearing Wrecks | 1.88 |
| 34. Advertising, Agencies, Commissions, Rents for Buildings, Yards, etc. | 4.66 |
| 35. Stationery and Printing | 0.53 |
| | 49.36 |
| 36. Taxes Paid | 5.64 |
| 37. General Expenses | 4.38 |
| Grand Total | 100.00 |

Average Cost per Train Mile for the Four Years..... $1.17

4123 TABLE NUMBER TWO.

*Statement Showing Distribution of Cost of Locomotive Repairs on Union Pacific Railroad.*

| Class of Service. | Per cent repairs charged each class. | Distribution of contributing causes in per cent. Time and exposure. | Stopping and starting. | Getting up steam and terminal work. | Average curvature. | Average grades. | Distance. |
|---|---|---|---|---|---|---|---|
| Passenger | 31.50 | 2.20 | 4.73 | 5.35 | 0.95 | 4.41 | 13.86 |
| Freight and Work | 43.25 | 3.03 | 6.49 | 7.35 | 1.30 | 6.05 | 19.03 |
| Helpers | 5.46 | 0.38 | 0.82 | 0.82 | 0.16 | 2.18 | 1.10 |
| Light Engines* | 6.38 | 0.45 | 0.64 | 1.08 | 0.19 | 0.32 | 3.70 |
| Switching | 13.41 | 0.94 | .... | 12.47 | .... | .... | .... |
| | 100.00 | 7.00 | 12.68 | 27.07 | 2.60 | 12.96 | 37.69 |

*Light Engine Mileage includes return of helper engines.

Only the first two classes enter into train mileage.

Any increase in repairs and renewals of shop machinery and tools caused by increase in gradients, distance or curvature is considered as proportional to the increase in repairs and renewals of locomotives and cars.

TABLE NUMBER THREE.

*Statement Showing Distribution of Cost of Car Repairs on Union Pacific Railroad.*

| Class of Service. | Total cost per cent. | Distribution of contributing causes in per cent. | | | | | |
|---|---|---|---|---|---|---|---|
| | | Time and exposure. | Stopping and starting. | Switching. | Curvature. | Grades. | Distance. |
| Passenger ..... | 100 | 11 | 20 | 11 | 2 | 20 | 36 |
| Freight and Work. | 100 | 6 | 20 | 16 | 2 | 20 | 36 |

4124 Mr. HILL:

Q. As I understand your views as heretofore expressed in regard to dividing the expense of maintenance of equipment, so far as it relates to coaches, mail and express cars, it is that you must get the expenses accruing to coaches and the expense accruing to mail cars and then to express cars, in order to divide them upon a mileage scale, and then the division should be of the respective classes—that is, a division made of the coach irrespective of the mail and express cars and a division of the express cars made irrespective of the coach and mail cars: is that correct?

A. Yes, sir.

Q. That is your view of the only fair way of dividing maintenance of equipment expense?

A. I would not say the only fair way because you might want to divide it some other way to arrive at a different purpose. But in order to find the cost.

Q. In order to arrive at the truth we are now trying to ascertain is that the only fair way of arriving at the truth?

A. I should say so, yes.

Q. All of the coaches, mail and express cars are lumped together, and the expense paid is a lump sum, and this expense is accruing in seven or eight states, is it a fair division then to divide that lump sum by car mileage, when you divide it between one of those

4125 states as compared with the other six or seven?

A. In order to find the expense between different territories?

Q. Between one territory and the balance of the six or seven territories?

A. If I were to try to find the expense in the different territories I would then work it up on one train here and one train there. I would have trains to deal with instead of individual cars.

And my passenger train expense would be divided on a mileage basis to get the relative cost of the expense in two different states, for instance.

But when it comes to finding out the expense of different classes and perhaps you have different units; and in the other case you have

the same unit—one train in each case—when you want to find out the expense of individual trains, then you must go to the expense of individual cars.

Q. I understand that explanation: but going back to my question, is it a fair division of maintenance of equipment expense of the cars composing a passenger train—that is, of coaches, mail and express cars—is it fair that the expense of an entire system, say an entire road, and the territory through which it runs is say six or seven states, are grouped and all expenses of those different kinds of cars composing the passenger trains being lumped—it is a fair basis, when you want to find out the expense to charge to one state
4126 through which that system runs, to take the expense of that one state as compared with the entire system?

A. I would say very nearly, because the make-up of the different trains in the different states is very nearly similar.

Q. I understand the question of the trains, but this is not a question of trains; it is a question of all passenger coaches, all mail cars and all express cars, the total cost for say eight states?

A. Yes, sir.

Q. And you want to separate the total cost for one state from the other eight states?

A. I should say the mileage basis would be as nearly as you could come to it there.

Q. Would it be a fair basis?

A. I should say so, because the relative number of cars would be operated in the states, according to mileage.

You understand that is a question of trains and not cars. It is a question of trains, as I understand you, not cars; and the same relative number of cars composing trains would operate in the two different states.

Q. You have misunderstood me.

A. You said "total expense."

Q. Yes.

A. That means total trains. There are a certain number of trains operated in this state, and a certain number of other trains
4127 operated in another state and the mileage would be relative, so I say the mileage basis would be right.

Q. If the trains are relative?

A. I say they are relative.

Q. What do you mean by that?

A. I mean about a similar character of trains on our railroad operate in all these different states.

Q. You say your trains are relatively the same?

A. I think they are.

Q. Your trains in Colorado are about the same trains as you have in Arkansas?

A. I should say relatively so, yes, sir.

Q. The expense of car equipment in Colorado is the same as in Arkansas?

A. I don't know whether that would be the same or not. Now

you are talking about cars. You said "trains" before. You mean that is a very distinctive feature, but it may not be to you.

Q. It looks as if we did not understand each other. I will come back to my question again:

Your Missouri Pacific System runs in about eight or nine states, does it not?

A. Yes, sir.

Q. The cars which compose your passenger service, which consists of coaches, mail and express cars,—three different kinds of cars?

4128 A. Yes.

Q. They are repaired in various shops on the Missouri Pacific System?

A. Yes, sir.

Q. Those expenses as a whole for those three kinds of cars are thrown into a lump sum, say so many million dollars for a given period, and say six months, and then the car mileage in Arkansas and in all these other seven states, is taken; and that gross sum is divided between Arkansas and those other seven states on the basis of the car mileage of those cars; I ask you if that is a fair division of the expense between Arkansas and those seven other states?

A. I should say yes.

Q. You would say it is?

A. Yes, if I understand you aright I should say yes it was.

Q. When you come to sub-divide them as between trains it is not a fair division?

A. This is trains.

Q. No, I didn't ask you a word about trains. I asked you about cars that compose trains. Not trains. I am taking a car as a unit and disregarding trains entirely in my question.

You may have the question read to you and you will see that the word "trains" is not mentioned at all. We are dealing with cars as a unit, and those cars are three separate kinds.

4129 A. I should say that the division of the total cost of repairs to cars, wherever they may run, should be on the basis of the relative cost of the different classes of cars. In other words, if a train of cars has made the same mileage as another train of cars the division of expense on them should be per mile, according to the work done, in order to put those cars in condition to go out again. That is no individual car, but irrespective of what the car is or what it does. That is merely doing the work required on the car for a given distance that the car runs.

I do not see what else it could mean if you are trying to get at the division of what the repairs on the different cars cost.

Q. Then it is fair to divide the cost of maintenance of coaches, mail and express cars as between states, but it is not fair to sub-divide it, when you come to apportion it between the different kinds of that service; that is, passenger coaches, mail and express cars; is that your proposition?

A. Yes, sir.

Redirect examination

By Mr. MOORE:

Q. When you say it is fair to make a division between states, you mean it approximates as closely to what is correct as it is practical to attain, do you? You do not mean it is an accurate division according to actual divisions, but it is as near as you can attain to a division of that character?

4130 A. Yes, sir.

Q. And if you were going to make a division on a large system of road, the cost of car repairs between two or more states, you don't know anything that would be fairer than that in its approach to correctness?

A. No, sir.

Q. The State in this case has assumed it is going to abandon all theories of division, and dissect this job and cut it up into small parts and then divide the expense of operating those parts on an actual basis; now, when you have ascertained the cost applicable to one state for maintaining passenger cars, then if you wanted to divide that cost among the different classes of cars on an actual basis, and abandon what the defense assumes to be its theory in this case, you would then separate the classes of cars and divide it upon the basis of the expense of each class, instead of the total car mileage of all classes?

A. Yes, sir.

Q. And you say that is necessary if you want to get an accurate division, on account of the fact that one class of cars costs more per car, per unit, to keep in repair than another class?

A. Yes, sir.

Q. That sums up your views in regard to it?

A. Yes, sir. That is an actual and not a theoretical view.

4131 Recross-examination.

By Mr. HILL:

Q. Suppose the car maintenance of equipment expense for a year on a system for eight states was for example $800,000, and that included these three classes of cars, coaches mail and express cars, all lumped together constituting $800,000, you would divide that between one state that is going to secede from the "pool" on a car mileage basis; and say that state's proportion assigned in that way would be $100,000: And you wanted to divide that $100,000 between passenger coaches, mail and express cars, inside the state, how would you do that?

A. I would take the miles each car made and the cost it would take to maintain the car during the period in question, on each class of car.

Q. How would you ascertain that cost?

A. Take it off the time books.

Q. But we have started with a lump sum. That is the only factor you have.

A. But we had to get the lump sum off the time book to begin with.

Q. I assume so, but it was all lumped into $800,000 for the entire system?

A. I say you would have to go back to the time book.

Q. That is the only way you could do, go back to the time
4132 book?

A. You would have to ascertain the cost of the repair and the time required on each car.

Q. Then if you go back to your time book and locate the actual expense of each class of these cars during that period, from your time books, how would you apply that to the $100,000 that had been arrived at by not making it up from the time book?

A. How can you arrive at the $100,00 without going back to the time book? I say you cannot do it. Unless you have your time from the payrolls to start it out how can you get the $100,000?

Q. I understood you to say a while ago here is a whole system of cars lumped together for eight states, amounting to $800,000: you would divide that between Arkansas and the other seven states on a car mileage basis of all cars, irrespective of their class. And that would produce say $100,000, to illustrate.

Now you say when you go to divide up that $100,000 between those three classes of cars you have got to go back to your original books to find out how the respective expenses accrued to each class: that is true, is it not?

A. I made the remark that you would have to do that in any instance, at any time.

To get the cost of maintaining cars, to get the actual cost, must be the actual money spent on the cars, regardless of the states.

When you come to divide among the states I think rela-
4133 tively the mileage basis would be fair.

Now, if you start with $800,000 you start with that because you must first get your $800,000 and you must add your labor and material cost together. But when you start with $800,000 you do not have to go back because you already have it.

Q. You ought not use that, to start with, to divide between Arkansas and the other seven states, ought you not to go back to the original data?

A. It is the same thing. Your percentage will have to balance the $800,000, if your figures are correct.

Q. It would have to balance the total, of course?

A. Certainly.

Q. But now you have separated one part of that system on the mileage basis which you say is not correct—at least, you have heretofore said it was not correct?

A. I guess it is as near correct as you can get.

Q. I am not asking about "near correct" but I ask you if it is correct. And when you sub-divide it you say you have to go back to the original figure out of which the lump figure was made: is that true?

A. I don't know that I understand what you mean.

If I spent a certain amount of money and I keep an individual account of it I surely can say what I spent it for,—if I spent $100 at the end of the month I ought to be able to know what each item costs me. I don't understand where you get your lump sum.

4134 Q. You have made up a lump sum of $800,000, which represents all these various expenditures?

A. Yes, sir.

Q. On all these cars, irrespective of their class?

A. Yes, sir.

Q. Of course, you have made some data—I don't know what you call your office data—but you have some data which represents or could represent every nickel of that $800,000?

A. Every cent of it.

Q. You found for a period of six months that $800,000 is the gross sum—instead of calling it a lump sum I will call it a gross sum—that has been spent for the expense of repairing these three kinds of cars. Now, you are called upon to divide that gross sum between one division, being one-eighth of the whole, do you divide it upon a car mileage basis? Ignore the fact that the coaches have been more expensive or the mail car more expensive than the express car. You throw it all together and divide it upon a car mileage basis?

A. I think that would be approximately correct, correct enough for the purpose but not for actual purposes. For actual results you must take each car and what it costs.

Q. For example, say that $100,000 is the expense accruing to Arkansas, or that has accrued within that given period. Now suppose you want to divide that between these three different

4135 kinds of traffic operating in the State of Arkansas: you would not apportion that upon the car mile basis, then?

A. I would not apportion it upon a car mile basis at any time. I have said that several times. I say, for different parts of the road, the car mile or the train mile might be as near as you can get to it. But that is not going into individual costs. You are dealing with trains in districts, and not cars. You do not run cars in districts but you run trains in districts.

Q. You do not run these cars in Arkansas but you run them as trains: is that the distinction?

A. You would compare the cars in a train, as I understand it. In districts you are comparing the trains with trains, made up of equipment cars.

Q. That is your definition. I am not assuming it and I do not think these statistics have assumed it in this case at any time. I think you have injected that into your case although your counsel is not familiar with it.

Taking our former sum of $100,000 and we wish to divide between coaches, mail and express cars, having reached that $100,000 on a car mile basis how are you going to divide it between the three classes of service?

A. By the classification of the cars and I think arbitrarily the other should be done the same way.

Q. In other words, is not this a fact: if you use the actual figures in one case you should use them in the other?

4136 A. I should say so.

Q. If you use the unit which is a relatively correct unit, in one case, you would have to use it in the other, wouldn't you?

A. Yes, sir.

4137 H. B. AUMOCEK, a witness of lawful age, being duly produced, sworn and examined on the part of the complainants in rebuttal, testified as follows:

Direct examination.

By Mr. MOORE:

Q. State where you live and what your occupation is?

A. I live in St. Louis. My occupation is Chief Mileage Clerk of the St. Louis, Iron Mountain & Southern Railway and Missouri Pacific Railway.

Q. How long have you been with them in that service?

A. Five years on the 23rd day of this month.

Q. You have to deal with the records, do you, which shows the movement of trains and the mileage made by them?

A. Yes, sir.

Q. Have you prepared a statement from the wheel reports showing how cars in through trains are handled in the terminal yards at Hoxie?

A. Yes, sir. That is, showing the way cars moved in and out of Hoxie.

Q. What are the compilations that you have made taken from?

A. They are taken from the conductors' wheel reports.

Q. How many have you prepared?

4138 A. 37.

Q. Are those 37 part of the trains shown on the sheets of Mr. Hamilton which have been testified to in this case?

A. Yes, sir.

Q. Did you adopt any rules in selecting the trains with reference to the sheets prepared by Mr. Hamilton?

A. I was instructed to pick out the trains which showed the largest number of cars.

Q. As being the most representative?

A. Yes, sir, that would be the most representative.

Q. Have you had any of these sheets prepared and typewritten so as to be used as exhibits in this case?

A. Yes, sir.

Q. How many of them?

A. Six.

Q. And are these compilations you have made fairly representative, you think, of the movement and the handling of cars in that station?

A. I think they are.

I did not try to pick out the best ones. We were working on

them and I simply chose the ones that happened to come first in the terminals I was working on.

Q. Those that would represent the largest trains shown on your sheets?

A. Yes, sir.

Q. I want you to file those that you have had typewritten
4139 in such a way as they can be put into this case as exhibits, as Exhibit 52.

The papers referred to are marked "Complainant's Exhibit H. B. Aumocek, 52."

Said exhibits are in the words and figures following to-wit:

For Exhibit 52, see Volume 8, page 5683.

4140 Q. These exhibits show the cars that came into and went out of Hoxie on each of the trains which is referred to in the exhibit, do they?

A. Yes, sir.

Q. And do they show the same with regard to the station of Little Rock, the cars that came into Little Rock and went out of Little Rock on the same train?

A. Yes, sir.

Q. You have filed exhibits covering six of these statements: you have 31 that were not prepared to be offered as exhibits?

A. Yes, sir.

Q. Are they prepared in the same way except that they are in pencil form?

A. Yes, sir.

Q. In order to prevent making too bulky a record I will offer only those that you have typewritten, as exhibits in the case and you may hold the other 31 subject to the inspection of the attorneys and experts for the State in this case?

A. Very well.

Q. I have in my hand here exhibit 52, sheet 1: it shows a train that came into Hoxie on October 1, 1907: where did that train come from?

A. It came from the north.

Q. It was a through train, was it?

4141 A. Yes, sir.

Q. What hour did that train arrive at Hoxie?

A. At 3:35 P. M.

Q. Does the first column to the left on that part of the sheet which relates to the cars in and out of Argenta show what cars came into Argenta on that train?

A. It shows the cars into Argenta on train number 55.

Q. I want you to explain one thing: that train is marked "second section train number 71": explain that if you please?

A. Train 71 evidently had more business to handle than they could in one train and this is the second section of train 71.

Q. To go back to what I asked you a while ago: does the first column to the left, to which I have referred in the question asked a moment ago, show the cars which came into Hoxie on that train?

A. It shows the number of cars coming into Hoxie on train second section 71.

Q. What do the next three columns show, headed October 1, 1907, 11:20 P. M.?

A. That shows when these cars moved out of Hoxie.

Q. What time does this sheet show they came into Hoxie?

A. They came into Hoxie at 3:35 and left at 11:20 P. M. of the same day.

Q. The fourth and fifth columns, train No. 55, show the
4142 number of the train that carried them out?

A. Yes, sir.

Q. All of those cars came in in that way and went out at the hour you mention?

A. Yes, sir.

Q. That train you say left Hoxie at 11:20 P. M. on October 1st?

A. Yes, sir.

Q. When did it arrive at Argenta?

A. At 2:20 P. M. of the 2nd of October.

Q. Does the second set of figures represent the trains in and out of Argenta and show when the cars in that train arrived at and when they got out of Argenta?

A. Yes, sir.

Q. Explain those columns: What does the first column to the left of that set of figures show?

A. It shows the cars that moved into Argenta on Train No. 55 at 2:20 P. M. of October 2nd.

Q. Does the sheet show when those cars left?

A. Yes, sir, they left at 6 p. m. on the same day on train first 81.

Q. All except those which are marked different in the column?

A. Yes, sir.

Q. If any of those cars did not leave at the hour and on the date you mention, it is shown below under the appropriate
4143 headings, on what day and at what hour and on what train they did leave?

A. Yes, sir.

Q. The last two right hand columns, trains and train number, of the Argenta column shows on what trains those cars went out?

A. Yes, sir.

Q. What is that?

A. First train 81.

Q. That is a through train, is it?

A. Yes, sir.

Q. The same explanation that has been made of the figures on this sheet will apply to the sheets on each one of the sheets constituting this exhibit, will it not?

A. Yes, sir.

Q. The figures above the double line to the left, on sheet one, to illustrate, reads:

"Into Hoxie, October 1, 1907, 3:35 P. M., train 2/71."

That intends to indicate the date on which the cars on that train reached Hoxie?

A. Yes, sir.

Q. And similar figures on the right hand side of the sheet relating to Argenta have the same significance as to the time of the arrival at Argenta?

A. Yes, sir.

Q. And that is so all the way through?

A. Yes, sir, that is the case on each sheet.

4144 Q. I see one of these sheets, Number 5 of this exhibit, shows cars into McGehee station?

A. Yes, sir.

Q. And those figures have the same bearing and effect with regard to trains in and out of that station as you have described with reference to these other sheets?

A. Yes, sir.

Q. How many cars does this sheet show went into McGehee on that train #182, on the 7th of October?

A. It shows 52 cars moving into McGehee.

Q. How many went out on the same day?

A. 51 of those same cars moved out of McGehee on train 182 of the third day at 10 A. M.

Q. Arriving at 11:30 A. M. on the second they went out at 10 A. M. on the third?

A. Yes, sir.

Q. I wish you would turn to the work sheet of Mr. Hamilton from which that exhibit of yours was prepared and examine that sheet and state if it shows that all those cars were handled at that station?

A. On Mr. Hamilton's work sheet he shows it here on the first day: Second 182 with 53 cars into McGehee. I have shown only 52 because I did not include the caboose.

Q. But with the caboose it would be 53, as he has it there?

A. Yes, sir.

Q. How many cars does he show out on Train 182 on the

4145 third of October?

A. As shown on Mr. Hamilton's work sheet there were 62 cars.

Q. How many of those were the same cars that came in on 182 of the second?

A. Fifty-one.

Q. The work sheets show that 53 cars including the caboose, came in on the first day?

A. Yes, sir.

Q. And 51 of the same cars went out on the next day?

A. You are speaking of Mr. Hamilton's work sheet?

Q. Yes.

A. He does not show how many of those same cars went out. He shows the total number moved out.

Q. But 51 of those cars were the same cars?

A. Yes, sir.

Q. The wheel reports show that?

A. Yes, sir.

Q. Excluding the caboose that makes 103 cars that Mr. Hamilton's work sheets show received terminal handling in and out of that station, that came in on that train?

A. Yes, sir.

Q. The same rule for ascertaining the number of cars handled in and out applies to all the cars shown on those work sheets, does it?

A. Yes, sir.

4146 Q. That is as shown by his work sheets contained in these exhibits?

A. Yes, sir.

Q. He gives them as handled in and out of stations whether Hoxie or Argenta or McGehee?

A. Yes, sir.

4147 B. W. MOORE, a witness of lawful age, being duly produced, sworn and examined on part of the complainants in rebuttal, testified as follows:

Direct examination.

By Mr. MOORE:

Q. State your name and residence.

A. B. W. Moore. I reside at Little Rock, Ark.

Q. What is your occupation?

A. Train Master.

Q. Where?

A. Train Master of the Pine Bluff District of the St. Louis, Iron Mountain & Southern Railway.

Q. What was your occupation in October, 1907?

A. Night Yard Master at Little Rock Terminals.

Q. What were your duties as night yard master at the Little Rock Terminals in October, 1907?

A. To handle all trains, make up and receive same.

Q. I hand you some sheets of paper showing the "consist" I suppose you call it, of the St. Louis through freight trains to Texas, being train No. 55, during each day of the month of October, 1907. I wish you would attach it to your testimony as Exhibit 53.

4148 The paper referred to is marked "B. W. Moore Exhibit 53."

Said Exhibit is in the words and figures following, towit.

For Exhibit 53 see Volume 8, page 5690.

4149 Mr. MOORE:

Q. I want you to show me on these sheets how you handle the cars in the consist of these trains. Take any one of them. Take this sheet (indicating). What I want you to show, Mr. Moore, is how those cars in that train would be handled and what movements would be necessary to be made in handling them, both in regard to trains that went out, going through to Texarkana and points beyond, and those which had to be switched off at Little

Rock, either for local purposes or to be put in other trains. Better begin with the cars going through Little Rock South.

A. (After examining paper handed him). It is shown by this consist that the cars destined to Texas are in the train beginning from the caboose, including 42 cars destined to Texas, and ahead of those are cars for the Valley Division and Little Rock proper and local South, or short points beyond Little Rock.

Q. Which cars were in the front of the train: those at the top or those at the bottom?

A. The first car mentioned on the consist, at the top, is the car next to the caboose.

Q. That is at the rear of the train?

A. Yes, sir, and following on up to the engine.

Q. The last car on that list is the car which is next to the engine?

A. Yes, sir.

4150 Q. You say there are 42 cars shown on that list, that were going to Texarkana?

A. Yes, sir, 42 to Texarkana, and 16 which were on the head end of the train.

Q. What would you do in the way of switching and cutting in order to get those 42 cars standing there switched and ready to go on to Texarkana?

A. Those 42 cars would remain on the train on which they were received, and the 16 cars would be taken off the head of the train and put on such tracks as are designated for that purpose.

Q. We will leave out the 16 cars at present and deal with the 42:

What would be done with those 42 cars, so far as switching in that yard is concerned?

A. They would remain on the track on which they were received, and there would be added to that train tonnage and forwarded from the track on which we received it. They would not be switched.

Q. There would be no switching service at all in connection with them?

A. No, sir.

Q. You would send them out in the order they come in?

A. Yes, sir.

Q. With a caboose at one end, or if you wanted to put on additional cars on that train you would put them on one end,

4151 then attach the engine and pull out the train?

A. Yes, sir.

Q. That would be all the switching you would render to the cars going through?

A. Yes, sir.

Q. In going through those sheets I see on every day large groups of cars—for instance I have one before me that shows twenty cars going to Texarkana in a group. Then there is another that has forty or more cars in a group. I won't stop to count them. All the cars, in all cases, on each of those sheets, cars that were going to Texarkana and grouped together, would be left together without

doing any switching to them and without any additions, except to add cars to them in going out.

A. Yes, sir, that consist there indicates how they come out of Hoxie. It is figured that way. Such cars as are grouped there remain intact, while in the Little Rock terminals, and they are added to to make the train mile tonnage.

Q. The sheet I first called attention to happened to be one showing the consist on October 2, 1907: referring to that particular sheet now for the purpose of illustration, what appears on the others right below the 42 cars on the sheet is 4 cars to Little Rock: what would be done with those cars?

A. It would be according to what their final destination
4152 is. If they are for city delivery or according to what industries they are consigned to.

Q. If it is for city delivery what would be done with them?

A. They would be switched to an assigned track in the terminal yards and then transferred from there to the industrial tracks either at East Little Rock, Little Rock proper or Argenta, according to where the industry was located.

Q. Would the switching movements on those cars at Little Rock be a separate movement for each car, or would it be that one movement would cover for the whole of them, for any part of the switching movement you had to perform?

A. If one or more cars were assigned to one industry, and they were together in the cut or group, they would remain intact. Otherwise there would be a switching movement for each car.

Q. If they were going to different places there would be a different switching movement for each car?

A. Yes, sir.

Q. The next five cars are destined to points on the Valley Line—Alexandria, McGehee and three to Monroe: what would be done with those cars?

A. Those cars would be switched to an assigned track in the receiving yard, which is Baring Cross Yard, and then transferred from
there to the Valley Yard, which is about three eights of a
4153 mile or more distant, and there they would be made up in train order.

Q. Two movements would cover that switching?

A. Yes, sir.

Q. How many movements would ordinarily be required to cover a car that was destined to Little Rock, say to some industry about Little Rock?

A. They assigned to separate tracks. In territories in East Little Rock we assign them to track 15. Then they go to East Little Rock and are switched to assigned tracks, which we term "make-up" tracks, and then from there to the industrial track to which they are routed.

Q. You first cut them out of the train they come in on and take them over to what track?

A. To the make-up track in East Little Rock.

Q. That is two switching movements?

A. Yes, sir.

Q. And then where do you take them?

A. Then we switch them to an assigned track, or the transfer engine gets hold of them.

Q. That is three switching movements?

A. Yes, sir.

Q. And then what is done?

A. Then we transfer them to the track from which they are unloaded. That is four switchings you make on an industrial car after they are received as they come in on the train.

Q. In view of the location of the industries about Little
4154 Rock with reference to the Baring Cross Yards, at which through trains are received, how does the switching service rendered to cars destined to Little Rock and that rendered to cars which are attached to trains going East and West on the Ft. Smith and Valley Divisions compare? Which has the most switching and how much more?

A. In making a comparison of the switching we make four to one movements against industry switching, compared to what we term train line movement.

Q. You mean a car going to an industry has four times as much switching?

A. Four to one as compared with a train line car. For instance, an industrial engine will operate on 75 cars as against 300 to 350 or 400 cars handled by the train line engine.

Q. That illustrates the difference?

A. Yes.

Q. 75 to 300 or 350?

A. Yes, sir, out of the ten hours.

Q. The average will run from 75 train line cars——

A. 75 industrial cars against 300 train line cars.

Q. That is what I mean.

A. That is our comparison and the way we figure the comparison of expenses in operation.

Q. Four or five times as much?

A. Yes, sir, and it would cost us $2.50 to $3.00 per car
4155 for industrial switching.

Q. How does it cost for the switching movement, in view of the kind of switching movement, in order to transfer cars to industries around Little Rock, as compared with train line switching? How does it compare? Is the distance greater or smaller?

A. The distance is much greater. We receive our trains on receiving tracks convenient to the intersection of main lines, and our trains are handled as they are received, cutting out the industrial cars, line them for such assigned tracks as we assign them for, and then our transfer engines are used for the purpose of moving them from those tracks to the industrial tracks.

Q. What you have said in regard to the manner of handling the consist of the train of October 2, 1907 applies to all trains, does it?

A. Yes, sir.

Q. When did you come to the Little Rock yards?

A. October 1, 1907.

Q. What was the condition of that yard when you came there, in the way of congestion?

A. The terminals——

Q. I just want to know if there was considerable congestion there.

A. Yes, sir considerable congestion.

Q. Do you know what brought about that congestion?

4156 A. The heavy movement of business and the failure of the consignors to unload their cars promptly.

Q. Do you know whether that was done in that section and along that line?

A. It was in that section and also in Chicago, where I had just come from.

Q. How was it in Memphis?

A. There was the same congestion in Memphis.

Q. And how about the Rock Island at Little Rock?

A. The same conditions.

Q. And how about Texarkana?

A. The same condition.

Q. It was nothing peculiar to the Iron Mountain?

A. No, sir, there was a general heavy movement of business.

Q. You at once took charge there as Night Yard Master, I believe, in those terminals?

A. Yes, sir.

Q. Did that congested condition have any effect in loading up any of the trains either local or through, more heavily than is ordinarily done?

A. We utilized the power to all the advantage we could naturally put it to——

Q. What did you do in order to accomplish that?

A. We added to our local movements and added tonnage

4157 of probably 500 to 600 tons.

Q. To the train?

A. Yes, sir, to the train.

Q. What was the object of that?

A. In order to move as many cars out of the terminal and get them to their destination as quickly as possible on the train movements, the number of trains moved.

Q. Now, as I understand it, the through trains at all times carry a larger tonnage—in other words, you try to move those to the full capacity of the engine; that is, at all times on the through trains: is that true?

A. At all times the full capacity rating of the engine is given in through train tonnage.

Q. That is not true of the local trains? They do not load to the full capacity of the engine pulling the local trains. Now, what was the class of tonnage that was added, as a rule, to the loading of the local trains?

A. Our added tonnage——

Q. What I mean is—perhaps you do not know what I am directing your attention to:—did the added tonnage consist of through or local freight?

A. The added tonnage was the excess or cars which were accumu-

lated from trains from St. Louis, Kansas City, New Orleans, Alexandria and Memphis, going to local points in the local territory or the division territory.

Q. Explain now about how that would be done. For in-
4158 stance, loading a local train South on the main line from Little Rock to Texarkana, with additions from such trains as you have spoken of just now, what class of freight would be put on it?

A. Ordinarily and as a usual proposition and also by the direct instructions for the operation of local trains, they could only handle, in order to serve their requirements, such cars containing less than car load or local freight to points on the territory in which they move. Or, cars consigned in car load lots from points on that territory to points moving from that territory and not beyond the destination of the local run.

Q. You say that is the ordinary loading of the local run?

A. Yes, sir.

Q. And what change was that?

A. Our Superintendent, Mr. Cannon, issued instructions to utilize the local power to the best advantage in the movement of business and not to exceed on the local trains, which had light engines of 1200 tons capacity, not to exceed 1000 tons on each local division. Those instructions, so far as I can remember, were carried out to the letter.

Q. Mr. Moore in ordinary times, not taking a congested period such as I was speaking of, in October 1907, but under ordinary normal conditions, what percentage of a local train would be
4159 interstate freight or through freight rather? Now, I am not speaking of an abnormal or unusual time, but just ordinarily.

A. Ordinarily the local would handle only such local cars, less than car load or car load shipments that originate on the local division.

Q. The point I want to get at is, if you can state it, about what proportion or what percent of the loading of a local train, in ordinary and usual times, would be interstate and through freights, and what proportion would be purely local business. That is what I want to undersatnd.

Mr. HILL: Are you using the terms "through" and "interstate" as synonymous?

Mr. MOORE: In a sense you might say they are synonymous. I doubt if Mr. Moore is sufficiently advised to answer that question.

Q. If you are not sufficiently advised to answer that question I will with draw it.

A. I would not care to answer the question as you have put it unless I was clearly familiar with what the question is whether it is interstate business going to local points on the local territory, or state business originating on the local territory.

Q. I will pass that.

You say there was a large addition to the loading of local trains

during that month of October, 1907, on account of that congested condition of the traffic.

4160 A. Yes, sir.

Q. And a great part of the loading came from trains from St. Louis, Memphis, New Orleans and other points elsewhere outside of the State of Arkansas?

A. Yes, sir.

Q. What was the condition in that respect of the local trains that came into Little Rock from Hoxie? Did they have any unusual accession of loading of that class of freight that came from points outside of the State?

A. Yes, sir, the local trains would come in with its full capacity of engine tonnage, in every nearly all cases, both North and South, accumulating that tonnage from the White River Division at Newport and the Memphis Division at Bald Knob, making pick-ups at both stations, and coming into Little Rock with full engine tonnage.

Q. What was the character of freight they picked up at Newport and where did it come from?

A. What they picked up at Newport came from Springfield, Mo. and on the Missouri Pacific territory, in which the business moves over the White River Division, Cotter and so on.

Q. How would it be about that you picked up at Bald Knob? Where would that come from?

A. That would come from the Memphis territory, which would move from Memphis to Bald Knob on the Memphis territory.

Q. I hand you sheet three of Exhibit 52 in this case,

4161 filed by Mr. Aumocek: this exhibit shows the number of cars that went into Hoxie on train 71 on October 12th 1907, and it shows when those cars went out. It also shows the cars on the train that came into Argenta on the 13th of October and went out on the same day.

Now look at that consist and state what handling, according to that which usually prevails in all terminal yards, would be given to those cars.

A. (after examining paper): From the consist given here——

Q. That is what I want you to state, from the face of the consist.

A. The star would indicate such cars as were not consigned through to Texarkana, and the final destination would indicate here that all the cars that were in the train were through cars.

Q. Yes, that is what that indicates. Would there be any switching service to those cars?

A. The seven head cars would be taken off the train on their arrival at Little Rock.

Q. That is on train No. 55?

A. Yes, sir, that is No. 55.

Q. Would it be necessary to do anything to the rest of them?

A. No, sir, the rest of them would remain intact, as they were received, getting no switching at all except putting on the

4162 engine and adding to these cars such tonnage as would make up the train out of Argenta.

Q. Take a train into and out of Argenta, say train No. 71: take

that consist on its face and show what services would be rendered there.

A. Train No. 71 out of Hoxie into Argenta and out of there is No. 55.

Q. But I am talking about this (indicating paper): take the same thing for Argenta.

A. That is a straight train, there is no exception.

Q. That train arrived, according to that exhibit, on the 12th of October at 2:50 P. M. and went out at 4:20 P. M. on the same day: does that exhibit show there was or was not any service at all, or that it went right through without any service?

A. That train went through solidly, without any disturbance or switching at Argenta. There was no occasion to make any switching on it, as it was consigned to a point beyond Argenta, being consigned to Texas.

Q. Here is sheet 5 which shows a train that came into McGehee on the 2nd of October at 11:30 A. M. and went out on the next day at 10 A. M. It shows one car was set out at McGehee: what switching would be necessary there and to what cars?

A. All the switching necessary to be done on that train would be to remove the car as noted by the star there (indicating)
4163 the third car from the caboose, which would be set out and the remainder of the train would remain intact.

Q. How would that be done to set that car out?

A. The switch engine would couple on to the rear end of that train, on to the three rear cars, and they would switch that car out, then put the caboose on to the other two cars and go ahead.

Q. There would be more switching service to that one car than to the rest of the whole train?

A. There would not be any service to the rest. There would be one move of the two rear cars which were behind the one that came out.

Q. What you have said in regard to the switching movement in handling those cars on the exhibit to which I have called your attention, and to exhibit 53 as shown by you, is true in all cases, isn't it? Wherever there is a body of cars coming in on these trains, that are going through, you do not touch them: is that true?

A. Yes, sir. They are not handled or "shifted" as we term it.

Q. If there are some cars on there going out on other lines and some destined to Little Rock, the switching in that case is to the cars going on other lines or cars set out at Little Rock, isn't it?

A. The switching is setting out those cars which may come out of the train, that are consigned to yards at Little Rock or not in the direction in which the train is moving.

4164 Q. But if there is a block of cars ten or twenty or forty that are going through, they remain intact; they receive and require no switching, do they?

A. No, sir.

Cross-examination.

By Mr. HILL:

Q. Mr. Moore on leaving a terminal would the conductor's wheel reports show the cars in the trains in their exact relation position?

A. The wheel report relative to the position of the cars in the train does not indicate as to their position. The conductor shows foreign and system equipment, in the lines prescribed, on the wheel report, and his wheel report will show the point from which received and the destination, but not the position in which they are located in his train.

Q. My question is, when leaving a terminal—say on leaving Hoxie—how would the conductor's wheel report show that train on leaving the Hoxie terminals?

A. His wheel report would show, just as I have answered the question, in numerical order, separating the foreign from the system cars, and the empties from the loads, but not respecting the position in which the cars are located in his train. His "consist", 4165 which he gives to the Superintendent, would indicate the position in which the cars are located in the train.

Q. Do you remember the change in the form of conductor's wheel reports on the Iron Mountain?

A. There is a change but I am not familiar with the change. The new form is being used whenever the old form stationery is exhausted.

Q. Here is a form, Mr. Moore (handing paper to witness), I don't know anything about it, whether it is new or old, but I reckon you do. It is filed as an Exhibit in this case.

You recognize the form, on the face of it?

A. Yes.

Q. It is form 223?

A. Yes.

Q. On the back of this form are instructions and I wish to call your attention to No. 2:

"Cars must be reported in train order commencing with the caboose, to show the make-up of trains leaving district terminals."

A. Yes, but those instructions are not governing this wheel report, but governing other reports made by the conductor as to his consist.

Q. Aren't you mistaken about that? Look at the instruction No. 2, to which I have called your attention, and to instruction No. 1, just above that. That states:

"This report must be filed promptly with the agent or 4166 operator at the end of each trip and receipt taken in train book for the same."

Doesn't that refer to the instructions on this wheel report?

A. Those are instructions and they are literal in a way, but they are not applicable to certain territories. For instance that rule there, on our territory, cannot be applied.

Q. In other words, you mean those are the instructions that apply to it, but they are not always carried out?

A. The instructions are for the benefit of the car accountant to

handle your cars numerically, foreign and system separately, in order for the car accountant's office to handle them more rapidly through their office for records. For that reason this column in here (indicating) is shown as indicated. You could not show your cars from the caboose to the engine, as you could not tell where or how many cars on a local train you would handle through from terminal to destination.

Q. When you are leaving a terminal and making up a wheel report, why cannot the conductor report them in their order in the train as well as in some other manner?

A. You do not make that wheel report until you are at your destination. That is, you do not file it as a matter of record until you have completed your trip.

Q. Do these various consists you have filed here—Exhibit
4167 55 I believe it is—agree with the wheel reports?

A. I am unable to say whether they do or not. I have not seen the exhibits compared with the wheel reports.

Q. How do you know this is the order of the train, just taking the face of these consists?

A. Just as my evidence would indicate, that that is the usual way.

Q. As a matter of fact you do not know whether that order was carried out or not, do you?

A. There may be some exceptions, but as a general proposition those are the instructions. And as practice has shown me, I have found them such.

Q. That is the way it should have been?

A. Yes sir, that is the way it should have been.

Q. And most generally it is?

A. Yes, sir, and we figure it that way in operating our terminal or division yards.

Q. But as a matter of fact you do not know whether these consists you put in evidence here are correct or not, do you?

A. I did not make them out. I mean I did not check them to see.

Q. You do not know but what they may be copies of the wheel reports?

A. I am satisfied that they are not copies of the wheel
4168 reports, as the records of these consists are kept in the office of the Superintendent of Terminals at Little Rock, while the wheel reports are forwarded direct by the conductor to the car accountant at St. Louis. We never have an opportunity to see the conductor's wheel reports in connection with what he gives us on the consist.

Q. Were these consists you put in evidence here made up in your office?

A. They were made up in the office of the Superintendent of Terminals, I presume.

Q. At Little Rock?

A. At Little Rock and Hoxie.

Q. I would like to have some of the wheel reports of October, 1907, showing the form used at that time you speak of. This con-

gestion which you found existed when you went to the Little Rock yards on the first of October, 1907:

How long did that congested condition of affairs continue?

A. Well, it continued up until some time in January.

Q. About when did that congested condition begin?

A. I was on the Illinois Central and I was General Yard Master at Mound, Ills., and it struck the Illinois Central about the 15th of June. I went to the Indiana Harbor Belt Line at Chicago and found the conditions there very congested on the 22nd of August. I remained with that Company up until Mr. Cannon sent for me on the first of October, when I entered his service.

4169 Q. You say it passed away about December or January?

A. It was in January, if I remember correctly.

Q. I will call your attention to the fact, Mr. Moore, that the panic struck the country sometime in October, and if I remember correctly, was in the early or middle part of October of that year.

A. About the 22nd of September—that is, it started then.

Q. The effect of that was that it took some little time for that to be felt in the freight traffic of railroads?

A. Yes, sir, it took up to December.

Q. There was no congestion of traffic in March, 1908, was there?

A. We had a normal movement of business which was moving during 1908.

Q. There was no congestion then, but there was a normal movement?

A. Yes, sir, there was a normal movement. We had a heavy movement of business but no congestion to amount to anything.

Q. You have described the switching as between trains and cars that would come in on trains from St. Louis and go through to Texarkana, and those that would be delivered at Little Rock: I wish you would describe the switching movement of a car of cot-

4170 ton, which, for instance, would come into your yards at Argenta from Morrillton—just describe the switching movement on that car of cotton.

A. A car coming in from the Central Division would be received in what is known as the Valley Yard. If it were consigned to an industry in Little Rock or Argenta it would be switched to an assigned track.

Q. It would be consigned to some compress I suppose?

A. It would be switched to an assigned track in what is known as the make-up yard. Then the transfer engine or the industrial engine assigned to the industrial work would come and get that car, or other cars, and take it and set it to the industry.

Q. It would be a compress in the case of cotton?

A. Yes, sir, it would be to a compress in the case of cotton.

Q. Then what would be done with it?

A. The car would be unloaded at the compress, compressed and then reloaded.

Q. Then what would you do when you would pick up that car again after the cotton had been compressed?

A. We would take it out of the compress to the make-up track

and add it to the cars that were added to the tonnage at that point, or the extra trains which originate at that point.

Q. How many switching movements would there be on
4171 that cotton, those four cars?

A. Two to the compress and two from the compress out to the train.

Q. How would that switching movement compare with the movement to an industry in Little Rock—say a shipment of shoes from St. Louis to Little Rock?

A. It would compare equally, if not the same. If the car was not assigned to the house—or to the houses I would say—the merchandise houses.

Q. I mean an industrial delivery. Take a car load of shoes from one of these big shoe concerns in St. Louis, shipped to a dealer in Little Rock: how many switching movements would there be on that car?

A. Four switching movements to the industry.

Q. The same switching movement on that as on the cotton?

A. Yes.

Q. That cotton would likely come in on a local train, wouldn't it?

A. No, sir, not necessarily.

Q. Very frequently it would?

A. In some cases it would and in other cases we run what is known as a pick-up train for cotton, or a cotton train.

4172 Q. Going back a moment to this delivery of a car of shoes to an industry at Little Rock: you say there would be four switching movements to get that car to the industry?

A. From the train on which it arrived to the industry, there would be four switching movements to get it there.

Q. Describe what those movements are.

A. From the train to the assigned track; from the assigned track to the delivery track in East Little Rock; there the delivery engine delivers it to the industry track on the "make-up" track, and the industry engine takes it from there to the industry.

Q. It makes practically the same number of switching movements as the cotton?

A. Every car practically that comes into Little Rock receives four switching movements from the track to the industry, and probably by four different engines.

Q. Is that true of other terminals in Arkansas?

A. Where there are industries. The movement by the road engine at Hoxie and then the movement by the road engine to the industry would make only three movements. But the peculiar condition at Little Rock and the distance you have to handle your industry business, taking that into consideration you have got to make four switching movements.

Q. That grows out of the fact that Little Rock is in a separate place from your tracks in Argenta and the industries are
4173 across the river and you have switching yards across the river from your industries?

A. Yes, sir.

Q. How many movements would you have to have to deliver all the Argenta business?

A. With the exception of company material there would be four, but on company material there would be three.

Q. There would be three movements on that?

A. Yes, sir, three in one instance and two on the other.

Q. Leave out company material.

To illustrate that point take a grain house such as Mr. Bernstein's, who has a great many cars of grain coming into his house: suppose it came on the White River division from Newport and from there to the north?

A. Yes, sir.

Q. How many movements would that grain have to be delivered to Mr. Bernstein?

A. It would come in on the delivery track to the assigned track, say track number nine. The Valley yard assigned engine would come to track nine and pull it into the yard. He would assign it to track ten—that is the Bunch elevator accumulation track. Then he would take that from track 10 and deliver it to the Bunch elevator whenever they can receive it.

Q. That would make three movements on that?

A. No, sir, that would be four movements.

Q. I did not follow you, then, because I did not so understand you.

4174 A. There would be one movement from the train to the assigned track in the receiving yard; then a movement from the make-up track in the receiving yard to the Valley yard; that is two movements. Switching it from the assigned delivery track in the Valley yard to track 10 is three movements. And from track 10 to the Bunch Elevator is four movements.

We cannot get out of four movements to any industry in Little Rock with the exception of the movement of company material.

Q. Then all the grain that is handled in Little Rock receives four terminal movements?

A. Yes—well, I will make an exception to that. On grain received from the central division.

Q. You mean Fort Smith?

A. Yes. That would receive three movements.

Q. That will receive three if it goes to the Bunch Elevator?

A. Yes, sir.

Q. If it goes to Little Rock proper it will receive four movements?

A. Yes, sir.

Q. Where does the bulk of that grain come from, that is handled down there? Off what division does it come?

A. Change that question to "territory" and I will answer it, Judge.

Q. All right.

A. Then I cannot answer it correctly as to the amount.
4175 We receive both from the central division and the St. Louis and Illinois territory—I mean by that the Kansas territory and the Illinois territory and the Missouri territory.

Q. The point I am trying to get at is, is it brought into your yard over the central division or is it brought in there from the north?

A. Both ways.

Q. Which way is the bulk of it brought in?

A. It will very nearly equal itself, with probably a little exception in favor of the central division.

Q. Let us trace that grain movement a little bit further:

Suppose it comes in to the Bunch Elevator and is delivered to Bunch there. It has then received either three or four switching movements, depending upon from which division it reached there. Then when the Bunch Elevator Company ships out that car of grain, say to Malvern or some other point south of Little Rock, how many switching movements would there be on that?

A. The Bunch swich engine would go in and switch the elevator and throw it on a track there in the Valley yard. The Texas or south end engine, which is in the main yard, will come up and get that delivery and carry it to the south end of the yard. Now, he will switch that to an assigned track, local—what we term "local" or "through". If it is going to Arkadelphia, Hope, Gurdon, Benton or any of those local points, it has got to be made up in
4176 station order, each car represented by the station in the direction in which the train is moving. It may take twenty-five tracks to make up train 71, which is what we call our "short load" train out of there.

Q. It is your local?

A. No, not a local.

Q. It does local work in there?

A. It handles interstate cars on short local deliveries. That car would receive four movements and probably five or six before you would get it properly designated in the train, in its proper position for the train crew to set it out without any switching.

Q. Then tracing the history of a car of grain which has gone into the elevator there and then gone out to some local point, it has received altogether some eight or ten switching movements?

A. Yes, sir, eight or ten movements if it is properly handled as it should be and moves in the train in the rotation in which it ought to be.

Q. That is, more switching than for any other line of work you have?

A. The industrial work, yes. The industrial work as I stated in my evidence before—on any industrial cars the best we can expect would be seventy-five cars to the engine for ten hours; while
4177 a train line engine would handle from 350 to probably four or five hundred cars.

Q. Have you in mind cotton and grain when you speak of in-

dustrial shipments and also shipments delivered over at Little Rock to merchants?

A. Any commodities which go to the consignee's tracks in Little Rock.

Q. All cotton and grain goes to the consignee's tracks in Little Rock, doesn't it?

A. Not altogether.

Q. Take the cotton, it all goes there, doesn't it?

A. Not in all cases, no sir. We have compresses at other points outside of Little Rock which compress that cotton and then it goes to New Orleans and Galveston.

Q. Of course it would be compressed at other points such as Fort Smith, etc., but I am speaking of cotton that would not be compressed.

A. Of cotton compressed in transit?

Q. Little Rock is a milling-in-transit or a compress-in-transit point, is it not?

A. Yes, sir.

Q. And all of that would have at least four switching movements?

A. Yes, sir.

Q. Take the grain, all that comes through as milling-in-transit grain, coming through to Little Rock to be cleaned and then goes out again, all that would take eight or ten switching movements?

4178 A. It would take, as I have illustrated, four movements to get to the elevator, and out of the elevator it would depend on what its final destination would be. If it was a through car to Alexandria or New Orleans it would receive two movements out of the Bunch Elevator.

Now the same class of commodities out of the elevators in East Little Rock would require four movements to *to* get it into the assigned trains.

The same class would be indicated on stuff going south or west or north, it would take four movements.

It varies from two to four movements on through stuff and from two to, I will say, six movements on local stuff.

Q. You could not get two movements on local stuff, could you? That would come in from Kansas City and be shipped out to Pine Bluff?

A. From the elevator I am speaking of now.

Q. Now, let us get that a little clearer. As I understand you, it would take a minimum of three movements to get it into the elevator, and not less than four or more than six to get it out of the yards, depending on where the car is going: is that right?

A. That is correct.

Q. I believe you say on cotton, taking Little Rock as the concentrating point, there would uniformly be four movements: is that right or do you mean simply four on the illustration I put to you?

4179 A. The four movements are absolutely necessary and probably with a congested condition of the compress when they are not taking your cotton, we would make probably five or six movements with it.

Q. I understand that is true not only of cotton but everything else when congested conditions exist?

A. Normally it would be four movements.

Q. Would that be true where cotton would come in, whether from the central or any other division?

A. The compresses are so located that that is true. There is but one exception, and that is the Bunch elevator, on the movement of cars to and from industries.

Q. How about the Dickinson brick plant? How about the movement there?

A. The Dickinson brick plant is so situated that under normal conditions we move that business with four movements, but under adverse conditions it would require about sixteen.

Q. Four movements is the minimum?

A. Yes, four movements is the minimum on the movement of all business to Dickinson. And the same thing applies on the return business out of Mr. Dickinson's plant.

Q. Take cotton seed products: I don't know that I know where those mills are located. Are they in Argenta?

A. Some of them are in East Little Rock.

Q. How is the movement of cotton products, such as seed, oil, etc.

A. The movements are all just about the same. They are
4180 peculiarly situated. It is impossible to move a car from a train inbound to an industry without four movements of it, to any industry, with the exception of cars coming in off the central division going to the Bunch elevator. And then you cannot get them in there under two movements unless he is ready for them. Otherwise it will take from three to four movements to get them in. We have got to put them on the assigned tracks for the Bunch elevator and if he is waiting for them when the train arrives you can get them right into his elevator, but otherwise you must throw them on an assigned track.

Q. You have explained that fully.

Take cotton seed and cotton seed products: how many switching movements would it require to handle that class of traffic?

A. Ordinarily, four movements.

Q. That would be the minimum, four?

A. Yes, sir.

Q. How about lumber: are there any plants in Argenta or Little Rock taking a milling-in-transit rate on lumber?

A. I don't know of any at the present time.

Q. We are talking about 1907?

A. I do not recall any at that time.

Q. How about Mr. Abeles, did he not have a plant there?

A. Mr. Abeles had a plant there, but he was doing very little business at that time, if I remember correctly. The lumber
4181 business at Little Rock at that time and at the present was local out of Little Rock.

Q. There was a good deal of it local?

A. Yes, locally out of Little Rock, but the principal movement of lumber is through business.

Q. Do you have an icing station there at Little Rock for these through refrigerator cars?

A. Yes, sir.

Q. What is the movement on that so far as switching is concerned from the train to the icing plant and from the icing plant back to the train? How many movements would that require ordinarily?

A. If it is necessary to throw the car to an assigned track——

Mr. MOORE: Take the ordinary course. That is what he wants.

A. Ordinarily the minimum is two and the maximum is three.

Mr. HILL:

Q. There would be two to three switching movements on that?

A. Yes, sir.

Q. You have a cattle feeding station there, haven't you?

A. Yes, sir.

Q. Do all the cattle stop there?

A. Yes, sir.

Q. What is the switching movement on that?

A. The same applies to the cattle.

4182 Q. Two or three movements on all of it?

A. Yes, sir.

Q. Are there any implement transfer houses there where a car is taken into the implement house, filled and then sent on?

A. There are wholesale houses there that handle everything—commission houses.

Q. Say take the John Deere Plow Company stuff: that comes down there into one of those houses and that same car is taken out, the same as you take a car out of an elevator?

A. They have an agent and those cars coming in there go to the John Deere Plow Company or agent. That agent unloads it and then ships them out locally or distributes them.

Q. That comes out in carloads a good deal, does it not, the same as it comes in?

A. I can't recall any such instance.

Q. I know they do up our way with some of those large concerns.

A. They have too many agents through Arkansas at local points to justify carload lots.

Q. That is done at other places to your knowledge, is it not?

A. Yes, sir.

Q. You don't recall any considerable movement of that kind at Little Rock?

A. No, sir.

Q. What place have you in mind where that kind of handling is had?

A. Well, Cairo, Illinois, for instance.

4183 Q. Is not Oklahoma City a very striking example of it?

A. Yes, sir, and Springfield, Missouri, and St. Louis, Missouri, for instance. I can't recall any place in Arkansas.

Q. There is some of it in Fort Smith, I know.

A. There are wholesale houses there and lots of implement agents, but I can't recall that kind of shipment.

Q. We will not dwell on that if you don't know.

You were telling us that in times of congestion you would load up the local freight trains with through traffic: that would give the through cars a great deal of extra yard handling at various terminals in the state, would it not?

I will illustrate what I mean, if you do not quite understand: suppose you have more cars there in the Hoxie yard than you could carry off in your trains, there being congestion there: you would load them up and take them down on the local train to Little Rock and then carry them out of Little Rock on the through train:

Is that the way you handle it in times of congestion?

A. Yes, sir, we add such tonnage to the local trains as would be justified in the handling of our business.

Q. That would give extra handling to all such through stuff as was added to the local trains and then carried to another station and put in the through train: does not that give extra yard movement?

A. It would give extra yard movement against that which would come in in solid trains.

4184 Q. That is what I am speaking of. You were talking about carrying these through in solid trains, but in times of congestion you would load this on the local trains and that would give extra handling to the cars you added to the local trains as compared with what they would receive if they had been carried on through trains, would it not?

A. Yes, sir.

Redirect examination.

By Mr. MOORE:

Q. From your experience in handling cars at the Little Rock terminals, do these consist sheets which you filed as your Exhibit 53, speaking independently of the consists, show the order and arrangement and conditions with reference to the engines that the cars on the through trains usually come into the terminals?

A. Yes, and in such exceptions as are made the conductor makes a note on his switch list, which is the consist.

Q. What I mean to ask you is, did you look over the consists you filed here, these thirty-one sheets?

A. Yes, sir.

Q. And is it your experience and observation from handling cars at that terminal, that they are correct?

A. Yes, sir.

Q. You were asked on cross-examination if there was congestion in March, 1908: was there not a heavy movement of empties in 1908 that had the effect of obstructing the movement of

4185 trains?

A. There was a heavy movement of both empties and loads.

Q. Did that have any obstructive effect on the movement of through trains in the state of Arkansas?

A. Yes, sir, the return movement of empties after the orders had been filled for the delivery—an empty would onstruct just as much as a load.

Q. The Texas railroads were sending back cars during that period?

A. All connecting lines were delivering back for home delivery all classes of empties.

Q. You spoke of a good deal of cotton being brought in October, 1908, on the pick-up trains, compressed at Little Rock.

What is a pick-up train?

A. What we term a "pick-up" train is one made up at Little Rock to start back and pick up all the cotton loaded on that territory during that day, for Little Rock compressing.

Q. Does most of the grain that comes into and passes through Little Rock come in on the central division or over the main line—or did it in 1907?

A. Well, I am not in a position to state positively as to the correct amount or the division of the same. We received grain from Memphis, St. Louis and Kansas City, Memphis and St. Louis grain coming over the main line and the Kansas City grain coming over the central division.

Q. I want to see if I understand you correctly in regard to the switching service required by grain: you spoke about the
4186 reshipment of grain that went through the elevators at Little Rock: that grain would be shipped out, some on the Valley Line and some on the main line south, you say: now, what is the difference in the switching that is required for the grain that was shipped out on the Valley line to Pine Bluff, and points in that direction, and that shipped out to points on the main line?

4187 A. That would be two to one. Two movements on the main line to one movement on the Valley Line to the Bunch Elevator. I explained that is made on the Bunch Elevator.

Q. And grain coming out on the Valley Line would not receive the amount of switching that that going out on the main line would?

A. No, sir, because the Bunch Elevator is located in the Valley Yard. We have solid trains of grain from Texas.

Q. There is a good deal of local movement from the industries to points out in the State, shipping brick and commodities of that sort to industries?

A. Yes.

Q. Will you state the entire movement in consigning from the Dickinson brick plant, say to be shipped out into the State, beginning with the movement of the car out to the plant for the purpose of being loaded. That would be the first movement, wouldn't it?

A. The first movement is to accumulate the cars and assign them to the tracks for Dickinson.

Q. In order to do that you would have to switch them out to the plant?

A. Wait a moment. I am in the make-up yard where the cars

would be accumulated as they come in to go to the Dickinson plant. From the time they reach Little Rock they are assigned and carded showing the final destination as the Dickinson brick plant.

4188 Q. That would be an empty car?

A. Yes, sir, that would be an empty car. It is drawn in on a track known as the track assigned to Dickinson. The engine then will take that car, after switching it into this track, and the transfer engine will take it to the Little Rock Union Depot. Then the Union Depot engine will take it from there to Dickinson's plant and set it in on the assigned tracks there to load the brick.

Q. Then it is left there?

A. Yes, sir, it is left there.

Q. And the engine comes back?

A. Yes, sir.

Q. Then what?

A. Then when it is loaded the billing is received from the plant for it and an engine goes out and gets it and brings it in to East Little Rock, and at East Little Rock it is switched to go wherever the cars are consigned, to the levee, or out on the road, if a Line car; and them the transfer engine gets hold of it and brings it to the Argenta train yard. Then the train yard engine gets hold of it and switches it into the train and it goes on. Four or five or six moves is the best you can get out of it.

Q. How many movements would it involve, the switching movement you have given?

A. Four to the plant and five back getting it into the train.

4189 Recross-examination.

By Mr. HILL:

Q. There is one other class of interstate shipments that I want to ask you about and that is oil: how is oil, coal oil, or kerosene handled?

A. You mean relative to the amount of switching it receives?

Q. Yes, I am on the switching proposition now.

A. It would receive the same switching as any other commodity assigned to the various different industries.

Q. It would receive the same switching that you have heretofore explained about industry switching?

A. Yes, sir. There would be no exception as to oil, with the exception of its explosive position in the train in which we send it out. We might have to make extra switches in order to get that into the train as prescribed by our explosive instructions.

Q. Doesn't that make more switching?

A. Yes, sir, that makes more switching.

Q. In an ordinary normal movement of the oil cars how many switch movements would there be on it there at Little Rock?

A. The same as I have illustrated that applies to industrial switching, with the exception of placing it properly in the train, ten cars from the rear or fifteen cars from the head end of

4190 train.

We have got to accumulate that oil on a certain track

and get a sufficient number of cars to cover the oil from the engine and then cut it in.

Q. That would be the same when the train is made up at Hoxie?

A. It applies at any division point or any intermediate point where oil is moved in the train. There is a statute which covers its position in the train.

Q. I understand about its position but I do not know how you work that out. How many extra switching movements would it take to comply with that statute?

A. It is a normal switching movement to accumulate that oil in the track, just plus another movement to cut it into a train of cars.

Q. There would be normally 5 movements on the oil car?

A. Yes, four to the industries and five out of the industries to the train.

Q. Seven altogether?

A. No, sir, there would be four movements to the industries and five movements out of the industries to the trains moving out of the terminals. That is, you would have to hold the oil out separately on a track all to itself, and fill up your train, and then pick up a sufficient number of cars to cover that oil car's position in the train and then pick up your oil and set it back in the train,

4191 covering the cars from your engine.

Q. You send out those oil trains about twice a week: isn't that the rule?

A. We sent oil out of Little Rock as it accumulates. There is no oil except cotton seed oil and there is no coal oil except such as is shipped locally.

Q. Those are small shipments, less than car load?

A. Yes, we have small shipments of less than car load, twice a week to local points North and South and East and West.

Q. Now, how about the return of the tank cars?

A. Empty?

Q. They have to go back empty. They are not like other cars?

A. They are placed in the train without any respect to their position, unless they have been loaded with certain classes of oil, nitro or gasoline or any explosive, when the gas might accumulate in the empty car. Then those cars are carded showing what commodity they were loaded with, and then they must be switched back, and as much respect is shown those cars as if they were loaded.

Q. That is an empty movement back always on those tank cars?

A. Yes, sir.

4192 Redirect examination.

By Mr. MOORE:

Q. You were discussing a while ago the switching movement of those grain cars to get the grain to and from the elevator: those cars handled in that way are usually moved in large blocks or groups, aren't they—that is, a large number of cars, a large cut of cars?

A. Consigned to the elevator?

Q. Yes.

A. We may have a solid train of grain coming in to the Bunch elevator. We may have a solid train coming in from New Orleans.

Q. And those would all be moved in one cut?

A. Yes, sir.

Q. And one switching service would frequently move twenty to thirty cars?

A. Yes, if they all came in, accumulated.

Q. Don't they always come in in a large number of cars?

A. Yes, sir, they usually come in in solid trains.

Q. How is it about the cattle cars that you bring to the yards to feed? They come in in groups, too, don't they?

A. Yes, stock is usually covered by four or five cars of dead freight from the head end.

Q. They are moved in one cut?

A. Yes, sir.

Q. Just one switching movement is required for all those cars?

4193 A. Yes, sir.

Q. Is that true about the icing plant?

A. Yes, sir, to and from the icing plant. And to the stock yards and from the stock yards to the train.

Q. And there is very little switching of the individual cars; it is switching that applies to these large groups of cars?

A. Yes, sir.

Q. And that class of business moves on these heavy through trains, doesn't it, both the grain and the stock?

A. Yes, sir, grain and stock. In all cases they are high class trains.

Recross-examination.

By Mr. HILL:

Q. Let me see if I understand that cattle business: those cattle have to be unloaded, don't they?

A. Yes, sir.

Q. And reloaded?

A. Yes, sir.

Q. Each individual car has to be "spotted" to the chute to be unloaded, and to be reloaded?

A. Yes, sir.

Q. And whether uncoupled or not each car has to be "spotted" to the chute?

A. They have five chutes and we can spot five cars at a time. The chutes are so constructed that when you spot one car you spot the five.

Q. But you could not spot fifty?

A. No, sir.

Q. How about the ice house?

4194 A. The ice house holds five cars.

Q. It is a five car capacity house?

A. Yes, sir.

Q. How many cars can you put on the Bunch elevator tracks down there?

A. We can put twenty-five cars. We could put thirty but he cannot drag any more than twenty-five.

Q. He has a winch on there?

A. Yes. We can put twenty-five cars on there.

Redirect examination.

By Mr. MOORE:

Q. Is it as expensive to spot those cattle cars for the purpose of reaching the chutes as it is for moving a car ordinarily, say to an industry? That is, where those cars come together?

A. Taking into consideration the distance necessary, it does not cost you as much to move your engine three or four car lengths as it would to move it half a mile.

Q. You can spot five cars at a time at the chutes?

A. Yes, sir, five at a time.

Q. There would not be any comparison in the switching expense, on the two services, would there?

A. No, sir, the only thing you would figure there is the amount of time consumed in loading the stock.

4195 JOHN CANNON, a witness of lawful age, being duly produced, sworn and examined on the part of the complainants, testified as follows in rebuttal:

Direct examination.

By Mr. MOORE:

Q. State your name, residence and occupation?

A. John Cannon; Desoto, Missouri; Superintendent of the St. Louis, Iron Mountain & Southern Railway Company, Missouri Division.

Q. What were you doing in 1907?

A. From June 1, 1907 the balance of the year I was superintendent of the Arkansas Division of the St. Louis, Iron Mountain & Southern Railway with headquarters at Little Rock, Arkansas.

Q. Your headquarters were at Little Rock?

A. Yes, sir.

Q. You were in Little Rock, then, during Oct. 1907?

A. Yes, sir, I was superintendent of that division.

Q. Do you know how the consist sheets there were introduced in evidence here yesterday while Mr. Moore was on the stand, being Complainant's Exhibit 53, were made up?

A. Yes, sir.

4196 Q. Please state how they are made up?

A. On the arrival of a train at Little Rock the conductor hands in to the yard office a switch list, giving the numbers of the cars in his train as they stand.

Q. You mean the order in which they stand?

A. Yes, sir. With this switch list is all of the waybills that he

brings in with his train. This switch list is checked against the waybills and then the cars are written up in train order in one of the "in-bound" books and from this book record the consists produced here yesterday was copied.

Q. Barring some clerical error that might creep in, those consists show the order in which the cars came into the terminal, do they?

A. Yes, sir.

Q. I hand you sheet one of Exhibit No. 52 filed by Mr. Aumocek, which shows the consist of a train into Hoxie and out of Hoxie on Oct. 1, 1907: State if you are sufficiently acquainted with the manner of handling cars at terminal stations to state how such consist as shown on this sheet would be handled with regard to the switching service?

A. Yes, I am sufficiently familiar with that to answer.

Q. Will you state, taking the Hoxie train there how the cars in that train are handled by the switch engine and what service is rendered to the different classes of cars and what service to the individual cars and to the groups of cars?

4197 A. 49 cars shown as arriving at Hoxie at 3:35 P. M. October 1, 1907 in train second 71 were handled out of that station on train 55, all but seven of them.

The ordinary manner of handling the train in Hoxie would be to pull it in on one of the receiving tracks and the "bad order" cars and cars for local points between Hoxie and Little Rock would be cut out. Ordinarily there would not be to exceed two or three switches to accomplish this. The bulk of the cars would be received on a track and go forward from that same track.

Q. There is a group of 11 cars at the top that went right through from Hoxie to Little Rock. Two were taken out. Then there is a second group of five cars, and a car or two taken out. And then there is a group of 20 or 25 cars that go on to Little Rock: was there any switching done to that first group of 11 cars I spoke of?

A. No, sir.

Q. The first thing would be to take off that top car, which it seems was cut out at Hoxie?

A. Yes, sir.

Q. And then the next two cars the sheet shows were cut out two switches, I suppose?

A. They would get off down here (indicating on sheet) and pull that whole cut out, and "kick" this car (indicating) in and kick that out (indicating) back on the train, and kick these (indicating) back on the train, and then kick these two out (indicating). There would be about three moves in there.

4198 Q. And those moves were for the purpose of getting the cars out that would be left at Hoxie?

A. Yes, sir.

Q. The last batch of cars there, 25 cars, would they receive any handling at all?

A. No, sir.

Q. You stated in describing the movement here that certain cars

would be kicked out: you mean the cars that were left at Hoxie would be kicked out?

A. Yes, sir, the cars that would be set out at Hoxie.

Q. Those are the cars you referred to when you said "this car" and "that car" would be kicked out?

A. Yes, sir.

Q. Mr. W. B. Moore who testified yesterday in this case referred to pickup trains that were sent out to bring in cotton to compress points: what are those trains? Just describe what class of trains they are?

A. These are trains we run nearly every day during the entire year, and during the cotton season in Arkansas, there are two or three run every day. We call a through freight crew—for instance he is going up the central division—or I will confine myself to my own terminal.

Q. No, describe it just as it was in Arkansas in 1907?

A. That was my territory in 1907.

Q. That is what you mean by your own territory?

A. Yes, sir.

4199 Q. Proceed.

A. Take a train going out of Little Rock down toward Texarkana: we would start him out with loads destined to stations between Texarkana and Gurdeon and empties for cotton loading. He would distribute those empties where needed and would set out the loads.

He would turn at Gurdeon and he would pick up the cotton that had been loaded during the day, and he would get a train possibly in five or six stations.

Then he pulls that train into Little Rock. That is a through freight train, as we look upon it; that is, as the Operating Department looks upon it. We pay them full through freight pay and they are not regarded as local in any sense of the word.

Q. Are they through scheduled trains?

A. They are not scheduled trains at all, but are "extra" trains, handled by the train dispatcher, and are not on the time card.

Q. Is a good deal of the cotton that is brought into the concentrated or compressing points picked up by these pickup trains through the State of Arkansas?

A. During the height of the season, yes.

Q. Mr. Moore testified yesterday in regard to the congested condition that existed in the State of Arkansas in October, 1907: I wish you would state what effect the conditions he described had upon the movement of freight on the two classes of trains, the through trains and the local trains: whether it created any accession

4200 to the loading of either of those classes of trains, and if so what?

A. During the Fall of 1907, on account of the very heavy movement of business, we departed from our usual practice in loading our local trains. The local trains during normal times handled nothing but less than carload freight and what we call "short loads"; that is, loads destined to stations on the local train territory.

During the Fall of 1907, in addition to that class of loading the locals were filled up to nearly the maximum tonnage with throught loads, loads that went an entire distance over the district the local was run on. That excess tonnage ran all the way from 300 to 800 tons per day.

Q. You said 300 to 800 tons: do you mean gross tons or net tons?

A. When I speak of tons I always have reference to gross tons, as an operating man never treats of anything else but gross tons, the car and the load together.

Q. What was usually the character of that excess tonnage? Was it freight that originated in Arkansas or that came into the state from other states and then went out? Did this freight come from Missouri, was it through freight coming from other states or was it freight that originated in Arkansas?

A. Most of it was interstate traffic. Of course, there was a lot of state traffic handled also. But the major part of it was interstate freight, through loads that were ordinarily handled in our through trains, going to St. Louis or Memphis and to points in Texas
4201 or Louisiana.

Q. What would you estimate was the proportion or per cent of interstate freight carried on local trains during the period mentioned, that is, the month of October, 1907?

A. In my opinion our local trains handled approximately 75% interstate freight during that period, October, 1907.

Q. What would be the proportion in ordinary times, when conditions were normal in the movement and handling of traffic? What would be the proportion then of state and interstate freight carried on local trains?

A. During normal times the interstate traffic on local trains does not amount to but 25%, because we did not handle any through loads on locals during normal times.

Q. The conditions would be reversed then?

A. Yes, sir, practically . ersed.

Cross-examination.

By Mr. HILL:

Q. Mr. Cannon, where did you get your information to make this estimates you have just given about October, 1907, that 75% of the traffic on the local train was interstate and at other times it was about 25%?

A. From personal observation, riding over the road on the trains, looking over the reports and the consists, of the trains.

Q. You have no statistics on the subject?

A. None whatever.

Q. It is just your personal opinion?
4202 A. That is all.

Q. That would require scrutiny of the waybills in order to form an opinion of that kind?

A. The destination of the cars gives you the same information.

Q. That is true. You get that from the waybills or some other source?

A. It is compiled from the waybills. The reports I would see would be the conductor's reports, the consists and so on.

Q. Have you, before this case came up, had any occasion to study the problem of how much interstate traffic and how much intrastate traffic would be carried on the separate classes of trains?

A. I never made any particular study of it, no, sir.

Q. In operating a railroad you do not pay any attention to state or interstate, do you?

A. I base my conclusion as to the proportion of state and interstate freight upon the fact that during the Fall of 1907 our local trains were all loaded practically to the maximum tonnage of the engines and the only way we could load those engines to that maximum tonnage would be in handling interstate freight.

Q. That is not an answer to my question. It is a very good reason for your opinion but I called for another answer.

A. I guess I don't understand the question.

Previous question is read to the witness as follows:

4203 —. In operating a railroad you do not pay any attention to state or interstate, do you?

A. No particular attention to it, but an observant man can always tell, and always knows, where his freight is going, the destination of his freight. He comes in contact with that every time he hits his office and every time he gets on a train.

Q. The thing you look at is the operation of the local trains and of the through train, isn't it?

A. That is what my reply specifically referred to.

Q. That is the way an operating man looks at it, isn't it, from the standpoint of a local train or the standpoint of a through train?

A. Why, of course, and you know where your freight is going.

Q. Of course, it makes no difference to you whether it crosses the state line?

A. No, sir, none whatever.

Q. The question is whether that freight is going on a local or going on a through freight train, not whether it crosses the line of Arkansas or Missouri?

A. The only question with me is to get my train loaded and moved on and off my division as quickly as possible.

Q. Your problem is not about the state line?

A. It does not have any reference to the operation of my railroad at all. But I always know all about that, of course. That
4204 is, anybody who keeps his eyes open, he cannot help knowing it.

Q. If he wants to make a study of it, and he studies it, he has a good opportunity to inform himself?

A. Every opportunity in the world, because under normal conditions you know your local train is on there to handle less than carload freight, and short loads, and normally there should not be any interstate freight on it, unless your local is scheduled to cross the

state line. When I was in Arkansas I had no trains that crossed the lines.

Q. No local trains, you mean?

A. No local trains that crossed the line. In fact, I had no trains that crossed the line.

Q. You send trains to Memphis, don't you, that cross the line?

A. My junction was Bald Knob.

Q. It takes both origin and destination, to know whether freight is state or interstate, does it not?

A. Yes, sir.

Q. You would have to have something more than the conductor's reports, wouldn't you?

A. Not necessarily.

Q. I am not speaking of necessarily, but I am speaking of usually.

A. I say no, sir.

Q. Where would you get the information as to the origin?

4205 A. For instance—Well, I would not always get it.

Q. I suppose not.

A. But I would know the car was destined to a point in Louisiana and in moving in Arkansas it must necessarily be interstate freight. Or if it was billed to Missouri or billed to Texas or billed to Kansas, if I handled it at all on my Arkansas Division I would know it was not state freight, because it crosses the state line. Of course, I would not know whether that car originated in Missouri or in Arkansas.

Q. You take a car destined to a point in Arkansas that would come on your division at Little Rock, and you would not know whether that was state or interstate, would you?

A. Not unless I looked at the waybill.

Q. It was not your business to look at the way-bill, was it?

A. No, sir, that was not a specified duty of mine.

Q. This sheet No. 1 that you have been testifying about, in Exhibit 52, is that made up from the wheel reports?

A. I don't know. My opinion, from the fact that it was compiled in St. Louis, is that it was made up from the wheel reports.

Q. Would this give the order of the cars in the trains?

A. Yes, sir.

Q. Would the wheel reports give the order of the cars in the train?

A. As a rule it does. There is an exception. On local trains, it does not.

4206 Q. But as a rule the wheel report does give the order in which the cars are set in the train?

A. Yes, sir.

Mr. MOORE:

Q. Do you mean on both classes of trains or only one class?

A. On the through trains.

Mr. HILL:

Q. You assume this was made from the wheel report and that the wheel reports give the order of the cars in the train, when you made your answers to Mr. Moore's questions about it?

A. Yes, sir.

Redirect examination.

By Mr. MOORE:

Q. Mr. Cannon, Judge Hill asked you if you had seen statistics here in regard to the percentages of state and interstate freight cars on local trains: I want you to state if you have seen or if you have been informed as to the result of any statistics as to the percents or proportions——

Mr. HILL: Excuse me, Mr. Moore, but I asked him if he had prepared any statistics.

Mr. MOORE:

Q. Have you seen or been informed of the result of any statistics in this case whatever, showing the proportion of state and interstate freight hauled on local trains?

A. No, sir, not in this case nor have I noticed them in recent years at all. I haven't had time.

4207 Q. Your opinion is based on your observation?

A. Absolutely my own personal observation from going over the road.

Mr. HILL: You misunderstood me. I asked him if he had prepared statistics or was answering from personal observation and he answered it was from personal observation.

Mr. MOORE:

Q. Counsel asked you if you knew the sources from which this sheet one of Exhibit 52 was compiled and if the wheel report would show the order of the cars in the trains; independent of any knowledge or impression you may have as to how this consist was made up, I want you to state what the rules and what the instructions are, if any, which have been issued in regard to making up trains at these terminal stations in reference to the order in which the cars that are to go through from one terminal point to another, or to go through from a terminal station to another state on a through train, are to be arranged?

A. A through train starting out of St. Louis is made up of all of the Texas loads switched together; all the Arkansas loads switched together; and all the Louisiana loads switched together. The short loads for points on the first district out of St. Louis are arranged in station order. Those that are set out at Poplar Bluff are put together.

Now we run what we call train 55 (that is a Texas train) filled out with Arkansas and Louisiana freight. All the Texas loads in

4208 that train—as a rule it is a solid Texas train—but if there is not enough tonnage of Texas freight we add on what we call Arkansas and Louisiana cars. There may be five Arkansas cars and five Louisiana cars. They are cut out at Little Rock.

Then we run what we call train No. 75: that is an Arkansas and Louisiana train and those cars are bunched.

So the train passing through Piedmont receives the minimum amount of switching to cut an engine off and put another one on,

cut out the caboose and put on a caboose, and cut out any "bad orders." Or, if there happens to be a Piedmont load on the rear or on the front end of that train, we cut that out.

The same thing is done at Hoxie and the same thing is done at Little Rock.

Q. As I understand you, that is the order they attempt to provide for as nearly as they can, always?

A. That is the usual order.

Q. This sheet 1 of Exhibit 52 illustrates the statement made by you as to the manner of making up these through trains?

A. No, sir, there is no destination shown on Sheet 1.

Q. Take sheet two covering October 7, 1907 of Exhibit 53, which is the consist of a train, and state if that illustrates it?

A. (After examining paper.) Yes, sir.

Q. Most of that work is done at the inspection yard at Dupo, isn't it?

4209 A. For the train coming down on the east side, yes. At Lesperance for trains coming down from St. Louis.

Recross-examination.

By Mr. HILL:

Q. Mr. Cannon, I believe you say you class these "pickup" as through trains and pay the wages of through trains to the crews on them?

A. Yes, sir.

Q. Those pick-up trains handle most of the cotton traffic in the state of Arkansas?

A. Yes, sir.

Q. I mean into the compress?

A. Yes, sir.

Q. And how do you handle it after you get it out of the compress?

A. It is made up into through trains at the cotton compress.

Q. The cotton is handled largely on through trains from the time it starts to moving until it gets out of the state?

A. The biggest portion of the cotton is so handled, yes. Of course, local trains handle all they can.

Q. Local trains handle some cotton, I presume?

A. They handle a great deal of cotton.

Q. But the bulk of it is handled on the pick-up trains, as I understand you?

A. Yes, sir.

4210 Q. You referred to the heavy traffic in October, 1907: I will ask you if in your judgment the ton mileage in October, 1907, was much more than the ton mileage of any other month in that six months period ending December 31, 1907: I mean ton miles of freight. I do not mean the car ton miles as you referred to but with the weight of the cars included. I am getting to the proposition of the handling of freight.

A. You are talking about net tons.

Q. I don't know your term, but I am talking about moving freight miles: that is the idea I have got.

A. I cannot answer that question because I cannot think any net tons. All we figure on in operating a railroad is the gross tonnage. That is what we have to haul with our engines; and that is made up of the car and the load, too.

Q. Your problem is—everything right behind the engine?

A. Yes, sir, everything.

Q. That is what you look at as your factor, to see what you can have that engine haul?

A. I have got to have that engine pull everything she will haul. It may be loads and it may be empties.

4211 H. V. BROWN, a witness of lawful age, being duly produced, sworn and examined on the part of the complainants in rebuttal, testified as follows:

Direct examination

By Mr. MOORE:

Q. State your name?

A. H. V. Brown.

Q. Where do you live and what is your occupation?

A. I live in Little Rock. My present occupation is Assistant Yard Master of the St. Louis Iron Mountain & Southern Railway.

Q. What was your occupation in the Fall of 1907?

A. I was known as Terminal Clerk in the Little Rock terminals, performing the duties usually assigned to a division agent.

Q. Do you know how these consist sheets that have been introduced in evidence here, (Complainants' Exhibit 52) were made up?

A. Those yellow sheets, you mean?

Q. Yes.

A. Those sheets were made up from the inbound train book. The record on the inbound train book is made by what is known as the "desk clerk," from the waybills after being checked against the switch list, in order that he may see that he has a waybill for each car shown on his switch list.

4212 Q. What is a switch list?

A. A switch list is a list of the trains that is made out and handed into the office by the conductor, showing the initial, the number, the contents, and the destination of each car in his train and as they stand in train order.

Q. The switch list shows the order of the cars in the train?

A. Yes, sir, it shows the order of the cars in the train.

Q. And that is handed by the conductor to whom?

A. That is handed by the conductor to what is known as the inbound desk clerk.

Q. I suppose the desk clerk then compares the waybills, which is really the contents of the train, with the switch list for the purpose of seeing that all the cars enumerated in the switch list are covered by waybills—or vice versa. That is to verify and balance the two?

A. His first duty is to check the waybill against the switch list

to see that he has a waybill covering each car shown on the switch list.

Q. How are the cars usually arranged in these through trains, say train 55, this through redball train, with reference to their destination?

A. Train No. 55 is known as our Texas train and frequently consists of a solid train of through freight.

Q. Is anything done to that train other than what it may require if there are any bad order cars in it, except changing the
4213 engine and that sort of thing—is there any switching service rendered to it?

A. If they have sufficient tonnage into the Little Rock terminal and no deductions are to be made from the inbound train, there is nothing done to the train except to change the engines and caboose, providing there are no "bad orders."

Q. Now, come back to the question I asked you before: what, usually, is the order that the cars stand in with reference to their destination, on that class of trains. I speak of Train No. 55 merely to illustrate?

A. The through cars are all en bloc, that is, they are all switched in one operation of the train.

Q. What is that done for?

A. That is done to save switching at the various terminals.

Q. You spoke a while ago about making additions: now I want you to state whether you have any information before the train reaches Little Rock as to what this consist is, and if anything is done with reference to putting other cars on that train: if there is any practice of that sort, describe it?

A. We receive the consist of these trains from a conductor frequently before they get very far out of Hoxie.

Q. How do you get that?

A. We get that by telegraph.

4214 Q. That simply consists of information as to the cars and their destination? Of course, it does not tell what order they are in on the train, I imagine?

A. Yes, sir, it tells the order. It gives all the information that is given on the switch list outside the initials and car numbers.

Q. What do you do when you get that information?

A. If No. 55 has not sufficient tonnage into Little Rock, as shown by the consist we receive by wire, we arrange sufficient freight to fill it out.

Q. That is all done when the train gets in?

A. When it is possible. It is usually done before the arrival of the train.

Q. It is your effort to do it in that way?

A. Yes, sir.

Q. Mr. Brown, you say the Texas cars, say the cars going through to Texas, are grouped together on this through train, say No. 55, if you should have additions to make to the train in order to fill out its tonnage, will the cars which you say are grouped together, require any switching?

A. That is what we would term "a fill out".

Q. How is that done. Describe that.

A. That would be either set on the hind end of the train after putting on the caboose——

Q. You mean the additional cars?

A. Yes, sir, the additional cars. Or they would be placed
4215 on the head end of the train as the inbound engine is removed, as conditions will permit. In some instances it is handier to put them on the hind end of the train with the caboose and in other cases the cars might be so located that it would be quicker to put them on the front end of the train.

Q. Would the cars that come in be put on the hind end, or would they stand there until the train was ready?

A. They would be received and handled off the same track, and wihout any extra handling, barring bad orders; that is those cars going through to Texas.

Q. It *has* been suggested in this case that there was a congestion in the yards at Little Rock in October, 1907: did that congestion have any effect in increasing the loading of either through or local trains?

A. It increased the tonnage on the local freights. Our through freights were carrying full tonnage all the time.

Q. The through freights were carrying full tonnage all the time but it increased the tonnage on the local trains?

A. Yes, sir.

Q. Of what kind of tonnage did this additional freight added to the local trains consist? Was it local freight confined to the state, or was it freight that came from other states?

A. It was some of both. In many instances we would give the locals short loads and also fill them out with through loads,
4216 destined to the next terminal yard.

Q. Which preponderated? Which had the larger proportion, the through or the locals, that were added to the local train?

A. Judge Moore, I could not answer that question. I would not know how to apportion that.

Q. During that period, October, 1907, what proportion of the tonnage that was carried by the local train would be interstate and what proportion would be state?

Mr. HILL: I think before doing that you should lay some foundation for his competency.

Mr. MOORE:

Q. What did you as yard clerk have to do, if anything, with the handling of those cars, that would give you information on that subject?

A. I handled the waybills every day. I went through the waybills and checked up the local situation in the yard and made reports daily as to the movement of freights in and out of the yard. It gave me a pretty good idea as to what we were handling.

Q. That gave you the means of knowing what kind of freights were handled on the local trains, didn't it?

A. I should say so, yes, sir. I think I was in a position to know as well along those lines as anyone who would be in the terminals, who was not preparing statistics.

Q. I will change my question: I asked you a while ago as to the conditions during this period of congestion. Now leave that
4217 out. But in ordinary times when the movement is your ordinary and usual movement, what proportion or percent of the freight hauled on local trains would be state freight and what proportion would be interstate freight: just give your idea and your best judgment about that?

A. I think the locals in normal times handle at least 70% of the state freight; and not to exceed 30% of interstate freight.

Q. What were the proportions handled during that congested period you spoke of when the additions were made to the local trains?

A. The proportion of interstate freight was increased considerably on account of the through loads that were being put on the local in order to facilitate the movement of the cars.

Q. What proportion of the freight carried on local trains would be interstate, during the congested period, say October, 1907?

A. I should estimate it was upward of 60%.

Q. You say you handle all the waybills and that gave you a means of knowing what the freights were that were carried on the trains?

A. Yes, sir, I checked the waybill every day. That was a part of my duties.

Cross-examination.

By Mr. HILL:

Q. Is much freight passing in and out of Little Rock
4218 from Fort Smith?

A. At the present time?

Q. No, we are talking about 1907, now.

A. From Little Rock to Fort Smith?

Q. I include Fort Smith and the mines, say the Jenny Lind mine, that passes through Fort Smith?

A. Inbound?

Q. Both ways.

A. Yes, sir, there was a heavy movement both ways and especially coming to us at Little Rock.

Q. Of what did that principally consist?

A. It consisted of coal, and there was a heavy movement of grain at that time, and there was a heavy movement of cotton from local stations. Of course, the cotton did not come to us from as far west as Fort Smith.

Q. I am talking about the movement that originated in Arkansas and passed through Fort Smith, like from the Jenny Lind mine, and furniture and manufactured articles from Fort Smith: wasn't there a considerable movement of that kind?

A. Through Fort Smith?

Q. No, from Fort Smith to Little Rock.

A. We did not get much merchandise from Fort Smith. But there is always a good movement of coal and it was especially heavy at that time.

Q. October, 1907?

A. Yes, sir.

4219 Q. Coming from the Jenny Lind mine?

A. Coming from mines up there. I am not sufficiently well acquainted with those mines to say whether it was all from the Jenny Lind.

Q. It was coal originating at different points in Arkansas and it came through Fort Smith to Little Rock?

**A. Yes, sir.**

Q. There is a great deal of furniture and things of that kind manufactured in Fort Smith that comes through to Little Rock?

A. I do not have any recollection of handling furniture and manufactured products manufactured at Fort Smith.

Q. There is considerable traffic between the two towns?

A. Yes, sir, it is heavy.

Q. Was it especially heavy in 1907?

A. Yes, sir.

Q. And in October, 1907?

A. Yes, sir.

Q. In discussing state and interstate freight here, a few moments ago, how did you treat that traffic from Fort Smith? Was that state or interstate freight?

A. To Fort Smith?

Q. Yes, to Fort Smith and from Fort Smith to Little Rock.

A. That would be treated as state freight, in my estimation.

4220 Q. You say you saw the waybills in October, 1907, and from the waybills you formed an estimate as to the amount of state and interstate freight: was it your business to study from those waybills whether the freight was state or interstate?

A. No, sir, it was not.

Q. That was just casually before you; it was no part of your business to study out that problem at all, was it?

A. No, sir.

Q. What use did you make of those waybills? What was your business with them?

A. The yard was in a congested condition and it was my duty to check the waybills each day to see the condition of the old loads—principally to keep a check on the old loads and so far as possible remove the oldest loads in the yard. Also to check the waybills and see that we had a car for each waybill in the yard, and the location of that car.

Q. It did not make any difference, so far as your duties were concerned, whether that was state or interstate freight?

A. None whatever.

Q. Your attention was not called to whether it was state or interstate?

A. No, sir.

Q. It was simply a question of what car should go out and how it checked up with the reports you had?

A. Yes, sir.

4221 Q. You saw the waybills on only four locals, did you not?

A. That is all the locals we had out of there, a local each way.

Q. That was the extent of your observation of the waybills on the local trains running in Arkansas in October, 1907?

A. Yes, sir.

Q. How would you determine from a waybill whether the freight covered by it was state or interstate freight?

A. By the destination or by the point of origin.

Q. You would have to have it before you, would you not?

A. Yes, sir. If you have a waybill before you, you have both.

Q. You would have to look at both columns, you would have to look at the point of destination and the point of origin, and the consignee and the consignor, in order to determine whether that was state or interstate freight?

A. Yes, sir, but you could determine it was state or interstate, without having the waybill before you.

Q. How would you do that?

A. For instance, if the consist showed the conductor had so many cars for Texas, we would know it was interstate freight; or if he had so many cars for Louisiana points we would know that was interstate.

Q. Suppose he had so many cars for Pine Bluff?

4222 A. We could not determine that unless we had the point of origin.

Q. It would be the same thing, if the cars came into your yards from St. Louis, or whether they came in from Hoxie destined to Texas, the consist would show the destination: but would it show the origin of either one of those two?

A. The consist does not show the originating point?

Q. You would have to have both, in order to determine whether it was state or interstate freight.

Was it any of your business to scrutinize these waybills before you could determine the origin and destination of those cars, when you were cleaning up that congestion in the yards?

A. No, sir. No more than if the freight was perishable or "red-ball" it was given special attention.

Q. You would have to look at that on the waybill and get that out first. I presume that is what your duty was?

A. Yes, sir.

Redirect examination.

By Mr. MOORE:

Q. Mr. Brown, did the duties you discharged in connection with the waybills and consists of trains in handling freight and giving directions, give you an opportunity to know about the destination

of the freight and form a judgment about the relation of
4223 state and interstate freight to be carried on the local trains?

A. Yes, sir.

Q. You were asked if you did not have to look at both columns in the waybill to determine whether or not the freight was state or interstate: if you say when you picked up a waybill that the freight was billed from a point in Kansas to a point in Missouri or Oklahoma, the fact that it was there in Arkansas would show that it came from another state: you would not have to look at another column to see that it was interstate freight, would you?

A. No, sir. You might look at either the point of origin or the point of destination to see whether or not it was interstate.

Q. If it was destined to a point in Texas you would know it was interstate freight?

A. Yes, sir.

Q. Coal is the principal traffic to Little Rock from Fort Smith—I mean traffic that originates there in the state of Arkansas?

A. Yes, sir, we have more tonnage in coal than anything else.

Q. Is it largely in excess of other tonnage? I mean tonnage that originates in Arkansas and comes by way of Fort Smith to Little Rock?

A. I would judge it is, Mr. Moore.

4224 W. L. SEELIG, a witness of lawful age, being duly produced, sworn and examined on the part of the complainants in rebuttal testified as follows:

Direct examination.

By Mr. MOORE:

Q. Please state your name, residence and occupation?

A. W. L. Seelig; St. Louis, Missouri; Auditor of the Missouri, Kansas & Texas Railway.

Q. How long have you been with that road as Auditor?

A. Eighteen years.

Q. Do you know Mr. Henry Wilmering?

A. Yes, sir.

Q. Was he employed by that railroad at any time within the last five years?

A. Yes, sir.

Q. Give the dates of his employment and what his duties were?

A. He was employed as Cashier at Cleveland, Oklahoma, from November 8, 1904, to December 21, 1905; and as agent from December 21, 1905, to May 22, 1907.

Q. What were the gross revenues taken in at that office from the time he began to act as agent there until he ceased to act?

A. Commencing with the business of January, 1906, it was as follows:

4225

1906.

| | | |
|---|---|---|
| January | Freight business | $8668 |
| | Passenger business | 3186 |
| February | Freight business | 6382 |
| | Passenger business | 2876 |
| March | Freight business | 4271 |
| | Passenger | 3088 |
| April | Freight business | 4421 |
| | Passenger | 3801 |
| May | Freight business | 3730 |
| | Passenger business | 2997 |
| June | Freight business | 3310 |
| | Passenger business | 3328 |
| July | Freight business | 3769 |
| | Passenger business | 3199 |
| August | Freight business | 3156 |
| | Passenger | 2574 |
| September | Freight business | 2700 |
| | Passenger business | 2950 |
| October | Freight business | 2488 |
| | Passenger business | 2174 |
| November | Freight business | 3054 |
| | Passenger | 2017 |
| December | Freight business | 2307 |
| | Passenger | 2151 |
| January | Freight business | 1716 |
| | Passenger | 1567 |
| February | Freight business | 2011 |
| | Passenger | 1644 |
| March | Freight business | 2237 |
| | Passenger | 1908 |
| April | Freight business | 3336 |
| | Passenger | 1523 |
| May | Freight business | 2829 |
| | Passenger | 1433 |

Q. What were Mr. Wilmering's duties as Cashier?

A. His duties as cashier would be to handle the cash, make the collections and make an accounting.

Q. He had nothing to do with the operating service?

A. Not while an agent is located at the station. His duties would be only to handle the cash and keep the accounts.

Q. What was the character and importance of that station as compared to other stations that did the same amount of business?

4226 A. I did not consider that station was of any greater importance than any other station of its size.

Q. It is a small way station?

A. It is so regarded, from the amount of the business done, except during the boom period which was in the fall of 1905.

Q. Was that before he became agent?
A. Yes, sir. For a period of about four months they did a very large business. For the month of October, the freight business amounted to $22,450, and the ticket business did $3950.
Q. Was that the largest?
A. I think that was the largest.
Q. That was not during the period when Mr. Wilmering was agent?
A. No, sir.
Q. Is there any terminal station or switch engine maintained there?
A. No, sir.
Q. What are the duties of the local agent there?
A. The duties of the local agent at that point would be similar to a small station of its size: he would handle the freight, load and unload, with such assistance as they had at that point.
Q. Was it any more extensive than the duties of any other local agent at a local station doing the same amount of business?
4227 A. No, sir.
Q. Do you know what the population of Cleveland was in 1906 and 1907?
A. No, sir, I do not. There was a rush boom in there for four months and that finally disappeared.
Q. That was in 1905?
A. Yes, sir, in the Fall of 1905.
Q. That was a case of men may come and men may go, was it?
A. Yes, sir, it was a wandering element.
Q. Where was the terminal station next to Cleveland?
A. At Osage across the river.
Q. How far away is that from Cleveland?
A. About four miles.
Q. Did the agent at Cleveland have any connection with the business at Osage?
A. No, sir.
Q. Was there an agent at Osage?
A. Yes, sir.

Cross-examination.

By Mr. HILL:

Q. Mr. Seelig, do you know personally the duties of a station agent of such a station as Cleveland?
A. Pretty well.
Q. Have you served in that capacity yourself?
A. No, sir.
Q. You never graduated out of a station?
4228 A. No, sir.
Q. What did you graduate out of, Mr. Seelig?
A. Practically I have had experience in the operating department to some extent, and in the purchasing department, but principally in the accounting department.

Q. You did not become Auditor in a day, I imagine?
A. No, sir.
Q. You have had a good deal of subordinate experience before you attained that exalted rank?
A. Yes, sir.
Q. Did you not find your experience in the various subordinate capacities in which you served had been of some use to you as Auditor of the M. K. & T. Railway?
A. Yes, sir.
Q. You would not be Auditor unless you had had those experiences, would you, Mr. Seelig?
A. No, sir.
Q. What do those figures you have just put in represent, about the business of Cleveland? Is that inbound and outbound, both?
A. No, sir, that represents the inbound. I did not take into consideration the outbound. It was practically all inbound business. There is no opportunity for outbound business there.
Q. They did not ship anything out of that country?
A. In considering the amount of business at a station we consider only the inbound business.
Q. The agent considers the outbound business, does he not?
4229 A. The agent would consider the outbound as a part of the business of the station.
Q. You have given just half the story as represented in your figures, I presume?
A. No, sir, I have given the business of the station.
Q. I understand, but as I understand your statement of it, that represents only about one-half of it—I mean just one side of the story, not half in the sense of an equal division of the business: But the agent has to attend to both classes of business, is the point I am making.
A. Yes, the agent has to attend to both classes of business.

Redirect examination.

By Mr. MOORE:

Q. Mr. Seelig, will you prepare a statement of the outbound business of Cleveland for a period of corresponding months covered by your statement already filed?
A. Yes, sir, I will try to do that. It is pretty far back, but if we still have the records I shall be glad to do it. I will do it as to the freight business. The statement given includes all the passenger business.

4230 FRANK NAY, recalled, testified as follows:

Direct examination:

By Col. MOORE:

Q. You have testified in this case before, I believe?
A. Yes, sir.
Q. I believe you have testified that you are Comptroller of the Chicago, Rock Island & Pacific Railroad Company?

A. Yes, sir.

Q. I think you stated your experience in the railroad work when you were on the stand before: I will ask you now, however, if as a part of your duty as a railroad accountant you have had occasion to make any study of operative conditions on railroads?

A. Yes, sir, to a considerable extent. I think the work of
4231 accountant official is always improved if he becomes familiar with operating conditions, and in that way is enabled to understand the results as they are reflected in the reports that come to him. And I have made it my duty, just as far as possible, to get on the line at every opportunity and study the actual operating conditions just as much as it was possible for me to do so.

Q. You have done that from actual observation out on the line, have you?

A. Yes, sir.

Q. Mr. Ludlam, a witness for the state in this case, testified that an accounting official for a railroad was better qualified to apportion and allocate expenses for repairs and matters of that sort, growing out of railroad operation, than an operating man: I wish you would state your views on that subject, if you please?

A. My views would be that an accounting official, unless he has had actual experience and up to date experience in operating matters, would not be as competent to decide as to the allocation of certain expenses as an operating man. What I mean by that is, would not be competent to decide from his own knowledge. It would be necessary for the accounting officer, to make proper decision, in any allocation of expenses, to consult with the operating officials and ascertain the actual operating conditions gov-
4232 erning expenses. And the operating official who is by his daily work in constant contact with the local conditions is better able to determine how these expenses should be allocated than any other official of the railroad, in my judgment. It has been my practice in accounting matter, wherever a question arose as to the allocation of an expense, to obtain complete information from the local official in charge of the work before determining how the expense should be charged.

Q. Do you regard that information as primary facts which it is essential to have knowledge of in order to be able to allocate and compile the expense of operation?

A. Yes, sir.

Q. I suppose the experience of an operating man qualifies him better, and fits him better to determine about the proper allocation of expenses of that class than the experience of a simple accounting man?

A. Yes, sir, and that is true for another reason: conditions may change and an accounting man who has had experience in past years might, if he attempted to allocate expenses without consulting an operating man, base it upon conditions which existed some years ago than which do not exist now.

Q. If an accountant is going to divide any class of operating ex-

penses between different classes of trains, say between local
4233 and through trains, it would be necessary, as I understand you if he did not possess the information himself, to obtain the information from operating officials to enable him to determine the cost and expense as between the two classes of service?

A. Yes, sir, that is true when it is necessary to make an estimate or approximation. That is to say, if you were going to divide the expense between local and through trains, the accounting official could, without consulting the operating official, determine certain expenses. He could determine the wages of the train crews on each train; and he could determine the coal used on each train, and perhaps some other supplies. To that extent—that is, to the extent where the actual cost can be definitely ascertained, it would not be necessary to consult the operating officer. But where any expense was involved that could not be actually and definitely assigned to either service, then in order to produce a fair result, it would be necessary, in my judgment, to consult freely with the operating officials who had knowledge of the local conditions.

Q. And in that I suppose you would include the expense of maintenance of cars, locomotives and things of that character?

A. Yes, sir, every expense except those few items I have mentioned, which can be definitely assigned to either one or other service.

Q. Have you examined the exhibits filed in this case by
4234 Mr. Wharton, a witness for the state, which are designated alphabetically from I to N, containing formulas for dividing expenses for freight service between local and through trains; and for passenger service between the classes of cars used in that service; and the results from that method of division?

A. Yes, sir.

Q. I wish you would state what your views are in regard to the practicability of dividing the expense of the transportation of freight by first separating it as between local and through trains in the manner that is attempted in Exhibit K filed by Mr. Wharton?

A. My opinion is that it does not reflect true conditions or true relative cost of the two kinds of service.

I have read the testimony regarding these exhibits, and as I recall it, the opening statement was that they would present actual facts as opposed to theories.

After examining these exhibits carefully, I am unable to find any results—that is, any assignment of expense between local and through, or between state and interstate that is an actual fact.

Q. Or based on actual facts you said?

A. Or based on actual facts.

The method subdivides the total operative expenses into various subdivisions, and treats of each subdivision separately.

The expenses that are grouped in these subdivisions are divided on various bases, many of which have little or no relation
4235 to the expenses that are subdivided thereon. The method is complicated, and is capable of being adjusted or manipulated—I am not using the word manipulated in an offensive sense—

but it is capable of being changed or adjusted in different ways throughout the details, that might bring entirely different results in different cases. The attempt is sought to divide what are termed train expenses between local and through, and those which are not train expenses between state and interstate. And then after the total local and through train expenses are ascertained, by a series of approximations, without any actual results being obtained, or without being based on any actual results, the entire expense of those trains is then apportioned between state and interstate on a ton mile basis which is another approximation of this summary of approximations. It might or might not produce a fair result. If it did produce a fair result I think it would be a coincidence or an accident.

Q. What do you think of the practicability, in the first place, of making the division of expenses as between through and local trains in the manner that is attempted in the state accountants in that exhibit? What I mean to ask you is, do you think it possible to make a fair division on any such basis as that, by dividing it into the separate elements of train cost, and in that way separating and dividing it between the local and through trains in your investigation of that exhibit?

4236 A. I think it is not possible to make such a separation with any degree of accuracy, except perhaps in one way:

There is a principle of accounting which is used by expert accountants in connection with manufacturing and mercantile business, which provides that indirect expenses shall be apportioned on the basis of the direct expenses of any class of service. It would be possible to obtain the direct expenses of through and local trains in the event such a separation was attempted, which would be the expenses I have heretofore referred to, namely, the wages of the train man, the fuel and other supplies of the train; and having obtained those direct expenses, then divide the indirect expenses on the basis of the direct expenses.

That is a method of accounting which is approved in mercantile lines of business, and if I should attempt to make a division of that kind, an arbitrary division, which it would be, I think that would be a fair basis for dividing between local and through.

Q. Do you think such a basis as that could be used and be as satisfactory and fair, for apportioning the expenses for conducting state and interstate traffic on a railroad?

A. No, sir, I don't see how it helps very much, because state and interstate freight are hauled on both kinds of trains, local
4237 and through, so if you have gone to the trouble of separating the expense between local and through you still have left the problem of separating the expense of each class of trains between state and interstate, which is the same problem with which you are confronted, before you have made that division.

Q. To take the matter up somewhat in detail, I want first to call your attention to the scheme which is presented in this Exhibit I for ascertaining the relative tonnage on the two classes of trains, that

is, local and through trains. You are familiar with the method adopted by them for that purpose, are you for that purpose?

A. Yes, sir.

Q. Please state what you understand it to be?

A. My understanding of the method used by the state's witnesses in ascertaining the state and interstate business one mile on local and through trains is as follows:

They took the conductor's reports, commonly known as "wheel reports" of all the local trains that were run during the month of October, 1907, and drew from those wheel reports the numbers of the loaded cars. They then traced from those car numbers the waybills covering as many as they could find. I understand they were unable to find all of the waybills covering those cars. After locating the waybills, the separation was then made between state and interstate shipments, and the tons one mile, state and interstate, were computed for carload freight only.

I understand that all of the less than carload freight was con-
4238 sidered to be state business; that is, less than carload freight that was hauled on local trains.

Having obtained those results, which purported to show state and interstate tons one mile, transported on local trains in October, 1907, they deducted those results from the total tons one mile for October, 1907, state and interstate, as compiled by the Railroad Company.

Q. That compilation is shown in Exhibit 26 filed in this case, is it not?

A. I am not familiar with the number of the exhibit.

Q. You may assume that it is.

A. Very well. What was left was assumed to be the tons one mile, state and interstate, that were transported on through trains.

However, the total tons one mile for the month of October, 1907, as computed by the railroad company covered only shipments that were taken into the accounts of the Company in October, 1907, regardless of whether the shipments actually moved over the rails in that month or at some other time.

Q. Mr. Nay, I wish you would state if a correct result can be arrived at by that method of division as between the tonnage of local and through trains?

A. I think not—I am sure not.

Q. Give your reasons please?

4239 A. For the reason that the business of the company is not taken into account according to when it actually moves in the trains, but is taken into account as follows:

System business which covers shipments moving between points on the Missouri Pacific system (including the Iron Mountain) is taken into account on what is known as the (forwarded basis) that is, all system waybills dated in the month of October, 1907, were taken into account for that month regardless of whether the shipments were actually hauled on the trains in that month or not.

Under that plan system waybills dated during the latter part of October, 1907, and which started to move in October, but finished

their journey in November, 1907, would be taken into account by the company in October for the full journey.

But the state's accountants in compiling the tons one mile from the conductors' wheel reports, would include only that portion of the journey that actually moved in October.

The same condition prevailed at the beginning of the month. That is to say, the waybills dated during the last few days of September, 1907, which were en route at the end of the month, were taken into account by the company for the full journey in September, 1907; while the state accountants would have in their reports for October the ton miles covering the completion of the journey in October. The railroad's figures would include nothing whatever in October accounts covering such shipments.

4240

Q. One moment, please. Let me see if I understand you: You stated in your last answer that in ascertaining the freight carried on local trains, as shown in these exhibits, the state included only that part of any movement that was billed on the system anywhere, which occurred in the state of Arkansas during the month of October?

A. That is my understanding, yes.

Q. But on the other hand, that the accounts kept by the Auditor, as to what you call "system business"—that is, business which originates anywhere on the system, would be entered on the books on the forwarded basis—and by "forwarded basis" you mean as of the date the shipment was billed, the waybill made?

A. Yes, sir.

Q. The result of that would be, if a shipment was made and billed in Missouri or Nebraska or Oklahoma, in October 1907, it would go in the auditor's account as an October shipment, without regard as to when it passed through the state of Arkansas?

A. Yes, sir, if the waybill is dated in October.

Q. If a waybill on any part of the system, covering the several states, is dated in August or September, it would go into the auditor's accounts as of August or September as the case might be?

A. Yes, sir.

4241

Q. In case there might have been some delay, it might have passed over the rails in the state of Arkansas in the month of October?

A. Yes, sir.

Q. That I understand, is the effect of what you call the "forwarded basis"?

A. Yes, sir.

Q. As I understand the effect of this manner of keeping the auditor's accounts, it would be to include the business billed in Missouri or Nebraska in the latter part of October, which would not reach Arkansas until the early part of November, and exclude business billed in August or September in other states, and which might have passed through Arkansas in the month of October?

A. Yes, sir.

Q. Now you may proceed with your statement, Mr. Nay?

A. The interline business represents business covered by way-

bills reading to or from points on other railroads, and is divided into three classes: Interline forwarded, interline received, and interline through or overhead.

The interline received business covers waybills made by other railroads reading to stations on the Missouri Pacific system, and is taken into account when such waybills are reported by the agents at destination.

In that way waybills which reach destination during the early part of October which travel part of their journey over the
4242 Iron Mountain in the month of September, would be included in the company's tons one mile, but that portion of their journey which was travelled in September would be excluded from the figures compiled by the witnesses for state.

Q. Suppose a shipment which passed through Arkansas in the month of October was received in Texas or Louisiana in November or even in December: on that basis as to what month would it be entered in the auditor's account?

A. It would be entered on the auditor's accounts in either November or December, according to when the shipment reached destination.

Q. Although it may have passed over the lines in Arkansas in October, it would not enter the auditors accounts for that month?

A. No, sir, but the tons one mile, covering the actual movement in Arkansas would be included in the figures compiled by the experts for the state.

Q. You mean that would be included in the figures worked out by the state's witnesses for the purpose of showing the tonnage of local trains in October?

A. Yes, sir.

Q. If it happened to get on a local train in Arkansas?

A. Yes, that is true. And that is true of all shipments I believe, that I spoke of as being included in the state's figures, because they computed local trains only, and deducted the tonnage on the
4243 local trains to arrive at the tonnage on the through trains.

Q. But while, if a car, in which freight was hauled happened to be hauled on a local train, it would be taken into account by the figures prepared by the state's witnesses for the purpose of showing the tonnage of the local trains, yet it would not be in the auditor's account, and, therefore, would not appear in the total of business from which the tonnage of the local trains was subtracted by the state's witnesses: is that correct?

A. That is right. And, furthermore, if that shipment or any shipment of like character moved part of the distance on through trains across Arkansas, and part of the distance on local trains, the state's witnesses would have entered the figures only for the mileage that actually moved on the local trains, and would omit the mileage moved on the through trains.

Q. Now you may proceed with your statement, Mr. Nay?

A. The next class of interline business is known as "interline forwarded," covering shipments that are waybilled at stations on the Missouri Pacific system going to points off that line and on some

other railroad. The waybills for such shipments are taken into account by railroads when they are reported by the destination carrier, and the destination carrier reports them when the agent at destination reports the receipt of the shipment to his accounting department.

4244 Q. That may be weeks after it has passed through the state, may it not?

A. It may be a long time. In actual railroad practice I think every railroad in the country has a large number of waybills of that kind, which are being constantly traced.

The Rock Island has several men tracing waybills that are not reported until some time after the close of the current month.

In case there is a congestion it sometimes happens that such waybills are reported several months after they actually move over the rails of the original carrier.

Q. What effect would a congestion in traffic have in the way of delaying the entry in the books of the auditor in that class of shipment?

A. On all interline business it would serve to increase the delay. The system business being taken up on a forwarded basis, congestion would delay the actual movement. But on interline business, which is taken up by the receiving carrier, when it reaches its destination, any congestion delays the reporting of that business, and, consequently, the taking of it into account.

This interline forwarded business is subject to perhaps the greatest delay of any (except perhaps the third kind of interline business which is through or overhead) because the company

4245 which originates the business has no control of when it is reported, and usually a large portion of the interline forwarded business of any carrier is not reported until after the close of the month in which it actually moves over the line.

In this case waybills would be taken into account for October, 1907, which covered the actual movement in months prior, say in September or August, or even in months prior to August.

While those shipments would not actually move in October, they would be omitted from the figures compiled by the state's witnesses, so far as the movement on local trains is concerned.

Likewise, at the other end of the month a large amount of traffic would actually move in October, which would not be taken into the company's account until a subsequent month; but such shipments, if they moved on local trains, would be included in the figures compiled by the state's witnesses.

The third class of business is the interline through or overhead, covered by the waybills made at stations on other roads, which passes across or over the Missouri Pacific, and has destination on some other road, the Missouri Pacific being the intermediate road.

This business is taken into account on a "received basis": that is, reported by the destination carrier in the same manner as the interline forward business.

4246 Q. You mean by that it is taken into account as of the date it is reported by the agent who receives it at destination?

A. Yes, sir.

Q. That is what you call the received basis?

A. Yes, sir. Of course, that is subject to the same delay in reporting as the interline forwarded, and would cause similar discrepancies between the company's tons one mile and those compiled by the state's witnesses.

Q. In view of the conditions you have just described, can a correct division of the amount of freight carried on the two classes of trains for a given length of time, say the month of October, 1907, be obtained in the way the state's witnesses have attempted to obtain it in this case?

A. No, sir, I think not. And the reason is that there is a principle in accounting which prohibits the deduction from any aggregate total something which is not included in that total.

For instance, suppose a man has on hand ten thousand tons of coal (using this for illustration) and some of it being hard coal and some of it soft coal: and he wishes to determine how much there is of each. If he can accurately measure how much of the coal is hard coal, he can by deducting that from the total arrive at the number of tons of soft coal. But he must be able to determine accurately either one or the other factor in order to reach the second one by deduction.

If in the case of the coal the man should decide to take
4247 the sales for a month as the hard coal on hand, and his sales amounted to say five hundred tons; and as a matter of fact, there were one thousand tons of hard coal on hand; he would by deducting from the ten thousand tons on hand originally conclude that there were ninety-five hundred tons of soft coal on hand, while as a matter of fact, there were only nine thousand tons of coal.

On the other hand, if he should deduct fifteen hundred tons of hard coal, if the sales amounted to that much, he would be violating the principles referred to of deducting more tons of hard coal than were there. And that would leave an erroneous result, in either case deducting more or less than the actual number of tons of hard coal, would leave an erroneous result as to the actual number of tons of soft coal.

In arriving at the actual number of ton miles hauled on the through trains by deducting the tonnage actually hauled on the local trains, from the company's figures, which were compiled without reference to the tons actually hauled, unless it should happen, (and it would be a coincidence or accident) that those tons actually hauled should really agree with the tons taken into account as hauled on the local trains, the result left as to the tons on the through trains, would be erroneous. It is scarcely conceivable that the number of tons actually hauled on the local trains in October, 1907, would be the same as the number of tons that were taken into account in
4248 1907 some of which was actually hauled prior to October, 1907, and some of which was hauled subsequent to October, 31 1907, should be the same.

I might add, that in my experience on the Rock Island, we ran

across this descrepancy several years ago in compiling operating statistics for our superintendents and general superintendents and operating men. We found that the so-called "lap-overs" from month to month did not equal each other—in fact, they were entirely different; and were so very different as to distort our monthly averages.

Beginning with March, 1906, the Rock Island has been computing the tons one mile, used in connection with operating statistics for our operating men, from the conductor's wheel reports, thereby obtaining the tons actually hauled during the month over each division; because we were unable to obtain the tons actually hauled, from the waybill figures.

We have made comparisons each month of the total tonnage one mile, ascertained from the conductor's wheel reports, and from the total tons one mile as compiled from the way-bills, and they are quite different from month to month. I think they will average a difference of ten per cent or more.

Q. From your experience in the effort you made on the Rock Island, do you think that the inequalities and defects in this system would not be remedied by being evened up, or through any uniformity in the "lap-overs."

A. No, sir, and certainly not for one month. The lap-overs
4249 for one year when compared with the business for a whole year, have only one-twelfth of the effect they would have on the business for one month.

Of course it is evident to anyone that the lap-overs at the beginning of the year will be the same as the lap-over for the first month of a year; and what I am trying to say is, that the effect of the lap-overs when applied to the business of any one month, is very much greater than if applied to the business of a long period—say a year.

That was the difficulty we had in our operating monthly statistics. In one month the tonnage that was omitted from our way-bill account, made the divisor into the expenses so small that the cost per ton mile was largely increased. Then the next month we would have tons in our account in excess of what was handled, and the reverse would be true—the expense would run a way down.

As those figures are used almost entirely for comparative purposes, the comparisons were destroyed on account of these lap-overs being so unequal.

Q. And you found it so impracticable that you abandoned it did you?

A. We abandoned it for our monthly operative statistics by divisions, and ever since have been making those compilations, based on the tons actually hauled in the trains.

Q. What would you say as to the month of October as compared with other months, as to its effect upon lap-overs, considering
4250 the character of the business done in Arkansas in that month, and any changes made in the character of the commodities at that time from that which might have prevailed in the preceding month.

Mr. KIRBY: That would necessarily be a guess on his part if he is testifying as to the Iron Mountain road.

Col. MOORE:

Q. You are familiar, are you not, Mr. Nay, with traffic conditions in the state of Arkansas?

A. I am familiar with those on the Rock Island, and presume in that period there was a similar condition on the Iron Mountain.

Q. As a matter of fact, are not the general conditions the same throughout the state, as to the character of the traffic being affected by the change from the summer to the autumn business?

A. Yes, sir, I think that is true. I spent about fifteen years on the Cotton Belt, and that was true on that road. And I know that on the Rock Island road the October business is usually the heaviest of the entire twelve months.

Q. What effect would those conditions have upon the figures of the lap-overs you speak of?

A. October being the heaviest month, there would be a greater congestion during that month, which would tend to emphasize these lap-overs.

Q. The state's accountants have taken, as you will see from an examination of their method, the month of October, as rep-
4251 resenting all of a period of six months, covering from July to December inclusive; what do you think of that month as being a representative month for the purpose for which it is used by the state's accountants in the exhibits referred to?

A. I should say that no month is representative of any six months, or of any twelve months, and, certainly, if I would choose a representative month, I would not choose the heaviest month in the year. An average month might be more nearly representative than either the heaviest or the lightest month, but I think where actual results are desired, no one month should be taken as representing a period.

Q. I want to call your attention somewhat in detail to the divisions that are made in Exhibit K.

The first item that is taken up there is "Maintenance of way and structures expenses" which is divided in this exhibit between local and through trains on the basis of the total engine miles and car miles of each class during the month of October (which it is stated in the exhibit is regarded as representative of the business of the six months ending December 31, 1907):

Now you have already discussed in a general way your views as to the incorrectness of any month, and of that month of October in particular, being considered as representative of a period; have you anything further to say in this connection, as to making this division of expenses on that or any other basis, as set out in
4252 this exhibit?

A. You mean as regards the month of October?

Q. Yes.

A. I don't know that I have.

I still feel that that same thing applies to maintenance of way and structures as to other expenses—that October is not at all representative, and that no one month should be taken as representative, where we want to obtain accurate results.

Q. When you say "Accurate results" do you mean actual results or true results?

A. I mean true results.

To take October, the heaviest business month of the year, the maintenance that was going on at that time would naturally be of a kind that would not interfere with traffic.

The railroads usually, and I think good management requires it, do their heaviest maintenance work when the traffic is light, because certain maintenance work, such as rebuilding bridges, ballasting, laying new steel and so forth interferes always to some extent with movement of trains. So I do not think that maintenance expense in the heaviest business month of the year would be correct, because in the first place the expense would not be representative, and in the second place the car miles would not be representative

4253 Q. I was going to ask you about that:

That item represents $553,000 of expenses, and it is divided on the basis of the engine and car miles. I want to ask you what you think of that method of division: if it is proper to divide that expense on that basis?

A. No, sir, I don't think it is:

In the first place, I think it is impossible to divide the expense accurately or truly between local and through service; but if such a thing should be attempted I think the car miles is an improper basis of division because a very large part of the expense, perhaps ninety per cent of the total expense, is not directly affected by the car mileage.

A very large part of this expense is due to deterioration and action of the elements, and would have to be incurred whether the car mileage was more or less. And this feature does not take into consideration the density of traffic, which is an important item to be considered.

The ties must be renewed in the track and the lifetime of a tie is eight, nine or ten years, some shorter, and some longer, regardless of whether your traffic is heavy or light.

Repairs to buildings, fences, telegraph lines, shops, fuel stations, water stations, round houses; sub-structures, of bridges, ditching, surfacing, aligning, and all that sort of thing, a very large

4254 proportion of the expense has no relation to mileage.

Mr. KIRBY:

Q. Is not all you have mentioned, or a large part thereof, more properly chargeable to deterioration or replacing equipment? Don't you charge off so much every year for replacement or for deterioration?

A. No, sir. Under the rules of the Interstate Commerce Commission we make a charge after replacement is made.

A new tie that is renewed today, that has been worn out by traffic passing over it during the last eight or nine years, but the expense goes into the expenses of October, 1910.

The same thing is true of the expense of the rails which have been worn out in the course of five, ten, fifteen, twenty or some-

times thirty years, according to the density of traffic. Now the renewal of the rail is charged to maintenance at the time the renewal is made, although it was worn out in prior years.

Col. MOORE:

Q. So the damage that makes that part of the maintenance and structures expense that is affected by the operation of trains, may have occurred years before the expense was incurred?

A. Yes, sir.

Q. The state, for the purpose of getting a basis for separating the expenses of freight and passenger business, accepted the basis used by the railroad for dividing maintenance of way and structures expense, which is on a train mile basis I think; is that correct?

4255 A. Yes, sir.

Q. If one were going to attempt to divide these expenses in this way between passenger and freight service and between local and through trains, is it consistent to adopt one basis for one purpose, and another basis for the other purpose, as they have done?

A. No, sir, I think either the train mile basis should be used in both cases, if such a division is attempted, or the car mile basis should be used in both cases.

Q. Have you studied these exhibits enough to have an opinion as to whether the train mile basis or the car mile basis would produce the better results for the interests of the state in this proceeding?

A. You mean dividing the expense between local and through?

Q. What effect would a division of these expenses between local and through trains, on a train mile basis, have upon the proportionate expense of the two classes of trains?

A. The train mileage would throw considerably more expense to the local, than the car mileage; because the local trains have fewer cars than the through trains.

Exhibit I shows that the average number of cars per train is 16.1 for the local trains, and for the through trains 32.2 cars; exactly twice the number of cars in the through trains as in the local trains.

for that reason the train mileage basis would assign a much

4256 greater proportion of expense to the local business than the car mileage basis.

Q. So one basis (that is the car mileage) would produce one result; and the other basis (that is the train mileage) would produce another and a different result?

A. Yes, sir.

Q. If it were proper to make a division of this expense between the local and the through trains, could it be done correctly without regard to the weight of the cars and of contents? In other words, to the extent that maintenance of way is affected by operation is the effect not greater or less as the car is heavily or lightly loaded?

A. I think it is greater in the case of cars that are more heavily loaded.

That is illustrated from the fact that frequently it is necessary to strengthen bridges and put in heavier rail, and do a lot of work to strengthen the track, in order to take care of heavier equipment.

The track might be all right for light loading and light equipment, but when heavier equipment is put on, a general strengthening must take place, which proves that the heavier equipment causes more repairs than the lighter equipment.

Q. Would a division which disregards the weight of the equipment be correct?

A. No, sir, I don't think it would be fair.

4257 Q. I am referring, of course, to that part of the operation which produces this expense?

A. Yes, sir, I understand; that small percentage which is affected by car mileage?

Q. Yes, that is what I am referring to.

A. No, sir, I think if an attempt was made to divide that between local and through trains, certainly the weight of the equipment should be considered.

Q. Would the same be true if you attempted to divide it on a car mile basis?

A. Yes, sir.

Q. The state's accountants have added fifty per cent to the engine mileage of local trains for station switching, in making their division; and are assuming that each engine mile was the equivalent of two and one-half car miles:

Do you know of any reason why fifty per cent should have been adopted there?

A. No, sir. I think that is an arbitrary percentage, and I do not know whether that is enough or too much.

Q. Is there any way you know of by which that could be determined?

A. None that I know of.

Q. Would the extra mileage, or the extra expense on that account be likely to be uniform from day to day and week to week, and so on?

A. You mean growing out of this fifty per cent?

Q. Yes?

4258 A. No, sir, it would not be the same, from day to day, because I have known local trains on one day to be delayed by switching at stations until they were ten or twelve hours late, and the next day they would go through practically on time, doing much less switching.

Q. Isn't that condition affected also by conditions of congestion, and by the character of the traffic that is hauled at different seasons of the year?

A. Yes, sir.

Q. In your judgment, can any such assumption as that be established on the basis of experience in railroad operation?

A. I don't think so, and especially for the reason that only a small percentage—I have estimated it at ten per cent—of the maintenance of way expenses are due to the wear and tear of the cars and engine over the tracks. And the relative wear and tear in switching service as compared with road service is a thing that cannot be determined.

So I think it would be very difficult, if not impossible, to obtain a percentage that would represent the true conditions.

Q. They have also assumed that each engine mile is equivalent to two and one-half car miles: what have you to say as to that assumption?

A. I judge that is based on an engine having twenty wheels while a freight car has eight wheels. If that is the basis, I think
4259 that is wrong, because very few engines have twenty wheels—only a very small portion of them. But as the engine is so much heavier than a car, if I were attempting to make a division between local and through, I think I should make that proportion much larger than two and a half—not because of the number of wheels, but because the engine is so much heavier than any car.

Q. Referring to the allowance of fifty per cent for station switching in this connection, do you think it would be proper to charge as large a proportion of it to interstate business, that is, business coming into and going out of the state from another state, as you would charge to intrastate business?

A. No, sir, I would not. That is to say, I think a greater portion of that charge if we could ascertain what that is, should go to state business than to intrastate.

Q. Why do you think that is true?

A. Because that extra switching with regard to state business must be done at each end of the shipment; that is, at the point it starts, and at the point it stops. There would be two services of that kind for each state shipment, and only one service in Arkansas for each interstate shipment. By "interstate shipment" I mean into and out of the state and not trans-state.

Then, again, as the average haul for state shipments is less than for interstate shipments, this excess of cost switching at stations would be still further emphasized to the extent of that difference in the length of the haul.

4260 Q. Some of the state business originates at terminals and is switched by yard engines: you do not mean what you have said to apply to that, do you?

A. No, sir, but I am assuming there is a corresponding amount of interstate business which originates and terminates at terminal points, and is handled by yard engines.

Q. That would offset that?

A. Yes, sir.

Q. Does not a larger proportion of interstate freight run through to the end of the train run, than state freight? That is, isn't there more intermediate handling between the beginning and the end of a run on state freight than on interstate; and does not that cause more switching?

A. That would be my judgment, for the reason that the average haul is less.

Mr. KIRBY:

Q. Do you mean local or through?

Col. MOORE:

Q. That is more largely true of local than of through, is it not?

A. Which do you mean Judge?

Q. The proportion of state and interstate freight which runs through to the end of the train run: what would be your idea about that?

A. I don't know that I quite understand that question.

Q. Mr. Kirby suggests that local and through trains both carry both kinds of freight: and he asks if your answer that the larger proportion of interstate shipments go to the end of the train run is true of both classes of trains, or only of the local trains?

4261 A. I think there would be more interstate shipments running through from one divisional terminal to the other on the through trains than on the local trains.

The local trains pick up interstate shipments and haul them to terminals, where they are put into through trains. They also take interstate shipments from terminal points and distribute them to the various stations.

Q. Under the head of "Maintenance of Equipment" Exhibit K divides the expense of maintenance of locomotives between yard locomotives and local and through road locomotives on the basis of the locomotive mileage of each class. Then they add fifty per cent to the mileage made by the yard locomotives to provide for the possible extra maintenance due to yard service:

Do you know of any basis upon which that fifty per cent additional can be accounted for?

A. No, sir.

Q. Have you any reason to suppose it is correct?

A. No, sir. I have never made any investigation as to the amount of extra repairs due to yard service.

Q. This is an addition of fifty per cent mileage to provide for possible extra maintenance expense due to yard service. The accountant, Mr. Wharton, who filed this, stated it was an arbitrary assumption; that they have no information or no means of obtaining any information.

What do you think about that method of proceeding to

4262 make such a division of this class of expenses?

A. Making an arbitrary assumption, without anything to base it on, might or might not lead to true results, and is more apt not to, I should think.

Q. Are there any actual facts, or facts you know of, which would call for that allowance, in railroad operation?

A. No facts I know of.

Q. Then they add fifty per cent to the mileage of road locomotives in local service, to provide for possible switching mileage; and again fifty per cent of the switching mileage of the local train engines thus obtained, to provide for possible extra maintenance for switching service:

Do you know of any actual facts that would justify or account for that allowance?

A. No, sir, that is arbitrary.

I assume that fifty per cent is similar to the fifty per cent under maintenance and way, to cover the extra switching; and then they add fifty per cent to that fifty per cent which is allowed for extra switching.

I don't know why that should be done.

Q. Something above $69,000 of this charge is divided between local and through service on the basis of the number of cars of each class handled by yard engines during the month. They assume that every car that comes into the terminal, and every car that goes out of the terminal is handled in coming in and going out: is that a fair basis of division of that part of the expense of maintain-

4263 ing locomotives?

A. No, sir, I don't think so.

Of course, in the first place this expense of $69,135.80 is arrived at on the arbitrary basis that has been referred to—the basis of locomotive mileage with those additions. But dividing that on the basis of the cars in and out, between local and through, would mean that the same service by the engine was performed in connection with every car; while a large number of the cars handled in the through trains would receive no service whatever from the yard locomotives.

I refer to those cars that go on through the terminal and have not destination at the terminal. They simply stand there until additional cars are set on, and then there will be a caboose put on the end and the engine in front, and they will go on straight through without receiving any switching from the yard locomotive.

These cars, under this basis, are treated just the same as the cars that have destination at the terminal point and which may be switched two, three or four miles to some industry. In my judgment, that method of treating all cars alike is erroneous.

Q. Would it be possible, Mr. Nay, to divide this class of expense growing out of repairs to yard locomotives, between the cars, the switching of which causes the necessity for the repairs, unless you could get every car, and keep account of every car that was switched, and the degree and amount switching that was done for that

4264 car, and divide it in that way; is there any other way in which there could be an approximation to a correct division of that item?

A. I don't know of any other way.

Q. Would it be practicable or possible to obtain such data or division to enable a division to be made in that way?

A. It might be possible, but I don't think it would be practicable. It would require a clerk with every switching crew, and then some more clerks to compile their results with blank forms, which would add a great deal to the expense, and make it impracticable. And even then, if you followed that plan, by keeping an actual account of the cars that were actually handled by each switching engine, it would have to run over a period, because the repairs to the engines are similar to the renewal of rails we spoke of—the engine goes into the shops for general repairs, and receives renewals and repairs, costing a considerable sum of money, say from twelve hundred to two thousand or three thousand dollars, and those general repairs

were made necessary by service covering a period of months, since the engine was in the shops for general repairs.

It is impossible to determine the wear and tear that occurs each day, even if you know the actual number of cars switched each day, and the service for each car.

Q. Anyway, it would be impossible to make any such division with any approximation to correctness, without keeping such accounts, and having such information, would it not?

4265 A. Yes, sir.

Q. The expense of maintenance of freight cars is nearly $478,000: this expense is divided between starting and stopping trains at way stations, repairs due to terminal handling of cars in local service; and the remaining expense is charged in a lump.

Now, in ascertaining the amount that should be charged to starting and stopping, the work written by A. M. Wellington in 1887 is followed: Mr. Wellington assumed that 21.5 of repair expenses for freight cars was due to starting and stopping:

Do you know whether any changes in the construction of freight cars have been made since the time that book was written, which would affect these relative expenses?

A. Yes, sir. The addition of the air brake I am sure would cause quite a change in those expenses. That is to say, in 1877 when a train was stopped it was stopped by the use of hand brakes. The brakeman would climb on top of the cars and set the brakes on one car and then on to the next, and the stop was bound to be gradual, under those conditions. While today, with the use of air brakes, stops are frequently made with great suddenness, such as to cause considerably more damage by stopping than in the days when hand brakes only were used.

Q. You think that per cent would be increased?

A. If it was 21.5 per cent in 1877 I am sure it ought to be much greater now.

4266 Q. They have divided the expense of terminal handling of cars on a car mileage basis: is there any reason why a different basis should be adopted for dividing that expense than was adopted for dividing the expense of yard locomotives, which was divided on the basis of the number of cars?

A. I should think if I were making a division of that kind I would be consistent, and would use the same basis for dividing repairs due to terminal handling that would be used in dividing repairs on locomotives. Because I understand the terminal handling is the handling at terminal points where the car is stopped and set out or picked up.

Q. And the damage is inflicted on the car in handling it in that way at those places?

A. Yes, sir.

Q. What connection has car miles with that?

A. I don't think it has any connection, because the terminal expense is due to the shifting of the car at the terminal point, which would be the same whether the journey of the car was ten miles or one thousand miles.

Q. Its handling in the yards would be purely local?

A. Yes, sir.

Q. Just as much so as the damage to the engine when handling the car at the terminal?

A. Yes, sir.

Q. The state accountants have allowed double handling
4267 in ascertaining the expense of terminal handling of the cars, but they made no such allowance in the case of yard locomotives. Is there any reason for that distinction in your opinion?

You will find yard locomotive expense divided on the basis of double the number of cars handled in each class of service. I don't know, so I am asking you what reason there could be for that difference?

A. I don't know. One is based on the cars handled, and the other on the car mile.

As I said before, I don't understand what relation the miles made by the car have to the damage caused by handling it in the terminals. As I see it, the car mileage has no relation, and, therefore, doubling the car mileage of local trains does not help the matter any. And if doubling the local car mileage and making a percentage of that result and comparing it with the through car mileage is a right basis for dividing repairs to cars caused by terminal handling, then I would think that is the right basis for dividing repairs to engines in terminal service, and, vice versa, if the car handled is the right basis for dividing repairs, then it would be the right basis for dividing repairs on cars themselves, due to terminal handling.

Q. Is either basis sound, or has it any reason in any operating conditions you know of?

A. I don't think so.

Q. I want to call your attention to the division of station
4268 expenses under the general head of "transportation expenses" that is divided between interstate and intrastate business on the same basis of the number of tons of each class of traffic, assuming that each intrastate ton was handled twice, and each interstate ton handled once. A later exhibit was filed by the state (Exhibit Y) in which they excluded trans-state tonnage from that expense: I will be glad if you will state your views as to the fairness and correctness of that division?

A. The tons that are included in the basis for this division, with the trans-state omitted, includes both carload and less than carload shipments. Practically all carload traffic is loaded and unloaded by the shippers and consignees, so the only item under the head of "station expenses" that refers to carload business is office expense, the expense of billing, recording and so on.

The large item of station labor, what we call platform labor, loading, unloading and checking, is in connection with the carload business. (Should be less than carload. See page 1029.)

Therefore, I do not think it is fair to divide the expense on the basis of the tons handled, including the carload business, because a greater portion of the state tons handled is less than carload business

than in connection with the interstate traffic. That being the case, the basis used does not charge a sufficient proportion of this expense to the state traffic, and charges too much to the interstate traffic.

4269 Q. Any basis that ignores the difference between carload and less than a carload could not be fair or correct, could it?

A. No, sir.

Q. The next item to which I want to call your attention is "yard and terminal expenses." These are divided on the basis of the number of cars handled at terminals, in and out; just as was the case in yard locomotives maintenance, since this exhibit is filed a changed and additional exhibit has been filed (Exhibit Y) reducing the cost of through trains twenty-five per cent.

A. That is, making a percentage based on the total local cars with seventy-five percent of the through cars?

Q. Yes. The plaintiff, St. Louis Iron Mountain & Southern Railroad, has filed the consist of a through train from St. Louis to Texas covering every day in the month taken by the defendant for that test, being the month of October, 1907; some of those trains were solid trains which required no switching at all; some of them were mixed trains, in which there would be groups of from twelve to fifteen to thirty to forty through cars from St. Louis to points in Texas, which required no switching, possibly there would be other cars attached to these trains destined to Little Rock, Arkansas, and others to points on the Valley Line and Fort Smith line, which had to be detached and switched at Little Rock or Hoxie. All of those cars required switching.

4270 All the cars and all the trains are charged with the same proportion of the expenses in the original exhibit filed; in the later exhibit filed by the state (Exhibit Y) the division is modified by deducting twenty-five percent of the cars carried on the through trains leaving as the cars among which the expense is to be divided all cars hauled on the local trains, and seventy-five percent of all the cars hauled on the through trains.

I will state further that the evidence shows that different degrees of switching are required by different cars, and that the expense of switching to industries is very much larger than the expense of transferring cars from the main line to other lines:

Will you state what you think of this method of division, for dividing this class of expenses?

A. I think it is inaccurate for the reasons stated in connection with the repairs to yard locomotives, that it considers that the service given to each car is exactly the same, regardless of whether it may not be touched or handled at all by the switch engine; or whether it may be switched two, three or four miles to an industry.

Of course, that is modified now by the amended exhibit to the extent of considering the service of each car handled in the through train to be only seventy-five percent of the service as compared with the cars handled in the local trains. But still that does not seem to me to be a fair basis, for the reason that so many cars in the ordinary

course of business on any day are handled by the through
4271 trains, go right through the terminals where those yard engines are without receiving any service whatever from the yard engine.

Q. Would the allowance of this twenty-five percent cure the unsoundness of their basis, in view of the facts in this case to which I have called your attention?

A. I don't think so.

Q. Is not what you said in regard to the impracticability of dividing those expenses on the basis of the number of cars handled in connection with terminal handling of freight cars, true also of this charge?

A. Yes. Of course that is further emphasized by the fact that it is based on the figures for one month, and that criticism as stated in the first place, applies all the way through—that the figures for one month should not be taken as representative of a period.

Q. On this exhibit fuel and locomotive expenses are divided on the basis of a test made on the St. Louis Southwestern Railway (The Cotton Belt) in October, 1908: you have the division before you there, Mr. Nay?

A. Yes, sir.

Q. What do you think of the soundness of that method?

A. I don't think much of it. It does not seem to me to be proper at all, to take a test made for only one month, on another railroad, and that month being entirely outside the period under consideration, and apply it to this period of six months ending Decem-
4272 ber 31, 1907.

It is bad enough, I think, to take a period of one month comprised within the six months under consideration here, as applying to the Iron Mountain road. But to take another month nearly a year later, and on another railroad, and use that as a basis, it seems to me is using something that has not the slightest relation to the expenses it is sought to divide.

Q. I also call your attention to the fact that the month taken as a test in this case is not one of the months in the six months period here under consideration at all.

A. I have referred to that. It is nearly a year later than the close of this period.

Q. The statistics filed in these two cases show that the trans-state tonnage of the Cotton Belt road is forty-four percent of the total tonnage in tons, and sixty-five percent in ton miles. On the Iron Mountain the trans-state tonnage is thirty-five percent in tons of the total tons, and thirty-one percent in ton miles.

Now what does that indicate as to the similarity or dissimilarity of conditions of traffic on those two lines?

A. That indicates that the character of the traffic is quite different on the two lines. That would produce different operating conditions.

Of course, the Cotton Belt has sixty-five percent, which is almost two-thirds of its ton miles, as trans-state business, which would be hauled almost exclusively on through trains, leaving only thirty-five

percent of it, or a little over one-third as interstate and state
4273 business, to be divided between the through and local trains.

While on the Iron Mountain practically only one-half of the ton miles, fifty-one percent is trans-state business; leaving the other half to be divided between the through and local trains.

The character of the tonnage being so different, and the fuel and locomotive expenses and other expenses, especially those like fuel and locomotive expenses, so closely related to the traffic, would very likely be different. And the results obtained on the Cotton Belt in October, 1908 might be entirely different from those obtained on the Iron Mountain in the six months period ending December 31, 1907.

Q. Can it be correctly assumed that the results on one of those lines would be properly representative of the results on the other?

A. I should not think so. Not for any purpose which required any degree of accuracy at all.

Q. You have a knowledge of the character and equipment of those two roads, in a general way at least?

A. I don't know that I have.

Q. Do you know whether there is any difference in the equipment of the two lines or not?

A. You refer to cars and locomotives?

Q. Yes, operating equipment?

A. No, sir, I do not.

4274 Q. What effect would dissimilarity in the equipment of the two lines have on the expenses of the two roads?

A. It would have a marked effect. That is to say, if the Iron Mountain runs larger locomotives, which would be heavier, on its local trains than the Cotton Belt does, it would affect the proportions between the through and local expenses, making them dissimilar.

Q. And those differences would have to be shown and weighed in determining a proposition of that sort, would they not?

A. Yes, sir.

4275 Direct examination of FRANK NAY continued as follows:

By Col. MOORE:

Q. Mr. Nay, the next sub-division to which I call your attention is "engine house expenses": I wish you would examine that item in the division adopted by the State, and express your views in regard to it.

A. In the first place I think it is wrong to divide the expenses for a six months period on the basis of the expenses of the month of October, 1907.

I think the method of dividing the engine house expenses on the basis of engine miles is wrong, because the engine house expenses are not in proportion to the mileage made by the engines.

I have learned from the testimony in this case that the average run for through and local trains was obtained by dividing the runs at state lines.

4276 I would consider this to be wrong, and that the proper way to obtain the average local and through runs would be to take the entire run regardless if whether it crossed the state line or not. That would be the proper method of determining the relative runs of local and through engines. And when that was determined on that basis the result would be similar to a result that would be obtained by dividing the engine house expenses on the basis of the engines handled, which I think is the proper basis whenever it is desirable to determine a division of those expenses.

Q. The next item to which I want to call your attention is "Other train expenses", which you will find under "F" on page 6 of Exhibit K.

Please turn to that and state what you think of the manner in which that has been treated.

A. Under the head of "Other train expenses" I understand are included practically all of the casualty account, in fact, all of them except loss and damaged freight, crossing watchmen, flagmen, joint facility accounts, and accounts of that nature.

Q. What do you mean by casualties?

A. I mean injuries to persons, damage to property, stock killed and injured by trains on the right of way. I think that comprises all of the casualty accounts outside of lost and damaged baggage, which is a passenger account, and loss and damage to freight.

4277 It includes also floods?

A. Yes, sir. And clearing wrecks, too.

Q. Proceed with your statement Mr. Nay.

A. The train mileage has little to do with those accounts. The casualties do not occur with regularity; that is, with reference to the train mileage. It would seem that it would be possible to locate the most of those casualties, if an attempt had been made, to the trains, in an endeavor to divide them between local and through trains. But a division on a train mileage basis might, as a matter of coincidence, bring the correct result. I think, however, it would be simply a coincidence. It might bring a result very far from that which would represent the facts. I think a division on a train mileage basis between local and through would not, except it should be a coincidence, bring true results.

Q. Is that expense of such character that it can be distributed through a given period, or a series of months, on any system of averages—casualty losses, and things of that sort?

A. No, sir, not definitely. Of course from years of experience we learn that the casualties are within certain limits, maximum and minimum, and will run about the same; and railroad officials in them must provide for a certain expenditure of that amount.

Q. I understand that. That is for the purpose of making
4278 estimates, and things of that sort. But for the purpose of making a correct division, between local and through trains, such as is sought in this case, can you take any one month and say that it represents the ratio for any six months period?

A. As I have stated before, no one month is representative of a

period. It is not fair to consider any one month as representing an entire period.

There is another feature about these accounts which represent the erroneous division on a train mileage basis and that is that these accounts represent largely payments that are made during the month of October, 1907, but not the damages or losses or injuries that occurred during that month.

For instance, in the injuries to persons, in ordinary railroad practice of settlement, that would represent in very large part payments for injuries that occurred prior to the month in which the settlement was made.

And that is true of damage to property and damage to stock on right-of-way.

I think the charges for clearing wrecks would be practically current because that represents labor performed by the company's own force.

But the fact that these settlements are for business that occurred in prior months emphasizes the erroneous application of
4279 the train mileage of the month of October, in which very few of the damages probably did occur.

Q. Will you turn to sub-division G on the same page under heading "Loss and damage, freight" and state what you think about the method of dividing that.

A. Almost the same objection applies to that as to the previous one; with regard to the dates of payment.

Here the State's witnesses have separated the actual payments in one month, October, 1907, which should not be taken as representing the entire period, between state and interstate freight, as I understand it, according to the nature of the shipments, whether they were state or interstate, that sustained these damages or losses.

Those claims that were settled during October 1907 and charged to this account in that month represented damages and losses that occurred very largely prior to that month, and emphasizes the fact that no one month can be taken as representative. The number of interstate settlements made in October might have been largely in cases of the ordinary number settled from month to month; but the reverse might have been true.

I do not think any reliance can be placed on the figures produced under this head, as representative of the conditions that prevailed during the entire period.

Q. I will call your attention to the item "Total Operating
4280 Expenses" which seems to be an explanation of the method adopted by the State's accountants.

A. The total operating expenses, or, rather, this heading in the exhibit, simply explains how the total of train cost in the state and interstate have been arrived at.

Under this heading it is proposed to include everything pertaining to the direct cost of moving freight trains, with all expenses incident to such movement.

The first item under this heading is "Maintenance of Way and Structures" and, as I have already said, a very large proportion of

the expenses under that head do not relate to the direct cost of the movement of freight trains, nor expenses incident to such movement, because perhaps ninety per cent of the maintenance of way and structures expense is due to deterioration and the action of the elements, and is incurred from time to time without regard to the number of trains that are operated over the track.

Furthermore, those expenses under maintenance of way and structures which do have some relation to the movement of trains and cars, are expenses made necessary by the wear and tear, or deterioration for previous periods running back over many years.

The rails are renewed because of the wear and tear that has occurred in past years. In some cases it is thirty years or
4281 more, and in some cases it is only a few years, according to the density of the traffic handled over the rails.

And so with the ties; they are renewed and those that were renewed in October, 1907, were renewed because of the deterioration from the traffic in past years, and not because of the train or car mileage during that month.

Of course when it comes to buildings, sub-structure of bridges, fences, telegraph lines, coaling stations, water tanks, and things of that sort, the expenditure for maintenance of those have nothing to do directly with the movement of trains or cars.

Q. Under the heading "Method of dividing train cost" (Page 7 of this exhibit) the State's accountants have made an application of the sub-divisions preceding that, to the six months' business: look at that, please, and state what you think of the method adopted there.

A. The State has again used the month of October, 1907, but has made a variation under this heading which is applied to a very large amount of money, and instead of using the two percentages for the month of October, 1907 (as in, I think, all of the other accounts) a modified percentage has been used which produces a percentage of twenty-six per cent for local trains, based on ton miles, instead of 28.51 per cent for local trains, which is the October, 1907, percentage.

Q. This 26 per cent you mean is applied to the six months
4282 business?

A. It is applied in a way. That is to say, the State has assumed that exactly the same percentage of state and interstate freight would be handled on local and through trains during the entire six months as during the month of October, 1907. And on that assumption, by applying those percentages to the state and interstate trains one mile for the six months, has arrived at the result that twenty-six per cent of the total tons one mile on local trains is intrastate freight; whereas the test made by the witnesses for the state in the month of October, 1907, showed that 28.57 per cent of the total tons one mile transported on local trains was interstate freight.

This percentage is based on the assumption that the relative proportion of tons one mile, state and interstate on through and local trains, is exactly the same during the six months as during October,

1907; which I think is wrong, because October is the heaviest month of the year for all Southwestern roads; it is the big cotton month and practically all cotton shipments are interstate shipments.

My judgment would be, based on a good many years' experience with Arkansas conditions, that the proportion of intra-state tonnage to interstate tonnage in October would be less than during the entire six months, or during an entire year, for the reason that
4283 there is an excess of interstate tonnage or shipments handled during that month.

But supposing this percentage were actual, practically all of the objections to the ton mile basis that have been mentioned heretofore (and which I do not think it is necessary to repeat now and burden the record) would apply to this division on the ton mile basis.

Q. The accountants for the state have used, you stated a moment ago, the October statistics for the purpose of dividing the expense under all the sub-divisions made by them, which appear on Exhibit J.

For instance, maintenance of way and structures, involving five hundred and fifty-three thousand and odd dollars, have been divided between local and through trains on the basis of the statistics for that month.

The same is true of maintenance of equipment which amounts to something over seven hundred thousand dollars.

All the way through where they have made a division between local and through trains, that has been the method.

Now the percentages of state and interstate tonnage on those trains, as shown by the October, 1907, statistics, is something over twenty-eight per cent of interstate tonnage on local trains.

In that single instance they have abandoned the methods used by them in all their sub-divisions, as described by you a
4284 little while ago, and in this one instance have adopted a new factor, using twenty-six per cent. Is that correct?

A. Yes, sir.

Q. Is such a method as that fair or consistent?

A. I do not think so. That is, I do not think it is fair to use such a method and have it purport to represent true conditions. I was going to call attention to the fact that this same thing applies to the freight on through trains.

Exhibit I shows the proportion of intrastate freight handled on through trains to be 5.59 per cent. While the percentage used by this method I have described as applied to the division of the through train expenses is 4.96 per cent, a difference of .63 per cent; but when applied to a large amount like $1.948,689.55 it will make a very substantial difference in the final result.

There is in each class, both local and through trains, state and interstate used in Exhibit K, substantially less than in the October business as shown in Exhibit I. And the result of that is to reduce the proportion assigned to intrastate traffic and increase the proportion assigned to interstate traffic. That is, to reduce it compared

with what it would have been if the two October percentages had been applied, as in the other cases.

4285 Q. And it reduces it to the extent of those percentages?

A. Yes, sir.

Q. In one case from 28.51 to 26, and in the other case from 5.59 to 4.96?

A. Yes, sir.

Q. And such a change in the method as that would produce a difference in the result of course, as you have just referred to?

A. Yes, sir.

Q. After having ascertained, in the manner indicated by what we have gone over, the relative cost of local and through trains, of the freight carried on each kind, the State has undertaken to divide that expense on a ton mile basis ratably between state and interstate freights: I want to know what your views are as to the correctness of that method of ascertaining the relative cost of conducting state and interstate business.

A. I think that the method is erroneous because it makes no distinction between the different kinds of freight, principally car load and less than car load.

The expense of hauling a given number of tons of car load freight is less than the expense of hauling the same number of tons of less than car load freight the same distance.

That is a distinction which is generally recognized in cost
4286 accounting and in the rates that are charged for the service.

One reason that the rates are less for car load freight is that the cost of the service per unit per ton mile is less on car load freight than on less than car load freight.

The ordinary ton mile basis makes no provision for a difference in the length of the haul. An attempt has been made here to provide in a measure for the difference in the length of the haul by a method of apportioning terminal expenses. I do not think it is adequate, because, as stated in connection with station expenses, they are stated on a ton basis, car loads and less than car loads all thrown together.

The lump expenses are divided on a ton mile basis, regardless of whether the cars contained a heavy load of car load freight or are lightly loaded with merchandise.

Also regardless of whether the cars are actually handled by the switch engines, or whether they are switched to a great distance.

Also regardless of whether the freight is actually handled by the Company's employees, or by the shipper and consignees.

Those are the principal conditions that make the ton mile basis an erroneous basis for dividing expenses between state and interstate.

Q. Does the difference in the cost of operating local and
4287 through trains contain all the elements of increased cost of handling intrastate over interstate business, or are there other elements outside of those?

A. There are other elements outside of the train cost.

Q. You mentioned a while ago the subject of long and short haul: is the difference between the cost of handling the two classes

of freight, state and interstate, correct, even if they were covered by an allowance in the train expense? Or, are there other elements and considerations in that which would have to be considered in determining the exact difference in the cost of handling freight, such as the long and the short haul and the difference in the character of the freight handled, and so on?

A. There are other elements for which allowance should be made. Allowance has not been made for the difference in the long and the short haul.

No allowance has been made for the difference in the character of freight, such as less than car load freight, high class expensive freight, as compared with low class and less expensive freight to handle.

Q. Take freight such as merchandise, car load and less than car load, hauled on the local trains: I know there is a much larger proportion of the less than car load freight hauled on the local trains than is hauled on the through trains (I mean

4288 State freight).

Does a division on a straight ton mile basis make proper allowance for that part of the state tonnage which is less than car load? Is it proper to divide that on the same basis that you divide the car load, and put the merchandise, high grade commodities, on the same plane with the lower grade commodities, in dividing those expenses on a ton mile basis, as they have?

A. No, sir, it is not. And the exhibits in this case I think show it is a fact that the greater percentage of the total tons and tons one mile for state business consist of merchandise or less than car load shipments than for interstate business.

In the case of the tons, my recollection is that the percentage of less than car load intrastate is nearly double the percentage of less than car load interstate.

Of course the less than car load freight, while it is relatively a small proportion in tons, incurs a large proportion of the expense. That is, a much larger proportion than its proportion in tons, because the less than car load freight is the more expensive freight to handle.

Q. In this connection, Exhibit N, I think shows it cost about 86 per cent more on the ton mile basis to handle state freight than interstate: I wish you would look at that and see what it is.

Every operating man who has testified in this case has put

4289 the minimum difference at three times as much. It runs from three times to six times as much for the cost of transporting state freight than interstate. In view of that testimony I wish you would look at that exhibit and state what you think of his method of division.

A. I have made a computation by dividing the state tons one mile into the state operating expenses as shown on Exhibit N, and the same compilation for the interstate tons one mile, and expenses. I find that the result of this exhibit is to show the cost of state business to be 86 per cent more on a ton mile basis than for interstate business.

The average operating expenses per ton mile for state business is 8.2 per cent and for interstate 4.4 per cent, a difference of 3.8 per cent—or 86 per cent.

I heard the testimony of some of these same witnesses in the Missouri Rate case and it was to the effect that the extra cost of state over interstate business on a ton mile basis would vary from ten per cent minimum, to sixty per cent maximum.

Now, this compilation presented here, which is complicated and produces a result which shown 86 per cent increased cost, indicates that the state's witnesses realized that they were mistaken in the Missouri Rate case in putting the extra cost so low. But it is still below what the railroad operating men testified to.

4290 I made a further computation with regard to the cost on a revenue basis, and found that by dividing the state revenue into the state expenses, and the interstate revenue into the interstate expenses, it produced a result which shows that the state traffic on a revenue basis is less expensive than the interstate traffic.

The average cost to earn one dollar on state traffic (I am referring now to operating expenses) is sixty cents; and the average cost to earn one dollar on interstate traffic, under this method, is sixty-three cents.

I have listened to the testimony in many rate cases and I have never heard an experienced man testify that it cost less to earn one dollar in state traffic than to earn one dollar in interstate traffic.

Q. Mr. Nay, on page 8 of Exhibit K, under the head of "Miscellaneous Revenue etc" the State's accountants have divided miscellaneous revenue on the basis of the direct earnings, state and interstate. Do you think that method of division is proper? Should the state and interstate revenue be divided on that basis? It amounts to $152,814.41.

I do not know that your attention has been called to that, but in order to refresh your memory I will state that some testimony has been introduced about it. The railroads do not attempt to divide it and their accountants have testified it cannot be divided on that basis. I want to get your views about that.

4291 A. Very frequently we have had that question up. I think one of the largest items that occurs under that head—I have not seen the details of that—but at any rate usually one of the largest items is switching.

Q. Wait a moment and I will show it to you.

A. I will go ahead with the switching until you find that.

We have found it impossible to make a separation of switching because the road that performs the switching does not know whether the shipment is a state or an interstate shipment. A great deal of this switching is collected from other roads, where, for example, if the Cotton Belt should bring a car into Little Rock destined to an industry located on the Rock Island tracks, the Rock Island would switch that car to the industry, but we would simply get a switching order "Switch car number so and so to such and such an industry." The Rock Island would not know whether or not that car contained

an interstate shipment and it would be impossible for us to make a separation between state and interstate.

For that reason the miscellaneous revenue in these cases where we endeavor to get at the facts as nearly as possible, has been treated separately, and we have not divided it between state and interstate, but have treated it as a whole and set aside a revenue proportion of the expense to apply to the miscellaneous revenue.

4292 The next large item is car service. That is demurrage, as it is commonly known, assessed on cars for delay in unloading. Of course if it could be considered as a part of the consideration for those shipments it would be possible to separate that according to the cars on which the demurrage occurred. But if it is simply considered as storage for the tracks it is a question then as to how it should be separated. That is the reason that in our preparation for these cases we have not attempted to make the separation.

The next large item is rents of buildings and other property. Practically the same thing will apply to that as to demurrage, because demurrage is equivalent to rent of the facilities for storing the cars during a given time; and the same difficulties appear there as to a separation between state and interstate.

In fact, I think it is impossible, and doubtless the state's witnesses have found it impossible, to make an actual separation; and that is why they have omitted the relative state and interstate proportion.

Q. Under the same heading (page 8 of Exhibit N) you will find $179,191.00 for hire of equipment: state your views about that.

A. That item "Hire of equipment" is made up of two elements: one the hire of cars belonging to other railroads and Companies while they are on the Iron Mountain Road; and the other is the

4293 amount received by the Missouri Pacific System or the Iron Mountain Road for the hire of its cars while they are off the line.

The testimony I have heard in connection with all these rate cases whenever it touched on these points, was, that the cars were delayed much more in the state traffic, or local traffic, if they were referring to local trains, than in the interstate or through traffic.

I have seen various estimates as to the difference in the delay, I think running as high as twelve or fifteen times the delay to cars in connection with state traffic as in through traffic.

Of course the difference in the length of haul for the two kinds of traffic makes it very evident there must be increased delay, at least in proportion to the increase in the length of the haul.

That would apply only to the debit end of this account, because neither state nor interstate traffic has anything to do with the amounts collected from the several carriers, while the cars of the Iron Mountain Company are on other roads.

So I think this method of division for hire of equipment which simply takes the balance and divides it on a revenue basis, without any allowance at all, produces an injustice to the intrastate traffic, because it does not assign enough to that traffic.

4294 Q. There should be allowance to cover the increased use, growing out of demurrage and so on?

A. Yes, sir.

Q. Mr. Nay, I want to call your attention next to the apportionment of passenger expenses made on Exhibit M (introduced by Mr. Wharton in this case): you have examined Exhibit M, have you?

A. Yes, sir.

Q. The State has adopted a different method of making that division and seems to divide it between different classes of cars without regard to trains: I would like to know, in a general way, what you think with reference to the methods that have been adopted by the State for that purpose.

A. In making this passenger division the percentages have been based, I think throughout, on the month of October, 1907, to which the same objection applies as in connection with the division of the freight business. No one month can be taken as representative of a long period, six months or a year; and the division throughout has been largely on the basis of car miles, which I think is inaccurate in many cases because many expenses are divided on a car mile basis, which have little or no relation to the car miles of the trains, or are governed by the car miles. Again, the car miles in local trains, which carry no Pullman cars, are treated just the same as those in through trains which do carry Pullman cars; and that
4295 works an inaccuracy, because it does not assign a sufficient proportion of the expense to the traffic carried in local trains, although no division has been attempted here between through and local.

It seems to me, to be consistent, the same division should have been adopted here between through and local as in connection with the freight, because there are through and local passenger trains, just as distinctive as through and local freight trains.

The reason given for not separating the through and local passenger trains was that practically all of the through trains do the local business.

That is true also of freight trains and I think there is an inconsistency in the method in not separating the pasenger expense between through and local, the same as they did in connection with the freight expenses.

The first item under this head is "Maintenance of Way and Structures." As stated in connection with the freight proportion of this expense, perhaps ninety per cent are not governed by the car miles, or have little to do with the car miles.

The reasons stated on this account in connection with the freight service all apply to the passenger traffic with equal force. That is to say, the expense is caused by deterioration, by the action of the elements, and not by the car miles; and that the expense is incurred by reason of wear and tear and deteriora-
4296 tion that occured in prior months and not during the month of October, 1907, and not during this period.

Then again, even as to that proportion of the expense (which is small) that is affected by the car miles; it is not fair to consider an express car on a parity with the coaches and Pullman cars.

An express car is simply a very substantially built freight car

which they run in passenger trains. It has eight wheels under it, while practically all of the Pullmans have twelve wheels and many of the passenger cars have twelve wheels.

Q. Then there is a difference in weight, isn't there?

A. Yes, sir, there is a marked difference in the weight of the cars themselves. The Pullman cars and parlor cars, chair cars and the coaches of the Company being heavier than the express cars.

And the weight has a great deal to do with the maintenance of way expenses, because we know from experience that it is frequently necessary to substantially strengthen bridges and put the track in better condition to accommodate heavier equipment.

It is, however, frequently the case that large expenses are incurred solely because of the operation of heavier equipment. The facilities would have been adequate for handling the traffic in lighter
4297 equipment.

For all these reasons I think the division of expense for maintenance of way and structures, the passenger proportion, on a car mileage basis, among the four classes, namely, coach, pullman, mail and express, and especially for one month only, will not produce results that can be relied upon as representing actual conditions.

As to maintenance of equipment, the repairs to locomotives have been divided again among the four classes of passenger train cars on a car mileage basis, while it seems to me there is very little relation between the mileage made by these cars and the repairs to the locomotives.

This is especially true because the repairs made to the locomotives during the month of October, 1907, are those caused by wear and tear during a previous period; and even if there was a relation between the car miles (which I think there is not) and the repairs to locomotives, it would be unfair to divide these repairs caused by wear and tear over perhaps a preceding year, on the basis of the miles made in one month, the month of October, 1907.

This emphasizes, I think, very strongly the objection to using percentages based on any one month.

Another injustice that is worked in connection with repairs to locomotives on this basis of division may be illustrated as follows:

4298 Suppose two trains, one a local passenger train, and the other a through passenger train; the through passenger train consisting of nine cars, three of which are coaches; and the local train consisting of four cars, three of which are coaches. Suppose the repairs to the two locomotives will average the same, for example $2,400.00 per annum.

The total expense of the engine pulling the local train should be charged to local service, namely, $2,400.00 per annum.

If that were divided under the State's plan, three-fourths thereof, or $1,800.00 would be allotted to coach service.

On the other, or through train, using the State's plan, one third of the total expense, or $800.00 would be assigned to coach service; making a total of $1800.00, plus $800.00, or $2,600.00, assigned to coach service for repairs to locomotives; providing the local and

through trains had been computed separately, and the State's plan of dividing on a car mileage basis had been used.

However, using the State's plan of combining the two trains, we would have a total of repairs to locomotives of $4800.00, a total of thirteen cars in the two trains, of which six would be coaches and six-thirteenths of $4800.00 would be assigned to the coach cost of repairs to locomotives, which would be about $2200.00, as against $2600.00, which would have been assigned if the local and
4299 through trains had been computed separately.

Of course I am supposing that these two runs are of equal length and that the car mileage would be in the same proportion as the number of cars in the train, which would be the case if the two runs were of the same length.

This shows that the State by abandoning the plan followed in connection with freight service of dividing the expenses between through and local, has relieved the intrastate expenses of charges that would have gone thereto if they had followed the division between through and local in connection with the passenger service.

Q. Should there be any difference made in the cars on local and through trains on account of the more frequent starts and stops of the local as compared with the through trains.

I don't know about that and I want to call your attention to it.

A. I should think there would be because it has been testified by operating men that starting and stopping causes more wear and tear, or damage, that subsequently must require expenditure for repairs, than straight running on the track.

Q. If that is true, and if it is also true, as has been shown in this case, that the local trains carry a large preponderance of the state passengers, would not the disregard of that element work an
4300 injustice to the local service?

A. Yes, sir. That is, it would fail to charge a sufficient proportion of the repairs to the traffic hauled in local service.

In a division of the expense of maintenance of passenger train cars, the Pullman cars are omitted, and the expense is divided among the three classes, namely, coaches, mail and express cars on the basis of the mileage of those cars during one month, October, 1907.

The same objection applies here, that the repairs were made necessary by wear and tear during previous months and that no one month should be taken as representative either of the repairs or of the mileage made by the cars.

This basis assumes it costs just the same per car mile to repair a coach as it does to repair an express car; while as a matter of fact it costs considerably more. Some men have estimated the cost at double for repairing coaches as to repairing express cars. No allowance has been made for this excess cost.

Q. Now go to the traffic expenses, please.

A. The traffic expenses have been divided on the gross earnings basis, which assigns to mail and express traffic 19.33 percent of the total traffic expenses.

The traffic officials, whose salaries and expenses are included under

this head, have practically nothing to do with either the mail
4301 or express service.

I am speaking of the common practice among railroads, and I am informed that the Iron Mountain is no different in that respect.

The contracts for express service in nearly every case made by the executive officials, usually by the President of the Company, or some one higher in authority, and are turned over to the operating officials to be executed. The accounting department looking after the proper revenue to be received from the Express Company.

The mail service is not covered by contracts, the United States Government determining the rate of mail pay, and the operating officials and their forces attend to the carrying of the mail under the conditions prescribed by the Government.

Q. "Salaries and expenses": Is that expense which I think has been described by the traffic men in this case as efforts to work up business, advertising, foreign agencies and things of that sort.

Isn't that solely and exclusively for the purpose of securing freight and passenger traffic? Do the railroads in any case employ traffic men to work up the express business or get up mail contracts? Did you ever hear of such an application of their talent as that?

A. No, sir. The expenses under this head are simply
4302 the passenger proportion of expenses and would not include any freight.

Q. I know that, but I am speaking of it under the broad term in which it has been used in this case. Is there any conceivable reason why twenty percent of that expense, practically, should be charged to mail and express?

A. No, sir.

Q. What were you going to say about miscellaneous?

A. I was going to say there is another class of miscellaneous passenger revenue, speaking of mail and express as miscellaneous for the present. That is such as "excess baggage" with which the traffic men do have something to do; these men whose salaries and expenses are carried under this head, prescribe the rates for excess baggage and provide for the excess baggage checks, and things of that kind.

But the miscellaneous passenger revenue has been omitted from this division. I think while they do have something to do with that miscellaneous passenger revenue, their duties in connection with it are not sufficient to entitle it to be included. But, if that is omitted, certainly the mail and express should also be omitted, because these men have less to do with the mail and express traffic than they have to do with the miscellaneous passenger traffic which has been omitted.

Q. In getting at this thing on the basis of actual facts, the State's accountants have, in this instance, really omitted the only
4303 item of miscellaneous expense which could reasonably be brought into this account; and have brought into it these two items of mail and express which have no relation whatever to it, have they not?

A. Yes, sir. Speaking of actual facts, I do not think there is any

result in this division, from start to finish that represents an actual fact.

Q. The next heading I believe is "Transportation Expenses": Take that up next please.

A. This exhibit shows that the station expenses under the heading of "Transportation Expenses" have been divided on the basis of the number of passenger of each class handled, after making allowance of ten cents per day for handling mail at certain stations.

Q. There is an assumption there, isn't there?

A. Yes, sir. "Assuming that each intrastate passenger makes use of two terminals, and each interstate passenger makes use of one terminal"—and then the division is made by doubling the number of intrastate passengers.

While this assigns a large portion of the expenses to intrastate traffic I don't think it assigns a sufficient proportion, because the trans-state traffic has not been allowed for, and the trans-state passengers would make no use of the terminals in the State of Arkansas.

Q. The State's accountants make no allowance on that
4304 account?

A. No, sir.

Q. That is a small matter, but at the same time, if the accountants who prepared this exhibit were basing it on actual facts, they should have taken that into account, should they not?

A. Yes, sir.

Q. "Yard and train expenses" I believe is the next item.

A. Yes, sir. This sub-division of the transportation expenses is made on the basis of the mileage of the four classes of passenger train cars for the one month of October 1907; and the same objection would apply here as mentioned under the head of repairs to locomotives, so far as being unfair to the traffic—that is, not allowing a sufficient expense to the traffic carried in local trains.

This might be illustrated as follows: take a local train with three cars and a local run of one hundred miles; the local miles would be three hundred. Then take a through train of nine cars and suppose the through run to be two hundred miles, the car miles would be eighteen hundred; making a total for the two trains combined of twenty-one hundred car miles. The local train's car mileage would be 14.3 percent of the total; and the through train's car mileage would be 85.7 percent of the total.

4305 Assume the wages of the crew running the local train to be $25.00; and of the crew running the through train to be $40.00; we would then have total wages of $65.00, $25.00 of which actually was incurred in connection with the local train, and $40.00 of which was actually incurred in the operation of the through train; which would have been the amount assigned to the local service, which carries the greater portion of the local traffic, if the local and through has been kept separately, as was done in connection with the freight traffic. But now, by combining them, and dividing the total wages of $65.00 on a car mileage basis, will assign to the local run 14.3 percent of $65.00, of $11.30 as against $25.00, the estimated

amount actually paid; and to the through train $57.70, as against the $40.00 estimated to be actually paid.

This illustration is used to show that the abandonment of the division between through and local in connection with passenger service has the effect of reducing the expenses applied to the traffic carried in local trains, the greater proportion of which is state traffic.

Furthermore, this division of the train expenses on a car mileage basis assumes that the wages of the train crew which runs a train of nine cars are exactly three times the wages of a train crew which runs a train of three cars.

Of course that is an absurdity, because the wages of con-
4306 ductors and brakemen, engineers and firemen, and other train men, are not based on the number of cars in the train, but are usually based on the number of miles the train runs or on a fixed rate per month. And the wages of the crews on the local passenger trains are greater per train mile than the wages of the crews on the through trains.

So that the division of the wages, even if it were made on a train mile basis between local and through would not assign a sufficient proportion to the local train. And a division on a car mile basis much less assigns a sufficient proportion to the local trains, because there are more cars in the through trains than in the local trains; and as the local trains carry the larger proportion of the state business, the result of this method is to assign to the interstate traffic too great a proportion of this train and yard expense, and too small a proportion to the state traffic.

Q. Does not yard and train expense include the cleaning of cars, Mr. Nay?

A. Yes, sir, it includes the cleaning and care of cars.

Q. Is there any comparison between the cost of cleaning coach, Pullman, mail and express cars? Can that be properly divided on a car mile basis?

A. No, sir. The cost of cleaning coaches and Pullman cars is very much in excess of the cost of cleaning mail and express cars.
4307 A division of that expense on a car mileage basis is not fair. This also includes the cost of supplies, such as ice, water, and lighting. The cost of those supplies for coaches would be greater than for mail and express cars.

Q. Are not the coaches cleaned at the end of every run, whether a short run or a long run, so the length of the run has no connection with the cost of cleaning?

A. Yes it is true that a coach is cleaned at the end of a run; so if a coach makes a 500 mile run it is cleaned at the end of a run; and if it makes a 200 mile run it is cleaned at the end of the run. Therefore, that expense is not in proportion to the car miles.

Q. I notice a division of expense for loss and damage, which is a small amount, but inasmuch as the State assumes it has done these things on an actual basis, and has attained accuracy, I will ask you to look into that.

I see they have divided the actual expense between interstate and

intrastate business in proportion to gross earnings. But they have made no allowance on account of local or state business:

What do you think of dividing that in that way, without making any allowance in favor of the local or state business?

A. I think there should be an allowance made for excess
4308 cost of intrastate over interstate business, which has not been made.

Q. Explain why you think that should be made, if you please.

A. Because the loss or damage to baggage occurs through the handling, either the unloading or loading, or trucking at stations, and the baggage handled on the intrastate movements would be handled oftener, loaded oftener, unloaded oftener, and handled at stations oftener. For that reason the loss or damage would be greater in connection with state traffic than with interstate.

Q. I understand there is a larger quantity of baggage carried on through trains, and that interstate passengers carry more baggage, perhaps, than local passengers. But the ratio of loss and damage from the causes you have mentioned is larger in the local service, the state service, than it is in the interstate service, on account of the greater frequency of handling; and it is on that account that you think the allowance should be made?

A. Yes, but I don't believe it is true that the through trains carry more baggage in proportion to revenue than the local trains.

Q. State what your understanding about that is.

A. That used to be the impression, I think, until some investigations were made and it was found that the local or state trains carry more baggage in proportion to the revenue than the through
4309 trains; because much of this local, state business, consists of traveling men, drummers who have large sample cases. While if you go to a station and see a man taking the through train from Chicago to Kansas City, for instance, he will have his grip in his hand; it is not put in as baggage. It is only when people are going for a long journey or for a protracted stay that they take a trunk which goes into the baggage car.

In connection with the Missouri rate case, after hearing part of the testimony in that case, I had an investigation made on certain portions of our line as to the actual amount of baggage checks issued at a large number of stations. The result was that there were more baggage checks issued for state traffic than for interstate traffic.

Q. That is, the proportion of loss and damage to the revenue received is greater in the state than in the interstate business?

A. Yes, sir, because of the additional handlings. A passenger buys a ticket or presents mileage, and he has three or four sample cases and rides 25 miles. That baggage is handled twice at the station and once on the train, making three handlings.

Another, passenger boards the train, say at St. Louis, and buys a ticket to Texarkana and pays—I don't know what the rate is, but suppose it is $10.00. That baggage receives the same number
4310 of handlings as in the case of the man who paid seventy-five cents.

So it makes the causes that produced the damage to baggage much

greater in proportion to revenue on the local trains than on the through trains.

Q. Under the head of "Total operating expenses" the State has made an explanation of the methods used by them in the division of passenger expenses: look at them and see if there is any comment you wish to make in connection with it.

A. Exhibit L, as I understand it, is an explanation where these various items mentioned in Exhibit M have been summarised and totals made for what purport to be train cost under coach and Pullman, and "other costs, state and interstate"; and another heading "Train and other costs, mail and express". And then "Total".

Q. I notice they state in that explanation that the amounts charged to state and interstate are expenses not chargeable to train service; would not that properly include maintenance of way and structures, and in that view should not maintenance of way and structures be charged to state and interstate rather than as they have divided it?

A. The same remarks would apply there as made in connection with the freight service.

The cost of maintenance of way has been treated as an
4311 expense directly in connection with or attributable to the train cost. I do not think it properly belongs under that head.

Q. The point is, that to the extent to which that is not properly a train cost, and it does not grow out of operation, it should not be treated as a train cost.

A. No, sir, it should not.

Q. Under the next sub-head division, "Cost of Pullman service" between state and interstate business, they have divided between intrastate and interstate in proportion to the passenger miles of each class of traffic. And then below that they have made a separate accounting with regard to Pullman service:

Just take that up, Mr. Nay, and explain the effect of that division.

A. All of the figures used to arrive at this coach service have been estimated, and the sum of all these estimates or approximations are now divided between state and interstate traffic on the basis of the passengers one mile.

Now, if these expenses had been actually ascertained instead of being estimated, a division on the basis of passengers one mile would be unfair, because proper allowance has not been made for the difference in the length of the hauls, the long and short hauls, such as additional expense incurred by frequent stops, etc., items that
4312 have been mentioned.

Besides that, there is included in the figures passengers one mile on which the percentages for dividing the coach expense are based; the passengers one mile hauled in Pullman cars. That is to say, a separation has been made between the coach and Pullman expense, but the separation has not been made between the passengers one mile hauled in coaches and in Pullman cars; but the entire passengers one mile hauled in both kinds of cars have been applied to the division of the estimated expense of the coach proportion.

This is unfair, because the State assumes that only twenty-five per cent of the passengers one mile hauled in Pullman cars are State

passengers. That percentage I would consider to be large. But supposing that is true, if the passengers hauled one mile in Pullman cars had been deducted, the result would have been a very large reduction in the passengers hauled one mile, interstate. That is, seventy-five per cent of those passengers hauled one mile interstate would have been deducted from the interstate passengers, and only twenty-five per cent from the State passengers one mile; and that result would have produced percentages which would have assigned a much greater proportion of this estimated amount for coach expenses to intrastate than has been assigned by the method used here.

It is erroneous to apply the entire passengers one mile in
4313 both coach and Pullman service to the strictly coach service, and then apply a different percentage to the Pullman expense.

Q. This 73,842,620 passenger miles is divided on the basis of 58.71 intrastate, and 41.29 interstate, and includes all Pullman passengers as well as coach passengers, does it not?

A. Yes, sir.

Q. And that total expense of $896,378 is divided between them on the basis of passenger miles of each class of service?

A. Yes, sir, that expense is divided on the basis of the passenger miles that were transported in both coaches and Pullman cars.

Q. And yet they have in the estimate that follows that, separated the Pullman, and estimated it on the basis of 75 per cent interstate passengers and 25 per cent state passengers in those cars?

A. Yes, sir.

Q. That is very far from a division on the basis of actual facts is it not?

A. Yes, sir, that is erroneous absolutely.

Q. And it involves a pretty large amount?

A. This method of division transfers a large amount from the intrastate to the interstate column, which would be in the intra-
4314 state column if divided on the basis of passengers one mile in the two kinds of service, considered separately.

Q. That item covers a very large aggregate, in the neighborhood of nearly one million dollars?

A. It covers over one half of the total passenger expenses, $896,000 out of $1,678,000.

Q. I want to know if that result was obtained on the basis of facts actually obtained, as is claimed.

Judge HILL: We do not claim it was all obtained on the basis of actual facts.

Col. MOORE: Let the testimony speak for itself.

A. This division is not based on an actual fact, because it divides the coach expense on the basis of passengers one mile transported in both kinds of cars, coaches and Pullman.

Q. I want to ask you if the items of which that is composed, which precedes it, was arrived at from actual facts or from approximations and assumptions.

A. The items that go to make up that expense are all on the basis of estimates.

Q. I see on page 5 of this Exhibit M the item "Miscellaneous revenue" divided between state and interstate business in proportion to the gross earnings of each class: I believe you stated a similar division of freight revenue was improper: what do you think about this?

4315 A. The division of that item between freight and passenger?

Q. The division of that between state and interstate business.

A. There are many items there which cannot be divided and of course this division on the basis of state and interstate business may or may not be right.

We felt that the difficulties in the separation of that were such that we would set aside this revenue and not attempt any division of it.

Q. You have explained that as regards the freight revenue: I wish to ask you if the same reasons apply to an attempted division of the passenger revenue.

A. Yes, they do.

Q. You have been over the exhibits now in detail, those relating to passenger as well as to freight traffic. You have given the matter some study, I see, from the statements you have made. I wish you would state what your judgment is in view of your experience in connection with such matters, as to the comparative merits of this system adopted by the State for dividing the expense between state and interstate business, and a division on the basis of revenue with proper allowance for any excess cost that may be incurred in conducting local or state traffic.

A. My judgment is that this method which has been used
4316 by the State, which is based on a series of approximations and which does not produce any actual results, either as to the division between through and local train service, or between state and interstate, or any of the other classes into which sub-divisions of expenses have been made; and then the final totals of these summaries being divided on a ton mile basis or passenger mile basis, cannot be relied upon as producing figures which represent actual conditions.

The ton mile basis has been used by the same witnesses in other cases as applied directly to the expenses. And the fact that the increased cost has been greatly enhanced in this division over what it was estimated to be by those same witnesses in the Missouri rate case, indicates that they have concluded they were mistaken, and have now adopted a method which approaches nearer to the method produced by the revenue basis.

It is conceded by every one familiar with conditions, that no accurate division can be made between state and interstate traffic; but certainly, the revenue basis with the merit of being based on rates which do consider the cost of the service—that is, the relative cost of the different kinds of service, such as high class traffic, low class traffic, car load and less than car load, long hauls and short hauls, all of which have been enumerated in my former testimony,

must certainly produce more nearly accurate results than any
4317 basis which involves a long series of approximations, some of which is even approximated on a ton mile or passenger mile basis.

In this connection I would like to make a little explanation concerning my former testimony on the revenue basis.

One of the witnesses for the state testified that I had set up a "snow man" and then knocked him down, because I had divided the expenses on the revenue basis and then said something else must be allowed for excess cost.

The witness apparently does not thoroughly understand the proposition in hand, or did not carefully consider his testimony regarding the "snow man." The revenue basis, which is the basis for dividing expenses on the revenue derived, based on rates which as has been said do take into consideration the relative costs of the different kinds of traffic, does not measure the entire excess cost inasmuch as the average revenue per ton per mile on state traffic is as much greater as the average revenue per ton per mile on interstate traffic, as the excess cost on state traffic per ton mile is greater than that of interstate traffic.

So that when the revenue basis is used and it is determined that the average revenue per ton per mile on state traffic is double that of the average revenue per ton per mile on interstate traffic, the revenue basis does allow for an increased cost of one hundred per cent, on a ton mile basis.

4318 When operating officials of long experience, who are thoroughly familiar with local conditions, testify that the increased cost of handling state or local business over interstate or through business is from three to seven times as much, they refer not to the revenue but to the traffic itself, which would be represented by ton miles. And if from their testimony it should be said that the state traffic costs four times as much as interstate, and it should be found that the average revenue per ton per mile is twice as much per ton per mile on state as interstate, then after a division has been made on the revenue basis, in such a case the allowance of one hundred per cent increase cost, or twice the cost of state traffic over interstate traffic is inadequate, and the additional excess cost must be added to conform to the testimony of the experienced operating men who have first hand knowledge of the actual cost.

For that reason the additional excess must be allowed when the testimony shows that the actual excess is greater than the excess of the average revenue per ton mile on state traffic over interstate traffic.

So there is no setting up of a "snow man" or knocking him down either, but simply supplementing the revenue basis by adding excess cost, based on the testimony of experienced railroad men.

I desired to make this explanation, fearing the matter was
4319 not thoroughly understood; and in order that the Court might understand just what my position is with regard to the revenue basis and its merits.

Q. According to the views expressed by you just now as I understand them, if there should be an increase or diminution in state or

interstate rates, which would affect the revenue per ton per mile, it would not, when you attempt to adjust the difference in cost upon the basis of its costing so much more to conduct one class of business over the other, on the basis of ton miles, affect the result of the application of the revenue theory at all, if the revenue derived from the State business per ton per mile was double that derived from the interstate business, and it cost four times as much. You would make proper allowance, as I understand you, with reference to the ton mile basis of increase, after you had made proper allowance for that additional revenue; and if it should fluctuate one way or the other it would simply affect that supplemental allowance to be made: is that correct?

A. What I intended to say was that this supplemental allowance should fluctuate in accordance with the fluctuation in the revenue. That is on the principle that if a man is manufacturing different kinds of machines, and one costs three times as much as the other, he would sell the one that costs three times as much for three
4320 times the price, in order to produce the same percentage of profit.

4321 FRANK E. WARD—Recalled, testified as follows:

Direct examination.

By Col. MOORE:

Q. You have been sworn before and have testified before in this case?

A. Yes sir.

Q. You stated in your former examination what your experience in railroad operation had been, I believe?

A. Yes, sir.

Q. The State, for the purpose of determining the relative expense of transporting State and interstate freight, has attempted to ascertain the cost of operating local and through trains, and
4322 the amount of state and interstate freight in ton miles carried on each class of trains. They have taken the month of October, 1907, as representative of the six months including July to December of that year.

They first attempted to ascertain the state and interstate freight carried on each class of trains, that is, the local and through trains, during that month, by taking the wheel reports and way bills of freight carried on local trains during that month, and deducting that from the total ton miles taken into account during that month by the auditor, whose basis disregards the actual movement of freight. These accounts do not represent business which actually moved in the month of October, but are made up as follows:

System business, which covers shipments moving between stations on the Missouri Pacific System, which includes the Iron Mountain, is taken into account on what is known as "The forwarded basis";

Interline business, representing shipments covered by way bills to or from points on other railroads, is divided into three classes, as follows:

"Interline forwarded", "Interline received" and "Interline through or overhead".

They next attempt to divide and apportion the relative expense of local and through trains on the method adopted in the formula filed in this case as "Exhibit K", and, after having ascertained
4323 the expense of each class of train in that manner, they apportioned it between the state and interstate freight carried on the local and through trains, respectively, on a straight ton mile basis.

You have made some examination and study of Exhibit K, have you not?

A. I have.

Judge HILL: Do you mean that statement you have read to the witness is a summary of the testimony thus far, or is it a summary of what you expect to prove?

Mr. MOORE: I state that as a summary of my understanding of the theory adopted by the State.

Judge HILL: It is a very incorrect summary, then.

Col. MOORE: I do not think there is anything in it that has not been covered by the evidence in the case.

Judge HILL: If you wish to submit that to him as a hypothetical case you expect to prove hereafter, I have no objection; but if you submit it as a statement of the evidence, I wish to object to it.

Col. MOORE:

Q. I will assume, for the purposes of the question, that the facts I have stated are proven, or will be proven. Upon that assumption, Mr. Ward, I wish you to state your views, as an operating man, of the correctness of the State's method of separating and apportioning the expense of transporting state and interstate freight.
4324 A. In my opinion, such a method as you have outlined would not be accurate and reliable for the purpose of accomplishing the object sought.

In the first place, the taking of any one month would not, in my opinion, be safe for determining so important a thing as the cost of performing service, when it is to be used for determining the revenue of the company.

The months vary very greatly, one from the other. The month of October, on most railroads in the West, is a month of very heavy business, by reason of the difference in the method of taking record of the tonnage, part of it being taken from billing, and part from the date of receipt, there would be a very great opportunity for tonnage to be omitted that was actually carried in that month. Or, on the other hand, there might be a great deal of tonnage included in the figures which would not move at all on the rails of the company during that month. Therefore, the great uncertainty as to the accuracy of the tonnage would make the first grave doubt as to the accuracy of the method for computing the cost.

Q. Would the incorrectness that would result from that method of ascertaining the relative proportion of freight carried on local and through trains be cured by the fact that the omissions and the

inclusions to which you refer would occur from month to month and would be about the same in each month. Or, in other
4325 words, would the difficulties you speak of be covered by an equality of "lap-overs" from month to month in the freight omitted, or that might be omitted in the Auditor's revenue accounts?

A. It would not, in my opinion. I do not believe that any one month should be taken or could be taken as a basis upon which to determine an accurate computation. Any month might be a high one or it might be a low one; and if it should happen to be correct in any given case it would be so purely by accident and not by reason of the inherent accuracy of the theory. No short period of a day, a week, or a month, would be safe. They would all give opportunity for variations sufficient to destroy the value of the method as a means of determining the separation of cost.

Q. What effect, if any, would any change in the character of the tonnage have upon the correctness of that method of ascertaining the total tonnage.

A. By "Character of tonnage" do you mean the character of the freight?

Q. I mean the character of the business, and the character of the freight, and all the characteristics that enter into and form an element in determining whether the method of keeping accounts by the auditor would give a correct result.

A. A variation in the character of the business handled
4326 that is, business of kinds that had different origins or destinations during that time—for instance, if during the month that was used as the basis of these computations there should be any material change in the class of business handled, there might be a very material opportunity for a variation in the time at which those tons would be recorded and they might be omitted in that month, or other tonnage might be included. It would have a bearing on that same opportunity for inaccuracy.

Q. What effect would congestion during the period that is covered by this investigation, and during the month or a congestion which was at its height during the month that is selected as a representative month, and in which the relative tonnage is sought to be determined in the manner I have described, have?

A. If congestion existed in the State of Arkansas during the month that was used in this theory, undoubtedly the same congestion existed in States outside of Arkansas, on lines connecting with the lines that are being considered here. That would mean in any such period of congestion the business would all move more slowly than at a time when business was being handled in a normal way. That would mean that business would be delayed outside of the State and inside of the State, and the margin for such inaccuracies would be greater. There would be a greater spread between
4327 the tonnage actually moved in that month and the tonnage that was recorded by the method described.

Q. Would such a condition have a tendency to change the proportions of tonnage carried by the two classes of trains mentioned, that is, the local and the through trains?

A. Yes, sir, it would for this reason among others: that in a time of congestion, when a railroad is hard pressed to move its business and keep its terminals clear, it would use to the fullest possible extent the capacity of the engines on its local trains, and the proportion of long haul, or interstate business, handled on its local trains would increase during such a time. And the local trains being ordinarily such light trains, the addition of comparatively few cars to their make-up would materially alter the percentage of giving tonnage that was carried in those trains.

Q. What do you think of the practicability of apportioning the expense of interstate and intrastate traffic by separating and ascertaining the cost of operation of through and local trains, as the state has done in "Exhibit K"?

A. I have given the matter of finding an accurate method of dividing that cost considerable thought, and have heretofore expressed myself as being of the opinion that there was not any practicable way of determining it by any mathematical calcula-
4328 tions, or any exact method; and I am now of the same opinion.

I do not think the State has yet solved the problem. I think the plan outlined in Exhibit K is not a practicable one.

Q. In introducing this scheme of division the State assumes that it has presented a method which is not based upon theory, but upon actual conditions; and they advance it here as an apportionment based on actual facts.

Judge HILL: I do not think that is a correct statement of the State. We object to the form of the question.

Col. MOORE: Q. (Continued.) In that view, what is your opinion of its merits as presenting a division based either actually or approximately on facts.

A. As I read the State's Exhibit K, the basis used is one that is not based upon facts, but to a very large extent upon assumptions of facts which in my opinion have no proper basis in fact.

My idea of the office of an accountant is that he should record accurately things that occur, and not undertake to formulate theories to prove one thing or another. It would be quite possible, by not very serious modifications of this particular theory, to make a very wide variation in the results that would be obtained from it.

4329 Q. Will you take Exhibit K and go over it in detail, and give your views as to the various divisions and the bases used by the State's accountants in making their divisions.

A. Item one on Exhibit K refers to maintenance of way and structures expenses, and states:

"The proportion of these expenses applicable to the freight business, as shown by the statements in this case submitted by the Company, has been divided between local and through train service on the basis of the total engine and car miles of each class, during the month of October, 1907, that month being considered representative of the business for the six months ended December 31, 1907."

Now, in the western country, so far as my knowledge and exper-

ience goes, the month of October is not an average month, but is always a month of heavy business. The month of October 1907, in particular, was an exceedingly heavy month—in fact I think business in the entire West was heavier in that month than in any previous month in the history of Western railroading; and heavier then than in any succeeding month.

Therefore, in the absence of actual local knowledge, I would not consider that month representative of actual business for six months from an actual railroad standpoint.

The exhibit then continues as follows:

"In arriving at the number of engine and car miles we have added fifty per cent to the engine mileage of local trains for station switching, and have assumed that each engine mile is equivalent to two and one half car miles."

4330 I question the feasibility of determining whether the addition of fifty percent to the engine mileage of local trains is an accurate addition. No operating man that I know of could determine with accuracy whether that addition is correct or incorrect. It may be right or it may be wrong—I don't know.

Q. Is not switching an indeterminable quantity that is continually varying?

A. Yes, sir, switching on local trains does vary very much from day to day, and week to week, and month to month, and in fact it varies with every trip; and it varies on various portions of the track.

A local train as a part of its day's work may be engaged almost exclusively in peddling out less than carload freight; or, on the other hand, it may have very little of that to do and may be engaged in doing the local switching. Or, it may be engaged in it in varying quantity.

Q. Proceed with your statement Mr. Ward.

A. Then the assumption that "each engine mile is equivalent to two and a half car miles," is made. That is an assumption for which I can see no proper basis. I do not quite understand how that factor of two and onehalf has been reached.

In my opinion the effect of a locomotive passing over the track is very much more than two and a half times the effect of a car

4331 passing over it. The effect cannot be measured by the number of wheels on the locomotive as compared with the number of wheels on the car. The blows which the road bed received from the improper balancing of the reciprocating parts of a locomotive might run two hundred, three hundred, or even five hundred percent as great as those of a car or a train of cars.

In fact, in my own personal experience, I have known of a strip of track to be enormously injured by a trip over it of one engine. It was run pretty fast, though not necessarily exceeding the speed allowed. But if an engine is run fast over a piece of track, immediately following a heavy rain, which has made the track soft, it might do damage which will require thousands of dollars of expense to repair. While that same engine could be run over that same piece of track on a dry day and cause very little damage, scarcely ap-

preciable; so that the two and a half times is entirely insufficient, in my opinion.

Going along further in the exhibit, under the head of "Maintenance of Equipment" the exhibit says:

"The expenses under this head are divided between yard, and local and through road locomotives, on the basis of the locomotive mileage of each class during the month of October, 1907.

We have added fifty percent to the mileage made by yard locomotives to provide for possible extra maintenance due to yard service."

4332 This is another assumption. I don't know where they have found a basis for adding fifty percent. That may be too much or too little. The mileage of yard locomotives is not kept accurately. It is the custom of most roads to credit the yard locomotives with mileage, but, as a matter of fact, the basis of hours worked would be more accurate.

It is the custom on most roads, I believe, to assume that the yard engines make six miles an hour; but those mileage figures when applied to yard locomotives are estimates only and are made only for the purpose of comparison, to determine the comparative cost of maintenance, and to ascertain whether the engine is performing service enough to justify "shopping."

They are not necessarily accurate and should not be used, in my opinion, in connection with the determination of anything so important as the rates, which should be charged for carrying freight.

Continuing with this exhibit it says:

"We have added fifty per cent to the mileage of road locomotives in local service, to provide for the possible extra switching mileage; and again have added fifty percent to the switching mileage of the local train engines, thus ascertained, to provide for the possible extra maintenance due to switching service; (making seventy five percent added to the local engine mileage)."

In the first place, to provide for possible extra switching mileage they add fifty percent; and to that is added another fifty
4333 percent on account of possible extra maintenance due to switching.

In my opinion, it is no more feasible to separate the cost of handling local and through business than for a general storekeeper to determine the cost of selling one article as compared to another. Those are assumptions for which I can find in my experience no basis in fact. I could not determine accurately whether those things are right or whether they are not, and I do not believe any accountant can do so.

Continuing further on with the exhibit, it says,

"The division between yard, and local and through road locomotives on this basis is as follows:

| | |
|---|---|
| Amount charged to yard locomotive mileage | 130,150 |
| Fifty percent added for extra repairs | 65,075 |
| Local locomotive mileage | 70,583 |
| Total mileage | 195/225 |

Percentage 37.64.

To that local locomotive mileage there is added 75% for extra mileage and repairs..... 52,937
Making a total of 123,520 miles, or 23.81 percent.
Through locomotive mileage..... 199,981
Or 38.55 percent.

The total expense under this head amounts to $183,673.40. The amount chargeable to yard locomotives on this basis is 37.64 percent, or $69,135.80. The amount chargeable to local service is 23.81 percent, or $43,733.35, and the amount chargeable to through service is 38.55 per cent. or $70,807.25.

The expense of maintenance of yard locomotives is divided between local and through service on the basis of the number of cars of each class of service handled by yard engines during the month of October 1907."

And then follows a statement of the number of cars handled and the percentage of each.

Now, if I understand this correctly, it means that the ex-
4334 pense of maintaining yard locomotives is divided on the basis of an account of all cars passing throgh the yards where yard engines are employed.

It is customarily the case, in counting cars handled through yards, that they are counted coming in and going out, that is, two counts for each car. If they counted each car passing through a yard twice, they give the local cars no more credit for the services of the yard engine than they do a car passing right through the yard on the through trains. Therefore, the proportion chargeable under this method to the through service would be very much greater than is actually the case.

The opinion of myself, or any other operating official, as to the excess cost of handling state over interstate business is on the basis of actual freight and not on the basis of the number of cars passing through the yards.

I might illustrate that position of mine by pointing to the fact that in practically—in fact I might say in all railroad terminal yards, a very large percentage of the cars on through trains pass through without any handling. The train runs in on to a yard track, and if there is a change in the tonnage by reason of a difference in grade or a difference in motive power on the next divi-
sion, a few cars will be taken off or a few cars put on that
4335 train. Or, there may be a few cars taken off that train, which are destined to that particular station, or to stations on the next local run. But the great majority of cars are not handled in those terminal yards.

On the other hand cars that run in local trains are all handled; they all have to be placed in their trains by the yard engine; and after they reach their destination or the distant terminal they are again handled and placed at industries, or on a house track, or in train yards, to go out on through trains going beyond.

So that a method which would count the cars handled in local trains and in through trains on the same basis would be very in-

accurate in determining the proper proportion of cost of maintaining yard locomotives to apply to one service as against the other.

Q. If you do not desire to say anything more about locomotives, the next item there is "Freight Cars" which you will find immediately following that sub-division.

A. This item (*b*, I think he calls it) freight cars, is as follows:

"The total amount of expense for maintenance of freight cars is $477,895.64. This amount is apportioned to Arkansas by the Railway Company on a car mileage basis. In dividing this expense between local and through service, however, we have taken into consideration the element of repairs due to the stopping and starting of trains at way stations, and repairs due to extra terminal handling of cars in local service.

4336 Mr. A. M. Wellington, in his work on "Railway Location" (page 203) says, that the stopping and starting at way stations is the cause of approximately 21.5 per cent of the repair expenses of freight cars; and that the terminal handling is the cause of approximately 13.5 per cent of the repair expenses.

Taking these elements into consideration, the maintenance expenses may be divided as follows:"

And then follows a table using the percentages given by Mr. Wellington.

I have looked at Mr. Wellington's work and I find that it was written some thirty years ago. I do not know what investigations Mr. Wellington pursued which led him to reach the conclusions shown in his table; but I do know that railroad practice since his book was written and his table published, has entirely changed; and in my opinion his figures can not be verified by any test in modern practice, because the repairs due to terminal handling are very much greater at the present day than 13.5 per cent.

As to the stopping and starting at way stations, I do not know, but I think that percentage is probably too low also.

However, I feel quite sure that 13.5 per cent for terminal handling is not enough.

There is one feature alone which has changed conditions very much, particularly in terminal handling, and that is the use of the automatic couplers. In the days before air brakes and automatic couplers were used, switchmen and brakemen had to go be-

4337 tween the cars to couple them together by the use of a link and pin, and much greater care had to be exercised to avoid personal injury than is the case now, when the cars are coupled by impact and no one has to go between them.

Cars are very much heavier now than they used to be, and the impact is greater and the damage caused is greater by coupling them at a given speed. While it is true that cars have been built more strongly in an endeavor to meet these new conditions, the fact is that the damage done to cars in switching at terminals is very much greater than it was several years ago, and, in my opinion, very much greater than the figure given by Mr. Wellington.

According to his figures there is a total of thirty five per cent of the repairs on freight cars due to starting and stopping and terminal

handling, and sixty five per cent due to other causes. I do not believe any definite determination has ever been reached as to what those proportions are, but as giving some little light on the subject, the Burlington officials, six or eight months ago, were all here in Chicago to look into the question of the high cost of repairs on freight cars, and the cause of the heavy damages which we found occurred. We had some forty or fifty of our yard masters here in Chicago. It was the opinion of that body that the damage done to cars was somewhere near seventy five per cent in the terminal yards.

4338 At that time we entered upon a campaign to reduce that trouble by modernizing some of the locomotives in the yards, and cautioning all those who were handling cars to handle them more carefully.

The principal items that go to make up the cost of repairs to freight cars are the repairs to the draft rigging, the couplers, and the sills—the sills perhaps more than anything else. Damage to the car sills occurs to a very great extent in the yards in the switching of the cars.

Turning again to exhibit K, it states:

"Assuming that each local train makes a stop say each five miles; and each through train a stop, say each twenty miles; the local service should be charged with four times as much as the through service in proportion to car miles for the expenses due to stopping and starting. Assuming also that each car in local service received two terminal handlings (including handling at local stations) to each terminal handling of a car in through service, the local service should be charged with two times as much as the through service, in proportion to car mileage, for the expenses due to terminal handling."

And then follows a table illustrating that idea.

I assume that these average distances as stated are approximately correct. But that does not constitute a proper measure of the expense of handling local as against through service, because the through train in starting and stopping simply takes the siding, and after it has met the train, which has the right of the road, it then proceeds; or, in many cases its stop is only for the purpose of taking coal and water and it does not have to stop even while the man

4339 turns the switch. On the other hand the local train goes into the siding and after it is there it has its work to do by taking out the cars or placing in cars at the various industries or on the house track at that station; and it must pick up other cars and place them in the train. To an extent that constitutes, for all practical purposes, a terminal handling for all of the cars in that train at practically every station along the line of its run. So the multiple of four to one for the through service, on account of the assumed difference of five miles and twenty miles would not be correct. It would be more nearly eight times although I don't know that eight is accurate. However, it is more nearly eight times than it is four.

For that reason the local, in my opinion, under this theory is not

charged with nearly as large a proportion of the car repair expenses as it should be.

I do not know that I want to make any comment on the item of "Supervision, etc."

Q. Mr. Ward, right in that connection, in the same paragraph you have just read is a statement to this effect:

"Assuming that each car in local service received two terminal handlings (including handling at local stations) to each terminal handling of a car in through service, the local service should be charged with two times as much as the through service, in proportion to car mileage, for the expenses due to terminal handling."

Is there anything about that point upon which you wish to comment?

4340 A. Apparently the accountants who worked this plan up counted this handling at local stations as a service of the same character as the terminal handling, and this multiple of two times for one is wrong. I think I covered that in a general way in my statement in regard to the stopping and starting each five miles instead of each twenty miles. They all come under the same class. The whole method, it seems to me, fails to take into account that feature that the handling of the cars in the local service is very much greater than in the through trains.

Q. What is the next item you wish to take up?

A. Under the head of "Transportation expenses" is an item Yard and terminal expenses." The exhibit stated:

"These expenses are divided between local and through business on the basis of the number of cars handled at terminals as explained under the head of maintenance of yard locomotives."

The same inaccuracy in regard to the division applied to yard locomotives as between local and through trains would apply here.

Q. "Fuel and Locomotive Expenses" I think is the next item: what have you to say about that?

A. The exhibit says:

"According to a test made on St. Louis Southwestern Railway during October, 1908, the local engines consumed 3.5 percent more fuel per engine mile than the through engines. Assuming that the same conditions would prevail on The St. Louis, Iron Mountain & Southern Railway during October, 1907, the fuel and the miscellaneous locomotive expenses would be divided between local and through service on the following basis:"

4341 And then follows a table carrying out that idea.

It seems to me that the distribution of the cost of fuel and locomotive expenses on the basis of a test made on another railway in another year, would hardly be fair considering the importance of the conclusions to be reached and the results of such conclusions.

As I believe I stated when I testified in this case before, engines of local trains are almost always smaller than those on through trains; and are loaded to a smaller percentage of their capacity than are the larger engines on the through trains. Therefore, if in this test 3.5 per cent more fuel per engine mile was used on those small engines, lightly loaded, than on the heavy engines, heavily loaded,

the cost per ton per mile for the fuel expense must necessarily be very much greater for the tons handled on those local trains than for the tons handled on the through trains. So the conclusions reached in the exhibit would be very far from being correct.

The difference of 3.5 per cent that is shown on the exhibit is undoubtedly due to the fact that those engines on the local trains do so much more starting and stopping, and do so much more switching in transit, that their mileage is counted, as I read this exhibit, as straight mileage, and no allowance is made in that particular case for station switching or anything else but straight mileage; so the basis is very wide of the actual facts and of the correct ones.

4342 Q. The next item is "Other Train Expenses": what have you to say about that? That includes casualties, and things of that sort.

A. The exhibit says, under the heading of "Other train expenses": "These expenses are such as are incident to, or generally caused by, the operation of trains, and are not included in the preceding classifications. They are divided between local and through service in proportion to the train miles of each class of service, during the month of October, 1907."

If the item of "Casualties" "Personal Injuries occurring on trains" is included there (and I believe it is) the train mile basis would not be fair because of the greater risk that employees on local trains are subjected to than are those on through trains. The employees on the through trains ride directly over the road, and the chances of injury to them are pretty slight. On the other hand, the employees on the local trains are not only engaged in switching at the stations, cutting cars out of and setting them into trains, but they handle such a large amount of package freight, loading and unloading it, and the opportunities for personal injuries, more or less service, are very, very much greater than in the case of the through trains.

That is one item that occurs to me as upsetting the train

4343 mile basis for dividing that particular expense.

Q. What is the next item?

A. The next item is "Loss and Damage—freight."

The same difficulty would apply there, because of the much greater opportunity for loss from pilferage and improper handling and damage to the packages handled in local trains, because the cars are opened at every station and the freight is knocked down and handled; and if the train crews are careless before the train gets to the next station in many cases the freight falls down and is damaged.

That is the reason why, perhaps, this method would not be fair at all. But inasmuch as an attempt has been made, apparently, to divide this on the basis of actual claims paid, that item may not be so very important. I think perhaps the State's accountant has been nearer right in that than in any other item I have seen.

Q. Mr. Ward——

A. Pardon me, but I wanted to speak about the general situation as it is reached up to this point. (It seems to be the case that up

to this point in this exhibit the endeavor of the State's accountants has been to determine what is a proper method of distributing train and car costs between local and through trains. And when they have done that, according to the method adopted, they undertook by taking into account the tonnage of state freight handled on
4344 local and through trains respectively, to ascertain the ton mile cost of handling such freight; and have assumed that the cost of handling a ton mile of state freight on a local and on a through train is the same as that of handling a ton mile of interstate freight on the same train.

This assumption, in my opinion, is an erroneous one. It fails to recognize the fact, which I endeavored to point out in my previous testimony in this case, that the terminal handling of short haul intrastate fright is much more expensive per ton mile than of long haul interstate freight. Many more car miles are required to handle a given number of intrastate, short haul ton miles, than the same number of interstate, long haul ton miles. A much larger amount of property and facilities is required to handle such a quantity of intrastate, short haul, ton miles, than of interstate, long haul, ton miles.

By this I mean that the station facilities at the local stations through any state, so far as my observations go, are when measured by the ton miles, used to a very much greater extent than is the case with other business passing those stations, or even originating at or destined to those stations.

In order to make myself clear on this point, I might explain that a ton of freight of a given kind received at a country station, will not cost any more to unload from a car and deliver to a con-
4345 signee, if it has originated in the State, than if it has originated in another State.

But when the cost of handling that ton of freight is divided by the ton miles applicable to it, it makes a much heavier charge per ton to the short haul, intrastate ton, than to the long haul interstate ton.

Q. Mr. Ward can you give an instance that will illustrate the idea you mean to convey there?

A. I might illustrate it by saying that I suppose the people of Arkansas, as in other States, buy a good deal of merchandise from mail order houses like Sears, Roebuck & Co. and Montgomery Ward of Chicago; let us imagine, if you like, the purchase by a man in a country station twenty five miles South of Little Rock; say he buys a ton of merchandise of Sears, Roebuck & Co. and it is carried down to his station and is delivered to him from the same car and at the same time as is a ton of the same kind of freight which he needed in a hurry and purchased in Little Rock. The station expense at the delivering station, in each case, is exactly the same; each operation is precisely the same as the other. But when you measure it by the ton miles, you have twenty five miles to apply to that ton which came from Little Rock, and approximately six hundred miles on the ton that came from Chicago; so there is perhaps twenty four times

more chargeable to the state ton than to the interstate ton, in
4346 that station expense.

Continuing in that statement of the matters that were overlooked in this assumption of the Sate's accountants, I would like to say that the various allowances made by the State's accountants, as shown in detail in exhibit K—such for instance as extra mileage for engines on local trains on account of station switching; extra and excess cost of repairs to yard engines; extra cost of repairing cars running in local trains; extra wear and tear on road-bed and structures through operation of local trains, etc., are to a large extent made necessary by the handling of this short haul intrastate business.

In fact, the assumptions made by the State's accountants omit some of the most essential factors, which in my opinion, go to make up the large difference between the cost of handling the two classes of business.

Further, if any attempt were made to accurately assign a division of operating cost as between state and interstate business, the accounting expenses by reason of the employment of additional men to record the facts would still further accentuate the already excessive cost of handling state over interstate business.

Q. What effect has the long and the short haul—what difference exists between state and interstate freight, on the cost of handling those two classes?

4347 A. I think that effect is illustrated by the example I gave you of that ton of freight from Chicago as compared with one from Little Rock, going to the station twenty five miles South of Little Rock. The interstate long haul ton has so many more miles to divide into that expense that the expense per ton per mile is very much less.

In the case in point my recollection is that the average haul per ton of state business in Arkansas is seventy miles, and of the interstate per ton two hundred and twenty four miles. Both of those are the number of miles in the State of Arkansas, as I understand it. Whereas, as a matter of fact, the interstate and intrastate freight must move a very considerably greater number of miles than two hundred and twenty four. So that proportion of three to one does not actually hold good as applied to the whole situation.

Q. Does the addition of fifty per cent to the car miles of local trains for switching at stations, as made under the head of "Maintenance of Way and Structures" provide for the actual expense of state over interstate business, grow out of the fact that the larger part of the switching is chargeable to state freight?

A. It does not. It seems to undertake to determine the cost of handling cars in local trains as against the cost of handling cars in through trains, but does not touch at all the cost of handling
4348 freight in those trains, as between state and interstate.

Q. Would that allowance as made there as between the two classes of trains, cover the extra cost of handling the state freight over the interstate?

A. No, sir, in my opinion it would come very far from doing it.

Q. There is a similar allowance made under the head of "Maintenance of Locomotives." They have added fifty per cent to the mileage of yard locomotives to provide for possible extra maintenance due to yard service; and fifty per cent to the mileage of road engines used in local service, to provide for switching in local service. The same is true of that, I suppose, is it, Mr. Ward?

A. Yes, sir.

Q. Allowance is made for starting and stopping and terminal handling: Is there an added element of extra cost on state over interstate freight that is not provided for in that allowance between local and through trains?

A. It seems to me that one great difficulty about the State's plan is that an attempt has been made to determine the cost of handling a local train as against a through train. In determining that, and in trying to determine it, a great many assumptions have been made which I cannot accept as being correct. But, after that is done, there still remains a number of very important factors which
4349 are not taken into account at all.

If the State's method of determining the cost of the local as against the through train worked out right, there still remains to be determined the question of how much more it costs to handle the state or short haul freight in that train than the interstate or long haul freight in that train. In fact, there is practically another question.

Q. I believe, if I remember aright, you testified when you were on the stand formerly in this case, that in your opinion it costs five times as much to transport state freight as interstate freight.

A. I expressed that as my opinion as applied to this case.

Q. Are there any facts developed in this Exhibit K (and the other exhibits filed in connection with it for the purpose of developing the theory upon which the State is seeking to divide these expenses) which would change or affect your views in that regard, Mr. Ward?

A. I have given the subject a good deal of thought from time to *item*, because it has come up not only in this case but in other States, in which I have been interested as a railroad man; and the more I think about it the more I am inclined to think that estimate is low and not high, as to the excess cost of state over interstate.

The conditions, as they seem to me, point to the fact that
4350 I have state it in quite low terms, and not at all too high.

I certainly have not modified my opinion as to its being as much as that.

Q. Mr. Ludlam, who is one of the State's accountants, and whose firm prepared these exhibits you have been discussing, testified that the extra expense as developed by the method of division adopted by the State was eighty seven per cent: how do you account for the difference between the eighty seven per cent developed by the State under its method, and the views expressed by you, and to which your attention was called a moment ago, that it costs five times as much?

A. It is due in part to the erroneous assumptions that have been

made here, in undertaking to divide the cost of local train service or through train service; and in part to the omission of those other elements to which I have referred.

My opinion is, as it was before, that this is not a matter which can be determined by any proper system of accounting. It is one very difficult of solution, and the closest approach to an accurate result in the matter can be secured, in my opinion, by getting the views of operating officials who are in contact with this kind of work every day of their lives, and who are watching it, and who have had every opportunity to see under what conditions the
4351 various classes of traffic are handled.

Q. I want now to call your attention to Exhibit M filed by the State, which contains their scheme for dividing the expense of transporting State and interstate passengers.

You will observe that the State has adopted a different method of making that division, and seems to divide it between the different classes of cars, without regard to trains.

They state in the opening paragraph of the exhibit:

"As nearly all passenger trains on the St. Louis, Iron Mountain & Southern Railway do a local business, we have not considered it necessary to make any division of expenses as between local and through service. Our statement of operating expenses covers the six months ended December 31, 1907, and the division of expenses is between coach and Pullman service, interstate, intrastate, mail and express business. In general, the expenses are divided on a car mile bases, the mileage used being that of October, 197."

They state as a reason for that, that the state and interstate passengers are carried on different kinds of trains. The same is true of state and interstate freight, as between local and through trains.

I would like to know what you think of the consistency of making a division of expenses of freight traffic, as they did, on the basis of the relative expense of the local and through trains; and of abandoning that method when it comes to dividing between
4352 state and interstate passenger business, and adopting the method outlined in what I have read you from their exhibit.

A. The change in the method does not seem to be consistent, inasmuch as there is approximately the same relation between the local passenger train and the through passenger train, as there is between the local freight train and the through freight train.

The local passenger train is used for doing the short haul business and, as I believe I stated in my former testimony in this case, there is a lot of expense attached to the handling of local passenger service which cannot be measured on a car mile basis. The local passenger train has to have in service for a given number of train miles a very much larger number of passenger cars, as those local trains runs practically in daylight only, and are tied up at night.

On the other hand, the through trains run day and night and make two or three times as much mileage daily, throughout the year, as do the cars in the local service.

So I think the objection to this method of determining the cost of handling the state passenger traffic is about as I have stated it

just now, due to the fact that they have overlooked that element of the short haul and long haul feature in the carriage of these passengers, and in the use of a greater amount of equipment;
4353 also the necessity for a greater use of the station facilities in the State for the state passenger train in the case of the through passenger.

Q. Take up the first division in that exhibit, "Maintenance of Way and Structures": You have already expressed your views as to the feasibility of dividing that expense as they have attempted to do, and have given your reasons therefor. I suppose that will apply here, but I want to call your attention to the manner in which they have divided it between coach, Pullman, mail and express service, on a car mile basis.

It is a conceded fact, I think, that as a rule Pullman cars are not hauled on local trains; also that the larger part of the state passengers travel on local trains and of the interstate passengers on through trains.

A. That is probably the case.

Q. The point I want to call your attention to is, is it proper to put those cars on an equality for the purpose of determining the relative cost of the different classes of passengers hauled in those cars, when some of them are not used, and if any at all but in the slightest degree, on one class of trains.

A. You are speaking of maintenance of way and structures?

Q. Yes, I am speaking of the expense for the maintenance of way and structures, which of course is affected to some ex-
4354 tent by the passage of these cars over the road, and the purpose of this is to divide that expense between the occupants of the cars.

A. If I understand this correctly, a car in a passenger train, no matter what its class, is counted as running a mile on equal terms with every other car.

Q. That is correct.

A. That seems to me to be wrong, because the cars differ very much in their weight, in their length, in their value, and in the amount of attention they need in order to keep them fit for the business in which they are engaged; and I do not see how it is possible to divide the expense of handling the state or the interstate passenger by any accounting method; and certainly not by this one which classes all cars as the same. They are very different units.

Q. Under the general heading of "Maintenance of Equipment" the first sub-division is "Locomotives": if you will read that exhibit you will see the manner in which the division has been made thereon, and I would like to know how that impresses you.

A. As I read that it means that the locomotive expense is divided into the total number of cars that the locomotive handled, counting each Pullman, coach, mail and express car as the same kind
4355 of a thing, while it is not the same but is entirely different; they are entirely different units.

Q. By this method they are divided on a car mile basis, are they not?

A. Yes, sir. For instance, a Pullman car is very much heavier

than an express car, and to haul it the engine has to work much harder and it is required to burn very much more coal.

If there was a way of dividing it between cars, they certainly should not be divided equally between the different kinds of cars, but more consideration would have to be given to the difference in weight and also the difference in length. A long car hauls very much harder than a short car—that is, of a given weight.

Q. The next item is "Passenger train cars"; you will find on the exhibit a short statement of the method of division. That is divided between coach, mail and express service.

A. That seems to be open to the same objection. It assumes, I think, that each car mile of the three classes named is of equal character to the others; whereas that is not the case.

The coach miles, for instance, as applied to a passenger train car expense would be very much more expensive than a mail or express car, being of an entirely different character and having to be maintained up to an entirely different standard.

4356 Q. Does not maintenance of passenger cars also involve repairs rendered necessary by injury from starting and stopping?

A. Yes, sir.

Q. What effect would that have as between the cars hauled on the local and the through trains respectively?

A. Such effect as starting and stopping has, and it is considerable—would be very much more in the case of the local than in the case of the through trains, because the local trains stop much more frequently than do the through trains. The through trains run perhaps forty or fifty miles before making a stop, while the local trains stop at every station, which are perhaps not more than five or six miles apart.

Q. If that is true the local trains on which the local passengers principally travel should be charged much more than the passengers on the through trains.

A. Yes, sir.

Q. Look down there on that exhibit at "Traffic Expenses": you will see that those expenses are divided between intrastate, interstate, mail and express business on a gross earnings basis:

The last two items in the tabulated statement of earnings and percentages based on earnings, you will find 11.63 percent of

4357 that class of expense charged to mail and 7.70 percent to express, making in all 19.33 percent of the traffic expense charged to mail and express:

Is there any service rendered by the agencies that incur that expense, in working up business for mail and express, to which you could charge that?

A. Nothing appreciable.

Q. What do you think of that basis of division?

A. It puts in a proportion of expense—well, I am not sure yet that I understand that.

Q. Read that carefully, Mr. Ward.

A. (After reading.) I see it now. It divides that 19.33 percent of that total expense——

Q. It charges 19.33 percent of the total traffic expenses to mail and express.

A. That is wrong, because there is no appreciable expense in connection with the solicitation of mail and express business.

Q. The next heading is "Transportation Expenses". Under that general heading is the sub-heading "Station Expenses": examine that, Mr. Ward, and give us your views in regard to the basis adopted there for dividing those expenses.

A. The exhibit states as follows:

"Station expenses divided between intrastate and interstate business on the basis of the number of passengers of each class
4358 handled, after making an allowance of about ten cents per day for the handling of mails at certain stations; and assuming that each intrastate passenger makes use of two terminals, and each interstate passenger makes use of one terminal, as follows:"

Q. Under their method they have charged intrastate with $52,377; and interstate with $4,678. That, apparently, is 91.8 percent of station expenses chargeable to intrastate business.

—. I don't know whether that would be accurate or not.

And I do not quite understand this allowance of "about ten cents per day for the handling of mails."

Q. It is a small matter, but the point to which I wish to call your attention is that they have not made any exclusion of trans-state passengers; they have made no provision for that.

A. Those trans-state passengers of course do not use the station facilities at all.

Q. To diverge just for a moment, for the purpose of illustrating the matter, would not the same principle exactly apply to trans-state freight?

A. Yes, sir.

Q. Of course this cannot be far wrong, but I want to test it as to the correctness of the basis upon which it is predicated, and for that reason I am calling your attention to small matters like this.

A. It omits consideration of that fact, there is no question
4359 of that.

Q. The next item under that heading is "Yard and Train Expenses", which you see they have divided between coach, Pullman, mail, and express service, on a car mile basis; charging the coaches and each of them with a percent that is set out in the table there.

Mr. Ward, the following items are included in that account, which covers yard and train expenses:

| | |
|---|---|
| For yard and train service the total expense is | $549,069.76 |
| Of that, yard service is | 15,124.00 |
| Train and engine men | 182,772.00 |
| Fuel and other supplies | 135,712.00 |
| Care of passenger cars | 50,600.00 |
| Engine house expense | 46,499.00 |
| Clearing wrecks | 17,879.00 |
| Injuries to person | 56,128.00 |
| Damage to stock and property | 39,624.00 |
| Miscellaneous | 5,088.00 |

You will observe that the same expense is charged to passengers on all these classes of cars, on local and through trains, state and interstate; and it includes the wages of crews and engine men, fuel and supplies, and the care of passenger cars; and divides that between local and through, state and interstate, and these classes of cars to which your attention has been called.

4360 Q. What are your views about that.

A. It is open to the same objection that applies to the other items in passenger classification.

In particular, for instance, injuries to persons, is an item which probably could have been accurately divided, but an attempt to divide it on a car mileage basis, including all kinds of cars, is manifestly wrong. And because, as I have stated before, the cars in local service are subjected to a different kind of treatment in service than are the cars of through trains.

The inclusion of those items of yard service, wages of train and engine men, fuel and other supplies, on a car mileage basis, is wrong. It is unfair, and charges too much to the through service, and not enough to the local service, and to the local trains on which are carried the state passengers.

Q. The care of passenger cars includes, I suppose, the cleaning of them, and things of that kind?

A. Yes, sir. I think I called attention to the fact in my former testimony if not today, that those cars in local service require a great deal more attention in the way of cleaning than do the cars in through service, because they are cleaned and attended to at the terminal each day; and in addition to that the coach requires a great deal more attention than does a mail, baggage or express car.

4361 They are entirely different units, and to count any of these things on a car mileage basis is wrong. It is comparing unlike things and classifying them all on the same basis.

Q. The next item is "Loss and Damage—baggage": that expense is divided between intrastate and interstate business in proportion to the gross earnings of each:

In view of the different characteristics of the service incident to baggage on local and through trains, would you consider that a fair division?

A. I should consider that was an item that could be definitely located by an accountant, and that he would not have to divide it on the basis of any percentage, if he sought to secure an accurate division.

4362 Cross-examination of Mr. FRANK WARD.

By Judge HILL:

Q. Mr. Ward, one of the questions asked you yesterday (Page 607) was:

"It is assumed that the state presented this division of expenses upon actual conditions and they advance this scheme as an apportionment based on actual facts:"

You have gone through the exhibits and I ask you if you do

not recognize the fact that they have attempted—whether successfully or not I am not now discussing—to use actual facts where they could, and then use what they considered the nearest factor where they could not get actual facts. I am not asking you whether they have successfully done that or not, but merely the effort that has been made there?

A. As nearly as I can tell by looking at the exhibits alone, and without seeing the testimony of those who put them in, it seems to me they have attempted to reach actual facts by methods with which I cannot agree.

4363 Q. I understand that. I am not asking you about your agreement but I ask you if it is not a fact that the exhibits show that they are using the factor which they evidently considered reached more nearly the facts themselves.

Take Maintenance of Way, no one claims you can get the actual facts on that, but what factor would most nearly approach the actual facts: is not that the case?

A. As I say, I think they have tried to do that, so far as I can tell by the exhibit, without the explanation that undoubtedly went with the exhibit when it was presented, which would undoubtedly make that clear.

Q. I will read the explanation made by Mr. Wharton at page 506. He said:

"From the reading of the testimony in the Missouri case and my understanding of the purport of that testimony it appeared all the time that the difference- in cost of state and interstate business were mainly differences in cost of local and through trains. The witnesses all seemed to testify that way and we determined that if it was possible we would work up statements showing the cost of local and through business and after getting that cost we would ascertain in the best manner possible the cost of state and interstate business carried in the two classes of service; in that way getting away from any question of theory, but getting down to an application of the facts and of the testimony given in that case, and subsequently given in this case."

Does not that bear out the suggestion made, whether they have been successful or not I am not now discussing; but that was the effort, to reach the nearest common factor where the actual facts were not known?

A. I think they have tried to do that.

Q. It is not a matter of actual facts because we all recognize that you cannot get the actual facts on some of these matters;

4364 but to get the factor that will most nearly approximate the actual facts: is not that the case.

A. I think that is what they have tried to do.

Q. I am not discussing with you now the scheme but I will discuss that with you later, whether they have done so successfully or not.

A. Yes, sir.

Q. Taking up the first item of Maintenance of Way, Mr. Wharton said, at page 517:

"Personally I think the expense should be divided on a gross ton mile basis which includes the weight of equipment and the weight of the product hauled, but this is the best information we had at hand to make a division." (Meaning the car mile.)

"Q. You think if you had the information the other way you would get a little closer to the facts, is that it?

A. I believe so.

Q. This is the best method that would most nearly represent the actual facts that were available.

A. Yes, sir."

I will ask you what you think of using the car mile as a factor to determine the cost of maintenance of way as between local and through trains, where there was no data by which they could get the gross ton mile?

A. You refer now to maintenance of way expense?

Q. Yes.

A. I do not agree that it can be reached by either method.

4365 One of the main difficulties about dividing maintenance of way and structures expense on either a ton mile or a car mile basis is the fact that a very considerable part of the cost of maintenance of way and structures is not caused by the movement of the traffic over the road but by the elements and I consider that either method would be very unsatisfactory and likely to be very far from the actual facts.

And besides that, the effort in this case is to determine the cost of handling freight in the local train as against the cost of handling freight in the through train; and that is a question almost of another nature than the determination of the cost of handling state versus interstate traffic.

So the elements of difference are so great and so numerous that I would not consider either method as approaching accuracy in the solution of the problem.

Q. Do you think the fact that a large part of the expenses of maintenance of way are caused by weather conditions and natural decay, should affect the use of a factor, when the factor represents the use to which that property is put?

A. Well, the objection to using a factor of that kind is the fact that in this particular case, for instance, we have got to take another question into consideration; and that is the uses to which the property is put, other than the handling of freight.

4366 For instance, there is passenger use and it opens up an entirely new question as to how much of certain parts of the maintenance is properly chargeable to passenger service.

You take the fences and the necessity for keeping the track up to a condition which will give the maximum comfort to the passengers, aside altogether from the question of safety, which would be the only question involved in the handling of freight trains.

I believe there is another question involved, that would throw doubt upon the use of the car mile basis in maintenance of way, either local and through or state and interstate.

Q. What is that?

A. That is the question whether maintenance of way and structures expense should not be divided in the same way as either general or unlocated expenses.

Q. Is it not a sound proposition of accounting that you use the factor that would most nearly represent the use of the property?

A. If the same factor must be used, I should say, yes.

Q. How much of the maintenance of way expense do you ascribe to weather conditions and how much to traffic?

A. I have not made up my mind definitely as to what proportion should be attributed to weather conditions. Railroad men differ a good deal on that subject. I have seen opinions to the effect that 90% of it was due to deterioration on account of the elements, and others down as low as 75%, or even less.

4367 My personal opinion is toward the lower figure.

Q. Is not this a sound proposition: he was asked along the same lines you have just been asked—was it not a fact that a large part of that was due to weather and natural conditions, and then was asked would that affect the basis: and he said it would not—is the substance of his testimony. And then occurs this, as a reason why they should use the factor:

"Because the primary object is to keep the tracks and roadway in condition for the operation of trains. We have to keep up the tracks and roadway for the trains to run over, and naturally whether the expense is caused by the train itself or is necessary so the trains may run over the tracks, it seems to me it would naturally follow the use made of the track."

Isn't that sound?

A. I think it is sound with the exception that it seems to make the assumption that the whole use of the track is for the purpose of running freight trains.

Q. I do not so understand it. He is speaking generally now, Mr. Ward.

Then when he comes to a subdivision he does make that use of it as between different classes of freight trains.

A. If I understand what you read of his testimony before, he was arguing in favor of the use of the gross ton mile?

Q. That was on freight trains. But I am speaking from the detail to the general proposition.

Is not this a sound general proposition:

"The freight and passenger trains that you have to keep up the tracks and roadway for the trains to run over, and naturally whether the expense is caused by the train itself or is necessary so the trains may run over the tracks, it seems to me it

4368 would naturally follow the use made of the track," would be a proper factor?

Is not that true?

A. I think that is true, assuming all the time that it must be divided into the business that moves over the track. I do not feel sure that is right. I do not really feel positive that it is not, but

I do not feel sure it is right. I think there is room for a great deal of argument for dividing that expense the same as general expenses.

Q. I understand that and I think a great many witnesses on this side and also on the opposite side of the case have taken that view.

But as I understand you, speaking generally, this is a sound proposition?

A. Yes, sir, with those assumptions I have mentioned.

Q. Coming to the division between freight and passenger, what do you think of the train mile as a proper factor to determine that?

A. I don't think that is proper. It would depend a good deal on the purpose for which we are undertaking to make the division. It may be for the purpose of simply making a comparison of a superintendent's performance of work on his own division, from month to month or year to year. On the other hand, it might be on a matter as important as the making of rates for freight and passenger. And if for the latter, a great deal more care would be needed to be exercised in order to make a fair division.

4369 Q. The latter is the object to which this litigation reaches, of course, to ascertaining whether the intrastate rates are compensatory. With that object in view and approaching the problem in this first step, maintenance of way, is it proper to divide that on the basis of train mile, as representing the use of the way?

A. My opinion is that it is not.

Of course, my opinion differs so materially from those of the accountants for the state in this respect, that I do not think the use of any of these factors, or any method that has been proposed heretofore, can really satisfactorily solve the problem. I wish it could, but I do not see that it can.

Q. Taking this as a basis I want to ask if I correctly understand your position:

"Maintenance of way and structures: This account includes all repairs due to maintenance of way and track, bridges, trestles, fences, culverts, etc., also material and supplies used in repairing same and supervision. This expense is practically all localized and is charged to the state in which the expense is incurred. The total charge to maintenance of way and structures is divided between freight and passengers upon the basis of the number of train miles in each class of service."

What do you think of that method of division?

A. That, as I understand it, is a method of division prescribed by the Interstate Commerce Commission. Speaking as an operating man I would hesitate very much to accept that as a basis upon which to determine the question we have under discussion now—that is, the cost of handling state versus interstate business.

4370 I think it omits a good many items that should be considered in trying to solve that particular problem. I do not think that division had in mind any such proposition as that we are discussing now.

Q. If that is used as a basis here to start a division of expenses, you consider it unsound?

A. Yes, sir.

Q. Mr. Ward, I notice all through your testimony you object to using the statistics compiled on the October movement: and as I understand your testimony, it was for two reasons, primarily because you could not take any one month as representative of the business; and, secondly, because you thought October was probably a heavier movement than the other months: is that correct?

A. Yes, sir.

Q. You are not familiar with the actual conditions of affairs in Arkansas, I believe you testified in your previous testimony?

A. That is true.

Q. I want to call your attention to the way those figures were put into this case:

Mr. Kimbell, the Assistant General Auditor of the Cotton Belt, with whom you are acquainted, I presume, testified as follows: (Page 80 Vol. 1).

"Q. Mr. Kimbell, did the operating officers of the St. Louis Southwestern Railway Company make a test at any time after this litigation was instituted, for the purpose of ascertaining the relative cost of conducting state and interstate transportation? If so, I wish you would state what was done in that respect?

4371 A. A test of that kind was made under my direction.

Q. What period did it cover.

A. The month of October, 1908. The temporary injunction was granted in St. Paul on September 3rd, and the month of October was selected for the purpose of this test, on account of it being the first full month following the injunction. October is rather a heavy month, but for a test of this kind, in my judgment, it fairly represents the general conditions".

And then Mr. Moore asked him this question:

"Q. Would it represent, fairly, a year's business?

A. I should say. It would represent relatively, the difference between the two classes of traffic."

He was asked further about that by the state's counsel, as follows:

"Q. Do you think that one month would fairly represent the business of your line for a year?

A. I think for the purpose of a test of that kind, determining the relative difference between the two classes of freight, that one month is perhaps as good as another.

Q. Why did you select October?

A. As explained, it was the first full month after Judge Vandevanter granted the injunction. He granted it in September, September 3rd; we wanted to make this test as soon as possible, so we selected the first full month.

Q. In your judgment, a test of this kind, made for the month of October, would fairly represent the operations for a year, or for a series of years.

A. I should say so."

Q. I also want to call your attention to the testimony of Mr. Doddridge, who has been the General Manager of both of these roads. (Page 43 Vol. 2).

Mr. Doddridge was asked this question:

4372 "Q. Do you think the test of one month's operation would be fairly representative of the entire year?

A. I think in this case that it would be representative as to the relative proportions of the different kinds of business, for the reason that the month of October, 1908, was one of the heaviest months of the year, and considerably above the average twelve months, probably.

The main purpose in making this test was to determine the average relation that one class of business bore to the other, and if the business of the road was lighter in a subsequent month, the chances would be more than likely in favor that the relative proportions would remain pretty near the same."

In view of this testimony, Mr. Ward, would not you feel like accepting that month as a fair basis, on the testimony of the Assistant General Auditor of one of the roads, and by a gentleman who had been general manager of both the roads.

Mr. MOORE: You should be further informed, Mr. Ward, in regard to the test that counsel calls your attention to:

It was made upon actual ascertainment from the actual movement of the freight carried on each class of train; and was not ascertained upon the relative amount of each class of tonnage in local trains only as in the Iron Mountain case.

A. In the case of the Cotton Belt, I do not know just what the test was and I cannot answer without that information, as to whether it would be likely to be a fair method. But, no matter what it was, in my opinion, it is a thing that cannot be measured out by figures and facts, even though you put men on the trains to watch every movement.

As to Mr. Doddridge's testimony, the only thing I can

4373 say about that is that I totally disagree with him.

Q. How about Mr. Kimbell, do you disagree with him?

A. In the first place, I do not know what his test was—yes, I do disagree with him because it cannot be done that way.

I might answer further that in a case not conducted under my charge but of which I have heard, Mr. Gray, the Comptroller of the Northern Pacific Railway, I think some three or four years ago, thought he would make a test and see if he could reach a basis.

He put auditors to ride trains on one of his divisions, and they watched the movement of every piece of freight of all kinds, and undertook by all the means that they could find to make a separation.

They were dissatisfied with the results, because they were not sure of its accuracy.

My recollection of the case is, that as nearly as they could figure it out the cost was eight to thirteen times as much for state as for interstate business. That was in Minnesota.

Mr. Gray wrote me two or three weeks ago, in reply to an inquiry I made to him about it, that thinking the matter over since that time they had reached the conclusion that the proportions would be very different and that the state would cost more than as

indicated at that time. The net result was that they could
4374 not tell accurately from the test what the cost was.

In other words, the test did not agree with their opinion?

A. No, sir. They tried to find a way, in the hope of being able to submit something to the state—as this case was coming up—that would be satisfactory. But they were not satisfied that the facts could be ascertained by those methods.

But, so far as the facts showed, they showed the cost of from eight to thirteen times more for state than for interstate business.

Q. It disagreed with their opinion?

A. Yes, sir. And as I understood Mr. Doddridge's testimony I disagree with him entirely.

Q. Mr. Kimbell's was the same test. It was made by Mr. Kimbell, but I believe the testimony shows it was made at the instance of Mr. Doddridge.

What I have read to you has been relating to the same test.

A. So far as I understand it, I cannot agree with them.

Q. The statistics on the Iron Mountain Railway were put in by the Iron Mountain, but I do not believe they had been analyzed as between local and through, as they were on the Cotton Belt:

The State's accountants have analyzed them substantially as was done with the Cotton Belt statistics.

4375 Mr. MOORE: The statistics contained in Exhibit 26 in this case, to which counsel refers, which gives the total amount of state and interstate tonnage taken in the Auditor's accounts from the waybills, was prepared at the request of the state's counsel in a conference held in the Judge's Chambers during the progress of this case.

I state this in order that there may be no misunderstanding as to how that came into the record.

Judge HILL: I did not so understand that. I remember it was given to us as the result of such a conference, but I understood it had already been prepared by the railroads and certainly the state's counsel did not ask for it to be introduced. Isn't that correct, Mr. Johnson?

Mr. MOORE: Some of the data was prepared, but that data was prepared as the result of a conference in Judge Trieber's chambers.

Mr. JOHNSON: In the Missouri Case such a statement as that was called for by the railroads and it was our understanding that it would be required in the Arkansas Case: and we worked it up for that purpose.

In Judge Trieber's chamber, at a conference between yourself and Colonel Moore, when Mr. Wharton was present, Mr. Wharton asked for three months of these figures and we told him we had prepared them for one month for his convenience and did not feel we should be called upon to prepare them for three months. Judge
4376 Trieber then said we should not be required to prepare those figures.

Mr. Wharton finally agreed that the figures for one month would answer the purpose.

For our own purpose, in presenting this case, we would have no

use for that exhibit. We believed that rather than check over the state exhibit it would be better for us to work that up ourselves, because it took us a considerable time to check their statement in the Missouri Case.

Judge HILL: You did prepare these and had them prepared before Mr. Wharton ever requested them, did you not?

Mr. JOHNSON: That is right.

Judge HILL: And you introduced them yourself, and not at our request?

Mr. JOHNSON: Only to this extent: that it was the statement compiled for this case and if we had not introduced it we felt you would call for it, just as was done in the Cotton Belt Case.

Judge HILL: But we did not call for them?

Mr. JOHNSON: It was not necessary, because we had filed it. And in the meantime we had turned over a copy to the state expert.

Judge HILL:

Q. Mr. Ward, irrespective of the history of the matter, that one month's business has been introduced by the railroad and it
4377 has been analyzed by the state accountants. I have read you the testimony of the witness on behalf of the railroad, as to another statement representing the one month's business and as I understand from your testimony, you disagree with these gentlemen that that would be fairly representative of a year or a series of years?

A. Yes, sir, I do.

Q. I believe you stated, probably more than once in your testimony yesterday, that after you determined the cost of the local and through freight trains, and after you determined the proportion of freight upon each of those trains, the problem of working out the expense between state and interstate still remains to be solved?

A. Yes, sir.

Q. That is your position about that, is it?

A. Yes, sir.

Q. I want to read you from the testimony of Mr. Doddridge—you know Mr. Doddridge, don't you?

A. I have just met him. I cannot say I know him.

Q. I will state for your information that Mr. Doddridge has been General Manager of both Iron Mountain and the Cotton Belt Railroads?

A. I know in a general way what his experience has been.

Q. At page 57 of the record in this case, the following occurs:

"Q. Your analysis of the different classes of freight, interstate and intrastate, is based on your experience and knowledge of the operation of the different kinds of trains, local and through,
4378 and the proportion of intrastate traffic carried on each isn't it?

A. Well, the local train is simply one of the incidents of the extra cost. It is not the whole reason. It is one of the circumstances and conditions of the handling of the short-haul business of the railroads.

Q. I think I have allowed for that in this question, if you will consider it more fully.

Previous question is here read.

A. Yes, sir.

Q. So we will understand terms correctly, Mr. Doddridge, in talking to each other, I will ask you if there is any such thing as an intrastate train; that is, an intrastate train which carries exclusively intrastate traffic?

A. There is no such train that I have ever heard of.

Q. There may be an intrastate train, but for the purpose of our inquiry it carries interstate traffic, and has to be considered relatively as to the traffic that is upon it.

A. It carries all kinds of business.

Q. That is true also of all trains, isn't it?

A. Yes, sir.

Q. Intrastate or interstate or transstate?

A. Yes, sir.

Q. It is a question of the proportion upon each?

A. It is a question of proportion upon each."

Q. Now, in further explanation of that view he says—or, rather, this testimony was read to him from the Missouri Case: I wish to read this statement made in answer to a question:

"So far as the particular freight is concerned, carried on those particular trains, there would be no greater cost in transportation for interstate freight than state freight, except the terminal charge.

4379 In order to ascertain the results correctly, you would have to take into consideration the amount of state freight that is carried upon that train, as applied to the total state freight carried on the other train.

In other words, what I mean to say is, we have to take into consideration all the trains and find out what relation the state freight bears to the whole."

Then this question was asked him:

"That is a correct analysis, isn't it?

A. Yes, sir, I think so."

Do you agree with this statement of Mr. Doddridge?

A. I don't believe I draw the same inferences from Mr. Doddridge's statements that you seem to.

If I understand you correctly, your idea is that Mr. Doddridge's statement was that with the exception of the terminal charge the cost of handling state business on those trains is the same as the cost of handling the interstate business?

Q. Yes, that is my understanding.

A. I would not draw that inference from what you have read.

Q. In other places he does state it, frequently, that that is his view.

A. That is not my view.

Q. That is what I was wanting to ask you, if that is your view.

A. No, sir, it is not.

Q. You knew Mr. I. G. Rawn in his lifetime, I presume, did you not?

4380 A. Yes, sir.

Q. He testified in this case heretofore the same day you did. I want to read you from his testimony at page 368:

"Q. What relation is there, if any, between local and through traffic, and state and interstate traffic? I will be glad if you will explain what, in your experience, you have found to be, if any, the relation that exists between the two classes of freight traffic?

A. For the purpose of determining the cost of operation of transportation, the question of state and interstate traffic is not the method of consideration. The method is that of through and local business."

Do you agree to that?

A. I do not because Mr. Rawn has not completed the statement, I think.

His answer omits a good many things which would be necessary to complete the answer, as I would make it; and, therefore, I do not agree with him. It is only a partial statement.

Q. Mr. Rawn further stated (page 383) going a little bit away from the proposition he is here discussing:

He was asked how he would divide the expenses between the local train and through train and he answered:

"One of perhaps the most accurate methods of determining the division of costs, if that is proper, is the ton miles. That is one of the very large elements and methods of determining the cost of the through freight and the local freight; on the question of maintenance and many other things that would otherwise not be determinable.

Q. What besides maintenance?

A. Maintenance of equipment and maintenance of way."

Do you agree with Mr. Rawn's views on that subject?

4381 A. No, sir.

Q. Mr. Rawn further stated (Page 366):

"I do not consider that there is any material increase in cost in maintenance of cars in local freight business and through freight business."

What do you think of that proposition?

A. I think it is very far from being correct.

Q. Then he takes up the question of locomotives. He says there is a difference on locomotives. But it was on cars I was calling your attention to.

You disagree with that?

A. Yes, sir.

Q. You were questioned yesterday considerably about various allowances that were made in the exhibits by the state, of 50% for extra switching and counting an engine 2½ times a car, and various other allowances, which you discussed in detail. I gathered from your answers with regard to that, that you were assuming that the accountants had arbitrarily assumed these figures.

I want to call your attention to the fact that the evidence here

shows that the accountant who prepared the exhibits had no first hand knowledge of these matters but informed himself and put those various allowances in on the basis of the best information he had. Those allowances have subsequently been sustained by the testimony of various witnesses.

Is not that a matter of fact in each particular case, to be ascertained by actual conditions?

4382 A. I do not believe that the facts can be ascertained by any known measure. Nobody can tell whether it is 50% or 40% or 60% addition. It is a varying quantity. It differs every day that the trains make a trip.

In particular reference to the question of the wear and tear on the track by a locomotive, that may differ so widely that one could hardly express it in figures.

The conditions are such that I do not believe anybody is competent to lay down a definite figure that could be safely used as an average.

Q. I understand that to be the case. That it is not attempted to be used as a general average, they have used these figures as applicable to these two roads; and then used the best judgment they were able to get as to whether a given percentage was the proper one for those particular roads.

Could not that be ascertained, not with mathematical accuracy but with a fair degree of accuracy, by men thoroughly familiar with these different matters on each particular road.

Colonel MOORE: I want to call attention of the counsel as well as the witness to the fact that there is no witness I recall now, who claimed to have had any experience in railroad operation, who has testified in regard to these matters to which counsel refers, any witness who had any knowledge of the local conditions on those roads.

They were gentlemen connected with railroads commis-
4383 sions in Texas and Oklahoma, who had never been connected with operation on railroads in the state of Arkansas, and knew no more about the local trains there than the present witness, Mr. Ward.

JUDGE HILL: I wish to call attention to testimony given by Mr. Wright, Traveling Auditor on the Iron Mountain Road.

Mr. MOORE: Wright was not a practical operating man, but simply traveled over the road as Auditor and *and* testified from his casual observations from traveling over the road.

Mr. HILL:

Q. The question is, are not these matters which are local in their nature, to be worked out according to the best judgment of the parties familiar with local conditions?

A. I do not believe those matters are local in their nature. I think they are of general application and I have had a great many years of railroad experience and covered a great deal of the country and have observed how these things are done; and they are practically

the same all over the country. My opinion is that these items cannot be accurately measured.

Q. While we are upon one of those matters which was an assumption, I will call your attention to this question of the fuel.

It seems there were no statistics in existence for the last half of 1907 on the Iron Mountain Road by which the fuel could be ascertained. In the test on the Cotton Belt, for October 1908, the
4384 actual figures were worked up. That matter was presented to Mr. Doddridge (Page 106):

"Q. Fuel, I presume, is another one of the chief items as you worked that up in the Cotton Belt case. Would the actual figures be worked up on fuel cost between local and through trains on the Cotton Belt, apply generally on the Iron Mountain?

A. I presume that those propositions would be applicable in a general sense to the Iron Mountain, or it ought to be.

On page 107 he says:

"In a general way the test on the Cotton Belt ought to reflect the general average conditions."

Then this was asked him:

"Q. That is all I am after. The detail may be different. You have taken that test on the Cotton Belt as a representative one and I want to know whether the proportions would be representative on the Iron Mountain?

He said:

"Yes, I used that largely as a basis for my calculation."

In view of that testimony from the gentleman who had been the General Manager of both those roads and worked that up and used those figures as representative in his various tests, would not you say it was right to accept those proportions as fairly indicating the general conditions?

A. Yes, I think so, in this sense.

If a locomotive handling a local train on the Cotton Belt Road consumes 3.5% more fuel per engine mile than the locomotive handling a through train, and Mr. Doddridge, who knew the conditions in both places, thought that would be a fair proposition on the Iron Mountain, I should say it would be. But I would not
4385 draw from that the inference that 3.5% greater fuel consumption should be applied to the ton mile. That would be an entirely different proposition and I do not understand from what you have read that Mr. Doddridge drew that inference. It was simply the percentage of fuel used per ton mile on local trains.

Q. Yesterday, as I understand you, in discussing the passenger proposition you criticised the state's accountants for not following the division of local and through on the passenger side of the question:

Do you know how many local or through passenger trains there are in Arkansas?

A. I do not, no, sir.

Q. Have you any judgment as to the usual proportion of local and through passenger trains on a well managed railroad?

A. That would differ altogether with local business conditions and would differ very widely on any well managed railroad.

Q. That would be purely a local question?

A. Yes, sir. The only assumption I made on that was, there were local and there were through trains.

Q. I believe the principal objection you had to this division was on the ground that the through trains would carry Pullman and the local trains would not?

A. I do not believe I expressed it that way.

The cars of all classes, mail, baggage, and express, coaches
4386 and Pullman, were all classed as the same kind of cars, so far as the use of these figures was concerned. And I objected to that method of classification. There is a great difference between them.

Q. In what would that great difference consist, Mr. Ward?

A. One difference is in the different weight of the car.

Another difference is in the length. Length makes a great difference, with similar weight. The long car is more destructive to the road than a short one of similar weight.

Another difference is the attention that is required to maintain and repair cars of different kinds. Mail, baggage and express cars are very much cheaper in maintenance of operation than are the coaches.

In addition to that, the coaches that are in the local service, stopping at every station, are more expensive in maintenance than are the coaches in through trains, which run through and are cleaned and attended to only at the end of long trips, instead of each day at the end of short trips.

Q. I believe the matter I had in mind was more in the question than in your answer. At page 632 Mr. Moore says:

"It is a conceded fact, I think, that as a rule Pullman cars are not hauled on local trains; also that the larger part of the state passengers travel on local trains and of the interstate passengers on through trains."

You answered: "That is probably the case."

4387 I don't know where Mr. Moore got his concessions on those points.

Col. MOORE: It is a matter of common knowledge.

I think that could not be controverted.

Mr. HILL:

Q. You think that is a correct statement, do you?

A. Yes, sir, I do.

Q. I wish to call your attention to an exhibit filed in this case by Mr. McPherson: you know Mr. McPherson, I presume?

A. I do.

Q. He was called upon to designate which of the passenger trains were local and which were through, and filed an exhibit, No. 46, showing the same.

That exhibit shows there are eight through trains and forty-eight

local trains in Arkansas—that is, during the period under consideration.

With that view, as to the difference in the traffic, only eight through trains and 48 local trains, would you say the expense should be worked up between the local and the through?

A. I don't quite understand what is meant by saying there are eight through and 48 local trains. He does not give the relative train mileage of the through and the local trains?

Q. Yes, that is given.

A. Is it in that proportion—six to one?

Q. I don't know. That would take quite a good deal of
4388 calculation, in order to determine.

If you look at this exhibit perhaps you can get it. He designates the through trains and gives their run and the number of stops.

A. (After examining exhibit.) I do not think you could tell it by that. He does not show whether they are "daily" or "daily except Sundays."

Q. These are all daily.

A. They run on Sundays as well?

Q. That is my information. Here he analyzes that and gives the stops of each one of the trains. And then he gives the run of each local train and the stops and the number of stops.

The previous question is here read to the witness as follows:

He was called upon to designate which of the passenger trains were local and through and filed Exhibit No. 46, showing the same. That exhibit shows there are eight through trains and 48 local trains in Arkansas, that is, during the period under consideration. With that view, as to the difference in the traffic, only eight through trains and forty-eight local trains, would you say the expense should be worked up between the local and the through?

A. I think so, if we are going to attempt to determine the relative cost of handling state versus interstate passengers.

4389 Q. Why?

A. Simply because if you ignore the difference in conditions, you will reach an erroneous conclusion and make the assumption that the cost is the same on one as on the other.

Q. Don't you think in view of this situation, the cost would be substantially the same on one as on the other?

A. No, sir, I do not.

Q. Wherein would be the difference?

A. Those forty-eight trains which undoubtedly handle the bulk of the state business would undoubtedly be more expensive in their operation; and the handling of the passengers on them would cost more than in the case of the passengers handled on those through trains.

Q. Don't you think from this exhibit here that the bulk of the interstate passengers would also be handled on the local trains?

A. That might be so. But it would not alter the fact that the

bulk of the state passengers were handled on those local trains; and those eight through trains undoubtedly handle a lot of people.

Of course, this is a question which really can be answered much more intelligently by a local man; and I would be a little afraid to be too positive in that opinion, as to the details of that, because of my lack of knowledge of local conditions.

Q. Let me give you another explanation of this: one of
4390 these eight through trains is a fast mail, that sometimes carries one sleeper and never carries a day car. I am not certain whether it carried a sleeper at the period under consideration. Mr. Johnson might tell you.

Mr. JOHNSON: It did.

Mr. HILL:

Q. It carried one sleeper?

Mr. JOHNSON: Yes.

Mr. HILL:

Q. In further consideration of the fact I will state I calculated from a time card the number of sleepers carried on the local trains. My time card was of a little later date than the period under consideration and may not be exactly accurate, but it is substantially so. I think thirteen of the local trains carried sleepers.

In view of these facts, would you say there should be a distinction made between the local and through passengers?

A. Oh, yes, certainly, for this purpose.

Q. You do not think these facts would modify your views?

A. No, sir.

Q. With the exception of one sleeper on those eight through trains, there were only seven through trains as against 48 local trains, and 13 of those 48 local trains carried sleepers?

A. In the comparison of trains you have so far ignored the question of mileage. No doubt those two trains are measured
4391 across the state; the mileage in which case is greater in each case than the mileage of the forty-eight local trains.

Q. No, some of the forty-eight local trains have the same mileage as the eight through trains.

Mr. MOORE: Give me the number or the date of the time card you referred to, please.

Judge HILL: I had a current one and it may not be accurate, as I have already said. But I do not suppose it is absolutely inaccurate. I wish to get a time card of the period under consideration. However, I think this one is nearly accurate.

Q. Mr. Ward, of these through trains, six of them (including that mail train which carried very few passengers) ran the length of the state, 305 miles; two of them made 184 miles each; and of the local trains, two af them made only the length of the state, 305 miles; six of them made 202 miles——

Mr. MOORE: Is that mileage of the through trains in the state of Arkansas or the total mileage of the through trains?

Judge HILL: In the state, I would assume, from Mr. McPherson's statistics.

Mr. MOORE: That is what I understand to be the case.

Judge HILL: I assume it would be true of the locals, just what is in the state.

Mr. MOORE: Most all of the locals are within the limit of the state.

Judge HILL: I just called attention to the fact that two
4392 of the locals ran the entire length of the state, just like two of the through trains. And six of them ran 202 miles. (Which I presume is the Memphis train.)

In view of these mileage facts, Mr. Ward, would you say there is any necessity of working up the cost between the local and through?

A. I do, if we are going to determine the cost of handling the state versus the interstate passengers.

Q. Would not these figures show you very plainly that the bulk of all the passengers in the state, both state and interstate, are carried on these local trains?

A. I would not say. That could be ascertained by an examination of the records.

Q. That would be the natural inference to draw from the facts I have just put before you, wouldn't it?

A. I do not think it would be safe to draw that conclusion, no, sir. Many of the local trains are very, very light and carry very few passengers. While most of the through trains are very heavy and carry a great many passengers.

Q. I will call your attention to the further fact that two of these trains go to Memphis?

A. They simply cross the river to get out of the state.

Q. That makes them interstate in this calculation?

A. Those handled west of the river would be state.

Q. The same thing would be true of the through trains?

A. Except that the through train does not do stopping
4393 to drop off passengers that the local trains do.

Q. Generally speaking, how often do the through trains stop?

A. Thirty to sixty miles, generally; and local trains stop at every station.

With regard to passenger business, I have watched with a great deal of interest the movement of passengers, in an endeavor to determine how our trains should be carded and the times and places where they should run.

My observation is that a very large percentage of all the passengers who travel, travel from their own town to the next station that is bigger than the one they live in.

The probabilities are that in the case of the local trains the passengers travel from a short distance and go from their own town to the next market town or county seat. That is the way the passenger business of the country travels, as a rule. I have examined the

records of hundreds of stations, to ascertain what the habits of the people are in traveling.

Q. I believe from your testimony I would infer that you do not believe in the car mile as a basis to determine the cost of maintaining equipment, either freight or passenger?

A. Not for this purpose, no, sir.

Q. Why is not that a good factor to determine the relative cost?

A. Well, it bears upon the purpose of the inquiry.

Q. You understand the purpose of the inquiry here is to
4394 find out whether those rates are compensatory.

A. I understand that. But I mean if a railroad wants to know what it costs to maintain its cars, it is a proper thing to keep a record of the miles they make, and determine how much it costs per mile per annum; or per car per annum. But if we are undertaking to determine what it costs per mile to repair a car with reference to the business that is carried in that car, then I do not think the car mile is a fair basis.

As I stated, yesterday, the car mile in local business, which is the car mile used to a greater extent than any other in the handling of state business, is a much more costly car mile than is the car mile used in the through business. The car is handled, so much more, and under conditions which are much more destructive to the car.

Q. Using the car mile as a measure of maintenance of equipment for the purposes of this suit, what do you say of it?

A. I think it is wrong. I think the state's accountants have recognized that by undertaking to add certain constructive miles to these miles in local service, in order to attempt to reach a theoretical car mile, because the actual car mile was not fair and reasonable.

Q. Suppose you want to use the car mile to get at the expense between states, with a view of seeing whether the rates are compensatory, and divide your business between states. What
4395 then would you say as to its being a proper factor?

A. We would still be in the difficulty that the car handling the state business is a less efficient agent, that is, it moves less ton miles than does——

Q. I do not think I made my question clear, Mr. Ward.

Suppose cars are used in two or three states—and of course they would be used in both kinds of traffic in those several states?

A. As between state and interstate business?

Q. No, not as between state and interstate, but as between two states. Suppose you had a road that ran in two states and your cost of equipment was divided between those two states on the basis of the car mile, what would you say as to that—or say six or seven states. No matter how many states your system runs into. How many states does the Burlington System run into?

A. I think it is twelve.

Q. If you had a rate case in one of those twelve states would you divide your cost of equipment between that 12th state and the other eleven states on the basis of the car mile?

A. I don't think I would.

If I were undertaking to determine what it costs me to do busi-

ness in that state I would have to make a careful local examination of what the conditions were; and if they justified apportioning more than a pro rata proportion of the expense to that state, I would so apportion it.

4396 Q. That would be comparing the condition in that state with the condition in the other eleven states?

A. Yes, sir.

Q. It might be that to one state that would be unfair, that is, too little, and very much too much for another state.

A. It might be.

Q. Owing to the conditions of the business?

A. Yes, sir.

Q. Your attention was called yesterday to a trans-state proposition on the station handling, and I believe I called your attention when you were on the stand heretofore to the fact that in Arkansas there is a great deal of the interstate traffic that has two or three handlings in the state, like cotton and grain and lumber, and various other large commodities, whose movement constitutes some of the largest percentages of these roads.

In view of that fact, it would not do to say that generally speaking the interstate business had one terminal and the state business had two terminals and the trans-state business no terminal in the state, would it?

A. I think generally speaking, it would be safe. I think I called attention to the fact that when I was on the stand before, in that particular case, that all states probably have some special condition attached to them: Minnesota has its iron ore and grain,

4397 which is interstate business; and North Dakota has its wheat, and Arkansas seems to have its cotton.

Q. And lumber?

A. Yes, lumber. I had those general conditions in mind and I tried to make allowance for the general conditions of that kind which must apply in all states. But that does not alter the substance of my view.

Q. Of course, the extent of this movement having three terminals in the state would be a matter that would modify the proposition as to how largely they would alter the general run of such things.

A. They ought to be taken into account.

Q. I omitted to ask you about one matter.

You testified yesterday that you did not think the mail and express should bear any part of the traffic expense: I want to call your attention to the fact that that item was questioned as being a proper item against intrastate traffic at all, that no part of these outside agencies and industrial agencies, etc., should be charged to intrastate traffic.

Quite a number of witnesses (I cannot recall them all) have testified that it was proper on the theory that these agencies build up the country and induce the business in to the country, and that any agency which would tend to build up the country and build up the traffic on the road generally, would indirectly redound to the benefit of the intrastate traffic. I believe that is about the

theory upon which the state is charged with a proportion
4398 of that expense. If that theory is true should not the mail and express also be charged with a proportion of it on the same theory?

A. It seems to me the point is a very small one. I would not personally think very much of the expense should be charged to the intrastate business.

Q. That is the position we took, but this gentleman converted us to the proposition of "laying up treasure in heaven"—or Arkansas—and we felt that on that theory they should be charged with their proper proportion.

A. That is true, in a general way; but I think it is a pretty fine point.

Q. I think so. But if you are going to accept that fine point, you should apply it to mail and express as well as intrastate traffic, don't you think so?

A. Yes, sir, it seems to me so.

Q. You agree with me that it should be cut out entirely or should be spread over all the business?

A. Spread over the business in such proportions as are correct, when ascertained.

Q. We may differ as to what would be the correct proportions, but get some factor that would properly spread it: is that the idea?

A. Yes, sir.

4399 Redirect examination.

By Col. MOORE:

Q. To the extent that that class of expense should be charged to intrastate business, on account of building up the state and thereby increasing the general business of the Company, that view is based upon the proposition that in doing that you do build up and develop the business of the railroad; but as I understand it the mail and express business is worked up by other agencies and the railroad has nothing to do with it except to carry it for other people—the mails for the Government and the express for the express companies. In that view there would be a difference between the ordinary intrastate business and the mail and express in the application of the principle to which Judge Hill called your attention?

A. Yes, sir, there would be a slight difference.

Q. I want to call your attention to the service rendered to cars in through trains, in the handling they get at division terminals, while being transferred from one train or track to the other; and the service rendered to cars in local trains, such as their being switched to industries, etc.: Is there any comparison in the expense of industrial switching for local cars and the switching that is given to cars on through trains at division terminals, for the purpose of transferring them from one track to another?

A. There is a very great difference, of course, in the
4400 handling and in the destructive effect on the car; a car in through service simply being put from one train into an-

other, or having its engine and caboose changed, as comparatively little is done to it and in many cases nothing whatever.

But a car switched in industrial switching has to be handled a number of times, depending upon the conditions. It has to be taken from one train and put on another track and sometimes there are a group of cars going into the same track or territory and, depending upon conditions, they are perhaps rehandled again, to be placed at the proper end of the switch tracks. These run in all directions, and the cars have to be dropped from the head of the train to the rear of it; and there are many movements which go to increase the risk of injury and the cost of maintaining those cars, which do not apply to the cars passing through terminals in through service.

Q. That would result in a very much heavier expense for maintenance growing out of switching to industries for local cars than it would to switching that applies to the through cars, in transferring them from one train to the other, would it not?

A. Yes, sir, and it was that difference I had in mind in making my statement yesterday.

Q. Mr. Ward, your attention was called to Exhibit 46, filed in this case by Mr. McPherson, showing the through and local trains. A reference to that exhibit shows, for the purpose of illustrating the point to which I call your attention, for instance, that
4401 through train number 3 runs 305 miles in Arkansas; in that 305 miles it makes ten stops; it carries 4 Pullmans. According to the assumption made by the State's accountants in their exhibits in this case, of the passengers on those cars seventy-five per cent are interstate passengers and twenty-five per cent are state passengers. That is the condition in regard to that train. The run of that train in addition to the 305 miles in Arkansas is 184 miles in Missouri, making the total run of that train about 500 miles.

Train number 24 is a local train; that also runs 305 miles; in running the 305 miles it makes sixty-eight stops. We will assume it carries one Pullman car ( I don't know whether it does or not). The local or state passengers in that car do not sleep there but go in there to get a more comfortable seat, going from station to station on the run of that car in the state:

I want to call your attention to these conditions and ask you to state, in view of those conditions what your opinion would be as to these matters to which Judge Hill has called your attention?

A. I think it simply calls attention to the necessity in such a matter as we are discussing of taking into account the difference between the local and the through train so as to accurately reach a conclusion as to the cost of state versus interstate business.

4402 Q. That shows also, does it not, that it would indicate that the Pullman on the local train is used for short haul business?

A. Yes, and such reference as I have heretofore made to Pullman cars has been with the idea of considering them not so much as "Pullmans"—as that is only a name—but as sleeping cars; not as

parlor cars, which may be also "Pullmans". I was thinking of sleeping cars.

Q. One of the grounds upon which you predicate your objection to the division of expenses on a car-mile basis, within the state, between these different classes of cars, is the different conditions?

A. You are speaking of passenger service?

Q. Yes. The different conditions which exist in regard to the cars themselves and the difference in the expense of maintaining the different classes of cars.

A. Yes, sir.

Q. In speaking of the division of cost of car equipment between the states, on a system which covers more than one state, you also stated that would not be a desirable way to divide it; but there is one thing to which I wish to call attention:

We will take the case in hand: the Iron Mountain operates in Arkansas, in Missouri and in Oklahoma; there are three states in which it operates; in each one of those states there are through and there are local trains. The probabilities are that the
4403 general conditions which would vary as between the cars used in the state locally, would as between those three states constituting a part of this system, be generally about the same. That is to say, they run local trains in Missouri, and they do in Arkansas, and they do in Oklahoma; and probably the same variations exist in each one of those states. I think that would naturally be the case.

Isn't that difference of condition such as would preclude a division between the different kinds of cars within the state, isn't it decreased very largely when you come to divide the cost on a system running in different states, growing out of the fact that the general conditions, etc., would be about the same in the different states—you have my idea?

A. Yes, I think so. I think I agree with you fully on the proposition.

Judge HILL:

Q. What is the proposition you are agreeing to, Mr. Ward?

A. My understanding is, that on a system of railroad which operates in a number of states, in those states there are varying conditions, such as through trains and local trains; and different costs of handling business on those through and on those local trains; and that in those different states those conditions are relatively about the same. And for a system undertaking to determine the cost of maintaining its equipment (as between the states) it would be fair to make the assumption that as between one state and another the conditions would be about alike. Is that the proposition?

4404 Col. MOORE: That is the proposition I asked you about.

A. That is the way I understand it.

Judge HILL:

Q. Why would that justify it on a car mileage division between states any more than between through and local trains?

A. It would be simply a comparison of one state with another, for the purpose of maintaining the Company's own records. That is the general proposition.

Q. You mean for the purposes of comparison of operation in one state and operation in another state, as to the question of efficiency in the management of the road: isn't that it?

A. Yes, sir, and a little more than that.

For instance, on the Burlington road if we were going to undertake to determine whether it cost more to handle passengers in Iowa than in Nebraska, the conditions as to through trains and local trains, branch line trains and main line trains, would average up one state with the other pretty well; so it might be safe to say it costs no more and no less to handle passengers in Iowa than in Nebraska.

Q. That would depend upon whether the conditions in Iowa and in Nebraska were the same, would it not, Mr. Ward?

A. Yes, sir.

Q. So your whole proposition would resolve itself into the question of whether the conditions in one state fairly represent
4405 conditions in all of the states into which the system runs?

A. Yes, sir, and also upon the idea that as between states in the same general territory those conditions are approximately the same.

Q. Do you know in how many states the Missouri Pacific System runs?

A. I know about where the system runs. I know generally.

Q. It runs through ten, eleven or twelve states.

Isn't that right, Mr. Johnson?

Mr. JOHNSON: It runs in nine states.

Judge HILL:

Q. Wouldn't you say that the conditions in those nine states are similar, so you could use the car mile as a basis to find out the proper expense in any one of those given states?

A. No, sir, not in all. There is a good deal of difference.

Col. MOORE (resuming):

Q. Any division as between states would be diminished when you come to divide between states, on account of that greater similarity in conditions, that you spoke of?

A. Yes, sir, there would be a closer similarity between state and state, probably, than between local and through business in the limits of one state.

4406 CARL R. GRAY, sworn and examined on the part of the complainant, testified as follows:

Direct examination.

By Colonel MOORE:

Q. State your full name, please?

A. Carl R. Gray.

Q. State your place of residence?
A. St. Louis, Missouri.
Q. What is your occupation?
A. Senior Vice-President of the St. Louis & San Francisco Railroad Company.
Q. What are your duties in connection with that? Are you general manager I mean of the Company?
A. I have exclusive jurisdiction over the operations of the railroad and in the absence of the President jurisdiction over
4407 all of the departments.
Q. Will you state when you began railroading and what your experience in that line of work has been?
A. I began railroad service in January, 1883, as telegraph operator and I served in telegraph and station agent's work until March, 1886.
Then I went into the traffic department and was successively clerk and chief clerk in the office of the general western freight agent at Wichita; then I succeeded him in April of 1887, as commercial agent.
Then I was in succession District Freight Agent and Division Freight Agent until October, 1897, when I became Division Superintendent.
I was promoted to superintendent of transportation in October, 1900, General Manager in April, 1904, second Vice-President and General Manager in November, 1904, and second Vice-President from August, 1906; and Senior Vice-President since November, 1909.
All of my service has been with the one railroad company.
Q. What company is that?
A. St. Louis and San Francisco Railroad Company.
Q. Where did you begin your service, Mr. Gray?
A. At Rogers, Arkansas.
Q. During all your service you have been connected with operation in the State of Arkansas, hav ou not?
A. I have been, either directly or indirectly connected with service in the State of Arkansas. Part of my time though, I
4408 have had jurisdiction which did not include the State of Arkansas.
Q. But what I mean is, that your jurisdiction, among others, has included the State of Arkansas?
A. No, sir. For some years I have had no jurisdiction over the State of Arkansas. But I have had jurisdiction over it for ten years.
Q. Mr. Gray, without asking a long question, in the way of explanation I will simply ask you whether you have examined the state's method of dividing the expense of conducting state and interstate traffic or transportation, by ascertaining the tonnage of the local and through trains and then dividing the cost of operation between those two classes of trains, and the method of dividing that between the tons of each class on the ton mile basis?

A. Yes, sir, I have examined these exhibits that have been introduced.

Q. Going back to the beginning of the method adopted which was the relative tonnage of the local and through trains, I will call your attention to the manner in which the tonnage of each class of train has been ascertained by the state's accountants:

They took the month of October, 1907 and by examining the wheel reports and waybills, so far as they could obtain them ascertained the actual movement of freight on local trains in the State of Arkansas during that month.

4409 Now, to ascertain the freight that was handled on through trains they subtracted the tonnage obtained in the manner I have mentioned, on the local trains from the total amount of freight, both state and interstate and of all classes, in the State of Arkansas, as shown by the Auditor's revenue accounts. That ascertainment is shown I believe, on Exhibit "I", if I am not mistaken.

I would like you to state your views as to the correctness of a division of freight hauled, as between local and through trains, ascertained in that manner?

A. I would like to ask if the practice on the Iron Mountain was for the Auditor to take into his accounts his local billing and his interline?

Q. I will state what that was. I intended to state that.

His accounts are made up in this way: System business is taken into account on what is known as "a forwarded basis"; the interline business is divided into three classes, interline forwarded, interline received and interline through or overhead.

A. You have not stated how the interline billing was taken into account.

Q. I will give you then a statement which was furnished to the state's accountants.

A. (After examining exhibit:) I gather from this state-
4410 ment or exhibit, that the local business and interline forwarded is taken into account as of the forwarded date.

That the interline received and the interline through, or where the Iron Mountain is the intermediate carrier, is taken into account as of the date actually reported or finally reported by the receiving agent or carrier.

Predicated upon that I would say that to subtract an absolutely determined amount from one which was not arrived at in any wise by the same manner, is entirely misleading, for the reason that the gross which is represented in the Auditor's net ton miles, includes business that may have been billed for some months before; certainly a very considerable portion of it is billed the month before; and excludes a great deal of business that was actually handled in this month.

That is such a variable quantity, varying as the proportion of the last two may bear to the first two, that in my opinion it is unreliable.

Q. Would the incorrectness that would be developed in the way

you speak of be cured by any equality in the lapovers from month to month, and make it representative in that way?

A. It would not, as applied to any reasonably short period. It might, if applied to a five or ten year period.

Q. I mean for one month, say the month of October?

A. One month as applied to what?

Q. To six months.

A. No, sir.

4411 Q. Have you had any experience on your line of railroad that furnishes you with any information in that respect?

A. At one time in endeavoring to provide statistics of value in determining the relative performance, on the several divisions of the road, we took the ton miles from the Auditor's reports. We found them to be unsatisfactory, for the reasons I have stated; and for the additional reason that the Auditor assumes, naturally, that freight travels through a certain prescribed route.

The operating department may not handle it via that route, for reasons that are good, and sufficient to them; such as interruption of the line or a more economical routing to a certain class of business, or a handling that would conserve time.

Therefore, we were compelled, in order to have reliable statistics, to adopt the method by which we arrive at the net ton miles handled on any division of the road, from the conductor's wheel reports, which represent actual conditions. And we have been satisfied with that.

Q. The tonnage handled on local trains on the Iron Mountain road during the month of October, 1907, in question here, appears to be only 11% of the total tonnage.

In that view about 89% of the tonnage was ascertained in the manner I have indicated from the Auditor's revenue accounts:

What effect would that small proportion of located tonnage, so to speak, have? As between the two classes of trains it
4412 would leave a very large margin for inaccuracy and incorrectness as to the other part of it, would it not?

A. It would add to the possibility and probability of that, in the greater proportion it bears to the amount accurately determined.

Q. What effect would a congestion in the business in the month that is adopted for this division, it being one of a number of months of congestion beginning some time previous, and extending later, with the particular month of October, 1907, in view, as the one in which the congestion reached its highest point and began to recede soon after the end of that month, but was greater during that month than it was during the previous time or later. Perhaps it began receding in the first part of November:

What effect would that have upon the correctness or incorrectness of such a method of dividing the ton miles carried on those two classes of trains?

A. It would have this effect: it would distort those conditions which prevailed under a more normal situation.

To make myself clear, in order to satisfactorily handle local business, the local freight trains running upon something like an estab-

lished daylight schedule, should handle the preponderance of that business.

In time of congestion or stress, that is of necessity lost sight of and under those conditions there can be no doubt that a greater proporton than normal of through business would find its place in the local trains.

4413 Q. Why is that, Mr. Gray?

A. Well, you have a certain given amount of power, and it is human nature, if not good practice, under those circumstances to make it count just so far as you can; and in that case they would load down the local freight trains to the full efficiency of the engine, even in some cases knowing it would be very seriously delayed and the service materially hampered, in an effort to get out from under.

Q. Mr. Gray, you have a copy of Exhibit K there before you: will you take that exhibit and take up the various items in which an effort has been made to segregate costs of operation of local and through trains and state your views as to the feasibility and correctness of the method adopted?

A. Do you want me to take Exhibit K as it comes and criticise each of the propositions contained therein?

Q. I do. State your views with regard to each.

A. Exhibit K seems to me in general a proposition to largely use physical conditions in arriving at this final separation, by first dividing between local and through and then dividing between intrastate and interstate finally.

In the maintenance of way and structures, which is the first subdivision, the engine miles in through and local freight have been determined and 50% has been added to the local engine mileage, for station switching:

4414 I am not satisfied with the 50%, because in my opinion it is not enough to compensate for the extra maintenance which is occasioned by switching.

Q. Is there any way by which anyone can tell what would be the proper amount?

A. I have not any method of arriving at that. I simply say that in my judgment it is not enough.

Q. From all your experience as an operating man you would not be able to state what would be proper?

A. No, sir, I have never felt I could do that.

This assumes further to convert engine miles into car miles, by an arbitrary allowance of 2½ times a car mile as an offset for an engine mile.

Then they have taken all of the freight car and caboose miles, plus 2½ times the engine miles, to arrive at the total of each, local and through.

Then a percentage of each has been taken to divide the maintenance of way expenses as between local and through trains. I believe there is in railroad practice only one more unreliable factor than a car mile, and that is a train mile.

1897

The car mile is so variable a quantity as to be of no service in any comparisons or divisions which I have ever made.

It takes into account no distinction between classes of lading; between weights of lading; between a car where the tare is a large proportion of the load on the rail, and where it is a light proportion. It assumes that the cost is equally proportioned for a car han-
4415 dled five miles as it is for a car handled 300 or 500 miles. The further inclusion of caboose mileage only accentuates this difference.

Above all that, however, is the fact that 2½ times a car mile is not sufficient for a locomotive mile, as it affects maintenance of way expense.

A locomotive, with its shorter wheel base, with its greater axle load, with its connected drivers, with its constantly present problem of counterbalancing, with its constantly changing load on the tank, due to the taking on and using up of coal and water, the known tendency of the engine tank to de-rail, out of proportion to all other carriages, the damage that a locomotive frequently does to the track itself, while on the track and the greater proportion of damage it does if derailed, none of these facts are taken into consideration.

I believe, however, that the greatest difference in the problem here is the fact that so large a proportion of the total maintenance of way expense is not appreciably affected by the volume of business and is a condition by itself.

At least 75 or 80 per cent of the expense of maintenance would be present were the business light or dense; were the preponderance of local and through to reverse themselves.

Q. What do you think of that method of dividing that class of expense?

4416 A. I do not think it is a good method, for the reasons I have stated.

Q. Mr. Gray, I want in that connection to have you state your views as to whether October, or any one month out of six months, say of the last half of 1907— is that month of October in your judgment to be used arbitrarily as representative of the 6 months, with reference to that class of expense?

A. From my knowledge of the conditions on all southwestern railroads in October, 1907, I would say that in my opinion for a comparison of this kind it would have been difficult to have selected a month in which the results would have been more misleading as applied to a longer period, for the reason that the congestion reached its flood during that month, and the conditions which were distorted by reason of the efforts of the operating department to move this unprecedented tonnage would reflect themselves through all of the remaining months, and the proportion of tonnage included which really did not move in that month, and the proportion of tonnage excluded which did move in that month, due to the Auditor's method of keeping his ton miles, would equally distort, and perhaps distort more greatly, all of the other months.

Q. Is there anything further you wish to say now in connection

with that branch of the subject? If not, take up the next, Maintenance of Equipment, which follows after that.

A. In the Maintenance of Equipment, division 2, sub-division A of Exhibit K provides for locomotive repairs.

4417 These are first divided between yard and local and through road locomotives on the basis of locomotive mileage of each class during the month of October, 1907; 50% has been added to yard locomotives to provide for possible extra maintenance due to yard service. 50% to local road locomotives to provide for extra switching service; to which has been added an additional 50% to this 50%, to provide for the possible extra maintenance due to switching service. There is nothing in my experience which justifies either of those assumptions. It is entirely arbitrary. It may be fair, and it may be not enough, and it may be too much.

One of the objections to it, is the fact that the word "mileage" to begin with is an assumption; and 50% added to an assumption does not strengthen it any.

It assumes further to divide the expense of yard locomotives between local and through on the basis of the number of cars of each class.

It is to be assumed that customary practices were followed in arriving at the cars handled at terminals, that is a car in and out counts twice.

Q. That has been adopted; that is the testimony in the case.

A. Yes, sir. The assumption then, that a car in local service requires no more switching than a car in through service, is not sound. It is a very frequent thing in practice for the through train to require one switch. That is, the caboose is taken off and a caboose put on the train. One cut is made to reduce, or one switch is

4418 made to add tonnage, where a reduction or increase in the train load is caused by physical conditions; while, on the contrary, a local train is the one which requires the most switching, and particularly in proportion to the haul.

The local train will in ordinary practice be composed of cars that have been picked up at the local stations, which when it reaches a terminal will go in all the different directions; or at that point are switched together for the through trains.

Another factor which this does not take into account is the fact that the car which passes through that yard, and is never touched individually by an engine, counts just the same in expense as a car which is switched to an industry, where it occasions a switch in some instances even of several miles; it may be handled by itself or handled in conjunction with several others, but it carries in proportion a great many times the expense of a car that would pass through that terminal in a through train.

The difficulty about it also is that it assumes that the cost of switching one car is the same as switching another car. It may be a good theory but my experience does not justify me in the conclusion that it is.

In the case of sub-division "B" "Repairs of freight cars":

This has been primarily apportioned on a car mileage basis

and evidently for the conceded element of additional repairs due to stopping and starting, an arbitrary allowance has
4419 been added.

Q. Pardon me a moment, Mr. Gray, but if you will read the latter part of that paragraph you will find that has been provided for on a basis advanced by Mr. Wellington.

A. I was going to comment on that.

Q. I do not think there has been any arbitrary added on that account: the arbitraries are allowed after that division: I wish to call your attention to that.

A. There is an assumption here of additional cost which is predicated upon Mr. Wellington's book as authority. I do not remember just when Mr. Wellington's book was published: is that in evidence?

Q. The evidence in this case shows it was published in 1877 and then the second edition in 1887. But I suppose it is not very material which year you assume. I think this proposition was contained in his first edition.

A. Whether it was contained in the first or second edition, 1887, precedes by eleven or twelve years, the universal adoption of the automatic couplers; and the adoption of the air-brake.

It precedes by even a longer period than that the introduction of the heavier carriage and heavier engine.

I have never been able to satisfy myself as to the percentage of damage that is done to cars by stopping and starting at stations and in terminals. I am constrained to believe that these figures given by Mr. Wellington are nothing more than a guess, an ex-
4420 pression of his judgment.

If they were predicated upon any test which could have been made prior to 1887, it would be valueless as applied to conditions today.

My own judgment is, that his proportions are reversed. He provides for 35% of the repairs, being due to stopping and starting at stations and handling at terminals. Of that he gives about 3/5 to starting and stopping at way stations and about 2/5 to terminal handling.

In my judgment he has very largely understated the gross percentage due to these two causes, and I think he has reversed the relations.

Q. In other words, you think it would be nearer 70 than 35 per cent?

A. It would be nearer 60 in my judgment than 35, and while I have nothing to substantiate this except observation and judgment and experience, I would say it is nearer 60; and I would place the proportion of damages done in yards and terminals at $\frac{2}{3}$ of that and to stopping and starting at way stations $\frac{1}{3}$.

Q. What is the next sub-division?

A. An assumption has been made here that local trains stop each five miles and through trains each 20 miles.

Q. That is based on the evidence in the case and we accept that so far as that part is concerned.

A. The assumption further is made that each car in local service receives two terminal handlings and that each car in through
4421 service has one handling.

The further objection to this is, that it does not take into consideration the trans-state car which has no terminal handling, distinctly as such.

After first having made an arbitrary deduction of the amounts which have been allowed in this assumption of the expense for starting and stopping and other terminal handling, the balance of this freight car maintenance is divided upon a car mileage basis as between local and through trains:

My criticism of that is, that it has not provided for the additional costs; that the allowances given are misleading and improper as applied to present day practices; and, further, that the assumption that freight car maintenance can be fairly divided into freight car mileage, is not sound, on account of the varying costs, varying sizes and capacities of the different cars; and the further fact that it puts the caboose mile as against the 50 ton car mile; that it puts a refrigerator car against a flat car; and all serving in my opinion to make an uncertain basis of division.

Q. Mr. Gray, that is for the purpose of dividing the expense between the local and the through trains: in that connection, there are certain of these divided between states on a car mile basis.

I want to call your attention to that and ask you if the conditions in different states in which a system is operating would or would not be similar as between one state and another, and if
4422 there would be greater similarity of condition and a better reason for dividing the expenses between states on a car mile basis than there would be as between local and through trains.

I simply mention it to call your attention to it. You see what I want to get your view upon?

A. I do not believe I understand that question.

Q. I understood you to say you did not think, in your judgment, the car mile was a proper basis to divide expenses of through and local trains?

A. To divide the expense of repairs as between local and through trains.

Q. What would you say as to that as the proper method of dividing these expenses of repairs as between two states in which a system is operating—say Arkansas and Missouri; I speak of that because both those railroads operate in both those states.

Is there a similarity in conditions in those two states which would more nearly justify that basis of division than as between local and through trains?

A. I would say there was.

Q. That is what I want to call your attention to, because it will be drawn out and while I do not know your views about that I want you now to express your view as to the merits of that kind of a division between states, as compared with a division between local and through trains: that is the method which has been adopted in this case for dividing between states.

4223 The state's accountant has made an assumption that each local train makes a stop each five miles and each through train makes a stop for each 20 miles: That assumption is based upon the evidence of operating men of the Iron Mountain Railway and we have no complaint to make of it.

Now, for the purpose of ascertaining the relative expense, the accountants have in determining the starting and stopping expenses, multiplied the local car miles by four, in order to account for the more frequent stops of the local train. Then they have in addition to that assumed that each car in local service requires two terminal handlings, to each terminal handling of a car in through service.

Now, I wish you would look at that and state if you think a sufficient allowance has been made there for stopping and starting of cars in local service?

A. There is as wide a variance as it is possible to conceive between two similar things, between a stop of a local train and a stop of a through train; in every day practice.

The stop of a through train is most frequently for transportation or operating reasons; that is, it is a stop to take a siding for or to meet and holding the main line for the opposing train. It is usually unaccompanied by any more work than the taking of
4424 the side track or holding the main line while the other train takes the side track.

The local freight trains perform the greatest amount of *its* functions in connection with a stop of that kind. It may be hours' duration, or it may be short. It is all dependent upon the work required at that local station, as differentiated from the through train which has no work whatever to do.

I would say that an allowance of four times, which is predicated solely upon the fact that the stops are four times as frequent, is wholly unfair. I am not prepared to say what it should be, but it should be several times that.

Q. Several times that?

A. Yes, sir.

Sub-division "C" provides for the division of supervision and general expenses in maintenance of equipment department on the basis of the direct charges which have been previously determined by the methods which have already been criticized.

In division three it is sought to divide traffic expense on a basis of straight revenue.

My criticism of this is that it has abandoned one theory and adopted another.

I do not see how it is possible to start out on an assumption following physical conditions and to swap to that of income.

I do not criticize the method, which is perhaps a fair one and, everything else aside, would not cut a great figure one way
4425 or the other; but I do feel it is not consistent to use one method upon a part of the expenses and another method upon another part of the expenses.

Q. In other words, you think there is no more reason for apply-

ing the car mileage basis to maintenance of way than there would be to traffic?

A. That is my theory.

Q. And, as I understand you, you do not think that is a proper method of dividing either one—that is, the car mile basis?

A. No, sir, for the reasons I have stated.

Q. The next sub-division is "Transportation expenses" and the first item is "Station expenses."

A. Sub-division "A" is "Station Expenses."

We have now still another method of dividing. This is stated not to be a train expense, therefore, a straight division of this expense between intrastate and interstate on the basis of tons of each class of traffic, doubling the intrastate tons as an allowance for two terminals, has been adopted.

Q. In that connection, before you proceed, perhaps it is as well I should call your attention to the fact that in a later exhibit filed by the state, after this one, they have excluded trans-state tons from this division; and the division now rests upon intrastate and interstate, excluding trans-state tons.

A. That again is rather decidedly admitting the weakness of the matter, in that they have eliminated only the weakest feature.

4426 But their action still further accentuates the fallacy of this position (indicating Exhibit) because it assumes there is no station expense in handling the trans-state tons.

The whole difficulty of this theory (indicating exhibit) is its assumption, first, that it does not cost anything in station expenses to handle an overhead or trans-state ton:

Second, that it costs in station expense as much for moving a ton mile as it does for moving 50 ton miles, in proportion or perhaps I had better state that instead of ton miles, a ton one mile as contrasted with one ton 50 miles.

That the cost of handling forwarded business per ton is the same as the cost of handling received business per ton. While practically there is a great difference and distinction.

A forwarded ton is billed by the agent; he is not even responsible for the correctness of that bill or the rate used.

He is also responsible for the correct accounting and the application of the correct rate, upon all business received.

It assumes there is no difference in the station expense of handling a ton of brick or coal, carloads, as contrasted with a ton of classified merchandise, the one involving a very minor amount of work, the other involving an intricate knowledge of rates, of accounting, and handling. It is further subject to criticism in my opinion, in that it assumes that it costs only twice as much to handle a ton which has two terminals as contrasted with the ton which has only one terminal.

Q. That being divided on the basis of tons handled at stations, and not ton miles?

A. Yes, sir.

4427 Q. Is there anything further you wish to add to that?

If not, I call your attention next to sub-division "B," Yard and Terminal Expenses.

A. These expenses are predicated upon the cars handled, and are subject to the same criticism exactly, on account of the great distinction between the work involved in handling different cars, that I have made in the matter of sub-dividing maintenance of locomotives.

Q. By a later exhibit filed by the state in this case, they have made some change by eliminating in the account 25% of the cars in the through trains: would that in your judgment cure the defect?

A. That is an arbitrary deduction, not based upon anything in my experience.

Q. Look at sub-division "C," fuel and locomotive expenses: and state what you think about the assumptions upon which that is apportioned between local and through trains, on this exhibit of the St. Louis Iron Mountain & Southern Railway Company?

A. It is the application of six months' operation on the Iron Mountain with its varying conditions—branches and main lines—with a test made upon another railroad, without any comparison being given for the benefit of the witness, as to the engines used on the Cotton Belt as distinguished from the engines used in the several classes of services on the Iron Mountain; and no information as to the relative number of cars handled on the two
4428 railroads, the length of the local such as the amount of work done by the two; and my conclusion is that it is not a fair basis upon which to divide the expenses of the Iron Mountain road.

Q. You have observed that the test on the Cotton Belt was made in another year; that is, October, 1908, for the purpose of applying it to the month of October, 1907, on another road: do you think that would be a fair method of testing?

A. No, sir. It only further accentuates the fact that it was made at a time of normal conditions, when local freight was performing such functions as it ought to in ordinary practice, handling a much less proportion of tonnage than it would if handled during a period of congestion; and not improbably a different type of engine was used.

Q. It would be objectionable, even on the same line of road, would it not, to measure a period of one year by a period in another one year?

A. It would be, especially two periods of such varying conditions as October, 1907, and October, 1908.

Q. The next subject is Engine House Expenses.

A. That is divided upon an engine mile basis and in addition 12% has been given to the local engine miles, on account of the fact that the local engines have a shorter average run, which I presume from these figures here is 12%: is that correct?

Q. Yes.

4429 A. This is misleading, but I must admit I do not know to what extent.

It is not a fair assumption, in my experience, to say that a local engine needs no more attention per mile than a through engine.

My observation would be that it needs a greater amount. Its firebox ordinarily is in worse condition. The engine has been subjected to harder usage; it has been longer per mile on the road and therefore, dirtier per mile.

I would say there is a considerable excess cost here, but just what I do not know. I believe, however, it is more than has been allowed.

Q. The next branch is "Road Enginemen and Trainmen."

A. Road enginemen and trainmen, it has been stated, have been accurately apportioned for the month of October, 1907. And this apportionment as applied to this abnormal month has been applied throughout a six months' period.

That is subject to the same criticism I have given to all conclusions which use this month as a basis for a six months' period.

Q. I want to call your attention (probably you know it but I have the statistics before me) to some of the matters included in there as follows: wrecks, stock killed, damages to persons and property; flood damages; road signal men, crossing watchmen. Also freight car lubrication and other train supplies:

You might take this paper which shows the railroad sta-
4430 tistics.

A. (After examining paper.) This is another account which uses the month of October, 1907, as a basis for a division for a six months' period, between local and through, applying the train miles as the factor.

It seeks to divide, for instance, freight car lubrication on a train mile basis. It assumes that the lubrication on a ten car train is the same as lubrication on a 40 car train, per train mile.

That the train supplies are the same for one class of trains as for another.

It divides the injuries to persons upon a train mile basis, while the experience which I have had would make the proportion of injury on a local train mile very much in excess of a through train mile, due to the greater hazard attendant upon switching, attendant upon coupling and uncoupling, climbing on to cars, handling brakes, handling of packages of freight, loading or unloading.

It is not a fair criterion to divide the stock killed and damage to property. Certainly not as affecting flood damage.

It is subject throughout to the criticism that it seeks to apply to a six months' period a separation of train miles applying to a month of exceedingly heavy business.

Q. What is the next sub-division?

A. Sub-division "G" "Loss and damaged freight" is stated to be
divided on a basis of the actual claims; and is the least
4431 objectionable feature except that it uses still another basis
for their theory; it presents objection to me only for that reason.

Q. The month of October, I imagine, or any other month, would represent in the account of the company, only payment made on account of damages that had previously occurred, and the claims for which had been adjusted and made ready for payment?

A. If you will pardon me, Judge, my answer was not responsive.

I should have said that the theory which provides for the actual claims paid being assigned to the intrastate and interstate, in itself does not present objections; but in this case I notice now what I had overlooked for a moment, that the month of October, 1907, has been again used as a basis for a six months' period.

We know in practice that claims paid and taken into account in one month rarely, if ever, reflect the results of that month's operations.

In other words, the claims paid for loss and damage represent previous months and the claims paid in this month would come into future months.

We might have taken here any one month——

Q. You do not mean claims paid; you mean damages accrued?

A. Yes, sir, I mean damages accruing in previous months, sometimes extending into years. The larger the amount paid, the longer the probability of duration of time.

4432 Q. Is there any uniformity in the length of time between the occurrence of the damage and the time of payment of claim?

A. There is no uniformity. Some of the roads—I do not know whether it is true here, but perhaps evidence has brought that out—some railroads recognize that by charging out an arbitrary amount per month, carrying the entire matter in suspense through the entire fiscal year.

Q. That is not done in this case?

A. Then it would be less reprehensible.

That method seeks to make a month representative of a year. That method would be less reprehensible, because if settlements were light or heavy in this particular month it would distort the whole priod.

Q. In order to apply a system of averages, you would have to establish first uniformity in the period intervening between the time the damages occurred, and the time the claim was paid?

A. We sometimes do that and are sometimes fooled and have to take in an excessive amount in the last month.

Q. Proceed with your statement, Mr. Gray?

A. Sub-division "H" is "Supervision and General":

This is a case where they have taken sub-divisions which have been arrived at through the different methods which have been criticised, and have used them to arrive at percentages to represent direct charges.

4433 They still hold to the train cost and car cost sub-divided between local and through, and have now the interstate and intrastate partially sub-divided.

I am unable to harmonize this feature.

In supervision, and general, under conducting transportation expenses, the supervision includes the superintendent and his office, the superintendent of car service or transportation and his office.

I think it is subject to all of the criticisms I have made to the other sub-divisions, upon which it is predicated.

In division 5 is provided for general expenses. And they have

applied the train cost and such locatable intrastate and interstate costs as they have determined up to this time, to a further sub-division of general expenses.

These general expenses are, executive, legal, accounting and auditing.

Certainly the function of the accountant is very greatly affected by revenue. I do not see that it has any relation to trains or train mileage.

I cannot see that the law expenses are in any wise affected by it. Most of their work is in the direction of conservation of the revenue.

I think this is subject to all of the criticisms I have directed toward the sub-division upon which this is finally based.

In sub-division 6 we have arrived at the total operating expense which has been brought down so as to represent four grand sub-divisions, namely, train costs, local and through; and other
4434 costs, intrastate and interstate, the last two being considered locatable.

Now, it is sought to divide these train costs, arrived at by these various methods, upon a ton mile basis, as between local and through.

Q. In sub-division 7 of this exhibit, for the purpose of dividing the expenses between these two classes of trains, they have adopted for local trains 26% and through trains 4.96%:

I wish to call your attention to that deviation from the application of their October percentages?

A. I think this is the most graphic illustration of the incongruities that come up through the application of a six month's ton mile result with the results of the month of October, because we have now dropped down by applying those results, from the 28.51% which you mention to the 26% which is here shown, as applicable to the intrastate business on local trains; and from 5.59% of intrastate business on through trains to 4.96%. Thus indicating that in some of the months throughout the six months' period there was even a very much greater difference than this average would indicate.

The great objection, however, to this method, is the fact that they have used car miles, engine miles, tons, and in practically all instances have applied the October, 1907, results to the six months' period.

And now, to this composite result they seek to apply a further percentage which is predicated upon the ton miles of a
4435 longer period.

The ton miles is the result of computations by the Auditor, and is as unreliable as a divisor for the reasons I have stated.

It is further unsatisfactory because it does not satisfactorily take into account the increased elements of cost as between the handling of intrastate on one hand and interstate and transstate freight on the other hand. One of which and a very potent one, is on account of the difference in haul and the difference in the expense of handling.

Q. What, in your judgment, is the difference in cost of handling intrastate business over interstate business?

Objected to by counsel for defendant as not proper on rebuttal.

Col. MOORE: I am asking that question as a foundation for another one I wish to ask: I can put it in a different way, if you want it.

Q. Mr. Ludlam, one of the state's accountants has testified that under the method adopted by the state in this case, the increased expense of handling intrastate business over interstate business is 87%: State, if in your judgment that is a proper allowance and if it is not state in what respect it is not and why you think it is an improper allowance?

Judge HILL: Let me call attention to this: Mr. Ludlam gave that, or I believe it was Mr. Wharton—as the figures of the cost
4436 as worked out by this exhibit. He was not basing an independent judgment upon that, but gave that as 87% based on this exhibit. It was not opinion evidence but simply mathematical evidence based upon this exhibit.

Col. MOORE: In order to meet the suggestion made by counsel I will state that Mr. Ludlam stated that the result of the figures obtained in the method adopted by the state was to apply 87% increased cost of intrastate above interstate freight, and Mr. Nay figured it out and puts it at 86%.

Now, I will ask you to state whether in your judgment that is a proper allowance of difference; and if it is not, state why and state in what way it fails to make a proper allowance.

Judge HILL: I submit if this were direct testimony it would be perfectly proper if Mr. Gray would go through this exhibit and give his views in regard to it, but this is getting into the direct case on rebuttal, which is not proper.

Col. MOORE: I think there is no impropriety in that.

Judge HILL: I do not think it is a question of impropriety, but a question of legality.

Col. MOORE: That is the only sense in which I considered it, from the standpoint of legality.

A. I do not consider that is a correct allowance. I do not consider it is enough.

Col. MOORE:

Q. Subject to counsel's objection, to be determined by the Court, I will ask you to state what your views are as to the amount of the difference and then state why you think that difference exists
4437 in reference to the figures submitted by the State in those exhibits, and your view as to what the difference is.

A. My judgment for a long time, as the result of giving such study to this mooted question as I could, such intelligent study as I was capable of, has been that the cost of handling intrastate freight business as against the cost of handling interstate and trans-state freight business, under the conditions which prevail in the Southwest, in practically any of the States in the Southwest with which I am familiar, will run from three to five times as much. In the subsequent study I have given the matter I would be inclined, if I changed at all, to raise the range of that cost.

Q. I understand you to mean if you were to deviate from your estimate of three to five you would be inclined to raise?

A. Yes, sir, to raise the five somewhat.

It is such a difficult thing to reach and determine that one has to make as wide a range as possible. It comes about through such a variety of causes and conditions.

Q. It is in evidence in this case in a large amount of testimony introduced by the complainants, that the revenue theory is the proper method of dividing the cost of operation between state and interstate business. You have seen and just gone over the methods adopted by the accountants for the state:

4438 I wish you would state what your views are as to the relative merits of the two methods of division.

Counsel for defendants object to the introduction of testimony from this witness, in rebuttal, as to the revenue theory. (Here follows colloquy.)

Col. MOORE: I will change my question.

Q. What do you think of the merits of the plan adopted by the State's accountants for ascertaining and dividing the relative cost of handling interstate and intrastate business?

A. I feel it is an unsatisfactory basis for the reason that it is not a consistent theory. That is, not consistent to itself; in that it has used a number of varying methods. Those methods being the car mile, ton mile, arbitrary assumptions as to the relation between the locomotive mile and the car mile; and that it has applied over a six months' period a result determined upon in one month; and that result in itself and in the nature of things is an unsatisfactory one and an indefinite one.

That at any point throughout its deductions an error or a switch of the business in the other months would very materially affect the final result.

That it is objectionable because it is difficult of understanding. It assumes conditions which in practice we are not able to verify.

4439 But, above all, remains the fact that there is not a proper allowance that has been made for the relative cost of the two classes of business.

Q. Mr. Gray, speaking of this plan of separation from the standpoint of the State, as to the arbitrary that has been allowed in these various sub-divisions, for instance, maintenance of way, they have made an allowance of fifty per cent to local trains on account of station switching; and in maintenance of equipment they have added fifty per cent to the mileage made by the yard locomotives for possible maintenance due to yard switching, to which has been added an additional fifty per cent for possible extra maintenance due to switching service.

And in maintenance of freight cars there is an allowance of four to one in favor of local trains on account of more frequent stops made by the local than the through trains.

That enumeration will illustrate what I mean by the arbitrary assumptions.

If those arbitraries were correct and there was any way to arrive at what division would be proper and you could say these allowances would be proper in favor of the local trains, would that account for the excess cost of handling intrastate over interstate freight?

A. No, sir.

4440 Q. Mr. Gray I will now call your attention to Exhibit M in this case, in which an attempt has been made to divide the expense of passenger traffic:

The State has in that exhibit departed from the method adopted in regard to freight and has not sought to segregate that class of expense as between local and through trains, but has used the car miles of the trains:

You have been over and examined that exhibit, have you not, Mr. Gray?

A. Yes, sir.

Q. Will you take up that exhibit before you and begin with the beginning of it and call attention to such parts of it as you desire and state your views about them.

A. In the deductions throughout this theory, starting in with maintenance of way and structures, the car mile basis has been adopted entirely.

Why the locomotive mileage has been dropped, although used in freight statistics, it is hard to understand; especially as the proportion of locomotives to cars is very much greater in passenger than it is in freight.

The coach, Pullman, mail and express car mileage has been set up and from those the percentages have been reached and the expense of maintenance of way and structures for six months divided upon percentages found to have been applicable in October, 1907.

4441 This is objected to because no consideration has been given the locomotive, because it assumes that the expense of maintenance occasioned by the passage over the rails of a coach is the same as that of a Pullman, or a mail car, or of an express car.

All of the Pullman cars, a very considerable and increasing proportion of the coaches, have six wheels per truck; most of the mail cars and by far the greater proportion of express cars, have four wheels to the truck?

The theory is objectionable because it applies to the longer period of six months the car mileage of October, 1907.

But it is objectionable principally because it seeks to apply percentages to an expense, the greater proportion of which is fixed, and not affected by the flow of traffic.

Q. What is the next division?

A. In division No. 2 "Maintenance of Equipment" it is sought in sub-division "A" to divide the expense of repairs to locomotives on the car mile basis:

It is impossible for me to conceive any relation between these two and I have never known of its being used. It must assume, to justify itself, that the repairs to a locomotive hauling a three car

train, are one-third of the repairs to a locomotive hauling a nine car train—which is wholly incorrect.

It eliminates the question of the relative damage occasioned
4442 by the different classes of service, local and through, which heretofore has been considered.

Sub-division "B" covers repairs to passenger train cars:

These repairs have been apportioned to coach, mail car, express cars, on a car mileage basis.

May I ask if that is actual mileage for the period or is this the month of October, 1907?

Q. This is the month of October, 1907, as I understand it.

A. This is not dependable for the reason that it assumes the repairs to a coach are the same as those to a mail or express car—which is not correct.

It is further objectionable because it has assumed a proportion of express car mileage to the total in the month of October, which is improbable as applied to other months of that period, when fruit and perishable stuffs are moving, and there must be further an arbitrary deduction because there are other classes of cars which are not included; for instance, combination cars, which must have been arbitrarily thrown into one or the other of these mileage figures. Such assumptions are necessarily arbitrary, whatever they are.

Q. There is one other thing I want to call your attention to: it is in evidence in this case that the interstate passengers are
4443 carried largely on local trains: it is also in evidence that local trains stop much more frequently than do the through trains: would not there be an increased expense in starting and stopping applicable to the trains that carry the local passengers, which is also unfair as a basis of division, as between those two classes of passengers.

A. I have not gotten to the point yet where it is sought to divide it between them.

Q. I did not mean in the general division, but I mean in dividing the expense between the cars that carry these passengers, if you wanted to get at it on this method, should you not, instead of doing it by the cars, ascertain the expense of service connected with those cars?

A. No, sir, that is not applicable to this sub-division, because this is just a division between coach, mail and express car miles.

Q. I just wanted to call your attention to it. Pass on them to the next.

A. Sub-division "C" provides for the application of percentage brought about by the four classes of car miles, and those percentages are used to divide the supervision and general expense appertaining to maintenance of equipment.

I want to explain that in this account has undoubtedly been included all of the shop expense, repairs to and use of tools, fuel, the mechanical supervision of shops and terminals; and it is sought to apply this car mileage, irrespective of locomotive mileage, or aside from considering the locomotive as a factor.

4444 I want to say that it is not an over-statement to say that in the shops 90% of the tools are provided for and are used in connection with locomotive repairs; that the expert men who are selected for the mechanical department are chosen because of their familiarity with machinery or locomotive repairs and maintenance; that 90% of the detail drawings made by the Motive Power Department employees, and 90% at least of the accounting handling by the office force, and the general correspondence and records, has relation directly to locomotives.

There is not the same degree of intelligent supervision required with regard to coach repairs.

And when it is sought here to eliminate the most important feature of the supervision and the use of the shops, it makes a very unsatisfactory sub-division.

Q. What is the next sub-division?

A. In division No. 3 "Traffic Expenses," and I would say practically the whole objection to this division is the fact that it has introduced into an equation already proceeding along another line, an entirely different basis, in that the gross earnings have been applied.

I do not contest their fairness, but I do feel that its introduction into this problem renders the whole inconsistent.

Q. I want to call your attention to the fact that this third
4445 sub-division, "Traffic Expenses," has included mail and express, and charged 19.33% of that expense to mail and express jointly:

Do you think it is proper to charge that expense to those cars?

A. I have tried to express that in my criticism.

As I say, if the theory were consistent with itself, I would have no objection to that.

But to set out in this one account alone and apply the gross revenue, to arrive at percentages and charge in the one element of expense alone, this amount against mail and express cars, is unfair, in my opinion.

Q. As I understand it, that represents commercial agencies, and things of that sort; agencies to hunt up business; and that expense is not incurred for the purpose of getting mail or express business by railroads, as I understand it.

A. It is so small as to be infinitesimal.

Q. Go on to the next item.

A. Division 4 of "Transportation Expenses" sub-division "A" covers station expenses and this is divided between intrastate and interstate business on a basis of the number of passengers of each class handled, after first making an arbitrary deduction of ten cents per day for the handling of mail at certain stations; and as-
4446 suming further that the intrastate passenger uses two terminals as against an interstate passenger's use of one:

My criticism of this is that it primarily assumes that the station cost of handling intrastate passengers doubles, which is not carried through any of the other sub-divisions.

Further, it assumes that an intrastate passenger occasions only

twice the expense of an interstate passenger, which is wrong, for this reason.

In order to intelligently answer that question I want to ask what is the average haul of these interstate and intrastate passengers.

Mr. JOHNSON: The average haul on the Iron Mountain of state passengers is thirty miles, and of interstate passengers 118 miles.

The average haul on the Cotton Belt of state passengers is 23 miles, and of interstate passengers 12 miles.

Mr. GRAY: Is this ten cents a day an assumption, or is it supported by evidence?

Judge HILL: It is supported by the evidence of Mr. Teachout, the General Mail Agent of the Iron Mountain, who testified before the Postal Commission in Washington, that that was the proper allowance, and our accountants accepted him as an authority on the subject.

A. I would not agree with Mr. Teachout that that is a fair allowance. I think it is a violent assumption, because at
4447 some stations we handle mail across the road, and the mail does not amount to much. At other stations we handle it in some proportion of eighty rods and it is very heavy.

This necessarily assumes that except for the allowance on the terminal, the passenger who traveled 30 miles costs as much in proportion as the passenger who travels 118 miles, on the Iron Mountain; or that the intrastate passenger who traveled an average of 23 miles as against the passenger who traveled an average of 121 miles on the Cotton Belt road. This, in my opinion, is unreliable because in the 118 miles on the Iron Mountain and the 121 miles on the Cotton Belt are a large number of passengers who did not use the stations, or station employees, at any point in their transit through the State.

It is a fact that that the intrastate passenger will average a greater amount of damage to baggage. It is more frequently a commercial salesman who makes short trips inside the State, with a large amount of baggage.

It is a fact that a passenger going five miles will use every portion of the depot facilities, baggage trucks, the length of the platform and the scales; and that the passenger going 300 miles will board the train with his valise.

I think it is fair to say that is an extreme of the two, but
4448 it is representative of what we find in our business every day.

With the short haul comes the greater proportion of the expense. The shorter the one haul is, the greater the other haul becomes, and the greater becomes that difference in the expense.

I want to say before I leave this one article, that of all the divisions which I have had occasion to criticise in this matter, this is the closest approach to being somewhere near a correct allowance. It is unfair only when taken in consideration with all the balance.

Q. I want to call your attention to the items that are embraced in yard and train expenses. Look at this paper and state what is embraced in those.

A. This expense includes——

Judge HILL: To what are you referring?

Col. MOORE: Mr. Nay probably testified to it, and I want Mr. Gray, if he knows, to state whether that is correct.

Judge HILL: What I want to know is what you are putting before Mr. Gray as contained in that heading. If it is an exhibit refer me to the number, and if it be testimony refer me to that.

Col. MOORE: I handed this paper to Mr. Gray for the purpose of asking him if those items are included in that.

A. I cannot do that Col. Moore.

Q. I will ask Mr. Johnson.

4449 Mr. JOHNSON: Those items make up the $549,069. It is merely an analysis of the different items.

Judge HILL: That is what I want to get.

Mr. JOHNSON: You want the items?

Judge HILL: Yes.

Mr. JOHNSON: Yard and train expense under the heading of passenger service includes the following items——

Judge HILL: Is that the Interstate Commerce Commission classification you are using?

Mr. JOHNSON: No, it is the classification used in this case:

| | |
|---|---|
| Yard service | $15,124 |
| Train and engine men | 182,772 |
| Fuel and other train supplies | 135,712 |
| Care of passenger cars | 50,600 |
| Engine house expenses | 46,499 |
| Wrecks | 17,879 |
| Injuries to persons | 56,128 |
| Damage to stock and property | 39,264 |
| Miscellaneous items | 5,088 |
| The total is | 549,069 |

These items are made up from the Interstate Commerce Commission classification primarily, and then adjusted to meet the Missouri Pacific classification, as has been explained already in this case.

4450 Mr. GRAY, resuming:

A. (after examining statement): This portion of the expenses is divided under this theory by assigning to the coach, Pullman, mail and express in the proportion that the mileage of those classes of cars bears to the total mileage of all the passenger cars.

It eliminates the locomotive as a factor, although it includes injuries to persons, in which the locomotive cuts a very considerable figure.

It divides engine house expenses on a car mileage basis, which assumes it costs three times as much to clean, knock the fire, and possibly fire up on an engine which had handled nine cars as it does on an engine which handles three cars—which is not true; that the proportion of fuel and the proportion of train and engine men

does not bear a true relation to the number of cars handled, but more particularly to the class of engines used.

Train men being largely paid on the train mile, engine men on the engine mile, but subject to variation according to the type of engine used.

It is erroneous, in my opinion, as affecting yard service, because one train of four cars will frequently receive more attention at the terminals in the way of switching than will a through train of nine cars.

It applies a car mile proportion to wrecks, which in the shape of passenger trains at least is not affected by the number of
4451 cars handled. Our experience being that so far as derailments are concerned, at least, by far the greatest percentage is due to derailments of the tender, which is a part of the locomotive, and which has not been included in this computation.

Sub-division "C" seeks to divide the lost and damaged baggage between the intrastate and interstate in proportion to the gross earnings of each: it seems to me if it were desired to be specific, here is one item which could be.

But it is chiefly objectionable, in my view, because it employs another factor or method which is injected into a theory, that is not consistent with it.

Sub-division "D" provides for a division of all the remaining expenses, supervision in general, on a basis of what purports to be two charges, which includes the car mileage, as I have already enumerated, and cetrain expenses which are assumed to be directly chargeable to intrastate and interstate; and from this another percentage has been arrived at.

This account includes the cost of superintendence of transportation; salaries of the Superintendents; a portion of the salary of the General Superintendent, and their respective offices; all of the Superintendent of Car Service or Transportation, with their offices:

Now, to apply this theory we have got to assume that in
4452 this supervision, where the dispatchers deal entirely with trains as units, where the Superintendent of Transportation and his clerks deal entirely with cars as units, that the expenses are to be sub-divided upon the car mile basis.

I think it is well to say in passing this sub-division, that a good proportion of those expenses is for dispatching and it has no relation whatever to the car mile.

One of the principal objections, however, is the fact that this is built up out of conditions which it seems to me are subject to criticism for the reason I have given, and that the percentage now arrived at is from a variety of causes, which have no relation to each other and are not one hundred per cent of any one thing.

In division 5 it provides for the general expenses, and that proportion of the general expenses chargeable to passenger is sought to be divided upon still another per cent, which is the result of an addition of the last percentages to those of each account.

If the car mile basis is not proper, for the reasons I have stated, it applies with greater force in the last two, numbers four and five,

because they have been distorted at the foundation, and the inequalities are even greater at this stage.

In divisions 6 and 7, having reached this point where we have coach, intrastate and interstate, it is sought now to make a
4453 final division of the cost of coach and Pullman service, which has heretofore not been divided between intrastate and interstate business, using as the divisor in this case the percentage of the passenger miles of each class of traffic for this six months period:

The objection to this is, the same as I have urged to the preceding paragraph, it has all of the objections which I have urged to the car mile basis; it is in my opinion valueless because in this percentage has been placed the passenger miles which were handled in Pullman cars and which were handled in caboose cars.

Q. You mean passengers?

A. Yes, sir. The passenger miles which were handled in Pullman cars and which were handled in caboose cars, and which must have been an unknown quantity.

This division presents the further objection that in its last analysis there is no consideration given for extra cost of service intrastate versus interstate.

It proceeds further to divide cost of Pullman service (which has been previously arrived at on a car mile basis), upon an arbitrary assumption that 25% was intrastate and 75% was interstate.

I am not able to say whether this is correct or incorrect; nothing in my experience would justify either figure conclusively or with sufficient accuracy to divide over $300,000 worth of expenses.

4454 In division 8 the results of these various computations are carried and added to the cost of the intrastate and interstate which had been previously located.

The mail and express business has been charged in that proportion of the total cost which the mileage of the mail and express cars bears to the total car mileage.

It must be remembered that the mileage used is that of October, 1907, being one month of the six months' period.

In this division is a proportion for the miscellaneous revenue, taxes, rentals, hire of equipment, dining car deficit, value of property, and the gross revenue has been used in determining these:

My comment on that would be that it is not a consistent theory which swaps from one basis to the other, and that under certain conditions the allowance by the state in this case would be unfair to the state; while under other conditions it would be unfair to the railroad; that it is chiefly objectionable from the fact that it is not upon the same basis as the major part of the theory.

The chief result of these theories in the passenger side of the expense is in the result, and I think it is fair to judge by that.

Take, for instance, the matter of express earnings: if there is any department of the railroad's income that represents the least expense to the dollar received, it is the express business.

4455 The determination of the space allotted in the train upon which this express is carried is determinable by the railroad.

Ordinarily an express contract provides that the Railroad Company shall allow space at the stations, if it has the space to spare. No contract that I know of expressly provides that the Railroad Company must furnish this at its expense, as in the case of the mail; there is no arbitrary allotment of space on a train for the express as in the case of the mail. There is no arbitrary allotment of space at the stations. No railroad employee is required to handle a pound of express, as is the case with mail, where the distance is less than eighty rods from the post office, or as is the case at transfer points, where the entire cost is borne by the railroads.

And yet the deduction which this theory finally results in is that it cost $172,475.77 to earn $133,910.82.

Q. Does this method of division of passenger expenses between intrastate and interstate passengers, if it were correct in principle, provide for the increased expense of intrastate passengers over interstate passengers?

A. It does not, in my opinion.

If you will permit me to say, Judge Moore, it is further objectionable because in the manner of reasoning employed there has
4456 been an undue amount of expense attributed to the miscellaneous earnings, such as mail and express.

4457 Cross-examination of Mr. CARL R. GRAY.

By Judge HILL:

Q. It seems you have approached these exhibits from a little different viewpoint from what they were put in. I gather from your statements that you regard these exhibits as an attempt to absoluely divide all traffic between local and through and subsequently between state and interstate, as something of an ironclad rule on that subject, do you not?

A. I do not believe I understand that question, Judge Hill.

I regard these (indicating exhibits) as setting up certain conditions and assuming certain arbitrary conditions as facts, which in their nature are hard and fast.

Q. I want to call your attention to the testimony of Mr. Wharton, at the time he put in his exhibits, explaining the plan upon which the work had proceeded:

He said "From the reading of the testimony in the Missouri Case and my understanding of the purport of that testimony, it appeared all the time that the differences in the cost of state and intertsate business were mainly the differences in the cost of local and through trains. The witnesses all seemed to testify that way and we determined that if it was possible we would work up statements showing the cost of local and through business and after getting that cost, we would ascertain in the best manner
4458 possible the cost of state and interstate business carried in the two classes of service; in that way getting away from any question of theory, but getting down to an application of the facts and of the testimony given in that case and subsequently given in this case."

So you see from that it is an attempt—whether successful or not I will discuss with you later—but it is an attempt to apply this formula to the testimony that had been given in this case.

A. I do not agree with that, except in part.

The testimony that I gave and heard in the Missouri Rate Case, did regard the local freight train as a very material consideration, but never as wholly fundamental; and only as one of the incidents affecting the excess cost.

Q. That is true of your testimony which is given in that case, but I want to call your attention to the testimony given in this case:

You know Mr. Doddridge, do you not?

A. Yes, sir.

Q. You know that he has been General Manager of both the railroads that are parties in these proceedings, the Iron Mountain and the Cotton Belt?

A. I remember that.

Q. You would regard him as qualified to speak for operating conditions on the Iron Mountain and the Cotton Belt, would you not?

A. As to operating conditions, yes.

Q. Here was his attitude in this case:

At page 28 of Volume 2 of the printed record he was asked these questions:

4459 "Q. You were employed by the Missouri Pacific in the Missouri Rate Cases, were you not?

A. Yes.

Q. You attended practically all the sessions of that hearing, did you not?

A. I attended a great many of them; I did not attend all of them, but a great many of them.

Q. You were in constant attendance at those hearings, though, whether in daily attendance or not?

A. Yes.

Q. You acted in an advisory capacity towards the counsel and the other expert witnesses in that case, did you not?

A. I acted as an advisor to the counsel and discussed some of these questions with a good many of the witnesses.

Q. You have occupied the same relation in this case, have you not?

A. Well, yes, but I have not had any conferences with any witnesses in this case."

Now, a witness occupying that position in this case and putting forth his opinion, would not you think the state would be entitled to rely upon that?

A. That is hardly a question I could answer. I do not know what Mr. Doddridge's opinion may have been. If I am given his opinion I will comment on it.

Q. I will give you that directly, but before we get to that, I am asking you if in making up these exhibits, if you take the statements of a witness who has had the experience Mr. Doddridge has, and who testified as he did here which I have just read you, that he acted in

an advisory capacity to the counsel in both the Missouri
4460 Case and this case, that the state would be justified in taking his opinion in preparing their exhibits, would they not?

A. I still want to say I would express my opinion of Mr. Doddridge's value in this manner purely upon operating conditions. I believe he is familiar with the operating conditions as they obtained on the Cotton Belt and on the Iron Mountain road at the time he managed those railroads, but I do not believe Mr. Doddridge is in any better position by virtue of his managing those properties, to testify in the matter of a division of cost or a matter of the method of arriving at that than any one of the operating officials of today—perhaps not quite so much.

Q. That is getting away from my question—unintentionally I am sure.

A. Yes, if I have done so it is unintentionally.

Q. My question is not how you would view Mr. Doddridge, but I ask you if the state would not be justified, in view of the relation which he occupied to these roads and to these cases, to accept his statements given as a witness in these cases, to prepare exhibits from? I am asking you from the viewpoint of the state and not from your viewpoint?

A. I would say that the state is justified in giving weight to a statement made by Mr. Doddridge.

Q. Mr. Gray, I want to read to you from Volume 2 at page 59 of the record, from Mr. Doddridge's testimony, as follows:

"Is not the only difference in cost of the intrastate and
4461 interstate freight carried on the same train, the one of the extra terminals?

A. There is no difference in the cost of one kind of freight or another kind of freight, arising from a distinction in the terms "state" or "interstate."

If the conditions are the same there would be no difference in the cost.

Q. Take freight carried on the same train?

A. Well, I say, if the conditions are the same; that is, the kind of freight, and all of the other elements that enter into it, there would be no difference arising from the terms "state" or "interstate." But the conditions must be the same to say that there would be no difference in the cost, because there might be difference in the conditions. The character of the freight, the weight, and other things.

Q. Take it, the same kind of freight and of the same character, carried on the same train, where is the difference, except in the terminals?

A. There would be no difference in the train cost."

I want to read to you from the testimony of the Frisco case:

"So far as the particular freight is concerned, carried on those particular trains, there would be no greater cost in transportation for interstate freight than state freight, except the terminal charge.

In order to ascertain the results correctly, you would have to take into consideration the amount of state freight that is carried upon

that train, as applied to the total state freight carried on the other train.

In other words, what I mean to say is, we have to take into consideration all the trains and find out what relation the state freight bears to the whole."

And then Mr. Doddridge was asked this question:

"That is a correct analysis, isn't it?

A. Yes, sir, I think so."

4462 Q. Do you agree with that, Mr. Gray?

A. No, sir, I do not.

Q. You do not regard that as correct?

A. No, sir.

Q. You know Mr. I. G. Rawn?

A. I knew him quite well.

Q. He was an operating man of a great deal of experience, was he not?

A. Yes, sir.

Q. Mr. Rawn said at page 368 of this record:

"For the purpose of determining the cost of operation of tranportation, the question of state and interstate traffic is not the method of consideration. The method is that of through and local business."

Would you agree to that proposition, Mr. Gray?

A. Not without qualification.

Q. Without taking up in detail the testimony of other witnesses introduced by the railroads, I will state that Mr. Edmund D. Sewell, and probably two or three others, I do not recall them all now, testified in substance the same thing. That there was no difference in the state and interstate per se, but the difference was in the character of the service, whether it was local or through; and in order to determine state and interstate you had to ascertain the local and through and the proportion of state and interstate on the local and through trains.

Do you agree to those propositions?

Mr. MOORE: I want to state in connection with that, that

4463 while I do not object to it as an assumption on your part, Judge Hill, I disagree with yau as to your understanding of the effect of the testimony.

Judge HILL: That is the way I understand the testimony and I put it that way as my understanding of the testimony.

Mr. MOORE: I don't want my silence to imply that I agree to that because I have a different understanding of the testimony.

A. My answer is that if the position has been taken by those gentlemen, that there is no distinction between interstate and intrastate freight, that does not equally apply to the through and local, that I dissent—I do not agree with them.

Q. You spoke several times yesterday of the inconsistency of the state's accountants in various ways:

I will ask you what you think of the inconsistency of the railroads in this case, putting Mr. Doddridge and Mr. Rawn on the stand and

proving these facts and then putting you on in rebuttal to take a different view of the same proposition?

Col. MOORE: I do not concede that the railroads have taken different positions. You are arguing with the witness.

Judge HILL: I am asking him about the views he expressed yesterday and I have read the testimony of Mr. Doddridge and of Mr. Rawn.

You disagree with that, Mr. Gray?

Mr. MOORE: You have read only scraps of the evidence.

4464 A. I disagree with what you have read of their testimony, if it is without qualification.

Judge HILL:

Q. Going back to the consistency of their position: after having heard that testimony what do you think of the consistency of the position of the railroads in putting them on and then putting you on and proving a different state of facts?

A. Your statement that they have proven anything by me, is a compliment to me.

I say in a situation so complex and so unnatural as this, it is not a surprise that the railroad men might disagree.

Q. That still does not answer the proposition of the inconsistency of the railroads, does it?

A. I do not know that I can comment on the consistency or the inconsistency of the handling of this case by either side.

Q. Did you not comment on it yesterday?

A. No, sir. I commented only upon the consistency of this theory with itself (indicating exhibit); or its inconsistency with itself and not on any attitude of the state or of the railroads.

Q. Is not that the same proposition here, where you see testimony of the witnesses introduced on behalf of the railroads, that express different views on those subjects from those you express?

A. Is it competent for me to comment upon that?

4465 Q. I don't know whether it is or not, but you commented upon a similar thing yesterday and if it was competent yesterday, it is today.

Col. MOORE: I object to the question as putting the witness in an attitude that I think is really not proper.

Judge HILL: You opened up this thing.

Col. MOORE: It bears no resemblance to the comments made yesterday by the witness upon the exhibits because he was contrasting or comparing one feature of the exhibit with another feature of the exhibit; and was not commenting upon the consistency or inconsistency of the management of the case.

Judge HILL: I am not referring to the management of the case but to the inconsistency of the positions taken in chief and in rebuttal.

Do you think they are consistent, in view of what I have read you here?

A. We are consistent, I think, to a certain point.

I do not believe the witnesses you have quoted have gone as far as they should have gone in considering this question.

Col. MOORE: You are confining that to what has been read to you?

A. Yes, sir, I am confining it to what has been given to me.

By what you say they have assumed to take as a fundamental what I regard as only one of the incidents.

Mr. HILL:

Q. Mr. McPherson testified in this case—I suppose you
4466 know Mr. McPherson?

A. Yes, sir.

Q. You know his relation to the Iron Mountain road?

A. Yes, sir.

Q. Mr. McPherson testified, as I recall his testimony, that there was no difference between state or interstate in itself. There was no magic in the state line; and that it resolved itself into a proposition of extra terminals and long and short haul: do you agree to that?

A. I agree to that a little more than I agree to the other statements you have read, because I think he is bringing in some of the other elements.

Mr. MOORE:

Q. You have not stated anything like all of Mr. McPherson's testimony. He spoke of the difference between car load and less than carload and a great many other elements that should be considered.

Judge HILL: I can turn to his testimony if you wish?

At page 398 Mr. McPherson was asked this, after going over this question of facilities and other matters:

"Your reasoning then, in its final analysis, places the difference in these classes of traffic, intrastate, interstate and trans-state, upon the difference in the length of haul and the use of the facilities—terminal facilities, I mean?

A. And the consequences.

Q. Well, that would be included in it, I take it. There are no other factors now that have influenced your judgment in this matter?

A. Yes, there are many other factors that have influenced
4467 my judgment.

Q. I would like to have them.

A. I don't know that I can reduce them to figures. They are matters of observation."

That is the substance of his views: do you agree to that?

A. I agree to it so far as it goes.

I think he has stated correctly the distinctions, but, if he has assumed that any of those alone are fundamental, I do not agree with him.

Col. MOORE: He has not done that.

Judge HILL: That is a difference of opinion. It is too tedious to take it all up in detail.

Q. Mr. Gray, you spoke yesterday of the lapovers, one might call them, where you would use one month's figures. I understand that this month of October, 1907, which exhibit was put in by the railroads, and which was subsequently used by the state, was an analysis of one month's business: you object to the use of one month in the way it was used. That is, of ton miles of freight on the local trains obtained from the conductors' wheel reports and waybills and then deducted from the total tonnage of the freight accounted for in the Auditor's office during that month, to thus obtain the ton miles of the through trains. That is what you objected to, was it not?

A. Yes, sir.

Q. Now, it seems that the railroads in making this ex-
4468 hibit took all of the system waybills dated in October, and on interline forwarded they took all such as were reported from all stations to other lines; and on interline received they took such as the agents reported as received as October business.

A. That is right.

Q. That would leave lapovers, would it not?

A. It would leave lapovers in interline received as well as in interline overhead.

Q. The inaccuracy in this statement would be in the railroads' compilation in this way, and not inaccuracy in making up the intrastate from the conductors' wheel reports, would it not?

A. The accuracy in this deduction is in what you mention, the information from the conductors' wheel reports.

Q. That is an accurate factor, and factors made up by the railroads in the way I have read you here, which you recognize as correct, is where the inaccuracy would be? That is, you mean so far as the actual movements of the freight would be concerned?

A. I mean, it is inaccurate as applied to the results of that month.

Q. Now, Mr. Gray, suppose the intrastate revenue for a given period was compiled from journals which were copies of the waybills, which were dated in a given period, so far as system business was concerned; and the intrastate interline which was reported during that month was added, so as to make the total intrastate
4469 revenue: then deduct from the total earnings for a given period this sum, and the remainder represents the interstate earnings for the given period: would the revenue so computed as a true compilation of the revenue actually earned on interstate freight transported during that given period be accurate?

A. It would be accurate so far as money was concerned. It would not be accurate as affects this application even to the operations of that month; and certainly not accurate enough to be used as a gauge for a period of months including that month.

Q. That would have the same objection to it, so far as its effect is concerned as the objection you have heretofore pointed out about this other.

A. I want to be sure that I understand your question, Judge Hill:

You mean the objection I have pointed out for using one month as a basis for determining the results of a six months' period?

Q. Yes.

A. Your question now is, does not this present the same objection?

Q. Yes.

A. I say, yes.

Q. You object to the use of ton miles compiled by the Auditor during any period, as not being the ton miles actually transported during that period. The Auditor would compile his revenue
4470 figures from the same waybills that he took his ton miles from; therefore, the Auditor's revenue figure for any period would not be the revenue actually earned on the freight transported during that period: is that correct?

A. I do not want to be misunderstood on that matter, but I object to the Auditor's ton miles figures for October being used as a basis, after deducting from those ton mile figures the actual conditions proven to have taken place on local trains and that deduction of a certainty being made from an uncertainty.

My objection was to the application of that principle throughout a six months' period.

Q. I understand that. But this is going, I think, to the same principle, carrying it to another application of it. That is, you take a given period, whether that given period is one month or six months, two months or three months: if you take a given period to use the ton miles compiled by the Auditor during that period, as represented by revenue, they are not the ton miles that represent the freight actually transported during that period?

A. That will nearer approach accuracy as the term is lengthened out.

Q. That is true. The principle is that you object to any given period being used in that way?

A. Yes, sir, and my principal objection, Judge Hill, as I stated yesterday, is the selection of the particular months, and the
4471 further action of the state experts in arriving at the actual conditions and deducting the exact ton miles from what was not exact, as representative of that month's operation.

Q. I understand that. And I am just carrying that same principle now to this other proposition.

Suppose you took the statistics made up in this way of a six months' period to represent a six years' period: would not that be equally objectionable as representative of six months, as one month would be objectionable as representative of a six months' period?

A. That would depend upon the railroad and the conditions.

I would say that if you apply any deduction to a six years' period it should be deductions based upon the entire years' experience.

Q. The expense of this period is actual. That is, represents the money actually paid out during a given period, say a six months' period.

The revenue derived in the way it has been put to you would be for some freight not transported during that given period, would it not?

A. That is a fact.

Q. There would be freight in that—say it was a six months' period, last half of one year—there would be freight in that transported in July that was billed in June, wouldn't there?

4472 A. Yes, sir, that is right.

Q. And that freight would go into the revenue report for June?

A. Or whenever it was reported.

Q. And on the other end of the period there would be revenue credited to December, when the actual movement took place in January or later; that is, a part of it at least?

A. Yes, sir, that is right.

Q. So, if you take any given period and take the expense of that given period, that expense does not actually represent the cost of earning the revenue that is made up in this way?

A. With this qualification, that the longer the period the more nearly it approaches accuracy.

Q. That is unquestionably true.

That would just make the lap-over thinner the longer the period taken?

A. Yes, sir.

Q. But the principle would be the same, would it not?

A. No, sir, that would depend upon the period taken. That would be affected in the degree that the proportion of interline received and interline overhead bore to the total, and is seriously affected by that.

Q. The principle is all right. It is just a question of degree, is it not?

The principal objection you have made here, applies equally to this revenue and expense, but runs into the question of degree, depending upon the length of the period that is taken?

4473 A. My principal criticism of that, but not my fundamental criticism of the theory;—my principal criticism of that yesterday was, the assumption that the condition in October, 1907, could be used as a basis for determining the results in the last six months of 1907. But that was not my sole criticism.

Q. I do not so understand it. I understood that was just one of your criticisms.

A. Yes, sir, just one.

Q. I believe if I can call it your principal criticism, it was to using one month as being good through a period?

A. No, sir, that is not the principal criticism. That is a strong feature of my criticism but it is not fundamental.

Q. Why is it not fundamental?

A. Because it is only one of a number of objections.

Q. I want to call your attention to some testimony which has been given in this case: you know Mr. Kimbell, the Assistant General Auditor of the Cotton Belt Road?

A. No, sir.

Q. You recognize him as a gentleman who would be qualified to speak of the conditions on his road, would he not?

A. Well, with all respect to Mr. Kimbell I think there are some things on the Cotton Belt that he possibly does not know and could not know.

4474 Q. You would regard him as a qualified witness on conditions on the Cotton Belt, as to revenue and expenses, would you not?

A. As to the money involved and accounting for that.

Q. What is paid in and what is paid out?

A. Yes, sir, I would.

Q. At page 80 Mr. Moore asked Mr. Kimbell this question:

"Did the operating officers of the St. Louis Southwestern Railway Company make a test at any time after this litigation was instituted, for the purpose of ascertaining the relative cost of conducting state and interstate transportation? If so, I wish you would state what was done in that respect?

A. A test of that kind was made under my direction.

Q. What period did it cover?

A. The month of October, 1908. The temporary injunction was granted in St. Paul on September 3rd, and the month of October was selected for the purpose of this test, on account of it being the first full month following the injunction. October is rather a heavy month, but for a test of this kind, in my judgment, it fairly represents the general conditions."

Then Mr. Moore asked this question:

"Q. Would it represent, fairly, a year's business?

A. I should say so. It would represent relatively, the difference between the two classes of traffic."

Do you agree to that, Mr. Gray?

A. Being wholly without knowledge, I do not see how I could dissent from that, my understanding being that Mr. Kimbell has talked there about relative business of the Cotton Belt, this being a representative month as to income, and representative per-

4475 haps as to the relative relation between state and interstate traffic; but I would not imagine he would testify as to conditions on the Cotton Belt Railroad.

Q. I will read you a little further what Mr. Kimbell testified.

At page 92 counsel for the state asked him this question:

"Do you think that one month would fairly represent the business of your line for a year?

A. I think for the purpose of a test of that kind, determining the relative difference between the two classes of freight, that one month is perhaps as good as another.

Q. Why did you select October? A. As explained it was the first full month after Judge Vandevanter granted the injunction. He granted it in September, September 3rd; we wanted to make this test as soon as possible, so we selected the first full month.

Q. In your judgment, a test of this kind, made for the month

of October, would fairly represent the operation for a year, or for a series of years?

A. I should say so."

Would you agree to that?

A. No, sir, I would not.

Q. I believe you expressed yourself yesterday as disagreeing with that principle, did you not?

A. Yes, sir, I do not agree with that.

Q. What do you think of the consistency of the railroads putting their assistant general auditor on the stand to prove these facts and subsequently putting you on the stand to express very different views?

A. They have not asked me my view on that, Judge Hill;
4476 and perhaps I am just as much surprised as you are.

Q. Did not they ask you your view yesterday and did you not express yourself that one month would not represent a year's business or for a series of years?

A. That is what I referred to.

Q. I am referring only to what developed here and not what was said in conferences.

Is not that an inconsistent position to place their assistant general auditor on the stand to prove that one month was fairly representative of a year or a series of years, and then put you on the stand and prove that in your judgment it was not?

Col. MOORE: We object to the question, but you may answer it, Mr. Gray.

A. Your question, as I understand it is, do I not regard the railroads' action as inconsistent, in proving one thing by the assistant general auditor of the Cotton Belt and proving another thing by me.

It seems to me that the railroads could not be charged with inconsistency, because I as an operating expert entertain an opinion on an important question like this, presenting a good many complexities, differing from the opinion of an accounting expert. It is not infrequent that these departments do clash as to their opinions, and not unnaturally.

Q. That is not quite the proposition, Mr. Gray.
4477 They have put forward this month's test and proved by Mr. Kimbell that that was fairly representative for a year or a series of years and then used the figures given in that test by nearly all the witnesses for the railroads to prove the situation as presented by that test.

Mr. MOORE: I think it is fair to explain, Mr. Gray, that when Mr. Kimbell testified that was a fair test, he was speaking solely of the difference in the cost of handling state and interstate business.

Judge HILL: I understand it so.

Col. MOORE: And he says in his opinion the month adopted by him would afford a fair test as to the difference in cost of handling two classes of traffic.

Judge HILL: That is true. That is exactly correct and I think I have made that clear to Mr. Gray.

Col. MOORE: You have not made it clear.

Judge HILL: I intended to.

Col. MOORE: I know you intended to but I do not think you were entirely clear.

Judge HILL: He is speaking of revenue and expense both, on a year's business.

A. I do not believe there could be such a test that would be anything more than interesting.

Mr. MOORE: You think such a test could not be made at all? Is that what you mean?

A. Yes, sir.

Judge HILL:

Q. In addition to this test on the Cotton Belt, the Iron
4478 Mountain worked up the total figures of their business for the month of October, 1907, and put that into this case as Exhibit 26; and Mr. McPherson and various other witnesses on behalf of the railroads have used the statistics as shown in that exhibit to illustrate their position in this case; in view of that fact, would not the state be justified in taking the statistics thus prepared by the railroads and introduced by the railroads and used by the railroads, as fairly representative of the conditions in that period?

Col. MOORE: I will state now that Exhibit 26 was brought about at the request of the state, at a conference held in Judge Trieber's chambers at Little Rock. I do not recall now to just what extent Mr. McPherson or any other witness introduced by the railroads has used it; but they have not used it to any such extent or for the purpose of the exhibits to which your attention was called yesterday.

Previous question read.

Judge HILL:

Q. Would not the state be justified in using those figures to illustrate its position as to conditions in that six months' period?

Col. MOORE: That Exhibit makes no effort to separate as between local and through trains.

A. I know what Exhibit 26 is.

As I understand it, Exhibit 26 is Exhibit I of the state: is not that a fact?

Col. MOORE: No, sir, Exhibit I is based on one column of Exhibit 26.

4479 A. Without attempting to comment upon what use the railroads have made of this data for the month of October, 1907, I still believe it is unreliable and undependable to apply its results to a six months' period.

Q. That is indicating your views, Mr. Gray?

A. That is what I supposed you were asking for.

Q. I asked you if in your opinion the state would not be justified

in using that which the railroads had selected, the month of October, as the period which would make up a full statement, and after the railroads had introduced it in evidence and after the railroad witnesses had used those statistics to illustrate their views as to the situation in those six months. Then would it not be fair for the state's accountants to use it for a similar purpose?

Col. MOORE: It is not fair to state only half of the facts.

The exhibit was called for in the manner I have indicated, by the accountants in this case, and the figures at that time—and if I am incorrect Mr. Johnson may correct me—it happened that the figures for that month had been already worked up. They wanted them for three months and we refused to furnish it for three months.

Mr. JOHNSON: That statement Exhibit 26 was worked up by the railroads in anticipation of a request to be made by Haskins & Sells, and for that purpose only.

I think that has been explained two or three times.

4480 Judge HILL:

Q. You took it as typical?

Mr. JOHNSON: We took it for one month, because we could not work up any more and we took October because it was the largest business of that period.

Judge HILL: You took it as a typical month?

Mr. JOHNSON: We took it as representing the largest movement of freight.

I want to say that the freight in that exhibit is not freight handled on the trains. It is made up by the auditor from the auditor's accounts. The only purpose that that statement was used for by our witnesses was to show the relative proportion of the trans-state, state and interstate freight carried into the accounts.

Judge HILL: And the length of the haul?

Mr. JOHNSON: And the length of haul.

Mr. HILL: State and interstate?

Mr. JOHNSON: Of each class.

Mr. HILL: Now, Mr. Johnson, you selected that month of October to work up these statistics, did you not?

Mr. JOHNSON: Yes, sir.

Judge HILL: And when the state asked you for a three months' statement you said you were not willing to work that up, but you had the figures for one month already worked up, which you were willing to give them?

Mr. JOHNSON: I said in Judge Trieber's office that we had those figures worked up in anticipation of their request, which we would give them and preferred to give them that, rather than check up figures which they might make.

4481 Judge HILL: You were asked at that time whether that one month was fairly representative of the six months' period?

Mr. JOHNSON: I said it was so far as volume of business and the revenue was concerned.

Judge HILL: Didn't you say it was fairly representative of the six months?

Mr. JOHNSON: So far as volume of business handled and the revenue.

Judge HILL:

Q. Mr. Gray, my question is, after this statement was put in evidence and after it was compiled by the railroads in the way you have heard stated, and after the railroad witnesses used that statement for various purposes, to illustrate their position in regard to the statistics, contained therein, was not the state justified in using that exhibit as a basis to illustrate those same conditions?

Col. MOORE: That is objected to because that is calling on the witness to make a statement about a matter which should be determined by the court and should be determined only by the court and not by the witness.

Judge HILL: I think the witness has passed upon questions similar to that, in answer to your questions yesterday and I think I am entitled to ask his opinion about it.

A. My answer to that would be that if a month's statistical data has been testified to by the competent officials of that company as being a representative month and safe to apply to a period of
4482 six months, the state would be justified in assuming that for the basis for that six months.

Col. MOORE:

Q. You mean for the purpose for which it is being used here by the state? If the railroad accountant represented it was a proper basis for the use that has been made of it here.

A. I meant to say, if that had been testified to by the competent officials of the railroad, which would include the accounting and include the operating officials, as being one which was safe to use for a basis for six months' business, then the state would be justified in so using it.

Q. You mean if they testified it was safe for the purposes for which they used it?

A. Yes, sir.

Q. And not safe for other purposes?

A. I mean it is reasonable for them to think it was safe to use it for the purposes for which they used it.

Q. Suppose the railroad officials testified that would be properly representative of six months for one purpose, and the accountants for the state used it for another and different purpose.

A. My answer must be considered as meaning that there should have been (to be of value) unanimity of opinion among the competent officers of that company, that that was a safe month to use as illustrative of an entire period.

Q. For the purpose for which the Exhibit you criticize was used, for ascertaining the relative amount of tonnage carried by local and through trains in the month of October, 1907?

4483 A. Yes, sir, that is right.

I want to add this to that answer: that the amount of tonnage carried on local and through trains is not the only deduction which the state made from these October statistics and that my criticism extended to all of that in the same proportion.

Q. You spoke of congestion yesterday, and its effect:

A congested condition of traffic would cost you more to earn a dollar than it would cost you to earn a dollar in a normal condition of traffic, would it not?

A. That is true as respects a certain proportion of the expenses.

Q. That is the next question I want to ask you: where would the additional expense represented in the congested condition appear—in what accounts would that appear?

A. Aside from the traffic and general office expenses, they would appear in all of the operating accounts.

Q. They would not appear in Maintenance of Way, would they?

A. Yes, sir.

Q. You think they would appear everywhere except where?

A. In conducting transportation, traffic; and in the general office expenses.

Q. I think we are probably using a little different terms here. In these exhibits "Conducting Transportation" is a pretty broad term.

A. I was using Interstate Commerce Commission classification.

4484 Q. What did you intend to include in "Conducting Transportation"?

A. Conducting transportation is divided into two parts by the Interstate Commerce Commission classification "Conducting Transportation Traffic" and "Conducting Transportation, operation".

I don't remember just how you show it, but I think you call it "Traffic expenses".

My idea is that that expense is affected only in an infinitesimal way as to the general office expense.

Q. "All other expenses"?

A. Are affected more or less.

Q. You should find reflected in the expense account for everything else, except those two classes, additional expenses?

A. Yes, sir.

Q. Due to congested condition of traffic, I mean?

A. Yes, sir.

Q. You spoke yesterday of October, 1907, being a congested period: I will ask you how long that congestion lasted; when did it begin and how long did it last?

A. My best recollection of that is that the congestion increased in volume during the summer months reached its flood in the month of October, 1907, and had almost assumed a normal condition as to the handling of traffic by the middle of January, 1908.

Q. When did it begin?

A. It commenced in the early part of 1907.

4485 Q. Then practically all of the latter half of 1907, there was a congested condition of traffic, was there not?

A. Varying in degree.

Q. But it was what you would classify as congestion, all of it?

A. Yes, sir.

Q. It would be an abnormal period, taking the last half of 1907, of railroad operation?

A. That is true. It is an abnormal period, the last half of 1907, in railroad operation.

Q. The expenses would be heavier to earn a given amount of money during that period than during the normal period?

A. That does not follow.

It does not always follow that the expenses to earn a given amount of money are greater under those conditions. Quite frequently, and my recollection is that in this instance, they were less.

The expenses in gross were unreasonably swollen by that. But the density itself increasing the gross does not necessarily mean that the operating expenses increased in a greater ratio.

Q. I was not asking for the ratio?

A. Your question was if it did not cost more to earn a given amount of money?

Q. Yes.

A. That does not necessarily follow.

Q. I suppose you mean by that, in a congested period
4486 the density of traffic would tend to reduce what would otherwise be greater expense?

A. Yes, sir, that is what I mean.

Q. But still the proposition remains, as I understand your previous answer, that it would cost more during a congested period of traffic to earn a dollar than it would cost during a normal period?

A. No, sir, that is not true.

Q. That is the way I understood you a few moments ago. I suppose I failed to correctly understand you.

A. If the notes show I made that statement it is incorrect, because I did not intend to make that statement.

My position is, that a congestion will have the effect of changing physical conditions as they normally obtain, and it will have the effect of increasing the expenses in gross.

But it does not follow and it is not my experience that it will cost more to earn a given amount of money in a period of congestion than it will in normal conditions.

In fact, my experience has been the reverse; that the ratio of expense of gross earnings would be less under this condition. But the normal operation conditions are distorted during its continuance.

Q. I understood you to say that all the expense accounts would be greater except "traffic" and "general" during a congested period?

A. In gross?

Q. Yes. The gross expenses would be heavier.

4487 A. Yes, sir.

Q. But you think the compensating density of traffic in a congested period would equalize those extra expenses?

A. Yes, sir.

Q. You would say for the last six months of 1907, that even if they were congested they would fairly represent the business of the road for a series of years?

A. No, sir, I would not agree to that.

Q. What is your view on that subject?

A. I would say they do not, either for the period before or since, and practically since.

Q. They would not be fairly representative months, by representative I mean representing the business?

A. A representative month, I understood your question to be.

Q. No, I was speaking of the six months.

A. I would not regard them as being representative enough to apply to a period of years either before or since.

Q. That is the way I understood you. That answer is directed to the six months' period, and the last six months of 1907?

A. But that they are more dependable in the ratio that they bear to the one month period.

Q. You think the six months would more nearly represent the six years, than one month would represent the six months?

A. No, sir, than one month would represent the six years.

Q. Oh, yes: six months would come nearer representing
4488 six years than one month would represent six years?

A. Yes, sir, or that one month would represent six months.

Q. That is, last half of the year would come nearer representing the six years than one month would represent the six months?

A. In the approach it makes to representing the entire year's operation.

Q. But neither of them you regard as dependable factors?

A. I would regard them as persuasive.

Q. But not dependable?

A. Not as a positive basis.

Q. When did you say normal conditions were resumed following the congestion in 1907: about the first of the next year?

A. Something about the first of the year, the congestion was relieved, the cessation of business activities began in October.

Q. What would you say of March, 1908: would that be a normal month?

A. No, sir.

Q. It would be a lighter month?

A. March, 1908, would not be even a representative month for March, and March is ordinarily a light month with the Southwestern roads.

Q. It would be unusually light? Its error would be on the side of being too thin rather than too thick, as October, 1907,
4489 would be?

A. That would be my recollection of that month.

Q. October, 1907, and March, 1908, then, would represent the two extremes?

Q. Yes, sir, with the further qualification that in March, 1908, every railroad was exercising the pruning knife until the operating

results in that month were not at all representative even of its business. They were trying to economize not only for that month but looking backward.

Q. Would you probably then find the most economical operation that could be found, in that month—railroads running on a cheaper basis?

A. Yes, sir, you would find that ought to reflect, if there were no arbitraries taken in for previous months' operation—economical operation.

Q. Taking up now the accounts you discussed yesterday, the first one is "Maintenance of way": I want to call your attention to the principle upon which the accountant worked in that case.

I do not know that I can turn right to it in the record but I will try to state it.

In attempting to get a factor or unit with which to apportion the expense of maintenance of way they sought to get a factor which would represent the use to which maintenance of way was put. It was not represented as car miles or any other factor would measure actual conditions, but they should take a factor which would
4490 most nearly measure the use for which these expenses were incurred.

I will ask you if that principle is not sound. I am not asking you whether they have properly applied it, but I am asking you as to the principle?

A. No, sir, I do not think it is sound. Because it assumes to divide 100% of an expense in usage when fully 75% of that expense is not affected by that usage.

Q. I understand that. I think the witnesses on behalf of the state put that element as high as 90% as not affected by usage but they still contended that the way was for the use of trains and the use of cars, and the same factor which would represent the use should be the factor with which to apportion the expense, notwithstanding even as high as 90% of it was due to wind and weather conditions.

Don't you think that is a sound principle. Whether they applied it correctly or not I will discuss with you later. I want now to discuss just the general proposition.

A. No, sir, I cannot agree that that is even a sound principle as applied in an effort to divide expense as between these two classes of traffic.

Q. Take a business concern: suppose a man had a factory and manufactured two or three different kinds of articles in that factory? And his roof would get leaky and he would have to put on a new roof and he wanted to apportion the expense of that new roof into his cost properly applied to the various branches of his business. No one of those different kinds of business he was
4491 conducting there had caused his roof to leak or rot away; would it not be proper for him to apportion that expense by a factor which would represent the use to which that roof was put, or that building was put?

A. No, sir, I don't think so.

Q. You do not recognize that as an accounting proposition?

A. No, sir. My application of that being that if a man in manufacturing business was manufacturing coats and trousers and vests and hats and shoes, he would never in the world attempt to apply repairs on his roof to shoes and trousers, but he would, if he attempted any division, in ordinary practice he would do it upon the money involved in the transactions. Granting he had been required to divide that between shoes and trousers.

Q. Money would be one factor but would not that in itself represent the use to which that building was put.

I am not discussing with you now the different factors. I will take that up later. I want now to get at the principle.

Isn't it a right principle to take the same factor which in the judgment of the particular individuals most nearly represents the use to which that property is put?

A. Not of necessity use. The value is as fair.

We have to assume in this case we are required to do an unnatural thing, and what is the fairest way to do it.

4492 We conceive for a moment that this manufacturer who manufactures these different articles, and that the use made of that building in making a pair of shoes which have a value of $2.00 was three times as much as a coat which had the value of $12.00, it certainly would not be right to charge a greater proportion of the repairs of this roof to the shoes, of a gross value of two dollars, as against the coat, of a gross value of twelve dollars. And yet one has really used the roof more than the other and longer.

Q. That is just indicative of your method of apportioning it?

A. No, sir, it is only in criticism of this method.

Q. I am asking you for the principle.

Would you take the gross earnings or net earnings, if you were going to take any factor,—using the factory as an illustration?

A. Following out this factory illustration, I would use the gross value of those articles.

Q. Suppose you had stored all your shoes in the building, for six months, because the market had gone against you, and you had not sold any and you did not have any gross earnings: then what would you do?

A. That would be "Hang-over," wouldn't it? Of course there are different kinds of hangovers, but I would say that would be affected a good deal by the time that roof was repaired. It would be a question of judgment. But the fact would not be changed, this being a factory and not a warehouse.

4493 Q. As I take it, the only difference between us is the question of what would be the proper factor: you recognize the fact that there would have to be some factor taken there to account for this 75, 80 or 90 per cent that was due to weather or natural conditions, and which did not represent the use of the property. Would it not be proper to use some factor, and you may differ about what that factor is, which would represent the whole of that expense and not merely the 15, 20 or 25 per cent that was represented by the use?

A. Yes, sir, I say some factor should be used which would reach the entire amount of this expense.

Q. That is the point I was trying to make.

What factor should be used on the place is a matter "the doctors would disagree about," is it not?

A. Yes, sir.

Q. Is not the car mile a known factor used among railroads for the use of joint tracks, for maintenance of way expenses?

A. I have had experience with contracts where that was used and other contracts where the train mile was used. Neither one is satisfactory.

But there is this fundamental difference: that each of the trains of the parties to these contracts are entities in themselves, and no necessity arises for dividing those trains or those cars.

It is a custom but it is not a basis that we feel brings
4494 about an entirely fair approximation of this division of expenses?

Q. But it is in common use?

A. Yes, sir.

Q. The car mile in some instances and in others the train mile is the common measure for dividing the expenses between the railroads themselves?

A. That is right.

Q. Are you familiar with the litigation which took place here in St. Louis between the Wabash and the Rock Island Railroads?

A. Pardon me a moment.

I wish to say also that I have knowledge of the expenses where the car is used.

Q. The number of cars?

A. Yes, sir, the number of cars. In that case, the car using the track for five miles would count just as much as the car using it for 100 miles. All these bases are in use.

Q. Are you familiar with the litigation in the suburbs of St. Louis between the Wabash and the Rock Island Railroads?

A. I only know there was a long drawn out litigation there.

Q. Do you know Mr. S. T. Emerson, a civil engineer of 36 years experience and chief engineer of the St. Louis Kansas City and Colorado Railroad?

A. No, sir, I never heard of him.

Q. He testified about that as follows——

Col. MOORE: What is that, Mr. Hill?

4495 Judge HILL: The testimony of Mr. Emerson.

Col. MOORE: We object to the introduction of his testimony in this case.

Judge HILL: This was introduced in the testimony of Mr. Byars and I want to get Mr. Gray's opinion about it.

Col. MOORE: I objected to it then and I object now to the introduction of testimony of someone in another case being read in evidence in this case.

Judge HILL: Mr. Emerson testified as follows:

"Q. I want to state to you a hypothetical case; suppose that one railroad has a right under a contract to use the track of anoher rail-

road for a fair and equitable compensation, between certain points, can you tell me what would be a proper basis to arrive at such fair and equitable compensation.

A. Well, I should think it ought to be arrived at in proportion to the use."

Would you agree to that?

A. No, sir.

Q. Then he further explains that, perhaps I had better make it fuller before I ask you the question. He said:

"A. I mean on the proportionate number of cars run over the road by the different railroads using it. Take the total of cars used on it and get the percentage."

A. I want to say I do not agree to that. I contend that it is absolutely a matter of barter. The desire of the applicant to use this track, the abilities of the landlord railroad to accommodate them, absolutely determine that.

And it is not the question of what is right in that matter—if that is the question.

4496 If the question is at to practice, all of the three systems which I have stated to you are in practice, within my experience.

Q. Mr. Van Dyne said the wheelage basis was the one ordinarily selected for the purpose. Do you agree with him about that?

A. There is a great difference as to what the wheelage basis is.

Q. They used it in this case as synonymous with the car basis.

A. You readily understand that is not true.

Q. That has been explained by witnesses: that they originally took the wheels and counted them, car mile.

Isn't that correct?

A. I imagine tha tthe wheeleage has commonly become an expression for car miles.

Q. That is what Mr. Hillman testified.

A. But it really did not have its origin in that.

Q. Mr. Hillman testified it originated in the actual counting of wheels.

A. Yes, actual counting of wheels.

Q. But in modern parlance it was used as synonymous with car miles?

A. I want to make myself clear as to the division of expenses between railroads:

If I am managing a railroad and I am approached by another railroad for trackage rights, my ability to take care of that
4497 other railroad is the first consideration I have. Whether or not I have to spend additional money to take care of that is the controlling consideration. Whether I want them at all. Whether I am advancing their interests to the detriment of the railroad I represent is another consideration. In its last analysis the matter of barter as to what terms I will grant them.

Q. You knew Colonel Talmage—whether you knew him personally or not you knew of him?

A. I knew him personally.

Q. He was a well known railroad operating man of many years ago?

A. Yes, sir, many years ago.

Q. He testified in that case as follows:

"Q. What are the usual arrangements where one road uses a portion of a track of another, as to the basis of compensation?

A. It is generally based on a rental based on valuation of the property, and for repairs of track and other necessary expenses connected with the operation, it is on the basis of wheelage which represents the percentage that the tenant line bears to the other, represents the percentage that it bears to the total number of cars passed over the line."

I rather take it your views would agree with that?

A. My views differ from that to the extent that while that basis is usual, it is determined entirely by the value of the service to the applicant and the ability of the landlord to accommodate him.

Q. The question of value of rental would usually take
4498 care of the track features of it, and then the wheelage basis would take care of the actual expenses: that would be the idea the railroads would meet upon on that proposition, wouldn't it?

A. No, sir, not necessarily. It all harks back to the necessities of the one and the humanity of the other.

Q. Let me give you an illustration in this case that is in evidence here:

The Iron Mountain rents a track from the Cotton Belt road; it pays it so much rental I presume by agreement as to what was fair for rental, and then divides the expense of maintenance of way on a car mile basis.

Mr. MOORE: Let me see if that is correct.

Judge HILL: Mr. Kimbell testified to that. That is the present arrangement; they formerly had a different one.

Q. That is correct, is it not, Mr. Kimbell?

Mr. KIMBELL: Yes, sir, that is correct.

Judge HILL: I will ask you, Mr. Gray, in view of the fact that these two railroads after having agreed upon compensation after it comes down to the question of expense have agreed upon the car mile as the proper unit for dividing that expense of maintenance of way, if that does not present a fair unit so far as those two roads are concerned at least, to use that unit for maintenance of way expenses?

A. No, sir, it does not, because it is a basis and is used perhaps in the majority of cases; but when it comes to an analytical
4499 application it is subject to all the criticism that the car mile and the engine mile have, and that is, that they are so varying in quantity as to be valueless as a basis of comparison.

Q. Did you include in that the train mile as valueless too?

A. Valueless for purposes of comparison, yes, sir.

Q. Or division?

A. That depends whether the train mile used in that division is analagous or not.

Q. Take passenger and freight?

A. I think it is perhaps fair as between passenger and freight on account of the fact that while one really subjects the right of way to much greater use, it does not require the same degree of maintenance, that is, the high degree of maintenance, and they come more nearly compensating.

Q. Apply that to a single track road where both classes of traffic are using them constantly, would your answer hold good to that kind of a situation, as using the train mile as between freight and passenger, when both freight and passenger are using the same track?

A. Yes, sir, it does, because it means that while perhaps one uses it harder on account of the greater number of vehicles and perhaps a greater axle load, the other requires a higher degree of refinement.

Q. It seems that the principle we are seeking here you agree to, you take a factor that would measure the use and you have
4500 something that would fairly approximate a proper result. Is not that true?

A. I don't believe I understand that question.

Previous question read to the witness.

I mean by that I take it your preceding answers indicate that the train mile would be the proper factor to measure the use of the roadway and being a proper measure of the use it would approximately bring correct results in the division of expenses.

A. That would be as between freight and passenger.

Q. That is what I am asking you.

A. Yes, sir, I think for the reasons I have stated that would not be unfair but it would not be satisfactory.

Q. Would it be nearly enough satisfactory to work out the basis for division between state and interstate business?

A. No, sir, because in the one case the trains are entities and are representative of themselves. And in the other case not even the carriages themselves are representative.

Q. You understand the claim in this case, as in all of them, is that there is a certain percentage of extra cost for freight business and a certain percentage of extra cost which runs in the passenger business, for state than for interstate business.

If you were to work out a division of expenses between state and interstate it would be necessary, of course, to separate the freight and passenger in order to work out the extra cost, would it
4501 not?

A. Yes, sir, it ought to be done.

Q. Now, what do you say to this method of doing it, using the train mile for dividing maintenance of way as between passenger and freight?

A. It presents the least objection as I see it, and is about the only method I can see where the relation between two branches of service have anything in common.

Q. That is a question of how obnoxious it is.

A. It is violent, but to my mind presents the only basis where

the two departments come nearest to each other; that is, in the train mile.

Q. But that would not properly represent the relation between freight and passenger when you are seeking to divide the expense between state and interstate, as I understand your testimony?

A. That is my view.

If you will pardon me, Judge Hill, I want to be clearly understood whether or not this is competent you will have to decide:

The criticism about maintenance of way and structures expense being divided upon a car mile basis, is that it does not take into consideration the use of these facilities by business which has no compensating car miles.

Q. That is the empties?

A. No, sir, that is the switching. It is the handling of a main line for loading and unloading materials and all of the other
4502 things that ultimately find their way into miscellaneous earnings.

But yet, they have all used this property and the physical conditions here do not reflect that they have made use of car miles.

(Witness refers to Defendant's exhibit.)

Q. In speaking of that yesterday you stated there was only one factor more unreliable than the car mile and that was the train mile—as I remember your testimony?

A. Yes, sir.

Q. Just what application were you giving to those factors in that statement?

A. I do not remember at what particular place that was stated.

Q. It appears on page 703 you say:

"Then they have taken all of the freight car and caboose miles, plus 2½ engine miles, to arrive at the total of each local and through.

Then a percentage of each has been taken to divide the maintenance of way expenses as between local and through trains. I believe there is in railroad practice only one more unreliable factor than a car mile and that is a train mile."

I believe that gives you the connection.

I would like you to explain just what application you were making of that?

A. I mean there is only one factor in railroad practice that presents a greater degree of variety than the car mile and that is the train mile; in that the train mile will run all the way from
4503 one car to sixty; and the car mile will run from 15 tons to 120 tons.

Q. I understand that. But the point I am getting at, is the application. Were you making that remark apply to the division of maintenance of way expenses?

I understood your principle but I did not understand the application.

A. I was meaning on the maintenance of way and structures expense, and expected my application to be made on that.

Q. That is what I wanted to understand. For Maintenance of way and structures you would consider the train mile a more unreliable factor than the car mile?

A. As between the two classes of traffic handled on that train, yes.

Q. That is, local and through?

A. Yes.

Q. Now, that would apply of course in particular—say you had a 50 car freight train as against a three coach passenger train, wouldn't it?

A. Not with the same degree of reasoning. I have tried to explain the distinction between the two classes of service.

Q. I do not care about any repetition of it, but I just wanted to call your attention to that phase of it.

Take up the next item, "Maintenance of Equipment." You object to the use of the car mile for a division of expenses of maintenance of equipment. You said something about it probably
4504 not being so objectionable when you divided maintenance of equipment between states as between local and through trains. I did not quite catch your idea about that. I wish you would explain it a little more fully.

A. There is this fundamental distinction in dividing expenses between states; on the one hand, dividing expenses between intra-state traffic and interstate and trans-state traffic handled on one train or in one car, on the other hand. That is, that these trains from one state into another or running in one state or in the other, have a degree of comparative relation to each other, which does not obtain where you are required to divide expenses of traffic where it is all handled on one train, even in one car.

In other words, my thought is that it could be properly used in one case as having a fair and just comparison to each other, where it could not be used in the other case.

Q. Could it be used where the division between states was some eight or nine states, and you segregate the maintenance of equipment to one state out of the nine, say, or the other eight states; and then use a sum which is found by segregation, as a fair element of expense representing that given state, for that account.

A. Assuming that I would be compelled to do that, I would say on the basis of the locomotive mileage would be the nearest approach to a reasonable division.

Q. Take some eight or nine states, would not there be a good deal of difference in repair accounts of those different states?

4505 A. Yes, sir, but in the business being either directly located it——

Q. I will take up that question subsequently. You are assuming it cannot be directly located. I am not asking you that.

I am going to call your attention to that phase a little later.

But take it just as a broad proposition, is it a fair way (and by fair I mean an accurate way) in arriving at the cost of maintenance of freight cars, for instance, to take the car mileage in one state as against nine states and subtract that car mileage from the other and use that as a factor in dividing the expense?

A. Yes, sir, I think that is the only method there is.

Q. That car mileage, of course, would be made up of the running of local and through trains, just the same?

A. Yes, sir.

Q. And you think that would be a fair way of dividing the account of maintenance of equipment between nine states?

A. Yes, sir, I do not see what difference it would make.

Q. I do not find it here in the testimony at this moment, but Mr. Rosing who was the head of the Mechanical Department, I believe, for the Iron Mountain road, testified that these items could be accurately located by going through the shops; that you could accurately locate the maintenance of equipment?

A. As between states?

4506 Q. No, not as between states, but actually.

Col. MOORE: Mr. Rosing was talking about starting and stopping expense. You had better turn to his testimony.

Judge HILL: I cannot find it at this moment. But he said you could find the cost for each class of equipment separately by going through the time books in the various shops and that that would be the only accurate way.

Take coaches for instance, take express cars and the mail cars, that that would be the only accurate method for arriving at it: Do you think that is correct?

A. Yes, sir, I believe it is possible to determine, after having made certain—and even in that you would have to make arbitrary considerations.

Col. MOORE: He means as between class of equipment and not as between states.

A. I understand. It can be done, but even in that you must make arbitrary allowances for expenses which are absolutely unlocatable.

Q. Suppose all of the freight cars, for instance, in the Missouri Pacific System reaching into nine states, are repaired at various shops at Baring Cross in Arkansas, Sedalia, Missouri, Hoisington, Kansas, and other points throughout their system; and that the entire cost of repairing freight cars is lumped, taken in the aggregate, and then divided between Arkansas and the eight other states, on a mileage basis.

A. What kind of mileage?

4507 Q. Car mileage. Would you say that would be a correct way in which to ascertain the cost of repairing freight cars charged up to Arkansas, in an effort to separate state and interstate business?

A. Let me understand that. There is a "pool" made of all the freight car repair expenses.

Q. Yes, all of the Missouri Pacific System including the Iron Mountain. It is a "pool" of the Iron Mountain with the Missouri Pacific?

A. Yes, sir, it is a pool of the Missouri Pacific and Iron Mountain.

Q. In nine states I believe the evidence shows?

A. And what proportion the freight car mileage in Arkansas bore to the freight car miles of the entire system is charged to Arkansas?

Q. Yes.

A. I would say that is fair.

Q. You would say that is fair in an effort to get at the division of state and interstate business in Arkansas?

A. Yes.

Q. If that is fair, isn't it fair then to take the car miles between local and through freight trains in Arkansas, to ascertain the relative cost betwen local and through trains?

A. No, sir, I do not think the two cases have any basis of similarity.

Q. I wish you would explain why it would not have any similarity?

4508 A. The business as between states, they use the cars in just the same way. There is no distinction as between classes of traffic. When you get down to a question of dividing between intrastate and interstate and trans-state then you do, because you have the same car handling the three, and if it were a fair basis you would have no information as to the tonnage in each car.

You would get to a point now in this thing, where there is a distinction as to the amount of freight loaded in the car.

Q. Why have you not that distinction to start with?

A. Because it is not brought about by any local conditions. I am trying to make myself clear on that. I do not know that I am bringing out my thought clearly.

But the one crosses an imaginary line. There is no change in the use to which it is put, until you come to the time you segregate that between freight which is purely intrastate and freight that is purely through or trans-state.

Q. No, it is between local and through trains is the question I asked you about, not between state and interstate.

My question is this: If it is fair to get a total sum chargeable to Arkansas by taking the car mileage of those freight cars in Arkansas, made upon local and through trains alike, as a factor to separate the Arkansas proportion from the proportion of the nine states, then is it not fair to take that same factor, the car mileage,

4509 and divide the expenses between local and through freight trains in Arkansas?

A. No, sir, no more than it would have been fair to divide it between local and through all over the entire territory.

Q. But they have done that, Mr. Gray.

A. No, sir. You have used all the car mileage which has been made by the local in the other states, where the local reasonably bears the same proportion to the through; and in the state of Arkansas where the local bears a certain proportion to the through. Then if you come to divide that between local and through in the state of Arkansas, you come right up against the average haul, and that makes the distinction.

You have not asked me, in other words, to pass upon the division between local and through in all of these states. You asked me

about Arkansas, which presents similar problems to the other eight states.

Q. Is it not a fact that they are unable to find the class of trains in which a damage occurs. For instance, here is a freight car damaged and when that goes into the Sedalia shop they do not know whether that was injured in a local or a through train?

A. No, sir.

Q. They would not know whether it was done in Arkansas in Missouri or in Colorado?

A. That is right.

Q. That is the object of the "pool" is it not?

A. Yes, sir.

4510 Q. The object of the pool is to throw all of these items together, because they are indistinguishable so far as the railroad is concerned, are they not?

A. Only we know in practice, if you reduce that in all states, to through and the local, the proportion of local is going to be greater than through.

Q. Your proposition just resolves itself into this: there is more damage to the car in the local than in the through train?

A. Yes, sir.

Q. That is what your reasoning is based on?

A. Yes, sir.

Q. If this pool is made up of cars damaged in the local trains all through the nine states and is also made up of all the cars damaged in the local train, and that represents the aggregate of all that damage—if it is fair to divide that into 1/9 I fail to see wherein it is not fair to divide it between the trains that caused it?

A. I am not making myself clear, perhaps, but my judgment is that the two conditions which you state are not analagous. The division between states all of which contain the local mileage and the through mileage, and applying that same principle as between local and through in one state, is not an analagous proposition.

Q. Why not?

A. Because in one case I must assume the relations of through and local are substantially the same.

4511 Q. Is not that a violent assumption you are proceeding upon?

A. I have got to assume something; you have given me nine states.

Q. Can you fairly assume out of these nine states the Missouri Pacific System runs into that the conditions of local and through trains are the same in all those nine states?

A. My judgment is that that is relatively enough true to justify the use of that car mile basis when dividing the pooled expenses, the position I take being that there is no other equally fair method.

Q. That is not the question in the case, Mr. Gray, whether there is any other method, but we are talking about this method.

A. The value of that depends as to whether or not there is anything else that is right and proper and fair.

Q. The whole value of your opinion on this subject rests upon

the assumption that the conditions in the nine states that the Missouri Pacific System runs into, are substantially similar as between local and through trains.

A. Not of necessity.

In fairness to myself I want to state that we are confronted in this matter with a demand to divide expenses as between states and my position is that this is the only practicable way to do it—as between states. That it is not practicable to divide them accurately.

Q. If that is the only practicable way, is not that the
4512 only practicable way to divide them between the local and through trains?

A. No, sir, because it then introduces an absolutely different element.

Q. That is a question of weight?

A. No, sir, that is a question of average haul and average service that is required by the use of the local trains.

Q. All those questions of average service, average weight, and average lengths of haul have been merged into one thing in this "pool"; they have been totally disregarded after this sum is made up?

A. As between state, yes, sir.

Q. And yet you subtract one part of that on a car mileage basis and say it would not do to resubdivide it again between local and through?

A. Yes, sir.

Q. Don't you think that is illogical, Mr. Gray.

A. No, sir, I do not.

Q. You know Mr. Rosing, don't you?

A. I know who Mr. Rosing is.

Q. I have forgotten his title?

A. He is the Mechanical Engineer of the Iron Mountain & Missouri Pacific Railway.

Q. You would regard him as competent to speak on this question, would you not?

A. Which question?

4513 Q. What we are discussing, the division of expenses between states and between local and through?

A. I would not regard him as having had experience that would particularly qualify him in that respect.

Q. The railroads put him on as an expert and I suppose he was. I dealt with him as such.

A. I believe he can testify absolutely with regard to repairs and with regard to everything that is connected with mechanical conditions.

Q. He is a shopman?

A. Yes, sir. I do not believe Mr. Rosing would claim he has had any experience tending to fit him to pass on a division of expenses between local and through.

Q. You should read his testimony.

A. Unless he has qualified other than as a mechanical engineer.

Q. Let me read you Mr. Rosing's testimony on this point, which you and I have just been discussing:

"You found for a period of six months that $800,000 is the gross sum—instead of calling it a lump sum I will call it a gross sum—that has been spent for the expense of repairing these three kinds of cars".

They were at that time speaking of mail express and coach).

"Now, you are called upon to divide that gross sum between one division, being one-eighth of the whole, do you divide it upon a car mileage basis? Ignore the fact that the coaches have been more expensive or the mail car more expensive than the express car. You throw it altogether and divide it upon a car mileage basis?

4514 A. I think that would be approximately correct, correct enough for the purpose but not for actual purposes. For actual results you must take each car and what it costs.

Q. For example, say that one hundred thousand dollars is the expense accruing to Arkansas, or that has accrued within that given period. Now, suppose you want to divide that between these three different kinds of traffic operating in the state of Arkansas: you would not apportion that upon the car mile basis, then?

A. I would not apportion it upon a car mile basis at any time I have said that several times. I say, for different parts of the road, the car mile or the train mile might be as near as you can get to it. But that is not going into individual costs. You are dealing with trains in districts, and not cars. You do not run cars in districts but you run trains in districts.

Q. You do not run these cars in Arkansas, but you run them as trains: is that the distinction"?

"A. You would compare the cars in a train, as I understand it. In districts you are comparing the trains with trains, made up of equipment cars.

Q. That is your definition. I am not assuming it and I do not think these statistics have assumed it in this case at any time. I think you have injected that into your case although your counsel is not familiar with it.

Taking our former sum of $100,000 and we wish to divide between coaches, mail and express cars, having reached that $100,000 on a car mile basis, how are you going to divide it between the three classes of service?

A. By the classification of the cars and I think arbitrarily the other would be done the same way.

Q. In other words, is not this a fact: if you use the actual figures in one case you should use them in the other?

A. I should say so.

Q. If you use the unit which is a relatively correct unit, in one case, you would have to use it in the other, wouldn't you?

A. Yes, sir."

4515 I have read you fully so you can see the full text of Mr. Rosing's opinion on that. You use the actual figures if you can get them and if these are not obtainable to divide between states, then you could use the car miles to divide as between those three diffrent kinds of coaches.

Do you agree to that?

A. Do I understand your question to be that you want to divide between three different kinds of coaches. You have been asking me about freight cars?

Q. I illustrated the same point with him there with three kinds of coaches?

A. I want to know if you are asking that question having previously determined the expense of repairs of those three kinds of cars?

Q. No, they were all lumped. We have shown that the passenger equipment was lumped, just like the freight was lumped. The proposition is the same but it happened in asking you the question I illustrated with the freight equipment.

A. Your question is, having divided it between the states on the car mile basis, ought not the car mile basis be used in determining it as between the different kinds of coaches?

Q. That is the proposition on the passenger side; and between local and through on the freight side of it.

A. I would say that the latter assumption is not correct.

Q. In other words, you do not agree with Mr. Rosing
4516 on that subject?

A. I do not know, really, what Mr. Rosing's position was. But I do say it is not proper to use the car mileage basis to arrive at the cost of repairs to coaches, express and mail cars.

Q. Do you know Mr. Frank Ward, the General Manager of the Burlington Railroad?

A. Yes, sir.

Q. Do you regard him as a competent railroad operating man?

A. Yes, sir.

Q. He is a man of about your age and your experience, I take it, is he not?

A. I should say just about.

Q. I want to read you what Mr. Ward said on this subject.

"Q. Suppose you had a road that ran in two states and your cost of equipment was divided between those two states on the basis of the car mile, what would you say as to that—or say six or seven states. No matter how many states your system runs into. How many states does the Burlington System run into?

A. I think it is 12.

Q. If you had a rate case in one of those twelve states would you divide your cost of equipment between that twelfth state with the other eleven states on the basis of the car mile?

A. I don't think I would.

If I were undertaking to determine what it costs me to do business in that state I would have to make a careful local examination of what the conditions were; and if they justified apportioning more
than a pro rate proportion of the expense to that state, I would
4517 so apportion it.

Q. That would be comparing the condition in that state with the condition in the other eleven states?

A. Yes, sir.

Q. It might be that to one state that would be unfair, that is, too little, and very much too much for another state?

A. It might be.

Q. Owing to the conditions of the business?

A. Yes, sir.

That was one point and he was examined by Colonel Moore about that. I will give you this testimony in full on that, so you can see what it was.

He was further asked by Colonel Moore as follows:

"Q. One of the grounds upon which you predicate your objection to the division of expenses on a car mile basis, within the state, between the different classes of cars, is the different conditions?

A. You are speaking of passenger service?

Q. Yes. The different conditions which exist in regard to the cars themselves and the difference in the expense of maintaining the different classes of cars.

A. Yes, sir.

Q. In speaking of the division of cost of car equipment between the states, on a system which covers more than one state, you also stated that would not be a desirable way to divide it; but there is one thing to which I wish to call attention:

We will take the case in hand: The Iron Mountain operates in Arkansas, in Missouri and Oklahoma; there are three states in which it operates: in each one of those states there are through and there are local trains. The probabilities are that the general conditions which would vary as between the cars used in
4518 the state locally, would as between those three states constituting a part of this system, be generally about the same. That is to say, they run local trains in Missouri, and they do in Arkansas, and they do in Oklahoma; and probably the same variations exist in each one of those states. I think that would naturally be the case.

Isn't that difference of condition such as would preclude a division between the different kinds of cars within the state, isn't it decreased very largely when you come to divide the cost on a system running in different states, growing out of the fact that the general conditions, etc., would be about the same in the different states—you have my idea?

A. Yes, I think so. I think I agree with you fully on the proposition."

"Judge HILL:

Q. What is the proposition you are agreeing to, Mr. Ward?

A. My understanding is, that on a system of railroad which operates in a number of states, in those states there are varying conditions, such as through trains and local trains; and different costs of handling business on those through and on those local trains; and that in those different states those conditions are relatively about the same. And for a system undertaking to determine the cost of maintaining its equipment (as between the state-) it would be fair

to make the assumption that as between one state and another the conditions would be about alike. Is that the proposition?

Col. MOORE: That is the proposition I asked you about.

A. That is the way I understand it.

Judge HILL:

Q. Why would that justify it on a car mileage division between states any more than between through and local trains?

A. It would be simply a comparison of one state with another, for the purpose of maintaining the company's own records. That is the general proposition.

Q. You mean for the purposes of comparison of operation in one state and operation in another state, as to the question of efficiency in the management of the road: isn't that it?

4519 A. Yes, sir, and a little more than that.

For instance, on the Burlington road if we were going to undertake to determine whether it costs more to handle passengers in Iowa than in Nebraska, the conditions as to through trains and local trains, branch line trains and main line trains, would average up one state with the other pretty well; so it might be safe to say it costs no more and no less to handle passengers in Iowa than in Nebraska.

Q. That would depend upon whether the conditions in Iowa and Nebraska were the same, would it not, Mr. Ward?

A. Yes, sir.

Q. So your whole proposition would resolve itself into the question of whether the conditions in one state fairly represent conditions in all the states into which the system runs?

A. Yes, sir, and also upon the idea that as between states in the same general territory those conditions are approximately the same.

Q. Do you know in how many states the Missouri Pacific System runs?

A. I know about where the system runs. I know generally.

Q. It runs through ten, eleven or twelve states? Isn't that right, Mr. Johnson?

Mr. JOHNSON: It runs in nine states.

Judge HILL:

Q. Wouldn't you say that the conditions in those nine states are similar, so you could use the car mile as a basis to find out the proper expense in any one of those given states?

A. No, sir, not in all. There is a good deal of difference."

Now, I have given you fully Mr. Ward's views about that, so you would have the benefit of the entire text of it.

Mr. MOORE: Read on further there, Judge Hill. Continue from what you have read to the bottom of that page.

Judge HILL: Very well, I will do so.

4520 "By Col. MOORE:

Q. Any division as between states would be diminished when you

come to divide between states, on account of that greater similarity in conditions, that you spoke of?

A. Yes, sir, there would be a closer similarity between state and state, probably, than between local and through business in the limits of one state."

A. My thought is expressed in that last answer there.

Q. You woul say as between nine states you would agree with Mr. Ward that it would not do to separate it between nine states as fairly representative but that if that was done it would be less objectionable than separating it between local and through in the one state: that is the way I understood Mr. Ward.

A. That would be my view, yes.

Previous question read to the witness.

A. I want to explain that answer. The conditions are shown to be here that these expenses were all lumped or pooled and in being required to divide that as between states, the car mile basis has been used.

My judgment is that the car mile basis in a case of this kind, while it presents objection (as do all arbitrary sub-divisions) it does not present them in the same degree or to any such degree as the further attempt to divide the expenses attributable to any one state for car repairs between through and local on a car mileage basis, because there now enters into the equation a distinction as between short and the long haul.

4521 Q. This expense that you have heretofore in your testimony pointed out as being burdens to the bulk of trains, the short haul business, the extra terminal switching of local trains, all of those expenses have gone into and been amalgamated with less expensive repairs to cars on through trains; and yet you think after that has been done you can separate it between nine states with a fair degree of accuracy?

A. Between nine states?

Q. Yes.

A. I think with a reasonable degree of accuracy.

Q. What do you mean by that?

A. I mean by that it is more reasonable than could be accomplished by any other method with which I am familiar.

Q. You do not claim when it comes to using that factor to prove mathematically the fact, that it would be accurate, do you?

A. No, sir.

Q. In fact, you know it would not, do you not?

A. I know that. My only position throughout that has been that it is the most equitable and accurate method that I know.

Q. On page 714 I notice that Mr. Moore put this question to you:

"Q. In that connection, before you proceed, perhaps it is as well I should call your attention to the fact that in a later exhibit filed by the state, after this one, they have excluded trans-state tons from this division, and the division now rests upon intrastate and interstate, excluding trans-state tons."

4522 Now, I want to call your attention to the evidence in this case wherein this supplemental exhibit was filed:

"Q. Mr. Wharton, Mr. Moore questioned you as he did other witnesses, as to the justice of charging the trans-state freight with terminal expense:

You have given your reasons why you thought it was right, I will not go into that again, but I will ask you if you made a calculation showing the difference in cost if you would charge it as his questions indicated it should be, that is, not to allow any station handling for trans-state business.

A. Yes, sir."

Then this question was asked about the handling of the trans-state cars:

"Then the question was asked about the terminal handling of trans-state cars: have you made an exhibit showing the difference it would be if you would conceive the point and reduce that 25%?"

A. If we would conceive the point and reduce it 25%.

Q. Yes.

A. Why would he do that?

Q. I read this testimony just to show you the fact as to how Mr. Wharton put in these exhibits; that if the contentions made by the railroads were correct, it would make no difference in the ultimate decision in this case.

Were you aware that that was the ground upon which he put in these exhibits?

A. No, sir. I have not any idea what were the origin of these exhibits.

4523 Q. Was that quite a fair criticism for you to assume that it was an abandonment of his position?

A. No, sir, my answer was responsive to Judge Moore's question.

Q. I know that is true, but is it not rather unfairly critiicising them for doing something which they have not done?

A. That is not impossible. But any criticism I made was in response to the question put to me.

Q. I concede that. But with the question and answer I have submitted to you presenting the matter, is that not rather an unfair criticism in view of the reasons I have read to you as to why the exhibit was put in?

What do you say to that, Mr. Gray?

Mr. MOORE: I do not recall or understand that I ever made any suggestion to the state's accountants as to the basis upon which divisions or allowances should any of them be made. Nor do I recall that the question ever arose between any accountant and myself.

The inclusion of the trans-state freight is one of the objections indicated by my cross-examination, and as to the reduction of 25% of the cars in through trains in connection with the yard and terminal expenses, I do not think that has originated with me. I never thought of it until it appeared in this case.

A. My answer is, that regardless of where the suggestion origi-

nated, it has not added anything to the soundness of that deduction to meet an objection, by entirely eliminating a large portion
4524 of the traffic which undoubtedly should bear a fair proportion of the expense.

Mr. HILL:

Q. I want to call your attention to the testimony in this case in this connection.

It was testified to by many of the witnesses for the railroads, that cotton had three handlings in Arkansas. You, of course, are familiar with the way cotton is handled, and that cotton is all interstate traffic.

It was testified that a very large proportion of the grain traffic, which is one of the largest commodities handled in Arkansas, has three handlings in the state.

It was also testified that a great deal of the lumber that took the rough material rate and was shipped out of the state, had three terminal handlings in the state.

It was also in the testimony that the business from Memphis was treated in these exhibits as Arkansas business and that all of the business from Memphis which in these exhibits would be interstate business had two terminal handlings, one in Memphis, with which Arkansas is charged the same as if it were handled in the state.

There is also evidence that on account of the way tracks run into Fort Smith all the Little Rock business in and out of Fort Smith is treated as interstate and has two terminal handlings, in the state.

It is also in evidence that a good deal of the trans-state business was broken up and delayed two or three days in the state.
4525 In view of all this evidence the accountants for the state thought it was fair to charge interstate with one handling and intra state with two handlings. And that is the basis upon which that calculation was made.

In criticising this exhibit did you take into consideration these factors that made unusually numerous handlings for interstate business into consideration?

A. Yes, sir. My experience being that the class of traffic which requires additional handling is usually provided for at a higher rate, which compensates for such work.

I also took into consideration the conditions which you mention, say at Fort Smith, in regard to being so situated that practically everythin gis interstate. That is not an uncommon occurrence.

Q. Mr. Gray, I believe you are answering a different point than the one I am asking about.

I am referring to this station handling and as I understood your answer it was referring to the broad proposition of extra expense. I am referring now just to these expenses of handling at stations being divided on the basis of charging one handling to interstate and two handlings to intrastate.

My question is, if in view of the facts I have detailed to you and

which are in evidence, would not that remove in part at least, the criticism you made of that division of station expenses?

A. No, sir. Whatever unusual element the accountant
4526 may have used in including or excluding, does not affect the criticism I made in this matter of the method of dividing station expenses, because they may have been more fair to the state contention in including the Memphis tons in the state tons. It might have been a class of traffic that had a longer average haul than the state traffic ordinarily had. Or, on the other hand, they might not.

The difficulty about all these things is, in the absence of specific information it is impossible to testify on it. But I believe that none of the criticisms I made of this method of dividing station expenses are changed either one way or the other by any of the facts you have stated.

Q. Mr. Doddridge testified at page 96:

"I will ask you if you have given further study and thought to the terminal expense in the freight traffic as well as the passenger traffic?

A. Yes, sir. I have come to the conclusion that the proper method of ascertaining the correct terminal expense as to the freight would be substantially the same as that of the passenger.

Q. That is your judgment as to the best and fairest way of apportioning the terminal expense in freight traffics; that is, it would be substituting merely a ton for a passenger, in making your estimates?

A. No, it does not substitute a ton for a passenger."

A little earlier at page 91 he testified as follows:

"Q. What method have you got, that got at that terminal expense, if you cannot take this method?

A. I find among my memorandums a method that we designed for that purpose, or formula. I did not give it in my reasons, because the information necessary, upon which to predicate it, is absent, but I will read the example; it is self-explanatory:
4527 Take the St. Louis Southwestern Railroad, for the year ending June 30, 1908; they carry 928,313 state passengers; double this number to compensate for two station handlings. The number then indicates 92% of the total passengers handled."

And he works that out in detail, and then he takes the position that with other passengers you would double the state charge, one for interstate; and the same thing for freight, by substituting the ton for the passenger: what do you think of that?

A. It does not appeal to me.

Q. You see that the state's accountants have rather followed Mr. Doddridge in that, do you not?

A. I think they have started with Mr. Doddridge, but whether they have stayed with him or not—I think the value of the opinion of any expert would be his entire opinion and not as you follow

him on one item. Because he has made up his mind on each item in its relation to the other.

In other words, you cannot depart from his opinion on A, B and C and take it on D, and then leave him again on E and F.

Q. Suppose they are separate propositions; one is sound and the other not sound: take for example some of your statements here and some of Mr. Doddridge. If they are separate propositions and not dependent one upon the other, and if it were found he was sound on this proposition and you were sound on that proposition, if they were not interdependent propositions, should not you take those bases that are sound?

A. I don't think that could be done. It may be.

4528 Q. Certainly it could not be done if one were dependent upon the other. I agree with you upon that. But assume they are not?

A. I do not believe it is possible to use varying elements in determining a theory for this purpose. The theory throughout has got to be consistent with itself, and you either go through with it or disagree with and adopt another theory which you can apply to the whole conclusion.

4529 Q. Mr. Gray, I believe when we left off you were stating that in your opinion it was not proper to take different factors with which to divide the various classes of expenses; that such might work out correctly, but in your opinion it would not:

I believe that was about the substance of your statement, was it not?

A. Yes, sir.

Q. It seems that that is the point on which you and the witnesses on behalf of the state have differed chiefly.

I will state that it is in evidence here from a good many witnesses introduced by the state, that that is a more accurate method of doing so—to take the factor which in the best judgment obtainable most nearly approximates a given quantity that is sought to be divided, and in that way you can more nearly approximate the actual conditions than you can by adopting a common factor:

Assuming that to be the position of the state, then they are not subject to criticism for swapping bases, if in their judgment when they are doing so, they are endeavoring in each instance to get a basis more clearly applicable to the particular matter?

A. The purport of that question, Judge Hill, is as to whether I believe the state in endeavoring to be fair, is fair. Is it

4530 not that?

Q. No, that is not the purport of it. The purport of that, as I gather it, is the main difference in your views on this subject and the views of some state witnesses that have taken the position that you can more nearly approximate the actual condition by taking in each case the factor that most nearly represents it, and you disagree with that position?

A. Yes, sir.

Q. And I say, that notwithstanding your disagreement and your difference of opinion with them on that subject, they are not open

to the charge of inconsistency when they change from one basis to another, if they are doing so in an effort to get nearer the proper factor for that particular basis?

A. I have never used the term "inconsistency" as applicable to the State's witnesses or to the State's experts who devised this theory. I have used it with respect only to the theory itself.

Q. I understand that. But then there would not be any inconsistency in the theory itself, from their viewpoint, if they changed from one basis—in one instance, from car miles to tons handled, if the tons handled was nearer an approximation than a car mile, would there?

A. As between the car miles and the ton miles?

Q. I say, tons handled.

A. The only distinction is that one is worse than the other. I don't believe there is any element of expense there by
4531 which, taking the physical characteristics alone, it can be subdivided, at the same time taking care of the costs, equitably, as between all earnings.

Q. You still do not catch the idea.

A. I don't mean to side-step.

Q. I understand that. You have used very frequently the statement that this or that is "inconsistent:" I understand you mean by that inconsistent with itself.

Now, if they are right— that they should change a basis as they change each particular item to get the factor that is more nearly an approximation of the actual results of that particular factor, it is not inconsistent for them to adopt it, although you may disagree with them as to the factor used?

A. It is not an inconsistency for them to do it, but that does not change my view.

Q. I understand. I am not asking you to change your view about it, but I am just asking you if it is not proper for them, having those views, to change those bases as often as the varying conditions would require them to do it?

A. I don't believe I do understand just what it is that you want me to cover in that answer: whether they are consistent in applying these various bases because they believe that they can be applied?

Q. That is my question.

A. Then I would say they are not inconsistent.

4532 Q. You differ with them, as I understand it, as to the proper application as to these bases, and you made your views on that subject very clear, but I want the viewpoint from the other standpoint.

Col. MOORE: May I ask a question?

Judge HILL: Certainly.

Col. MOORE:

Q. What I understand you to mean is this: you regard the change of factors, in your view, as an inconsistency in the exhibits, but

you would not say that the party who made the exhibits was conscious of acting inconsistently in making that change of factor——

A. That is the way in which I endeavored to state that proposition.

Col. MOORE: That is what I thought.

Judge HILL:

Q. One of the matters that you referred to in that connection was "Traffic expenses:" you pointed out an inconsistency in dividing that on a gross earning basis: I want to state to you the substance of the testimony in regard to that:

I think every witness for the state (certainly those who were employed as experts) testified they did not think the revenue was the proper factor to divide traffic expenses, but that they knew of no physical factor like car mile or train mile, or any of these others—even the ton mile—that was proper, and in the absence of having a factor which they could prove, they merely accepted the railroad division on that subject. In the absence of anything else
4533 and to avoid discussion on that subject, they just accepted that as a division, and it was also shown here by some of their exhibits that if they had taken the ton mile or car mile it would work out more favorably to the state.

So in view of that fact, they are not subject to criticism for merely accepting the railroad's division on that point, with that explanation, are they?

Col. MOORE: It seems to me that is not a matter for the witness to determine. That is a matter to be determined by the court. That is just Mr. Gray's opinion as to the good or bad faith of these witnesses.

Judge HILL: Oh, no. He was criticising that, I assume, without the knowledge of their explanations as to why they did so.

Col. MOORE: Mr. Wharton said some of these factors they did not use as proper ones——

Judge HILL: That is one of them. I am illustrating that very point; that he stated about the traffic expenses that he merely accepted the railroad's division on that.

A. I would say that would perhaps modify any view I might have entertained as to the inconsistency of the one who planned and prepared it, but not with regard to the inconsistency of the proposition itself.

Q. I understand that. But when matters are prepared in that way it puts a different face on them than the way they were
4534 put to you in your direct examination, does it not?

A. I don't believe I conceive an opinion of inconsistency on the part of the people who prepared this. I only approach it in criticism from the standpoint of one who has dealt with these things practically every day for years.

Q. Speaking of that item of "traffic expenses" while we are upon it, is that a proper charge, to any considerable extent, against the intrastate traffic?

A. From my viewpoint I want to say it is difficult to determine in traffic expenses what part is really attributable to competitive conditions and what part is merely attributable, and a benefit to all the public alike, to the extent of having conveniently located traffic offices.

The element of stable rates has largely eliminated competition, and I believe under those circumstances—especially as these traffic expenses include all of the general freight office and their tariff issues, that the earnings basis is not unfair.

Q. I believe you said that you do think that it would be some considerable portion of some proper basis, that should be ascribed to intrastate?

A. I think the state ought to stand an equitable proportion of this traffic expense.

Q. That was the only point that I was seeking to bring out.

I want to call your attention to the testimony of Mr. Ward
4535 on that subject (page 686), where he says:

"It seems to me the point is a very small one. I would not personally think very much of the expense should be charged to the intrastate business."

You would differ with him on that, would you not?

A. Yes; my theory is that the state should stand an equitable proportion of that expense.

Q. On this question of starting and stopping and those other physical questions that you were asked about yesterday: are you familiar with this book of Mr. Wellington's?

A. No, I am not.

Q. It is in evidence here that it is used as a text book in an engineering school and that he was accepted as a standard authority.

It is true that this table to which reference has been made, has been carried forward from the earlier edition and the edition from which it was copied in this case was 1908, containing this table, and the table was based on the results of tests made on the Pennsylvania Railroad, so the book says, and that is all in evidence.

Subsequently there was a test made—or rather a compilation made—from working conditions extending over a series of three years, I think it is, on the Union Pacific, by Mr. Berry (then chief engineer) and he gave the result of those examinations in 1904 in which he disagreed only one per cent with Mr. Wellington, using Wellington's classifications but putting different percentages as he found it worked out on the Union Pacific:

4536 In view of that would you not consider (whether you agreed with him or not) that those were good authorities to act upon?

Col. MOORE: I disagree with counsel as to what Mr. Berry did. I don't think the exhibit made here of Mr. Berry's formula of division in the report referred to, indicates that he did more than to use a formula in the Wellington book, without any indication as to what his own views may have been. I called attention to that at the time the exhibit was made. It is not quite fresh in my mind now and I will not undertake to state it more closely.

Judge HILL: I may be mistaken, but I am asking him from that viewpoint. It is all in the record.

A. I would not undertake to pass on either test unless I knew how it was made; what methods were used in arriving, particularly, at the damage done in stopping and starting at way stations. Candidly, I would not give much consideration to this matter. The only thing that would prompt me to do that would be the regard I have for Mr. Berry.

Q. You know Mr. Berry?

A. I know him intimately, but if Mr. Berry has stated and it is in evidence how he arrived at these figures, and there were no arbitrary assumptions, they would have a good deal of weight. But if Mr. Berry agrees with Mr. Wellington in the proportion that
4537 is stated here as being Mr. Wellington's deduction, I believe that they are both manifestly wrong.

Q. If it is in evidence that Mr. Berry used Mr. Wellington's classifications, but that he worked up the percentages (among others, on this starting and stopping proposition) from actual investigation for a series of years, on the Union Pacific road, if that is a fact you will give great weight to it?

A. If that is a fact and it was a practical test over a series of years on the Union Pacific road, subscribed to by Mr. Berry, it would have a great deal of weight.

Q. That is the point I want to make. Whether Mr. Moore or I am right in our construction of Mr. Berry's statement, is a matter for the court.

Mr. Rosing testified on that subject: he would be in a position to testify very intelligently on it, would he not?

A. This is on the question of the relative cost of stopping and starting and damage done at terminals?

Q. Yes.

A. I don't know whether Mr. Rosing's experience has been such that he——

Q. His observation would be in the shops; he would not know how it occurred on the road: is that your point?

A. I don't know what Mr. Rosing's experience has been.

Q. He gives it here and as I recall it it has been in the mechanical department in the shops, all the time. I am not certain, but that is my recollection: is that not correct?

4538 Col. MOORE: I think he said he occupied several positions.

Judge HILL: He says here he has been employed in all branches of the machinery department.

A. A man could be that and be almost entirely without road experience, so I would not for a moment discredit anything he says as being based upon his experience.

Q. I understand that. It is just a question of whether he has formed a correct opinion based on his experience. I myself am not questioning the absolute honesty and sincerity of his testimony, but doctors differ, you know.

What was the proportion you put on that yesterday?

A. I believe that of the damage which results in repairs, not less than sixty per cent of it has its origin in those two causes.

Q. Sixty per cent?

A. Yes, sir.

Q. How did you divide that sixty per cent?

A. Two-thirds of that, or forty per cent, is due to terminal handling.

Q. Mr. Rosing (as I find it) put 32% on starting and stopping and 28% on terminal: that just about reverses your proportions, does it not?

A. It does not exactly reverse it, but my judgment is that twice the damages done in terminals is done in starting and stopping at stations.

Q. You know Mr. Whitenton, of the Rock Island, I suppose?

4539 A. Yes, sir.

Q. He is a man of large operating experience, is he not?

A. Yes, he has had a good deal of experience.

Q. Road experience you mean, not in the shops?

A. No, not at all.

Q. He says (page 493, printed volume 2):

"In fact, I believe that somewhere about 70% of our total damage to equipment is done in the switching of cars."

That is still different, is it not?

A. Is that just terminal switching or switching for——

Q. I will read the entire paragraph. He is summarizing the extra cost proposition and this is in the ninth paragraph of that summary:

"The increased damage to equipment: the increased switching and handling of cars in the local business, in my opinion, has a very decided tendency to damage the equipment. In fact, I believe that somewhere about 70% of our total damage to equipment is done in the switching of cars. That is based simply on my observation and experience in trying to run down the elements that go to make up the cost of repairs to equipment, and which create the conditions which make repairs necessary."

That is his complete statement on that subject.

A. His term "switching" there is inclusive of a good part of the cost that I have used. For instance, my twenty per cent (which covers starting and stopping at stations) is bound to include the switching at stations and does not include switching at terminals.

I think you will find that Mr. Whitenton and I are not so far apart when you include both figures, which practically means that.

4540 Q. Do you think Mr. Whitenton is including his starting and stopping in this?

A. When he talks about switching and——

Q. I do not see anything to draw that conclusion from.

A. I have included the switching necessarily, at local station in my stopping and starting, because my other forty per cent is term. al

only. I should say that we are not very far off on it. He may be a little bit high and I may be a little bit low.

Q. You are using different terms, though, and it seems to reach the same result, as you construe his testimony?

A. Not widely different.

Q. This illustrates the point I was making, that doctors do disagree sometimes.

Col. MOORE: I do not think they disagree very much here, Judge.

Judge HILL:

Q. Now, Mr. Gray, turn to this passenger proposition: as I understand you, you thought it was a change of bases, or an inconsistency, as you may term it, for the State's accountants not to attempt a division on passenger traffic, between local and through trains: is that correct?

A. I think I commented more on the fact that another method has been used and the local and through trains now eliminated.

Q. What do you consider in railroads in this section of the country, to be the division between the number of trains, local
4541 and through, in passenger? About how many through trains are there and about how many local trains, in proportion to each other?

A. That is such a variable——

Q. This is the point I want to get at: as I recall your testimony in the Missouri case you stated it was usually about one-half of each—the proportion of the local and through to each other:

That, roughly speaking, you would consider to be about the situation, would you not?

A. Yes, as applicable to the lines that I know.

Q. And you gave your testimony on this subject with such a division in mind, did you not?

A. That influenced my thought.

Q. That is what I would have supposed.

Now, I want to call your attention to the actual conditions on the Iron Mountain in that respect. This is an exhibit put in by the railroads, by Mr. McPherson, giving the classification and list of all the passenger trains run on the Iron Mountain system in Arkansas: there are eight through trains and forty-eight local, according to his classification, and of those through trains one of them was a fast mail that goes south from St. Louis to Texarkana and carries one sleeper: that is the only passenger traffic it does:

That is a different situation of affairs from what you would ordinarily have in mind when you consider that problem, is it not? Is not this situation different from what you would expect to find?

4542 A. It is not different from what our situation was in Missouri at that time. The train mileage of forty-eight and the train mileage of eight would of necessity have to be considered, but we had at that time a fast mail, which is a duplicate of what you have in mind—which runs from St. Louis to Bonita, across the

entire length of the state of Missouri, and does not carry any passengers.

There were also factors in the Missouri case which have not yet been given to me in this case, and that is, what of this local train mileage was considered necessary by the railroads; what was brought about by any regulation of Federal or interstate authority, and what had been put on by express authority of the state. We had all those conditions in the Missouri case.

Q. In regard to that latter proposition, there is really no testimony in this case bearing on it, but I will call your attention to the physical situation of the Iron Mountain so that you will see there is very little, if any, effect given to that by reason of forced train runs.

The main line runs through the state from one end to the other and then there is a very large traffic, as you know, between Little Rock and Fort Smith; between Little Rock and the Louisiana line; the White River branch is a through line; and the one over there in eastern Arkansas—the River Level Line, is another through line division; the Memphis train, as you know, has a heavy traffic:

Calling your attention to those things, you will at once
4543 see there would be very little, if any, forced trains; no stubs, curved lines or things of that kind, like we are pretty well blessed with here in Missouri: is not that a fact?

A. Yes, or in Arkansas either, as far as we are concerned.

Q. Recognizing that situation that I have just outlined on the Iron Mountain, you see that would hardly be the effect of forced runs?

A. Is it admitted for the purposes of this case that there is no——

Q. I said there was no testimony on that, but I am just calling your attention to the physical condition of the Iron Mountain, which I suppose you are more or less familiar with. I suppose you see that if there are any forced trains on these little lines, they are very inconsiderable factors?

A. I can see in this exhibit——

Col. MOORE: You assumed a while ago that there were no regulations in Arkansas—I believe you said in evidence—in regard to the running of local trains——

Judge HILL: I don't recall any.

Col. MOORE: Mr. Johnson informs me that there are regulations, either by statute or put in force by order of the Commission, which has the effect of the statute because they are authorized to do that, and I want it understood that that is material——

Judge HILL: I don't care anything about that. I just stated in my question that if there were any he would know from the
4544 general situation that they were a comparatively small number.

Col. MOORE: I would not want Mr. Gray to make an answer upon a statement which may be incorrect, and you would not, either.

A. I don't know how much of this local mileage is brought about

by an action of the state. That has an effect upon the matter of cost to which I testified in the Missouri case.

Col. MOORE: I imagine it is about the same in both states.

A. There are a number of others which enter into the equation here that were not present in the Missouri case, and which in my opinion, affect the expense of operation of passenger service considerably.

Judge HILL:

Q. I am not asking about the operation—of the expense of it: I was just asking you of the desirability, in view of the way the trains run in Arkansas, of making a division between local and through; whether it would come as near as possible to actual results: that is my question to you.

A. I see no value in dividing it between local and through, as I have seen no value in the freight statistics, and for practically the same reason.

Q. You do not object to its being divided as between the coaches, etc., instead of being divided between the local and through trains?

A. I would not regard the coach mile basis as being any
4545 better or any worse than the primary method of dividing it between the local and through, except that in criticising the entire theory, I think it is as inconsistent to use the local and through in the passenger, and finally divide that between interstate and intrastate on a passenger mile basis, as it would be to do what is done here.

Q. Is it not considered by good operating railroad men, that a division of passenger traffic, between the coaches, mail and express, on a car mileage basis, is equitable?

A. Not within my acquaintance.

Q. Do you know Mr. Seward R. Knott?

A. No, I never had the pleasure of knowing Mr. Knott personally.

Q. You know him by reputation?

A. Yes, sir.

Q. From your knowledge of him you regard him as a competent railroad operating man, do you not?

A. No, I do not think Mr. Knott ever had any experience as such.

Q. Was he not vice-president and general manager of the Louisville & Nashville Railroad?

A. I think he was vice-president, in charge of the traffic of the Louisville & Nashville Railroad. Mr. Knott has never had any operating experience, to my knowledge.

Q. Subsequently he was president, I believe, of the Kansas City Southern?

A. He was the executive head of the Kansas City Southern.

Q. We have already put in evidence in this case state-
4546 ments from Mr. Knott, which I will not take the time to again quote in your testimony: he takes the position that the car mileage basis is a fair one when they divide the passenger traffic between mail and express: what would you say to that?

A. I would not accept it at all.

Q. Do you know Mr. S. C. Johnson, of the Cotton Belt?

A. Yes, sir.

Q. He gave testimony before the Postal Commission to the same effect, where a division of the passenger mileage was very much as it was in this case, and testified that that was a most equitable way of reaching that: you could not agree with him, either, could you?

A. On a car mileage basis?

Q. If you wish I can give you in detail just what they said about it, Mr. Gray, but that is the substance of it. It has already been introduced in evidence here.

A. No, I would not feel that that was right.

Q. I believe it is also in evidence that Mr. Peabody, of the Santa Fe, testified that that was a proper way of dividing—I think he was testifying about express; these other gentlemen were testifying about mail. You know Mr. Peabody?

Col. MOORE: He did not testify in this case.

Judge HILL: No, but his testimony was quoted in this regard.

A. Yes, I know him quite well.

Q. He is a man of large railroad experience, is he not?

4547 A. I don't know. My only acquaintance with Mr. Peabody has been as a statistical expert.

Q. He has given great study to these accounting propositions, has he not?

A. I think that is a fair statement, that he has done that.

Q. If I remember correctly, the excerpt from his testimony was taken in the hearing in regard to the express, in which he advocated the car mile division—express and mail, substantially the same proposition as is used here: I understand from your previous answer that you disagree with him?

A. Yes. I don't believe that that is a fair and equitable basis.

Q. You criticised yesterday the use of the statistics on the Cotton Belt for the fuel, using those same percentages that applied on the Iron Mountain:

I want to read you the testimony of Mr. Doddridge on that point, and I will explain further that the accountants in this case have testified that they were unable to get any statistics for the year 1907; when these statistics were put in, not having preserved them—they had no statistics to get that information from.

This question was asked Mr. Doddridge (page 106, volume 2):

"Q. Fuel, I presume, is another one of the chief items as you worked that up in the Cotton Belt case. Would the actual figures you worked up on fuel cost between local and through trains

4548 on the Cotton Belt, apply generally on the Iron Mountain?

A. I presume that those proportions would be applicable in a general sense on the Iron Mountain, or it ought to be.

Q. That is, you mean the relation in the cost between the two classes of trains?

A. They ought to be unless there is some difference in conditions on the Iron Mountain that might change the relations.

Q. Do you know any conditions between those two roads (you have been general manager of both) that would change the relation of the fuel cost between them, as to the proportion consumed on the local as against the through, or the through as against the local?

A. I do not know of any conditions that would change those relations on the main line of the Iron Mountain as compared with the Cotton Belt—the Cotton Belt Railroad is mostly main line. The Iron Mountain main line is a very similar road through Arkansas, as to grades and other things—I guess the Iron Mountain is a little better than the Cotton Belt, some parts of it—and of course the Iron Mountain has other divisions, like your road from Little Rock to Fort Smith, that used to be very different from the Cotton Belt. I guess it has been improved now.

Q. It has all been improved. You must not indicate that anything going out of Fort Smith has not been improved, or we will have a falling out.

A. In a general way the test on the Cotton Belt ought to reflect the general average conditions."

Q. In view of that testimony of a gentleman who had been general manager of both of the roads, would you not think the state could fairly accept those percentages in trying to get the general conditions, in the absence of being able to get actual figures?

A. I cannot see any inconsistency in the state assuming that, but I can see an inconsistency in an operating officer making
4549 a test upon one road in one month, and assuming that that condition could apply to another railroad, without any knowledge of the business conditions on that line for that month, and which (while he had previously been general manager) he had not been associated with for over five or six years.

Q. But he testified, Mr. Gray, that he made a close study of the statistics of those two roads before he testified in the Missouri case and in this case.

A. And yet there are no statistics which he could have studied, on the Iron Mountain, which would have given him the relative consumption of the local and through freight.

Q. You disagree with Mr. Doddridge in this statement?

A. I question the statement. While I do not disagree with it, I don't know whether it is too much or too little.

Q. Under these circumstances, where Mr. Doddridge is put forth as a leading witness for the railroads, and testified he was an adviser of counsel in the case, do you not think the state would be justified in assuming that this was a correct percentage to use?

A. Did the state assume everything else that Mr. Doddridge said to be true, applicable to the Iron Mountain?

Q. I don't know that any other question was raised that I can answer you.

Col. MOORE: He said a good many things applicable to the Iron Mountain that we do not think you will agree with.

4550 Judge HILL: But as to any physical matter like this, I do not recall anything else that he stated that there has been any disagreement with. There may have been, but as far as I can recall right now there were not.

A. Without a knowledge of all of the facts which Mr. Doddrioge may have reported with regard to the two lines, I could not take one deduction and say that it was right for the state to use that to the exclusion of others.

Q. I think I have read you all that relates to this point, Mr. Gray. If there is anything more, I do not know where it is.

A. I would have to say that I couldn't state with any consistency in that matter, while I might still entertain my respect for doubt of the efficacy of those figures.

Q. But poor, inexperienced Arkansas lawyers would be justified in taking a man of that vast operating experience as knowing what he was talking about, would they not?

A. I don't know. When these Arkansas lawyers get a man on the stand they twist him into pretty near any distorted shape, before you get through with him.

Q. Mr. Gray, we have all sorts of doctors in this case: we have Dr. Johnson, statistician of the Iron Mountain, and Dr. Kimbell, of the Cotton Belt, and under this head of "traffic expenses" I see Dr. Johnson uses the gross revenue in dividing between states.

Mr. Kimbell uses the revenue train mileage as the factor:

4551 with which one of those doctors would you agree?

A. I would agree with Dr. Johnson.

Q. You would take the train mileage?

A. No, sir.

Q. The revenue train mileage?

A. No; I understood you to say he took the gross earnings.

A. Yes, Dr. Johnson takes the gross earnings; that is right, and Dr. Kimbell takes the revenue train mileage.

A. I will agree with Dr. Johnson in that particular.

Q. In "Station expenses" Mr. Johnson makes a division between freight and passenger, of combined station expense, on an approximately revenue basis: that is the way it is stated, I believe:

Is not that switching from one basis to another when he takes the "traffic expenses" on gross revenue and then takes "station expenses" on approximately revenue basis?

A. I would have to have the whole proposition before I can answer on that. I never knew any basis by which you divided "station expenses" alone. I don't know of any basis upon which you divide station expenses alone.

Q. Here is his exhibit:

"Station service includes the wages of station employés, station supplies and expenses and telegraph and telephone expense. This expense is practically all local and is charged to the state in which the expense is incurred. Wages of employés at and expenses of stations handling both freight and passenger business are divided 75% freight and 25% passenger, which is approximately the proportion of revenue for each class of business."

4552 What do you think of that?

A. From my observation and judgment, I would say that to divide those unlocated station expenses between freight and passenger on a basis of seventy-five and twenty-five, is about in line with equity, even if it did not closely approximate the earnings.

Q. How are you going to reconcile that basis with dividing "maintenance of way and structures"——

Col. MOORE: That is gross earnings equalized?

A. It happens to be.

Q. And the per cents of seventy-five and twenty-five are not accidental, but are used for the purpose of equalizing—as being the proper basis of equalizing?

Judge HILL:

Q. How are you going to reconcile that with dividing "maintenance of way and structures"——

Col. MOORE: Will you let me have this question repeated?

Judge HILL: Certainly.

(Last question of Col. Moore read.)

Mr. JOHNSON: It is a monthly occurrence; it has to be done every month. The percentage is 26 one month, 24 or 25, and in order to make a uniform percentage we accepted the average, which was 25 and 75.

Judge HILL: I am not objecting to that. I am calling attention to the different basis——

Col. MOORE: I object to comments being made on it without proper information.

4553 A. I understand that is not a different basis from what he has used; that he has located in the state, to begin with, all the expenses that are locatable.

Judge HILL:

Q. And then taken this 25 and 75 as approximately the revenue, I presume?

Col. MOORE: No——

The WITNESS: He says it is the revenue.

Judge HILL: It is an average of the revenue, I presume, or something of that kind. I do not care anything about that. There is a different basis injected into this.

Col. MOORE: If you want Mr. Gray to pass on the method adopted in that exhibit, I would rather you would either read it to him or let him read it than to state your construction of it.

Judge HILL: Very well. You take this copy, Mr. Gray, and I will keep the other.

Q. Now, take the first page, Mr. Gray: you see that is divided between freight and passenger on yard engine mileage: is not that a fact?

A. (After examining paper.) Yes, that is true.

Q. What do you think of that basis? That is a swapping of bases, too, is it not? Do you understand that paper?

A. No, not this last part.

Q. It follows right there (indicating on exhibit) "this is the proportion of yard engine mileage in each class of service."

4554 A. I don't understand it.

Q. That is what they say. I am sure if you do not understand it, I do not.

A. I don't understand how they arrive at the proportion of yard engine mileage in each class of service, unless it was supported by the experience of some one. I have never had occasion to divide that.

Q. Suppose it was properly based on an estimate of six miles an hour: what do you think of this factor to divide that expense?

A. There has to be an arbitrary assumption in that; whether or not that assumption is correct or incorrect I couldn't say. I don't believe any six miles an hour can be divided into freight and passenger without some arbitrary.

Q. Is not this subject to the same criticism that you made of similar divisions in the state's exhibits yesterday—divisions between local and through?

Q. Yes.

A. No, sir.

Q. Did you not say that the train mileage would have no relation or bearing to it? Was it not six miles an hour? I know you objected to it.

That was in the expense of maintenance of yard locomotives, at the top of page 2, exhibit "K"; what was your criticism of that?

A. That criticism was of the fifty per cent. I said I did

4555 not know whether it was enough or too much.

Q. Did you not criticise the use of the yard mileage as six miles an hour?

A. I don't believe I criticised the six miles an hour. I don't know that that is an unfair allowance. I would not be still using it if I did think so.

Q. You were not critical of the six miles an hour?

A. I did not criticise the six miles an hour. I think I said I assumed that this was based on six miles an hour?

Q. Is not the principle of adding these arbitraries equally open to the criticism you made of the other, if that mileage was figured at six miles an hour?

A. I don't understand that this is on six miles an hour.

Q. You do not understand that it is?

A. It says the total charge is divided on 95 and 5: I have not been told how that 95 and 5 is arrived at. I have never seen any figures that would enable me to——

Q. Assume, Mr. Gray, whether it is in evidence or not, that this has been figured on that six miles an hour basis: would that be actual?

A. Oh, no.

Q. Then this division would be subject to the criticism of using an assumed proportion, would it not?

A. The difficulty about my criticising this division is that I don't know how it is arrived at.

Q. I just put it to you hypothetically—that if it were
4556 based upon the six miles, that it would have the objection that the other had, except that it has to be divided, and the logic used in arriving at the arbitrary would be the determining factor in passing upon its reasonableness?

JUDGE HILL: I think the Interstate Commerce Commission gives a direction for something of that kind authorizing the use of six miles an hour for that purpose. I am not criticising the exhibit or the item itself, but I am calling Mr. Gray's attention to the fact that it has assumptions and arbitraries in it as well as some others.

Q. Is not that true, Mr. Gray?
A. Yes, sir.
Q. Now take the "Mixed train service": have you that before you?
A. Yes, sir.
Q. You will see that is divided 75% freight and 25% passenger: is not that another arbitrary assumption?
A. I cannot agree that that is an arbitrary without knowing how it is arrived at.
Q. Suppose that is made under the same rule of the Interstate Commerce Commisison that might justify that; still it would not be actual results that they have there?
A. I don't think it is fair to ask me to say how that is arrived at. I would say that if that is an arbitrary assumption without any basis in fact, that it has to stand in that category.
4557 Q. Would not that ignore the expense of carrying passengers in cabooses of local trains?
A. Ignore the expense?
Q. Yes.
A. Yes, sir. I would like to see the mixed train mileage as contrasted with the total train mileage, because I believe that that item is immaterial, however divided, as affecting the whole.
Q. I believe you made a point yesterday on one of these sub-divisions of the state, that it had ignored or taken no account of carrying passengers in cabooses of local freight trains?
A. No, the criticism I made yesterday was the use of passenger miles in dividing the coach expenses which included passenger miles in Pullman and caboose cars, without any information as to the amount in each.
In other words, the criticism I had of that was that that divisor was not composed of common units.
Q. What do you say of this?
A. I don't know how this is arrived at.
Q. This ignores all expense of carrying passengers in local freight trains—this diviison that we are now considering.

COL. MOORE: This has nothing to do with passengers carried in local freight trains, had it? It is dividing mixed trains between freight and passenger.

4558 A. This ignores because it applies—there is nothing in this formula that puts on the passenger side of the house the expense of handling the passenger on the local freight train.

Judge HILL:

Q. Mr. Gray, turn to "General Expenses":

You see the primary division betwen states is on a gross revenue basis, and a subdivision between freight and passenger inside the the state, on a train mile basis: what do you think of that?

A. I think that that is fair, for the reason that the greatest proportion of the general expenses is in connection with the accounting, auditing and conserving of the revenue, and for the reason which I have stated before in the examination, I believe that the basis between freight and passenger being placed upon train miles, which is a complete entity in each case, is the most equitable.

Q. Is not that a swapping of bases?

A. No. Here we have used train miles for this right through this theory.

Q. I do not think you have for general expenses, anywhere else, used train miles on a division between freight and passenger.

A. They used the earnings basis here for dividing between states, and the train mile for dividing between freight and passenger. That is true throughout the other part of this formula.

Q. Mr. Kimbell, of the Cotton Belt, used the train mile all through, both between states and trains: which are you going
4559 to agree with, Dr. Johnson or Dr. Kimbell?

A. I incline to the earnings basis as between states, and the train basis as between passenger and freight, for the reasons which I have given.

Q. Then you would disapprove of the use of the train mile all the way through in that, would you?

A. No, I have approved of it as between freight and passenger.

Q. I mean, when divided between states on a train mile you disapprove of that, do you? You see, one uses the gross earnings and the other the train mile: I want to get your judgment as to which of these gentlemen have the better theory.

A. Let me have just the exact item——

(Mr. Kimbell shows same to witness.)

Q. Which do you now agree with?

A. Having been approached by Mr. Kimbell, I still agree with Mr. Johnson.

Q. Now take "Hire of Equipment": will you read that over, Mr. Gray?

A. Yes, sir.

Q. This seems to be a net figure in the difference between the amounts paid by the Iron Mountain for the use of cars of other lines, and the amounts received by it for the use of its cars by other lines:

It seems the railroads have used the same division between states, that the state used between local and through trains, the car mile: do you think that is right?

4560 A. I think that a division of that kind between states is equitable and I don't think that a division of that between local and through trains is equitable, because it does not take into

consideration the elements of difference brought about by the short and long haul.

Q. Aside from being equitable, is that an accurate division of that item?

A. I think it is, for the reason that in common practice there is no distinction whatever between a foreign and a local car mile.

Q. What relation would car mileage on the Iron Mountain tracks, in Arkansas, have with the car mileage of cars off that line?

How do you understand that question, Mr. Gray? Maybe you understand it a different way from the way I do.

A. "This account includes the amount of rentals, mileage or per diem paid for the use of equipment belonging to other companies, less the amount received from other companies for the use of our equipment."

In other words, that is a net credit or debit.

This item is divided between states upon a basis of the total mileage of each class of equipment in each state.

Q. You have taken the car mile running in Arkansas to divide that equipment expense running through the state have you not?

A. Yes, sir.

Q. That is what I thought I asked you a while ago.

4561 A. Yes, that is right, and it bears that through relation because of the fact that in common railroad practice there is very little distinction made between ownership, particularly at the time of business stress.

That debit created by such a condition is, in my opinion, correctly chargeable to the several states on the basis that they have profited, and that profit is represented in the car miles.

Q. You criticised yesterday the use of the month of October for the purpose of getting the casualties and damages occurring during that period, and stated that generally there was quite a lapse of time between the time when the damage was occasioned and the time it was actually paid: that would be true of the six months' period, too, would it not?

A. Always in less proportion on account of the inclusion of a larger period. It presents less elements of objection because of the inclusion of a larger period.

Q. But it certainly would not represent actual conditions.

A. It would not represent actual conditions.

Q. You testified yesterday that much of the trans-state business was cheaper because there was very little handling of that in the state and that it would not be charged up with station expense: was not that about the substance of it?

A. Yes, sir.

Q. It is in evidence in this case that in the month of October, 1907, 1454 trans-state cars were examined, by taking fifteen days' billing—just as they came.

4562 Those 1454 cars took an average of 6.03 days to get through the state, as against a schedule of 1.1 days; would not such a movement as that represent some station expenses in Arkansas, as well as terminal expenses?

A. That would depend upon where they rested during this interim. If they were stowed away on some abandoned mill track and stood out there until you could get to them and use them, they are not representing any material expense in station service——

Q. These were not empties.

A. I mean loaded. Take a period of congestion and cars quite often take the direction of least resistance.

Q. Would it be your judgment that 1454 cars, taking that length of time going through the state, that all of them would be stowed away some where, on some track?

A. No. But I would not feel qualified to say whether or not that would make material difference in proportion. As far as accounting is concerned it would make no difference.

Q. I am speaking of the expense of handling the business.

A. The station expense is what you are talking about.

Q. That would be using the tracks and the facilities in the state considerably, would it not?

A. What is the distance that these 1454 cars passed——

Q. They ran from 221 to 298 miles in the state. They were all trans-state.

A. What is that average per day; did you figure that out?

4563 Q. The average schedule movement was 1.1 days. The actual movement was 6.03.

A. But what is that average miles, per car per day?

Q. Mr. Hamilton says it is something like fifty miles.

A. I would say that in a period of congestion that is a fair movement.

Q. Take a movement in March, 1907: there were 1560 cars worked up: they took an average of 4.1 days to get through the state and the schedule time on those cars was 9/10 of one day, or practically one day.

A. I don't think it is fair to contrast actual with schedule. I don't believe that out of 1500 cars any railroad hopes to make schedule. You haven't told me whether this schedule was a fast freight schedule or that these cars are fast freight cars.

Q. There was a schedule applicable to these cars.

A. I did not know there was such a thing.

Q. It is the schedule which is called "ordinary schedule" as distinguished from red ball.

A. Ordinary schedule and 1.1 days for 298 miles?

Q. That is the schedule day on the 1454 cars in October; the other was practically one day schedule and the actual time was four days.

A. The one day schedule comprised how many miles?

Q. 221 to 298.

A. That is an exceedingly unusual schedule. I cannot believe that any railroad would undertake to do that.

4564 Q. It has been done.

A. I am talking about your schedule; not your performance. I don't believe any railroad has that schedule. I don't believe the Iron Mountain has it.

Q. This was taken from employés' and official time cards.

A. 298 miles in twenty-four hours——

Q. That is the average given.

A. I am talking about the average. I am not picking out one fast train.

And you have taken the lowest schedule as being a possibility, and without placing against that the actual performance?

Q. That is the way I understand it.

A. As I understand your schedule, the car has got to start running just as quickly as it is received and is not given any time after it has stopped, to arrive by your schedule?

Mr. HAMILTON: What we did was to take all the billing shown there, from and to the territory shown on those sheets.

The WITNESS: Your average, for instance, might have included one car that might have been delayed thirty days for bad order?

Mr. HAMILTON: It shows the exact time. There were 100 cars that stayed fourteen days in Arkansas. Of course one of them might have been there fifty. It is an adding together of the time
4565 cards without any terminal delay, and by the short line routes. We took certain tissue books, without knowing where they were going, to find the cars and trace them by the wheel reports. We did that so as not to call attention to——

The WITNESS: But the time it actually stood in the yard you did not consider?

Mr. HAMILTON: We made no allowance for that.

The WITNESS: And you made no allowance for that in your schedule?

Mr. HAMILTON: No, that was on the theory that they ran them into the yard, cut off a caboose and started another out, as has been testified to.

Judge HILL:

Q. Would not such a movement as that represent some use of the facilities and terminals of the railroad in Arkansas, for trans-state business?

A. It would represent some, but an absolutely indeterminable amount, as I said.

Q. What about representing terminal use?

A. It would not change my idea as to the relation, because all the freight handled there was being handled under exactly the same conditions and terms, and the officers and employés directly handling it have no opportunity to make any distinction between transstate, intrastate or interstate. They simply know it as freight.

In my opinion, the relative conditions as they obtain between those three classes of freight and as affecting the expense, would not be changed by this condition, because the men handling
4566 them, the men who create the expense, do not know the difference between them.

Q. They handle it indiscriminately?

A. Yes, sir.

Q. And that would be there for handling that length of time above the schedule?

A. Yes, and if it assumed the same proportion of the other freight which would hang up in the same way. I am just stating that as an unfortunate experience.

Q. That would be a matter of assumption on your part?

A. Yes, sir.

Q. Would not that represent the use of facilities, sidetracks, yards, etc.?

A. Yes. But it does not change, in my estimation, the relative conditions which go along with it.

Q. Whether it changes the relative condition or not, it shows——

A. Yes, that represents a use of all facilities in the state.

Q. And represents the use of station forces and terminals in the state?

A. Yes, sir.

Q. And you are assuming that the other freight would be running in the same proportion and if it was it would not change the relation?

A. That is it.

4567 HUBERT ROTH, recalled, testified as follows:

Direct examination.

By Col. MOORE:

Q. Mr. Roth, you have testified heretofore in this case?

A. I have.

Q. I believe you stated on your former examination that you were connected for a number of years with the Accounting Department of the Iron Mountain Railroad?

A. Yes, sir.

Q. Mr. Roth, you are familiar with Exhibit 26 filed on the part of the railroads and with Exhibit I filed on the part of the state, in this case?

A. Yes, sir.

Q. The first exhibit referred to covers all freight taken into the account of the Iron Mountain road for the month of October, 1907:

Have you made any investigation of the local trains that ran during October, 1907, for the purpose of ascertaining whether there was any freight hauled on those trains that was not included in the Auditor's accounts and in the statements contained in Exhibit 26 and Exhibit I?

A. Yes, sir, I made such an investigation.

4568 Q. If you have, please state what that investigation was and what it showed. First, how did you make it and what did you investigate, what trains and so on?

A. We investigated 16 trains in all, 13 of which were on the Arkansas Division; one westbound on the Memphis Division; one

northbound on the Valley Division (that is from Monroe to McGehee) and one eastbound on the Central Division.

We compared the state detailed sheets with the waybills and made corresponding sheets, in which we inserted the dates of the waybills as an index of the account that that particular freight would have gone into in auditing our accounts.

We also made a notation if it was received at a period subsequent to the month of October.

We found that all of the freight on those 16 trains, of the trans-state freight about 30.5% was not included in our October account and about 15.5% of the interstate was not included in our October account or our Exhibit 26.

Of the state freight, a fraction over 6% was not included

Q. Mr. Roth, as I understand you, those proportions you have mentioned of trans-state, interstate and state freight you found on those sixteen trains, were not included in the Auditor's accounts of freight handled in October or in the statistics on Exhibit 26, and consequently, not in totals of the state's Exhibit I which is based on the railroad's Exhibit 26?

A. That is correct.

4569 Q. You say you investigated, and analyzed I suppose, the results of sixteen trains. I believe there were 46 local trains investigated by the state. Am I correct in that, Mr. Hamilton?

Mr. HAMILTON: That depends on what you mean by "trains". If you mean all the trains running under that number, there were 46; if you mean individual trains running that month there would be about 1400.

Mr. ROTH:

A. (continued). As compared with the trains I mentioned, it would be 46.

Q. You investigated about one-third of the local trains for October?

A. Yes, sir, about one-third.

Q. Why did you not extend your investigation over the entire 46?

A. It would have taken too much time. I believe we could not have completed that under a year's work.

Q. So it was impracticable to extend it beyond the trains you did investigate?

A Yes, sir, it was.

Q. Did you have any data from which to investigate the through trains?

A. No, sir, there was nothing in the shape of data which would have enabled us to do that.

Q. Mr. Roth, if the same conditions which developed on the sixteen local trains, you investigated in regard to freight not included in the auditor's accounts, had existed on the through

4570 trains, what would have been the amount of tonnage actually handled in the month of October, omitted from the auditor's accounts and from Exhibit 26?

A. There would have been a difference of about 27 million ton miles.

Q. It would have swelled the tonnage for October about twenty-seven million tons?

A. Yes, sir.

Q. Where did you find the percentage of business not included on the trains you investigated was heavier with regard to the division or territory in which the trains operated?

A. We found it was heaviest on the trains nearest the border of the state, and not so heavy with those running central in Arkansas

Q. What effect in your judgment, would that have upon the percentage which would have developed if you had been able to analyze the entire forty-six trains?

A. I think if we had been able to analyze the forty-six trains the three percentages I have mentioned would have been considerably increased.

Q. Mr. Roth, I believe the heavy cotton movement begins with October, and that is one of the months in which there is a very heavy shipment of cotton in Arkansas?

A. It begins in October and there is a fairly heavy movement in that month.

Q. What effect does that have upon the loading of the
4571 local as compared with the through trains in that month?

A. It would necessarily increase the percentage of interstate business, as all cotton is treated as interstate business in our exhibit. It was also so treated in the state Exhibit I.

Q. How is cotton counted in the state's Exhibits in this case: are the tons of cotton handled on the trains doubled up by their method of treating it?

A. Cotton, owing to its double movement, in all statistics compiled by us, would shaw a double movement on account of the movement into the compress and the movement out.

Of course, that would not apply on ton miles as you would have those individually. But the tonnage necessarily repeats itself.

Q. It doubles itself?

A. Yes, sir. That, of course, is only in so far as cotton goes into the compress points.

Q. A good deal has been said about the handling of cotton at terminal stations: what proportion of the volume of tonnage handled on the Iron Mountain road consists of cotton?

A. The total cotton movement in the year 1909 was 1.27% of the total tonnage of the Iron Mountain road for that year. In the month of October, 1907, it was 2.58 percent.

Q. That is in the statistics of the company?

A. That is in these statistics.

Q. In those statistics does this double accounting on account of handling at the compress appear?

4572 A. Yes, sir, all cotton that goes into the compress would naturally come out again?

Q. Really, the percentage of cotton handled that way is swelled somewhat as it appears in the statistics of the company?

A. So far as the tonnage is concerned I would say it would be swelled some 60 or 70 percent.

Q. Do your estimates of 2.27 percent in 1909, and 2.58 percent in 1907, refer to the actual tonnage, the tons handled?

A Yes, sir.

Q. That would be affected by this doubling up at the compress points?

A. Yes, sir, that would be reduced somewhat, if you could eliminate the first movement.

Q. What does Exhibit 26 give as the quantity and number of tons of interstate freight carried in the month of October?

A. 291,110 tons.

Q. That is interstate, not including trans-state?

A. That excludes trans-state freight.

Q. What amount of that in tons or percent, or both ways, is cotton?

A. 7231 tons or about 2.5%

This was cotton that was loaded at Arkansas stations and billed to the compress points, only.

Q. Does not a considerable quantity of cotton in the state of Arkansas move to the compress points in other states?

4573 In other words, is there any considerable quantity of cotton that does not receive that additional handling, which grows out of the additional handling at the compress points?

A. Yes, sir.

Q. State what are the facts on that point?

A. For instance, all cotton shipped from stations north of Newport would go directly to St. Louis or to Dupo uncompressed.

There is also a movement from various stations in Arkansas south to Houston, Texas, that would go uncompressed, particularly from McCrary.

There is also a movement in southern Arkansas to Monroe, Louisiana, which is compressed there for shipment south.

I should say fully 30% of the cotton movement would not be compressed in Arkansas.

Q. And would not have that extra terminal handling that has been referred to in this case as chargeable to cotton at compress points?

A. Yes, sir.

Q. Is that an estimate or have you any figures on that?

A. I have no actual figures. It is more or less an estimate so far as this cotton movement is concerned. But I have looked into the matter.

Q. You have investigated for the purpose of forming an opinion?

4574 A. Yes, sir.

Q. But you have no statistics on that?

A. No, sir, I have no statistics.

Q. I wish you would state the proportions of grain shipped into Arkansas to the freight movement in that state?

A. The total grain movement over the Iron Mountain in the month of October, 1907 was 105,646 tons.

The grain milled in Arkansas, of interstate origin, 5513 tons or a fraction over 5% of the total grain movement or about 1.1 per cent of the total interstate tonnage as shown by our exhibit 26, which is 507,350 tons.

Of these 5513 tons, 3037 tons were reshipped to interstate points. This would constitute about 1.4 per cent of the trans-state tonnage shown by our Exhibit 26.

The other 2,476 tons were reshipped to Arkansas points and would be less than one per cent of the Arkansas interstate tonnage, as per our exhibit 26 which is 291,110 tons.

Q. Have you prepared a statement showing a comparison between the percentage of revenue accruing from the handling and hauling of the commodities and the percentage of the total tons one mile made by such commodities?

A. Yes, sir.

Q. I see you have a statement prepared which contains also in narrative, form, deductions you make from the table which constitutes the principal and important part of the statement: I will ask you to file the entire statement as a part of your testimony?

4575

A. This statement is as follows:

Comparison between the percentage of Total Revenue de-
4576 rived from the handling and hauling of Commodities and the percentage of the Total Tons One Mile made by the same Commodities.

The Comparison is made both on the Missouri Pacific and St. Louis, Iron Mountain & Southern System as a whole, and on the Intrastate freight traffic in the state of Arkansas.

The object of this comparison is to demonstrate that the Revenue derived from the handling and hauling of all classes of freight traffic bears a very much closer relationship to the cost of handling these Commodities than does the Ton One Mile.

In order to make plain the cost and the relation of Revenue and Ton One Mile, I have graded the various Commodities into six groups, according to character, loading, risk by loss and damage, handling and incidental cost.

Group No. 1.—Consists entirely of less than carload Merchandise and is of necessity the most expensive class of freight handled by the Railroad Company, as it involves very light loading, consists of many articles that are bulky, fragile or of delicate texture and of considerable value which naturally carries with it a heavy risk from loss and damage, it also involves much handling at stations and the maintenance of a large force of men for this purpose. It further necessitates a larger clerical force than carload freight as it involves the making out of waybills and bills of lading of about 100 less than carload to one of carload and increases the clerical work in the Auditor's office in the same ratio.

Group No. 2.—Represents carload Commodities, the loading of which is, on the average, light, many of which have the same characteristics as less than carload, making them liable to loss and damage and subject to extra handling. This group consists of carload merchandise, all kinds, and manufactured articles, fruit and vegetables, cotton and live stock.

4577 Group No. 3.—Represents commodities generally carried in light loads but on which the risk from loss and damage is less great and which requires no handling and consists of Hay, Packing House Products, Oil and Machinery.

Group No. 4.—Represents medium grade commodities, carried in heavy loads on which there is some risk from loss and damage and consists of Grain and Grain products, Cotton Seed and Cotton Seed Products.

Group No. 5.—Represents lower grade commodities, carried in heavy loads with little, if any risk from loss and damage and consist- of Lumber and other Forest Products, Salt, Brick, Lime and Cement.

Group No. 6.—Represents lowest grade of Commodities and the cheapest to handle, cars being loaded to full capacity, little, if any, risk from loss and damage, several cars usually moving together, some moving in train loads. This group includes Coal, Ore, Sand, Stone and Gravel, Cinders, Clay and Fertilizer.

*Statement of Freight Traffic of the Missouri Pacific and St. Louis, Iron Mountain & Southern Railway Companies as a Whole and of the St. Louis, Iron Mountain & Southern Railway Company Intrastate in Arkansas, by Commodities, Showing Tons One Mile and Revenue Earned and Percentages of Total.*

Calendar Year 1909.

| | System. | | | | Intrastate. | | | |
|---|---|---|---|---|---|---|---|---|
| | Tons, one mile. | % of total. | Revenue. | % of total. | Tons, one mile. | % of total. | Revenue. | % of total. |
| Grain | 591,187,133 | 13.43 | 3,958,829.03 | 11.15 | 1,139,362 | 1.56 | 25,363.48 | 1.93 |
| Hay | 56,909,711 | 1.29 | 521,482.58 | 1.47 | 575,015 | .80 | 14,357.41 | 1.09 |
| Cotton | 45,408,962 | 1.03 | 860,667.56 | 2.43 | ..... | ..... | ..... | ..... |
| Cotton Seed | 58,762,372 | 1.34 | 490,250.38 | 1.38 | 6,471,876 | 8.96 | 135,734.03 | 10.34 |
| Fruits and Vegetables | 106,636,371 | 2.43 | 912,444.66 | 2.57 | 159,350 | .22 | 4,611.88 | .37 |
| Live Stock | 132,957,358 | 3.02 | 1,702,029.21 | 4.81 | 252,724 | .35 | 7,531.09 | .57 |
| Packing House Products | 67,813,286 | 1.54 | 537,778.91 | 1.52 | 28,323 | .04 | 1,407.92 | .11 |
| Coal and Coke | 563,183,034 | 12.81 | 2,811,715.82 | 7.98 | 16,488,448 | 22.82 | 136,983.02 | 10.43 |
| Ore and Products of Ore | 232,846,122 | 5.29 | 1,021,623.30 | 2.88 | ..... | ..... | ..... | ..... |
| Stone & etc. | 144,170,531 | 3.28 | 1,033,028.03 | 2.91 | 5,207,234 | 7.20 | 51,774.42 | 3.94 |
| Salt | 48,044,198 | 1.09 | 298,152.37 | .84 | 135 | ..... | 14.40 | ..... |
| Lumber and Forest Products | 1,312,674,369 | 29.94 | 7,489,149.75 | 21.14 | 29,464,064 | 40.77 | 436,507.93 | 33.24 |
| Oil | 36,425,109 | .83 | 391,965.30 | 1.10 | 18,637 | .63 | 509.05 | .04 |
| Rails | 31,130,486 | .71 | 135,431.95 | .38 | 162,272 | .23 | 2,564.67 | .19 |
| Machinery | 25,673,741 | .58 | 296,004.75 | .83 | 121,119 | .17 | 7,272.36 | .55 |
| Lime, Brick & Cement | 209,712,937 | 4.77 | 1,405,115.19 | 3.96 | 4,428,010 | 6.13 | 44,597.27 | 3.40 |
| Miscellaneous | 100,450,818 | 2.29 | 787,207.52 | 2.22 | 879,927 | 1.22 | 17,041.57 | 1.30 |
| Merchandise & Mfd. Articles, C. L. | 426,456,209 | 9.72 | 4,004,224.01 | 11.31 | 2,520,783 | 3.48 | 63,865.09 | 4.87 |
| Merchandise & Mfd. Articles, L. C. L. | 202,865,961 | 4.61 | 6,774,592.59 | 19.12 | 4,352,871 | 6.02 | 363,029.31 | 27.65 |
| Total | 4,393,315,508 | 100% | 35,431,692.91 | 100% | 72,270,148 | 100% | 1,313,164.70 | 100% |

4579 *Percentage of Tons One Mile and Revenue.*

Calendar Year 1909.

| | Mo. Pac. & I. M. & S. System. | | Arkansas Intrastate. | |
|---|---|---|---|---|
| | Tons 1 mile. | Revenue. | Tons 1 mile. | Revenue |
| No. 1 ..... | 4.61 | 19.12 | 6.02 | 27.65 |
| No. 2 ..... | 16.20 | 21.12 | 4.19 | 5.79 |
| No. 3 ..... | 4.24 | 4.92 | 1.04 | 1.79 |
| No. 4 ..... | 14.77 | 12.53 | 10.52 | 12.27 |
| No. 5 ..... | 35.80 | 25.94 | 47.98 | 37.94 |
| No. 6 ..... | 24.38 | 16.37 | 30.25 | 14.58 |
| | 100.00 | 100.00 | 100.00 | 100.00 |

4580 The Ton Mile figures in themselves are the result of two factors only, the net weight of the shipment and the distance it is hauled, i. e. the net weight is multiplied by the number of miles it is hauled and the result is tons one mile.

The percentages of tons one mile shows on sheet 3, are the tons one mile made by the commodities in each group, compared to the total tons one mile of all freight. The percentage of Revenue shown, is the Revenue derived from the handling and hauling of the commodities in the same groups, compared to the total Revenue derived from all freight traffic.

The tons one mile take into consideration, only the two factors named, weight and distance, whereas the Revenue takes into consideration not only these two factors, but every other factor brought into play during the process of handling and hauling the freight.

These percentage figures show that the construction of rates generally State or Interstate, is based on the cost of doing this business, and that such departures as may, from time to time, be made by traffic officials for reasons testified to by them would not detract from the value of the Revenue as a basis of division of costs.

The revenue is governed entirely by the rate, based on cost, ton miles entirely by weight and distance; the heavy loading of low grade Commodities largely offsets the length of haul when compared to lightly loaded Commodities—for example, a carload of coal containing 80,000 pounds hauled 100 miles, would make the
4581 same number of ton miles, as carloads of Merchandise containing 20,000 pounds hauled 400 miles; this gives you a common factor of 4,000 ton miles to measure the cost. The shipment of coal at the Arkansas Commission's rate would earn $38.00, the shipment of Merchandise, $82.00, or over twice as much. The Arkansas Commission's Standard Distance Tariff Rate for 400 miles is the same as for 300 miles and applies equally on one Line or two line shipment.

Applying Interstate rates to the same shipments, a shipment of 80,000 pounds of coal hauled from from Jenny Lind to Wagoner, a distance of about 100 miles, would produce a revenue of $52.00 and

a shipment of Class S. Freight of 20,000 pounds moving from St. Louis, Mo., to Donaldson, Ark., a distance of 400 miles, would bring a revenue of $96.00. Again compare one carload of coal hauled 100 miles to four carloads of Merchandise hauled 100 miles. The ton mile gives you the same common factor of 4,000 ton miles for the car of coal and the four cars of Merchandise. The Revenue from the car of coal would be $38.00 and from the four cars of Merchandise $208.00, from four cars of Machinery $144.00, from two cars (each 40,000 pounds) of wheat, $80.00.

4582 Q. You stated a moment ago that all cotton at compress points is in the statistics of the company as handled twice in and out?

A. All of the cotton movement into the compress is counted twice, in and out.

Q. Is that true also of grain?

A. Of grain milled in transit.

Q. That is what I mean, at milling points.

A. Yes, sir.

Q. That also is interstate?

A. Virtually all in Arkansas. It is not all.

Q. It is practically all?

A. Yes, sir.

4583 FRED P. JOHNSON, recalled, testified as follows:

Direct examination.

By Col. MOORE:

Q. Mr. Johnson, how long have you been engaged in railroad accounting work?

A. A little over 21 years.

Q. All your business life, then, has been in the auditing department of the St. Louis, Iron Mountain & Southern Railroad Company?

A. Yes, sir.

Q. You have, consequently, I take it, given a great deal of time and attention to railroad accounting, have you not?

A. Yes, sir.

Q. You are familiar with the manner in which the accounts and statistics in the auditor's office of the Iron Mountain road are made up and kept, are you not?

A. Yes, sir.

Q. How has the data upon which the accounts of expense and maintenance in its several branches, equipment—and in fact all the ways in which it is divided between the different branches of the service and between the different classes of equipment, and in regard to which the statistics have been compiled, been obtained?

Does the Auditor work that up from his own views as to the proper basis of division or does he obtain information from the operating officials of the road to aid him in keeping accounts and statistics? State what the practice is on the Iron Mountain Road, please?

4584

A. The operating expenses of the railroad are taken from practically two sources: the payrolls and the vouchers.

In some cases the vouchers originate in the Auditor's office and in other cases they originate in the division office that incurs the expense.

The payrolls of the operating department are made up entirely in the division office from individual time books of each department.

The distribution of these expenses is made by a division accountant at the various division points.

In the Iron Mountain organization this division accountant in the maintenance of way department reports to the chief engineer of maintenance of way.

In the equipment department he reports to the superintendent of machinery.

In the transportation department the division accountant reports to the Assistant General Manager.

The accounts are made up monthly and submitted by the various superintendents to the general auditor. They are in that office checked and verified as to the total and consolidated into the system accounts.

These accounts that are rendered by the division accountants to the general auditor's office represent the charge to the ex-
4585 pense account, and since July 1, 1907, have been compiled practically under instructions contained in circulars issued by the Interstate Commerce Commission.

The compilation of these accounts and the division when necessary between freight and passenger, and the various statements in connection with the operating expenses, are made in the auditor's office.

Q. Mr. Ludham, a witness on the part of the state in this case testified that the operating man is the one least qualified to figure out his own cost, and that that is done by the accounting department.

What is your view as to the qualification of these classes of officials for the purpose of distributing the operating cost?

A. I do not know exactly what Mr. Ludlam meant by that statement. But if he means that the accounting man is more familiar with the individual items of expense, and the causes that brings that expense about; and for that reason is able to say just how it ought to be apportioned and what kind of a statement ought to be compiled in order to enable the operating official to know just what it costs on his road, then I do not agree with him.

I will say this, that ever since I can remember, in the service of the Missouri Pacific Railway we have had frequent occasions to divide the individual items of expense. For instance, there may be joint stations between two operating divisions or under the old
4586 Missouri Pacific System there may be joint stations between two corporate lines, where the employés were performing service for both companies or both operating divisions, and in order to find the cost of each division it was necessary to divide this joint expense. In that case the matter was referred either to the general

superintendent of that territory or to the two superintendents of the individual divisions, for their opinions.

Judge HILL:

Q. Mr. Johnson, you have read Mr. Ludlam's testimony, have you not?

A. Yes.

Q. Don't you recall that he states it is the duty of the accounting official to acquaint himself with the facts from the operating official, and then devise a system by which these accounts could be properly separated?

A. Yes, sir, I believe he did say so.

Mr. MOORE:

Q. Mr. Johnson, state your views as to the correctness of the opinion expressed by Mr. Ludlam?

A. The accounting official is hardly able to acquaint himself with the actual operating conditions from any particular part of his line, except by conferring with and getting information from the operating official.

Referring back to these items of station expense, the way that was handled was to refer the matter either to the general superintendent of that territory or to the superintendents interested and after an investigation by them they would either advise the auditor's office of some arbirary percentage or some unit that they felt would
4587 represent the relative use of the service at that point by the two divisions. And that recommendation was always accepted by the auditor's office.

Now, getting down to the operating costs of a railroad, most of the railroads in this part of the country had to compile a statement showing the relative cost per ton per mile and in some cases the cost per passenger mile, on different stations of their road. I have never known of any case where any road adopted such a system as that where the system itself was not practically installed by the operating official.

The Missouri Pacific road commenced compiling such a statement as that in May, 1900. It was done at the request of the general manager, and the system that was installed was installed under his instructions and brought by him from the road he was with before coming to the Missouri Pacific System. I have always understood that the formulas in use under that system were formulas which he had originated.

Judge HILL:

Q. Was that Doddridge?

A. No, sir.

This particular statement which is compiled in the auditor's office, is a statement furnished to the operating official exclusively, and any change recommended by the operating official is always adopted; and no change is ever made in that statement unless it is recommended by the operating official.

That statement is the only statement compiled in the Iron Mountain office that pretends in any way to show the cost of operation in either the freight or the passenger service. The operat-
4588 ing department in using that statement has never pretended that it represents the actual cost nor do they ever use it for that purpose. Its object is to enable the general manager or general superintendent to make a comparison of the cost of operation upon one division in one month with another.

Q. Now, Mr. Johnson, I will come to that a little later.

You are familiar of course, with Exhibit I filed by the state in this case and also with Exhibit 26, upon which Exhibit I is largely based:

Will you state what you think of the correctness of the method adopted by the state for the purpose of ascertaining the tonnage carried on local and through trains in the month of October, 1907?

A. So far as the method used by the state is concerned in ascertaining the business handled by the local train, and then deducting those figures from the total figures shown by Exhibit 26 (which was filed by the railroad) is concerned, I do not believe it is fair and I do not believe it is a system which would be used by any railroad official.

The figures compiled in Exhibit 26, representing the total business for that month, are compiled from one source.

The figures representing the movement of local trains are compiled from another source.

The figures purporting to represent the local train move-
4589 ment are not figures that are included entirely in the total figures.

I do not believe it is a fair assumption to make such deduction. That refers particularly to the tonnage figures.

Q. You think correct information as to the relative tonnage carried on these trains could be ascertained in that way?

A. I do not believe you can get a correct figure.

Q. It has been shown in this case that there is a large amount of tonnage moving the month of October, which is not included in the auditor's accounts for that month: do you believe that omission could be accounted for or made up by any system of lap-overs from month to month that might exist in the relation of the auditor's accounts to the actual movement of the freight handled.

A. I have no idea how the lap-over from month to month will run. But in order to make this statement of any service we are compelled to assume that whatever buisness moved on the locals in the month of October and did not get into our accounts, was offset exactly by the proportion of business that got into the accounts but did not move. That proportion must be exactly the same, not only in volume as to ton miles, but as to the commodities themselves.

It seems to me a violent assumption to assume that the lap-overs from September to October and October to November and November to December would be exactly the same.

In order to verify that it would mean as much labor and
4590 time upon each of those months as was spent in compiling this exhibit I. It is a work which is practically impossible.

Q. But your view is that the lap-overs would not equalize mistakes of that sort, or rather, the misleading effect of comparisons of that kind.

A. I cannot imagine how such a condition could prevail.

Q. Mr. Wilmerding, the witness on the part of the state, and who was connected with the Oklahoma Corporation Commission testified that that Commission had never been able to arrive at any satisfactory basis for dividing expenses of railroad operation, or, he said "To get the railroads to agreed to anything." That they had been working on the question since November, 1907:

I wish you would state what you know about that and if the Oklahoma Corporation Commission has made any suggestion or request upon the railroads with which you are connected, the Iron Mountain Railroad, in that regard?

A. The Oklahoma Corporation Commission, very shortly after its organization, undertook to establish a system of reports from railroads and called several meetings of railroad officials. I attended two or three of those meetings (representing the St. Louis Iron Mountain & Southern Railway) and I do not understand that the Oklahoma Corporation Commission ever attempted of their own accord to adopt a system for ascertaining the cost of state and interstate freight. But the only order the Oklahoma Corporation Commission has issued to the railroads relative to this matter. is their Order No. 201. That order was sent
4591 out to the railroads two or three different times, as tentative orders.

There were several conferences with the Commission and the substance of those conferences was that the railroads would furnish whatever information the Corporation Commission of Oklahoma asked for.

Order No. 201 (which is a standing order) is in force today, and merely provides for the items under expense accounts and revenue accounts that the Commission wants.

So far as the division of those operating expenses between freight and passenger, or between state and interstate, there is no order in force from the Corporation Commission, and the railroads are expected to make this division upon any basis that they might believe to be fair.

The Iron Mountain has been furnishing the Commission with a monthly statement, ever since its orders was in effect.

The statement undertakes to show the state freight and passenger revenue; and the state freight and passenger operating expenses.

We are furnishing that statement upon the basis used in all these rate cases, which is the revenue basis.

During my attendance at those meetings and conferences with the Commissions and with its representatives, I have never heard of any plan proposed by that Commission for such a separation of expenses and earnings.

Q. Were you in any way connected with the Missouri Rate Case, and if so, state in what way?

4592 A. I either compiled or was connected with the compilation of all of the exhibits that were furnished by the Missouri Pacific Railway in that case.

I attended all of the hearings before the Master, with the exception of one week at Chicago; and all of the hearings in the Circuit Court, with the exception of one day.

Q. Mr. Wharton testified that the testimony in the Missouri Case indicated that the main difference in the cost of state and interstate traffic was the cost of the local and the through trains:

Is that your understanding of the testimony in that case, that the main difference was in the cost of local and through trains to the exclusion of other elements of increased cost of state traffic?

A. No, sir, I think there were a number of reasons given for the extra cost of state freight, as contributing very largely to that extra cost, in addition to the local train expense.

Q. Has the Iron Mountain Railroad ever made a practice of dividing the expense of maintenance of way between local and through trains in such manner as has been adopted in this case?

A. No, sir, I do not remember of any case where the Iron Mountain has ever had occasion or ever attempted to ascertain the cost of an individual freight train, whether it be a local or a through

4593 train.

Q. What do you think of the state's method of dividing the expense of maintenance of way between local and through trains? If the separation had to be made do you believe the manner adopted by them, the car mile basis, is proper from your standpoint as an accountant and from your experience in railroad accounting?

A. I do not see that the basis adopted by the state, so far as the maintenance of way and structures is concerned, brings about any closer relation to the expense of those two classes than any other arbitrary method would be, and I have no idea how the exact expense of either local or through trains or of one individual train, could possibly be ascertained with any degree of accuracy.

Q. You have heard the testimony in this case that a large proportion of the expense of maintenance of way and structures is not due to operation, but to other causes?

A. Yes, sir.

Q. In that view do you think the method adopted by the state is a proper one?

A. No, sir, the larger the proportion of that class of expense that is due to the elements the less accurate would be any unit either of car miles or train miles, because, as has been stated by other witnesses, neither the train miles nor the car miles would have any effect upon that class of expense. It goes on regardless of the volume of business.

Q. It is more or less of an overhead expense than other-

4594 wise?

A. It seems so to me and it is more of a general expense than any other item in the operating department. It is not a regular expense. By that I mean that the expense which is incurred this month is not taken into the account this month or next month or

possibly not this year, and the traffic or the car movement has no bearing upon the amount of money which is taken into maintenance of way expense in the month in which the car movement is made.

Q. I notice in ascertaining the engine miles for the purpose of making the division under that heading, they have assumed that 270,564 engine miles and on the next sheet speaking of maintenance of locomotives under "Maintenance of Equipment" there is an enumeration of 130,150 engine miles for yard locomotives:

Is that omitted from the figures to which I first called your attention under the head of "Maintenance of Way?"

A. The item of 270,564 engine miles as shown in the state exhibit K under the heading of "Maintenance of Way and Structures" is road engine miles. While under "Maintenance of Equipment" yard locomotive mileage is shown to be 130,150.

This 130,150 miles has been omitted from the engine miles or wheels taken into account under "Maintenance of Way and Structures."

The yard engines are incurring an expense in maintenance of way, maintenance of tracks, and the use of structures to at least the same extent as the road engine mileage is; and if the wheelage basis is to be considered a reasonable basis for dividing maintenance of
4595 way and structures expense, I do not understand why the switch engine mileage should not be included in it.

Q. What effect would its omission have upon the percentage of cost under that heading?

A. It is 130,000 miles, practically 50% of the total road engine miles, and it would have a bearing upon the division to the extent that that mileage should be increased to equalize the switching car movement.

Q. Mr. Wright was examined in regard to the allowance made for road switching. He submitted his statements based upon the average number of cars set out and picked up at stations on the Iron Mountain road:

Have you looked into Mr. Wright's statements to see whether they were made upon a correct basis or not?

A. Yes, sir, I have read his testimony on that subject and secured the work sheets upon which he based his calculations.

Q. Are his calculations made upon a proper basis?

A. I do not think they are.

Q. State now what the difficulty with them is?

A. In the first place, in taking an estimate that Mr. Wright made, he arrived at the conclusion that 40% would be more nearly correct than 50%, to be added.

He took as his basis of calculation a train run from Newport to Little Rock; he estimated the number of cars set out and the number of cars picked up and assumed that the engine in local service would make two trips for each car. He then estimated the length
4596 of the passing track by multiplying the car capacity of that track, as shown on our timecards, by thirty and in that way ascertained the number of feet; or, reducing it to miles the number of miles made by that local engine in switching service.

I notice in his work sheets he allows at Bald Knob ten cars, five set out and five picked up. But for some reason allows but ten engine trips.

At Kensett he allows four cars set out and four cars picked up, making eight in all; but allows only ten engine trips.

Now, if those two items were changed, allowing two engine trips for each car, as was done in the case of every other point, the percentage would be increased to about 63%.

But there is this objection to that basis: the mileage of those passing tracks is not the car capacity multiplied by 30.

The method used by the railroads in ascertaining the car capacity, is to take the actual length of the track, allow various lengths at each end of that track for leads and then divide the balance by various figures, from 36 to 40, based upon the length of the car and the space between them. Such a method would naturally bring about a much larger mileage for that passing track.

Q. Speaking of leads, what is the allowance for that?

A. It varies, I think, from 75 to 125 feet at each end.

There is this additional objection to Mr. Wright's method,
4597 in my opinion, and that is that in making his assumption as to the amount of mileage made by switching engines, or the engine engaged in local service, he assumes that all the switching done by that engine would be done on the passing track and makes no allowance for other tracks that would be maintained at the various stations.

Q. Where is the switching usually done? On the passing track or on the other side tracks and industry tracks?

A. My understanding of the method of handling that kind of work at the local station is, that there would be no more switching done on a passing track than is absolutely necessary and the side tracks and industry tracks are maintained for that purpose.

Q. What is the purpose of maintaining a passing track?

A. The name indicates that. It is for the purpose of allowing a train to take that track for the purpose of enabling another train to pass by.

Q. The habit of switching on the passing track would probably defeat the purpose of their maintenance?

A. It would in many instances.

Q. The fact remains that the majority of switching is done on the side tracks maintained for that purpose?

A. Yes, sir, on tracks maintained for that purpose.

Q. Is the mileage of such tracks included in Mr. Wright's figures?

A. No, sir, as I understand from his exhibit and testimony it is the mileage he arrived at by multiplying the car capacity
4598 of these passing tracks by thirty.

The car capacity of the passing track is the only information of that kind that was shown upon our timecards, from which this information was taken.

Q. That is probably the way he was misled, seeing it on the timecard?

A. I do not know what his idea was.

Q. The real switching tracks, and the industrial tracks mileage do not appear on the timecard?

A. No, sir.

4599 Q. Mr. Wright also testified he made a comparison from the time table of the time allowed to #98 and #96 local trains between Texarkana and Little Rock and train #56, the red-ball train between same two points and found there was about 40% more time allowed the local train than the through train to make the same distance. He says that would tend to support his statement:

Now, Mr. Johnson, I wish you would state to what extent those schedule allowances and allotments are carried out in actual practice and what is the value of Mr. Wright's deduction there?

A. I do not believe it is fair to make any assumption of the amount of switching that might be done by an engine on a local train, by comparing the time card mileage of one class of train with the time card mileage of another class.

In looking into that matter I took our wheel reports that are made by the conductors and which were largely used by the state; and from that drew off the running time of the local trains between Little Rock and Texarkana; and of the through train between the same points, during the month of October, 1907, for each of the 31 days.

We found that the average running time of the through train was sixteen hours and seven minutes. And that the average running time of the local train was 25 hours and 18 minutes.

That would indicate a difference of about 57%.

Then going further we took the line between Hoxie and Argenta and the average running time of the through train for that
4600 entire month was 10 hours and 35 minutes; and for the local train it was 20 hours and 45 minutes, a difference of 96%.

Some of the witnesses for the state have testified that they believed that that was some indication of the amount of swiching that was done by the local engine.

If that is a unit that can be used to compare the relative service, it seems to me the actual time consumed by those trains would come nearer than the timecard or the schedule time, because our experience has been that very few local trains make their schedule time.

Q. Mr. Wilmering in his testimony took the position that the cost of each locomotive should be ascertained and divided on the basis of the mileage made by the engine, in ascertaining the cost of the locomotive under the head of "Maintenance of Equipment."

Is such a scheme as that practicable, Mr. Johnson?

A. My understanding of Mr. Wilmering's testimony was, that he thought the repairs of each yard locomotive should be ascertained and that these repairs should be divided between the class of cars switched by that locomotive, and such a basis as that is impracticable and could not be compiled from any system of records that the railroads might adopt.

In other words, no railroad could undertake to keep a record of the number of car miles in local and through and strictly switching

service, that might be handled by the individual switch
4601 engine in any yard.

Q. The same witness also testified that station expenses should be divided on the basis of the number of tons handled and that the tons handled should be doubled in the case of state freight, and one additional terminal should be added to interstate freight for each 100 miles of average haul:

What do you think of such a method of ascertaining the average expense?

A. I do not believe that method is at all right; and especially so so far as station expense is concerned, because after the freight is billed and loaded and incurs all the expense that is incurred by a ton of freight for forwarding, certainly that expense would not be multiplied every 100 miles of that ton movement.

I think the exhibits introduced by Mr. Moore would show that beyond any shadow of doubt.

The cars might be billed from St. Louis and certainly would receive no service at the hands of any station agent in Arkansas.

Q. Mr. Hillman testified that the cost of yard service should be ascertained directly as between state and interstate on the basis of the tons instead of dividing that item between local and through trains:

What effect upon the result in the figures produced by the state here would such a division as that have, if divided in the manner suggested by that witness?

4602 A. If the total yard service, which amounts to $293,000, were divided between state and interstate business, it would then result in the same percentage of that total expense being charged to state business as was used in the case of station service; or practically one-third of all of the yard expense upon that basis would be charged to intrastate freight. And then that would assume that every ton of interstate and every ton of trans-state freight received a full yard service within the state of Arkansas.

Now, in an amended exhibit (Number Y) the state has changed this method of dividing station service by eliminating trans-state freight, and if that is done to yard service as well, it would result in a charge of almost 50% of the total terminal expense, or practically $140,000 being charged to state freight.

The result would tend to very materially reduce the percentage of return upon the value of the property, so far as state freight is concerned.

Q. What amount is chargeable to state freight upon the basis adopted in the exhibits filed in this case?

A. The yard and terminal expense is divided by the state in Exhibit K, first as between local trains and through trains.

Then the expense apportioned to each class of trains is divided between state and interstate tonnage on the ton mile basis.

The result of that is that $23,468.64 has been charged to
4603 state freight on account of yard service.

Q. On Mr. Hillman's plan it would be what?

A. If we were to adopt the tonnage basis and charge to interstate

and trans-state freight one full terminal handling, then the proportion of the total expense that would be assigned to state freight would be $97,782.

Q. And that would be the result of the working out of the plan suggested by Mr. Hillman, would it?

A. Yes, sir.

Right in that connection, on that same page of Exhibit K, I would like to call attention to a statement that is made there and I think has been overlooked by the state:

Under traffic expenses at the head of page 4 they say "These expenses are incurred in securing and looking after traffic."

"The amount apportioned to the state of Arkansas is based on the revenue train mileage in that state as compared with the revenue train mileage of the whole road."

Our traffic expenses are apportioned between states on the basis of the gross earnings and not the train mileage. That is shown in our statement 5 on Exhibit 3, and I think our basis for dividing that expense between states is in exact accord with the basis adopted by the state in dividing the proportion that is assigned in Arkansas, between state and interstate. That is, the gross earnings basis in both cases.

Q. What do you think of the way in which "Other train expenses" is attempted to be apportioned on Exhibit K?

4604 A. I do not believe we can come any closer to the expense incurred by local trains and the expense incurred by through trains, by a division on the train mileage of such accounts as are included in this item than we can under maintenance of way and structures.

Out of a total of $132,000, 73% of that amount is made up of such items as wrecks, injuries to persons, damage to stock on the right-of-way, and fires set out by sparks, and damage to other property.

In the next item, loss and damage to freight, the state has undertaken to assign directly to state and interstate freight the amount of expense taken into account in that month, for loss and damage to freight; and the result of that is that they found 24.29% of the total expense under loss and damage to freight was paid for damage to intrastate shipments.

Now, that was an actual ascertainment from the vouchers themselves. And so far as the greater part of the damage to stock, wrecks, injuries to persons, are concerned, that expense could have been located either to the local train or the through train with the same degree of exactness as the loss and damage to freight was.

I do not believe the train mileage has anything to do with that class of expense at all.

Q. Mr. Johnson, you said the cost attributed to state freight on account of loss and damage to freight was actually located and was 24.29% of the total:

4605 Is there any other item which was actually located by the state accountants in going through these figures?

A. The nearest to an actual allocation of expense to that was the wages paid train crews.

They took that from the time books, showing the amount paid the crews upon each train run.

The only difference between that method and an exact amount would be the question of overtime and the last two or three days of each month that might not get into our time books.

But this actual allocation of loss and damage to freight resulting in a charge of 24.29% results in a larger charge in these accounts for state freight than the revenue basis would assume, even with 100% added for extra cost.

Q. I will call your attention to the division of general expenses in Exhibit K:

Will you state what you think about that method?

A. I do not believe the amount of money that is expended in the operation of a railroad say for expenses in the transportation department has anything to do with the cost of operating our general offices.

The greater portion of general expenses consists of the salaries and expenses of the employes in the General Auditor's office. And, in turn, the greater part of the General Auditor's expense is for the purpose of accounting for the revenue of the railroad company.

4606 It also includes, for instance, the freight claim department, which is the largest single department in the General Auditor's office.

I cannot conceive of any way by which the cost of maintenance of equipment and the cost of maintenance of way or the cost of the transportation department has anything to do with this expense.

A large item under "General Expenses" is our Legal Department And the increase or decrease in the amount of expenses in the law department bears no relation whatever to the expense of the several operating departments of the railroad.

I do not see how dividing the general expenses on the basis of the fixed charges in that department would bring about a very close cost.

Q. You mean to show what is the proper relation between the two?

A. Yes, sir.

Q. Our old friend Mr. Wilmering, whom we have been quoting here, also said in his testimony that the ton mile is the standard measure or unit of freight cost in the real art of railroading, and has been used for many years.

He further says the results are accomplished after great expense and the compilation from waybills and that it is an expensive undertaking and if there was no real use for it why should the railroads work it up. And if it is not a good unit why should it not be discarded.

4607 Yet the railroad companies instruct their operating men to watch their cost per ton mile:

I wish you would state if Mr. Wilmering's impressions are correct and also state what is the real purpose of those several units that have been discussed here, as they are used in the operating accounts of a railroad company?

A. I do not think the cost per ton mile is a unit upon which the

operating official depends exclusively in judging of his operating performance.

These operating statistics that Mr. Wilmering undoubtedly has in mind deal with three units, for these comparative purposes. They show the cost per train mile, they show the cost per car mile and they show the cost per ton mile.

I do not believe that any operating official ever uses one without the other nor do I think the general operating official would ever criticise the cost per train mile or per ton mile upon an operating division in Missouri as compared with an operating division in Arkansas.

Nor would they compare that relative cost as between any two operating divisions, even in one state.

The real use which is made of this cost per ton mile unit in the operating department is to judge of the individual operation of one division through different periods of the year and during different years.

I believe that the cost per ton mile as understod by Mr. Wilmering has been discarded by most of the railroads and instead of
4608 using the cost per revenue ton mile the railroads are now getting down to a basis of cost per gross ton mile, including not only the freight but the weight of the car. And I think, too, that they are getting away from the cost and dealing rather with the physical operations. I do not think that the cost per ton mile as an operating unit was ever given the consideration and the value that a great many people seem to think it has.

So far as our road is concerned, we have tried twice since May, 1900, to devise some better scheme for showing the comparison on the various operating divisions. And perhaps sometime we will reach a unit that will be satisfactory to the operating man—but we have not done it yet.

Q. Mr. Johnson, has your work been connected with these units?

A. When this operating sheet was established in 1900 on our road I was transferred to that department and in July, 1902, I was placed in charge of the department and my duties were entirely in connection with figures of that kind, up to the time I left the Auditor's office.

Q. So you had the opportunity to familiar knowledge of these statistics and the purpose for which they were used?

A. Yes, sir, I have compiled them ever since our road had them.

Q. What do you think of the method pursued by the state accountants in Exhibit K, in dividing the state and interstate ton
4609 miles for six months between local and through trains on the basis of ton miles, of October, 1907, instead of using the October percentage as they have done in every other case.

A. I think if this general scheme is worth anything it would have been fairer to the railroads if they had adopted the percentages they found to represent the volume of *of* business moving on those trains, in the month of October, rather than to have adjusted it to the six months ton miles.

They have used percentages based upon October figures in ascer-

1993

taining the cost under each expense account; and then in undertaking to find out how much of the total local train expense should be assigned to state business, they take the percentage of the state and interstate business on the local trains applied to the ton mileage for six months.

The conditions might be entirely different in the month of July or in the month of November. I do not believe this method reduced the general percentage to any more correct basis than the October percentage itself would have done. And it results in a reduction of practically 2 1/2 per cent of the total expense on the local trains and about 2/3 of one per cent in the total expense of the through trains being assigned to state freight.

If the railroad itself had applied the same basis in compiling its figures and had used the revenue percentage for one month rather than six months, we would have brought about an entirely different result in our net earnings and percentage of return upon the
4610 value of the property.

It seems to me it shows that one month's percentages are hardly fair, especially when you take into consideration the amount that is involved.

I do not see that this basis gets any closer to the desired results than would have been the case had they taken the percentages for the month of October. It simply brings about a different figure.

Q. What do you think of the disposition made by the state's accountants in this exhibit of miscellaneous freight revenue, or, rather the use that has been made of it.

A. In Exhibit K the state has undertaken to divide miscellaneous revenue of $122,000 between the state and interstate traffic on a basis of the percentage of actual freight revenue.

I believe I testified in the original examination that I did not believe that could be done. I do not believe so yet.

Q. I want you to state in that connection why. Give the reasons why you think it cannot be done?

A. The reason is that in this $122,000, there are items that bear no relation to the actual freight earnings.

We have included in the $122,000, an item of $37,000 for switching service.

I do not understand the percentage of state freight to the total freight revenue has anything to do with that switching revenue.

4611 There is an item of 520,000 for car service:

The same objection would apply to that, that applies to the switching revenue.

There is $55,000 for miscellaneous rents:

I do not think items of that kind are divisible between state freight and interstate freight.

Q. Up to this point I have examined you in connection with Exhibit K and in regard to such matters as I thought you would be familiar with from an accounting standpoint.

If there are any other matters I have omitted, they have appertained to operating conditions with which you are not so familiar.

I want to call your attention to a few matters connected with Exhibit M, of the same class, relating to accounting matters, about which I examined you in connection with Exhibit K.

Please turn to "Traffic Expenses" on page 2 of Exhibit M:

You will find nearly 20 per cent of that expense is charged to mail and express. I want you to state what relation, if any, there is between that expense and mail and express:

I should like to get that clearly stated and you should know something about that?

A. So far as the accounts of the Iron Mountain Railway are concerned, I do not believe the traffic expense bears any relation to the mail and express service.

4612 There is no soliciting of express business nor is there any soliciting of the mail.

The compensation that accrues to the railroad is by contract.

There is no official whose salary and expenses are charged to this account and has anything to do with the making of those contracts.

If the state is attempting to adopt bases that will come nearest to reflecting the actual expenses, then the revenue basis, which includes over 19 per cent of mail and express earnings, is not the proper basis on which to divide this $53,000.

The handling of our mail business is practically all done by a separate department and in our classification the expense of that department is charged to our general expenses. That is, under our classification that was in force when these figures were compiled.

The contract in connection with the express business is handled by our executive officers. And the expense that might be incurred in making that contract or in watching its operation after it is made, would be charged to general expenses.

So I can hardly imagine any expense charged to traffic that would bear any relation to the mail any express revenue.

Q. "Station expenses" I observe they have also divided on the basis of the number of passengers handled:

4613 What are your views in regard to that?

A. I think any rule that would require these expenses to be divided on the basis of the number of passengers handled ought to be used in exactly the same manner as would a similar expense be divided under freight. That is, the trans-state passengers ought not be charged with any more of those expenses than would the trans-state freight.

The amount involved is perhaps small, but under this basis it assumes that all trans-state passengers incur just as much station handling or just as much station service as the intrastate passenger, who may originate at a station in Arkansas or is destined to a station in Arkansas.

Q. To use Mr. Doddridge's illustration, the trans-state passenger is the man who goes through from the borders of the state and is carried like a man going over a bridge?

A. That is my idea of a trans-state passenger.

Q. Perhaps the bridge simile would be a little closer there than in the freight matter, would it not?

What station expense is incurred in regard to the trans-state passenger, who has no occasion to get on or off the train and no call for any station service?

Is there any service at all rendered at a station in Arkansas to a trans-state passenger? You have traveled on the trains. You know they have a dining car. I don't know of any service that would be rendered to him, and I want to know if you know of any?

4614 A. If the passenger buys a through ticket to a point reaching beyond the state of Arkansas, I cannot conceive of any item of expense which should be included under station service, that would be charged to that passenger.

Q. It is the universal rule that trans-state passengers, as well as all other passengers, buy a ticket from the origin to the end of their trip?

A. Yes, sir.

Judge HILL:

Q. Suppose you had a fellow who was going from Coffeyville, Kansas, to Memphis, Tennessee over your line, what station service would he have in Arkansas?

A. If he had a through ticket I do not see that he would have any station handling in Arkansas.

Q. What about Memphis?

A. If that is the final destination, there is very little expense at Memphis that would be incurred.

But that is an exception in Arkansas, where we have our Memphis expense in here (indicating exhibit). I had not thought of Memphis.

Q. Take it at Fort Smith. There is the same proposition there, isn't there?

A. From Memphis to Fort Smith? He would not be a trans-state passenger.

Q. He would be an interstate passenger, with two handlings?

A. Yes, sir.

Q. Suppose you had a trans-state passenger who took one

4615 of your trains in Missouri, say the Hot Springs special at St. Louis, and changed at Little Rock to the through train going on to the City of Mexico, would not he have one station handling at Little Rock?

A. No, sir, I cannot say he would incur any of the expense charged to this account.

Q. Would not he use that station just like any other passenger getting off at Little Rock?

A. He might use that station but the maintenance of that station is not charged to "Station expenses".

Q. He would have the same service, whatever classification that might be, as would the man who would get on at Little Rock and go on to San Antonio?

Col. MOORE: In these station expenses?

Judge HILL: What character of expense are you talking about there?

Mr. JOHNSON: Station expenses—the wages of the agent and his office force.

Q. If the man who got on your train at Little Rock was going to El Paso, he would have one handling?

Col. MOORE: He is an interstate passenger.

A. He would buy a ticket and get service from that station force.

Q. Suppose a man came down from St. Louis on the Hot Springs special, but could not go on with that train further, he would get off at Little Rock, take his baggage off, and then pursue his
4616 journey from Little Rock to Texas on another train. What would be the difference between him and the man who got on the train at Little Rock in the first place?

A. I don't know what he would be doing on that train, in the first place.

Q. Assume that he did that. I know some folks did that.

A. If he did get on that train and bought his ticket at St. Louis for El Paso and changed trains at Little Rock, he would not receive any attention at the hands of the station force, to any such extent as the passenger who buys his ticket and checks his baggage at Little Rock.

Q. He would receive attention?

A. He would receive attention from the station force if his baggage was transferred from the Hot Springs special to the Texas train. But if the baggage had been checked and sent on through, he would not receive even that service.

Col. MOORE: In railroad practice, if there are two trains going out of a station, one a trans-state train and the other you might call a local train in the sense you speak of the Hot Springs special, would a baggage man send baggage that belonged to the trans-state passenger over the special train, even though the passenger for some purpose of convenience might want to get off at Little Rock? Would not he ship it off on the through train from St. Louis?

A. I do not know positively but that is my impression, that he would do it that way.

4617 Judge HILL:

Q. That passenger while waiting in Little Rock would receive the benefit of the heat of your station, and good drinking water you had there for him and the light, and the cleaning force, and all of those manifold blessings that are heaped upon the passenger visiting that station—in 1907.

In other words, the point I want to make is he would be treated just like the other man except for his ticket and baggage, would he not?

A. Yes, sir, and to this extent: that of the station service that is treated of in this item, amounting to $57,000, not more than 3% would be included in that heat and light and "other blessings" he would receive as compared with the service that would be rendered by the station force proper, that is, the labor.

In other words, the heat and light chargeable to station service is a very small part of the total station expenses.

Q. Cleaning is the smallest part—I mean for the old station.

Col. MOORE: That was infinitesimal, I think we can all agree.

Col. MOORE:

Q. (Resuming:) Counsel called your attention to the Memphis situation: what proportion of the trans-state passenger traffic would be affected by that situation?

A. I have no idea what proportion of the trans-state pas-
4618 sengers credited to Arkansas would originate or have its destination in Memphis.

Q. It would be an infinitesimal proportion, would it not?

A. I would not care to even estimate it.

Q. In the general expenses of this exhibit, the salaries and expenses of train auditors is included, is it not?

A. Yes, sir.

Q. What do you say to the propriety of dividing that on the basis adopted there, of direct charges?

A. The state has undertaken to set up a basis that they believe represents the actual service performed under each of these oprating accounts.

If that is a proper method to use the expense incurred on account of train auditors, which is included in "General Expenses", merely for the purpose of comparison, should be eliminated from this account; and not divided upon the same basis that the balance of the general expense items should be divided.

Q. On what do you base that opinion?

A. The train auditor's expense is an expense in connection with the handling of passengers upon the train.

The Interstate Commerce Commission itself provides that this expense shall be charged to transportation expenses, but under the system in force in the Iron Mountain office prior to the Interstate Commerce Commission classification, this expense has always been charged to general expenses, because they are employees who report direct to the general auditor.

4619 Under our present method, where we conform entirely to the Interstate Commerce Commission classification we include this item under transportation expenses.

But the unit that would indicate the expense of train auditors is entirely different to the unit that would be applicable to all these other items under "General Expenses". And it seems to me that an item which is some forty odd thousand dollars should be treated separately.

Q. They have no service to perform except in connection with the passengers on the train, do they?

A. That is all. The collection of tickets and the collection of cash fares. They have nothing to do with the train movement itself.

Q. Down at the bottom of page 4 of Exhibit M, where they seek to divide the cost of coach and Pullman service between intrastate and interstate, they have in that first table there assumed passenger miles 73,842,620, and they have divided that on the percentage which each of those classes of passengers bear to the total.

Does that include Pullman mileage?

A. The passenger miles they have used as basis for dividing coach expense also includes the Pullman car mileage.

Q. Then have not they divided the Pullman mileage below on a different basis?

A. Then in dividing the Pullman expense they assume that whatever passenger miles were carried in Pullman cars were
4620 approximately 25% state passengers and 75% interstate passengers.

The result is that they have practically used the Pullman passenger mileage twice.

It is a factor in the percentages that were used to divide the coach expenses.

Now, if not more than 25% of the Pullman passengers are state passengers that would indicate that 75% of them were of much longer haul than the state business. Or, to put it differently, the interstate passengers are of much longer haul than the state passengers, and the result would be that by reducing the total passenger miles to the extent of the Pullman passengers, the change in these percentages would be very substantial; because you would reduce the interstate passenger miles in larger proportion than you would the state passenger miles.

Q. What difference would it make in the figures, Mr. Johnson?

A. In the month of October, 1907, the records of the company show there were 2,188,495 passenger miles in Pullmans while the total passenger miles during that month were 12,566,398.

Assuming of the two million Pullman car passengers 25% were state passengers and 75% were interstate passengers, it would make a difference of about 8% in the coach expense chargeable to state passengers. That is, it would increase the cost of handling
4621 state passengers in coaches, about 8%.

Q. That is a large item, is it not?

A. Yes, sir.

Q. What is the amount of it. I mean the total coach expense?

A. $896,378.

Q. That would make a very substantial difference, would it not?

A. Yes, sir.

Q. Have you made any check of the passenger car mileage used in this exhibit, for the purpose of ascertaining whether it was correct or not?

A. Yes, sir, we checked the passenger car miles as shown by the state in their exhibit, and found some slight variation.

The result of our check shows that there were 785,703 coach miles as against 751,229 coach miles. This makes a change of about 2% in the percentages.

Q. That is for one month, is it not?

A. Yes, sir.

Q. Multiply that by six months and that difference would be exaggerated probably, would it not?

A. No, sir, it would still make the same difference of 2% in the six months' mileage.

Q. What I mean is, that the effect upon the revenue for the six months' period would be changed?

4622 A. The effect of that 2% on the total expense for the six months, is of course a considerable item. But the difference in that mileage more than anything else indicates that one month's percentages are hardly fair to decide six months business upon. That is the point brought out by a comparison of the gross earnings for six months as against the gross earnings for one month.

Our Exhibit shows that the percent of state freight earnings to total freight earnings was 13.41. While the month of October (one of those six months) it was 14.75%.

While that difference is small, being about 1.34%, yet when it is applied to the total operating expenses for six months, it would have resulted in an additional charge to the state freight of over $45,000.

Had the railroads used one month's percentage instead of six months, we would have charged to state freight $45,000 more than we did.

While the difference in percentage is small it might make a difference in the result applied in this manner.

Direct examination of Mr. FRED P. JOHNSON continued.

By Mr. MOORE:

Q. I believe the local car miles in Exhibit I includes cars

4623 hauling company material.

A. Yes, sir, that is my understanding.

Q. How many of them are there?

A. There are more than 3,000. I do not remember the exact number.

Q. Is the company material in local and through trains included in the tonnage statistics in that exhibit?

A. No, sir, the tonnage statistics included in Exhibit I are merely revenue tonnage.

Q. What effect would that have upon the average per car, as shown on the exhibit?

A. I think the fact that the car mileage includes the cars hauling company material would have the effect of decreasing that item of the average loading of freight per car. And I think it would decrease it very materially.

Judge HILL:

Q. Do you mean both local and through?

A. Yes, sir.

Col. MOORE:

Q. What is the mileage of those cars of company material?

A. The car miles of company material would be approximately 90,000 miles; that is, of local trains.

Q. Mr. Johnson, is the assumption that the increase in the average revenue per ton per mile in January, 1909, as compared with the six months ending December 31, 1907, represents the average in-

crease in rates or revenue resulting from the railroad operation of November, 1908, fair?

4624 A. No, sir, I do not think an assumption based upon the figures that that assumption is based upon is at all fair.

Q. Explain why you think it is not proper?

A. I can explain that better perhaps by dealing with similar figures upon our own road.

Q. Use anything to illustrate it.

A. During the six months ending December 31, 1907, the average revenue per ton mile of state freight on the Iron Mountain road was 13.38 mills.

During the six months from December, 1908, to May, 1909, which was the period in which the Company tariff was in force, the average revenue per ton per mile under the company rates, was 20.95 mills.

Now, had the Commission tariff been in force during that period the average revenue per ton per mile would have been 14.57 mills.

During the month of January, 1909, which is one of the six months in this latter period, the average revenue per ton per mile under the company's rates was 21.63 mills.

Had the Arkansas Commission tariff been in force during that month the revenue per ton per mile would have been 15.01 mills.

During the six months ending November 30, 1909, which is a six months' period under the Court tariff, the average revenue per ton mile was 16.85 mills. And had the Commission tariff been in force during that period the revenue per ton mile would

4625 have been 13.36 mills.

That shows that the percentage of increase in the average revenue per ton per mile in January, 1909, under the Company's tariff as compared with the six months ending December 31, 1907, under the Commission tariff, was 61.7%.

The percentage of increase in the average revenue per ton per mile in January, 1909, under the Commission tariff as compared with the six months ending December 31, 1907, was 12.2%. While the percentage of increase in January, 1909, under the company tariff as compared with the same month under the Commission tariff was 44.1%.

That shows that the increase in the average revenue per ton per mile in January, 1909, brought about by the increase in rates was 44.1%.

The increase in January, 1909, under the company tariff as compared with the six months period ending December 31, 1907, was 61.7%. And this latter per cent would compare with the 96% which has been referred to as applying to the Cotton Belt in this case.

This statement indicates that the month of January, 1909, shows an increase of 12.2% in the average revenue per ton mile under exactly the same rates.

Q. The Commission rates?

A. Yes, sir, the Commission rates.

And that increase of 12% is brought about by the difference in

the commodities and the difference in the length of haul and the various other items that would naturally change the revenue
4626 per ton per mile, other than changes in rates.

The statement shows that for six months ending November 30, 1909, under the existing Court tariff, there was an increase of 26.1% in the average revenue per ton per mile.

Q. Have you a statement showing those percentages to which you have just referred?

A. Yes, sir.

Col. MOORE: I will offer in evidence the statement just identified by Mr. Johnson.

The paper referred to is marked "Complainants Exhibit 54."

Said exhibit is in the words and figures following to-wit:

For Exhibit 54, see Volume 8, page 5722.

4627 Q. Mr. Swain's Exhibit 23, showing the average reduction in rates made by the Arkansas Commission, is made on five different distances without regard to the average volume moved under each distance or the average haul of the commodity moving.

Can the average reduction be shown in any such way as that?

A. No, sir, I think that is merely an assumption on Mr. Swain's part and of course it was not based upon any actual data.

The average could not be ascertained in that way with any degree of accuracy.

Taking those same commodities that Mr. Swain referred to there was the reduction on bagging and ties. That percentage for 25 miles was 21%.

For 100 miles 39 percent.

For 200 miles, forty-nine percent.

And the average arrived at, as Mr. Swain did, was 39 percent.

Now, if the greater volume of business in that commodity moved 200 miles, then the actual decrease in revenue of the railroad would have been nearer 49% than 39%.

While, on the other hand, if the greater part of the bagging and ties moved 25 miles, then the reduction in the revenue to the railroads would be less than the average Mr. Swain showed.

4628 And without the movement of those various commodities it would be a hard proposition to undertake to estimate the decrease in the revenue that would accrue to the railroad by any change in the tariff.

Q. Does the Iron Mountain Railroad keep and furnish its traffic men statistics relating to the movement and the volume of traffic to aid them in making rates?

A. Yes, sir, it furnishes the traffic department and all departments of the railroad with a large number of statements bearing upon this subject.

Q. State what they are.

A. One of the statements that is furnished by the Auditor's office to the traffic department is a statement similar to that filed by Mr. Roth this morning, showing the revenue and the ton miles of a large number of individual commodities.

That statement shows all of the information that is necessary in

order to obtain the length of haul, volume of business, and the average revenue received per unit.

They are being furnished sometimes with weekly reports and sometimes with daily reports showing the car movement and the direction of tariff and the increase and decrease in any particular commodity.

Q. Mr. Wharton filed an exhibit in this case( which is marked Exhibit Z) containing a comparison of transportation cost per train mile for the years, 1907, and 1897; and the same on the St. Louis Southwestern Railway:

4629 I wish you would state how the traffic conditions of those two years compare with other years and if this comparison of two years would afford a fair comparison?

A. Exhibit Z shows that the operating revenue per train mile upon the Iron Mountain during the year ending June 30, 1907, was $2.17; for the year 1897, it was $1.45; showing an increase of 50%.

The operating expenses for the same two years shows an increase of 40%.

The net revenue per train mile shows an increase of 69%.

I do not believe that kind of a comparison of those two particular years is fair.

The statistics shown by that exhibit were taken from the annual report to the Interstate Commerce Commission for the year 1897, and in the opening statement of that report (On page 9) it has this to say:

"A review of statistics of operation since 1890 would disclose the fact that each year ending June 30th, from 1890 to 1893 inclusive, closed with an increase in net and gross earnings as compared with the previous year.

The year 1893-1894, however, proved to be a disastrous one for railways, the gross earnings being less than $147,000,000 and the net earnings $50,000,000, than the corresponding items of the previous year.

The year 1894-1895 showed practically no recovery from the depression of the previous year.

4630 The year 1895-1896 closed with an increase in gross earnings of $74,000,000 and net earnings of $27,000,000. But this movement toward better conditions did not continue during the year covered by the present report, which as compared with 1896 shows again a decrease in gross earnings of $28,000,000 and in net earnings of $7,000,000.

It was not until June, 1897, that is to say, the last month of the twelve covered by this report that the railway earnings showed a healthy revival of commercial conditions. This fact indicates the character of the year covered by the present report and must be held in mind by one who endeavors to interpret the figures about to be presented."

On the other hand, the testimony in this case shows that the year ending June 30, 1907, was one of the best in the history of the railroads.

Q. That is just about the poorest year that could be taken for a comparison of that sort?

A. It does not appear to be a fair comparison.

Right in connection with that, the annual report of the Missouri Pacific Railway for the calendar year ending December 31, 1897, which would cover part of the period covered by this Interstate Commerce Commission's report, has this to say:

"With the advent of 1897, a general improvement in business was predicted; and while this has been realized in some directions it would appear from facts and figures that the improved conditions were not of such a character as to proportionately benefit passenger travel until the latter half of the year.

4631 The most practical explanation of this seems to be that the farming element, which constitutes a large percent of the travel of western roads, being dependent upon their produce did not experience the benefit of the improved conditions until after they had realized upon their crops. And a synopsis of the earnings for the year shows the entire gain to be for the last five months".

Now, that refers to the months of August and December, inclusive, which would not be a part of this comparison.

Q. The years of that comparison end with June of the year mentioned?

A. Yes, sir.

Q. Exhibit F-1, filed by the same witness, I believe, is a comparison of passenger statistics for the same years, is it not?

A. Exhibit F-1 shows a comparison of various traffic statistics for the year 1897, compared with the year 1907.

Q. That is years ending with June 30th, being the fiscal year?

A. Yes, sir.

Q. State if that is a fair comparison for the periods?

A. The same criticism that may be made in connection with Exhibit Z would also apply to this. It compares two periods entirely different in their character; and in addition to that, so far as the passenger service on Exhibit F-1 is concerned, it gives no consideration to the change in revenue brought about by the two cent passenger fare.

Q. Mr. Johnson, those two years represent rather extreme conditions of prosperity and depression, do they not?

A. Yes, sir.

4632 Mr. Wharton filed an Exhibit showing the results of operation on the Iron Mountain Railroad, based on what purports to be Judge Farrington's formula in a decision rendered in the case of the Southern Pacific R. R. vs. Bartine, reported in the 170 Fed. Rep. at page 725:

Now, Mr. Johnson, will you prepare and file a statement showing what would be the result in this case, under Judge Farrington's formula, as we interpret it, and file with it extracts from the opinion of Judge Farrington, upon which our interpretation is based?

A. I have prepared such an Exhibit.

Col. MOORE: I will offer in evidence this statement.

The paper referred to is marked "Complainants' Exhibit 55. Exhibit 55 is in the words and figures following, to-wit:

For Exhibit 55, see Volume 8, page 5724.

4633 A. I would like to say in explanation of this Exhibit 55, that there was nothing in the case decided by Judge Farrington relating to passenger business; it was a freight case.

In Exhibit G-1 the State shows the net earnings from intrastate freight ascertained under this method to be $200,000; and then adds to that the net earnings from intrastate passenger traffic, ascertained under their formulas to have been $134.000, showing the total net intrastate earnings to have been $334.000 for the six months period.

In making this calculation on our Exhibit 55 we find the net earnings from intrastate freight to be $140,000 and have added to that the net earnings from intrastate passenger traffic, ascertained on the formulas outlined by the Railroads in filing their Exhibit 3.

The result is, that so far as the passenger service is concerned, the result will be upon two entirely different formulas. The difference in opinion is confined to the application of Judge Farrington's formula to the freight service.

Q. State what result is shown in the way of net earnings by the formula you have filed?

A. Exhibit 55, net earnings freight, on intrastate business amounts to $157,174.17. This is equal to 3.51% return upon the assessed valuation of the property in 1907; and 2.92% upon the assessed valuation of the property in 1909.

4634 The difference in opinion is confined to the application of Judge Farrington's formula to the freight service.

Q. State what result is shown in the way of net earnings by the formula you have filed?

A. Exhibit 55, net earnings from all intrastate business amounts to $157,174.17.

This is equal to 3.51% return upon the assessed value of the property in 1907; and 2.92% upon the assessed valuation of the property in 1909.

Q. Have you prepared a statement showing what the net earnings of the Iron Mountain Railroad would be on the formulas presented in this case by the state, contained in the exhibits heretofore referred to, with such modifications in certain items of the sub-divisions of those formulas as the testimony introducted on the part of the complainants in this case indicates should be made?

A. Yes, sir.

The paper referred to is marked "Complainant's Exhibit No. 56." Said Exhibit is in the words and figures following, to-wit:

For Exhibit 56, see Volume 8, page 5726.

4635 Have you prepared statements showing what the net earnings of the Iron Mountain would be, on the formulas presented in this case by the State, contained in the Exhibits heretofore referred to, with such modifications in certain items of the sub-divis-

ions of those formulas as the testimony introduced on the part of the Complainants in this case indicates should be made?

A. Yes, sir.

Col. MOORE: I will offer in evidence the statement prepared by the witness.

The paper referred to is marked "Complainants' Exhibit 56.

Exhibit 56 is in the words and figures following, to-wit:

For Exhibit 56, see Volume 8, page 5726.

4636 Q. I will ask you to make such explanation of those as may be necessary to enable the changes made by you in the formula to be clearly understood.

A. Exhibit 56 starts out with the item of "Maintenance of Equipment-Locomotives."

In dividing this expense between yard and local and through trains we have adopted the basis outlined in the state's exhibit.

In dividing the proporton chargeable to yard locomotves, instead of dividing that between local trains and through trains on the basis of the number of cars handled, we have divided it between intrastate and interstate freight on the basis of the number of tons handled and we have included all of the trans-state freight in the interstate.

The next sub-division is "Freight cars repairs (B)".

This item has been divided between "Stopping and Starting" "Terminal Handling" and "Other expenses," upon the percentages suggested in Mr. Rosing's testimony, making a change of about 20% in the charge to stopping and starting and terminal handling as compared with the percentage used by the state.

In dividing the amount chargeable to starting and stopping, between local trains and through trains, we have multiplied the car miles on local trains by eight instead of by four, as was done in the state exhibit K.

4637 The terminal expense and the other expenses under freight car repairs have been divided on the basis outlined by the state.

The next item "c" is "Supervision in General" under "Maintenance of Equipment"; and we have divided this account between the local trains and the through trains, intrastate and interstate traffic, on the basis of the two charges as was done by the state in their Exhibit.

The next item, number two, is "Traffic Expenses":

We have adopted in this case the method used by the state and make this division between intrastate and interstate as they did, by using the gross earnings basis.

The next item is "Transportation expenses."

The first sub-division "a" is, "Station expenses" and we have in this case divided the expense between intrastate and interstate on the basis of the number of tons handled, allowing two handlings for state freight and adding to the interstate tons, 10%.

This is done on the assumption that a certain percentage of the

interstate and trans-state freight may have more than one handling in the state of Arkansas.

In this division we have followed the state's method as shown by their exhibit Y, with the exception of adding this 10%.

Sub-divison "b" s "Yard and terminal expenses":

We have divided this expense between state and interstate traffic on the basis of the number of tons handled using exactly the
4638 same percentages as were used in dividing the repairs to yard locomotives, under "Maintenance of Equipment."

This division results in an equal charge under yard and terminal expense to all interstate and trans-state freight.

We have made no change in the method of dividing sub-division "c" fuel and locomotive expense; sub-division "d" engine house expenses; sub-division "E" road engine men and train men; sub-division "f" other train expenses; and sub-division "g" loss and damage to freight.

In each case we have adopted the state's method in apportioning these expenses between local trains and through trains.

Under sub-division "h", supervision and general, we have again adopted the state's method, using the direct charges ascertained under these various formulas.

The next division is "Maintenance of way and structures", "General expenses." Both of those items have been divided between local trains and through trains and intrastate and interstate, traffic on the basis of the direct charges ascertained under each of the other expense accounts.

This method follows the metod adopted by the state insofar as general expense is concerned and places the cost of maintenance of way and structures on a parity with that item.

The next item is "Total train cost": We have divided the total cost of local trains and the total cost of through trains
4639 between state and interstate on the basis of the number of state and interstate ton miles on the local and through trains as shown by the state exhibit I instead of adjusting that October percentage to the six months figures.

Sub-division 7 which includes miscellaneous revenue, taxes, rentals, hire of equipment, and value of property, have all been divided on the basis outlined by the state, reaching the same result, with the addition of the assessed value of the property under the assessment of 1909.

The next page of this exhibit is a summary of the foregoing figures and agrees in form with state exhibit J.

The next page deals with the passenger service:

The first item under the passenger head is "Maintenance of Equipment-Locomotives."

We have followed the state's method there using the percentages that were obtained from a recheck of their car mile figures, and that showed that the state percentage of coach mileage was 56.77 percent of the total mileage, while in our recheck we found it to be 59.38 percent.

The next item "b" is "Passenger train cars": We have divided

this expense between coach, mail and express on the car mile basis as adopted by the state, with this change: that to the coach mileage we have added 100 percent, to take care of the extra cost of maintaining coaches and chair cars as compared with baggage and express cars, and to the mail car mileage we have added 15% to take care of the excess cost of the mail car.

4640 This was done in accordance with the testimony offered by Mr. Rosing.

Sub-division "c" Supervision in General has been divided on the basis outlined by the state, using the revised amounts.

"Traffic Expenses" has been divided between intrastate and interstate on the basis of the gross earnings of each class of traffic, omitting the earnings from mail, and express, and other miscellaneous passenger revenue.

The next headng is "Transportation expenses":

The first sub-division is "Station expenses". This item has been divided on the basis outlined by the state, and the same result is obtained.

We have made no change in the state's method of sub-dividing sub-division "c" yard and train expenses, sub-division "d" loss and damage to baggage; sub-division "e" Supervision and General, using their basis in each case.

The next sub-division is "Maintenance of way and structures":

We have divided this item between each class of traffic upon the basis of the direct charges under maintenance of equipment and transportation.

This basis is similar to that adopted by the state for general expenses.

Under "General Expenses" we have deducted from the total, \$160.767, the expense of train auditors, which amounted to

4641 \$44,872; and have divided the balance of the general expenses between each class of service, on the basis of the direct expenses, using the same percentages that were used in dividing maintenance of way and structures.

The expense of train auditors, sub-division "*b*" has been divided between intrastate and interstate on the basis of the number of passengers carried.

I do not remember what witness it was who testified to that formula but I believe that basis has been mentioned for this item.

Q. You testified to it yourself, that the train auditors should not be included in and divided upon the same basis as general expenses and you gave as a reason that they deal with passengers and not with the class of service that is covered in the division of general expenses.

I will ask you now, assuming for the present purpose that this segregation scheme adopted by the state for the separation as shown on these exhibits is a proper one, then how should that item of expense "Train auditors" be divided?

A. If it is necessary to divide the individual item of train auditors' expense between state and interstate business, I believe the number of passengers handled is the best unit that could be obtained.

The expense itself is entirely different in its nature from that of train expense; has nothing to do with the movement of the train or the car; nor has it anything to do with the length of haul
4642 of the passenger. And so far as the duties of the train auditors are concerned, I should say that the greater part of his time was devoted to the short haul passenger and the cash fare collection brought about by that short haul passenger.

Q. Proceed.

A. The next division is a division of the cost of the coach and Pullman service between intrastate and interstate business:

The method of getting at the passenger miles in coaches is shown at the bottom of this page in the note. The note itself shows that during the month of October, 1907, there were 12,566,398 passenger miles.

The company records show that in October, 1907, there were 2,188,495 passenger miles carried in Pullman cars.

On the state's assumption that 25% per cent of the Pullman passenger car miles is intrastate, the division of the passenger miles for October, 1907, would be as shown by that last paragraph.

We have used that basis in our sub-division 6 and divided the coach expense upon the percentages based upon the passenger miles in coaches; and the cost of Pullman service has been divided arbitrarily 25% to state and 75% to interstate, as was done in the state's exhibit.

To my mind there is this objection to that method of division: that is, that the 2,188,495 passenger miles in Pullman cars repre-
4643 sents the passengers actually carried in the cars. While the 12,566,398 passenger miles which represents the total for the month of October, is the record as taken from the ticket sales and cash fare collections; and it has that same element of lap-overs that appears in the state Exhibit I and is used by them.

I do not believe the lap-overs in passenger service would be as large as the lap-overs in freight. But that difference is there.

Sub-division 7 "Miscellaneous Revenue and dining car deficit"; and sub-division 8, "Taxes, rentals, hire of equipment and value of property" have been divided on the basis outlined in the state's exhibits with the addition of the assessed valuation of 1909.

The next page of Exhibit 56 is a summary of the passenger expense divided between coach cars, Pullman cars, state and interstate, mail and express business, and corresponds with the state's Exhibit L.

The next page of Exhibit 56 shows the gross revenue, total operating expenses and the net earnings obtained as a result of these various approximations.

It also shows the assessed value of the property in 1907 and the percentage of return or the percentage of net earnings to valuation; and the assessed value of the property under the assessment of 1909 with the percentage of net earnings to valuation upon that basis.

It shows the division of freight, passenger, to total intra-
4644 state and total interstate.

Q. State what those per cents are as shown there?

A. Under this basis the percentage of return under intrastate freight traffic, under the assessment of 1907, would have been 2.76%. It would have been 2.29% on the assessment of 1909.

Interstate freight shows a return of 11.1% per cent upon the 1907 valuation and 9.22% upon the 1909 valuation.

The intrastate passenger shows a deficit or a red ink figure of .14% in 1907 and on the 1909 valuation it is .12%.

The interstate passenger is .30% on the 1907 valuation—that is a red ink or deficit figure. And a deficit of .21% on the 1909 valuation.

The total intrastate shows a return of 1.12% on the 1907 valuation and .93% on the 1909 valuation.

The total interstate business shows a return of 9.72% on the 1907 valuation and 8.08% upon the 1909 valuation.

While the return upon the total business is the same as that shown in the other statements, 7.5% on the 1907 valuation and 6.23% on the 1909 valuation.

Q. That is on the basis of the division adopted by the state, is it, that is with the modifications you have pointed out in your testimony?

A. Yes, sir.

4645 Q. And without any allowance for extra expense as between intrastate and interstate except such as such claims that were made under arbitrary allowances and were found in the various sub-divisions of their exhibits and the modifications made by you.

A. That is right. There is no additional allowance to the state freight or state passenger upon the local train.

Q. My purpose in introducing this exhibit with which you have just been dealing is to show to what extent changes in the bases adopted in the sub-divisions will make in the result:

I want to ask you if this scheme of division adopted by the state is not one that can be, by a few changes adapted by a person making the figures under it to meet almost any end he has in view as to the results to be obtained:

I am not asking that with a view of saying that it has been used in this case for any improper purpose. That is not a question for you to pass upon. But I want to ask you if it is not a scheme easily changed by the person making it to reach any desired result?

A. Any change that might be made in the arbitraries under maintenance of way and maintenance of equipment or under transportation, would bring about a corresponding change in the results shown, and in the percentage of return upon the valuation of the property. A reduction might bring about an increase in the percentage of return; or an addition to these arbitraries would bring about a reduction.

4646 A change in the method of dividing any particular item might have a material effect upon the total.

I can see where under the passenger service in dividing the yard and train expenses, which includes this cleaning and casualty account, upon a revenue basis for instance would make a very sub-

stantial loss in the state passenger business. Any change in the method would change, of course, the results.

Q. Mr. Roth has testified that all cotton at compress points and all grain at milling points is charged in these statistics with two handlings, or, rather, it is charged as two tons, a ton in and a ton out: you heard his testimony, did you not?

A. Yes, sir.

Q. If that is correct I want you to take sub-division "a" of transportation expenses, which deals with station expenses (page 4 Exhibit 56) and state if the interstate tons included in the division there between intrastate and interstate does not double all the cotton and all the grain at milling points in view of the testimony of Mr. Roth. That is to say, does it provide for them, count that double, in other words, state what effect that would have?

A. If cotton into the concentrating points, into the compress, is treated as one ton and then when shipped out is treated as another ton it means that every ton of cotton in the interstate tonnage is shown in this item as two tons. And on the basis of the number of tons handled would be charged with two terminal handlings.

Q. How about grain?

4647 A. The same is true of the grain milled in transit.

Q. I overlooked calling your attention to the contention of the state in regard to the effect of the increased rates on passenger revenue:

Have you prepared an exhibit showing that? I wish you would file it with any explanation you wish to make.

A. I have.

Col. MOORE: I offer in evidence this exhibit.

The exhibit referred to is marked "Complainant's Exhibit 57."

Said exhibit is in the words and figures following to-wit:

For Exhibit 57, see Volume 8 page 5740.

4648 A. I think Mr. Kimbell was asked to compile a statement on the assumption that there would be an increase of 35% in the revenue per passenger mile for intrastate traffic without any increase in the interstate passenger traffic.

This statement is one showing the passenger miles and passenger revenue upon both state and interstate business for the six months ending December 31, 1907; and for the six months ending December 31, 1909.

In 1907, the passenger rates were upon the basis of two cents and in 1909 on the basis of three cents, except in competitive territory where it was necessary to meet the 2½ cent rate.

This statement shows that the average revenue per passenger mile for intrastate business during 1907, was 1.93 cents.

The average revenue per passenger per mile in intrastate business for the six months ending December 31, 1909, was 2.63 cents.

The percentage of increase in 1909 over 1907 is 36.2%.

By applying to the 1909 passenger miles the average rate of 2 cents per mile, which was in force during 1907, the average revenue per passenger per mile would have been 1.981; and the percentage of

increase in 1909 over the two cents basis would have been 32.8%. The average revenue as shown by this statement, on interstate business for the six months ending December 31, 1907, was 1.865.

4649 And the average revenue for the six months ending December 31, 1909 was 2.258.

The percentage of increase in 1909 over 1907 was 21.1%.

This shows that there was an increase in the revenue from interstate business when the state rate was increased to three cents.

4650 Cross-examination of FRANK NAY.

By Judge J. M. HILL:

Q. There seems to be a question brought into this case of the accountant versus the operator, as to who should allocate the expenses:

I see you have expressed some views about it: I do not know really whether there is a difference between you and the other gentlemen on that subject or not:

I believe Mr. Ludlam testified that he did not think the operating man was the proper man to design a system of accounting, or to allocate the expenses; but that the accounting officer should inform himself from the operating man of the actual conditions, and plan the division and proper allocation of expenses:

Does that differ particularly from your views of it?

A. Well, as you have stated it, there is not a very substantial difference. What I attempted to say was, that no man—accountant or other man—can determine the allocation of the expenses, without knowledge of the local conditions.

If the accounting officer, who is usually located at some central point, has not definite knowledge of the local conditions, the local operating man who is on the ground and has that knowledge, can

4651 determine better than anyone without the knowledge, where the expense should go. But the accounting officer by possessing himself of that knowledge is then the one to determine.

Q. I think that is about Mr. Ludlam's views as I remember it.

Of course, no one could contend that the accounting officer would know all about the railroad without informing himself any more than the accounting man could devise a cost system for a manufacturing concern without informing himself.

A. I may be mistaken, but my criticism of Mr. Ludlam's testimony was that in one place he stated he would not consult the operating officials.

Q. I think you will find you are mistaken. I think he did not say that but said it was his duty to consult them and inform himself.

Col. MOORE: What he said was that the operating man was the last man to determine how the expense should be finally allocated.

Judge HILL: Well, there seems to be practically no difference between you as I understand the testimony.

A. I think there is no substantial difference, Judge Hill, in the

way you put your question. But the way you put it was somewhat different from my understanding of Mr. Ludlam's testimony. As you put it, I think there is practically no difference.

Q. Is it not a fact that practically all the expenses of the railroad are now being classified under the rules of the Interstate
4652 Commerce Commission and proceed in accordance to the rules promulgated by them?

A. Among the primary accounts or divisions of expenses, yes.

Q. What do you mean by "primary accounts"?

A. I mean the 116 different accounts prescribed by the Interstate Commerce Commission, which refer to superintendence and to ballast, rails, and so on. Those various accounts.

Those are items, Judge, which may be definitely determined. That is, you can lay down a classification, as the Interstate Commerce Commission has done, which shall prescribe with a large degree of accuracy the very items which go into each account. Now what I understood what was in question on this matter of getting the judgment of the operating official and of the accounting official was those expenses which could not be so definitely determined as those covered by this classification does, for example, the difference between passenger and freight, state and interstate.

The Interstate Commerce Commission has not undertaken to prescribe any classification as between passenger and freight or as between state and interstate.

There is where the matter of judgment comes in; and that class of expenses requires actual knowledge of local conditions, in order to determine that question.

Now in this classification of the Interstate Commerce Commission is rails: it is easy to say the rails shall go to rail; ties to ties; ballast to ballast; track labor to track labor; bridges to bridges, and so on.

But when it comes to the division of those bridges and ties
4653 to freight and passenger, state and interstate, that is the thing which requires the knowledge of the local conditions, because it is a matter of judgment.

Q. When the Interstate Commerce Commission classification began there were many conferences between the accounting officials and the operating officials and the statistician of the Interstate Commerce Commission, weren't there?

A. Yes, sir.

Q. Much objection was raised by the railroad accounting officials and operating officials as to the ability to work out such classifications as had been worked out, wasn't there?

A. I don't think I would say that—and I was on the committee of 25 from the beginning, from 1906, which worked closely with the Interstate Commerce Commission during the entire formation of that classification; attended nearly every meeting and am still on the committee. I would not say there was a feeling that such a classification could not be worked out. There was a feeling that such a classification would not be satisfactory to everybody.

Q. I expect that would express the idea better than what I said. Not satisfactory in what sense, Mr. Nay?

A. In the sense that some of us had certain ideas due to our training and experience, that we were not willing to give up.

As for example, the joint facility account. That I think
4654 was one of the things that caused the greatest amount of discussion, more than anything else.

Some had the idea we should have separate joint facilities account as we have now. Others thought we should have nothing of the kind, and the debits and credits should be mixed in with all the other expenses.

Q. It was not a simple proposition, then, to charge rail to rail account and bridge to bridge account and ties to tie account and so on, was it?

A. There was no trouble over accounts of that character. The trouble came over such things as joint facility accounts, depreciation, insurance, which might be distributed over all five headings or might be put in "General Expenses".

Q. Wasn't there quite a controversy over the switching proposition, too?

A. Do you refer to switching expenses or switching revenue?

Q. Switching expenses, I think it was, but I am not clear. I know I have heard something of that and my recollection is it was switching expenses?

A. There was some controversy but that was not so marked as these others. It was not so marked as to fix itself in my mind like these other things I speak of.

Q. Has the classification of accounts worked out by Professor Adams been satisfactory to the railroads?

A. Fairly so.

4655 Q. I think one of these operating gentlemen here the other day testified it was very unsatisfactory?

A. As I stated, it has not been satisfactory to everybody. When I said "fairly so" I meant to infer there were, of course, exceptions.

Q. Wasn't there quite an issue between capital charges and expense charges?

A. Yes, sir.

Q. Wasn't there much dissatisfaction felt over the ruling of the statistician on that, by the operating men?

A. Only as to certain items and of course the item of abandoned property is one that has caused a great deal of dissatisfaction.

Q. The question of replacements has also, hasn't it?

A. I don't know just what you mean.

Q. I mean using the technical term. Suppose a bridge is burned down and another is built in its place, don't you call that "replacement"? What is your technical term for carrying that expense into your accounts? Or suppose a steel bridge is put in in lieu of a wooden one and so on?

A. That is usually considered under the term of "Renewals."

Q. Probably the word "renewal" is what I should have used instead of "replacement". Of course, I don't know anything about your technique.

A. I am not quibbling over words but I simply want to understand your idea, Judge.

4656 Q. That is the idea I intended to convey.

A. No, sir, I don't know that. There was dissatisfaction on the part of some whose ideas were different from what was finally adopted.

Q. That puts quite a rein on the operating man, doesn't it, as to where his expenses shall go or as to his determination of the expense, as to the money charged for these things.

A. Now, again, without appearing to quibble about words, what did you mean by "the operating man"? Do you mean the President?

Q. What do you mean by "operating man"? You have used that term?

A. Ordinarily the operating man means the subordinate operating official, from general manager down, general superintendent or superintendent.

Q. That is the sense in which I mean it.

A. In these days the president is frequently spoken of as the operating head while the financial head may be another man.

Q. I mean the man directing the operating forces, whether he is called general manager, general superintendent, or superintendent. I mean the man who is directing the operation. That is the man I refer to.

A. I think I can make my answer clear.

I do not think the rules promulgated by the Interstate Commerce Commission have put much of a check on the subordinate operating man. They may have put a check on the operating man who

4657 directs the affairs of the company, the man who ranks as president or vice-president in charge of operation. The man who had authority to give instructions to the accounting department.

But to those who were subordinate to the accounting department, I do not think there is much difference now than formerly.

Q. How about the general manager? Do you class him as subordinate to the accounting department?

A. On most roads. On some roads the General Manager appoints the accounting officer and instructs him as to the duties.

Q. The point is this: Since these rules have been promulgated, it is more difficult to put a given item into capital account which should go into expense account than it was before these rules were promulgated? Is not that a fact?

A. Not unless it is an item which does not properly belong in expenses or in capital account.

Q. I do not quite understand your answer, Mr. Nay?

A. What I mean is this: an item which properly belongs to the capital account or to operating expense account, formerly went there just as truly as it does today, barring cases which occur in every class of business, where there are men who want to manipulate the accounts.

Every railroad man is not a saint. I think they average up about the same as other men. But for such men, who had

4658 such inclination, there is a check on them today which did not exist before.

But as to the ordinary course of railroad affairs, the men who wanted to do what is right and intended to do what is right, there is no check now that did not exist formerly.

Q. That would be an opinion as to what was right. A general manager might think it was entirely proper to run a lot of those charges into capital account and be just as honest as you are who would think they should not go into capital account. It might be just a difference of opinion. That man might be just as honest as you and as sincere as you and yet think that the capital account was the proper place for it.

A. Yes, sir, I do not mean to impute any wrong motive where none existed.

Q. In other words, there was a freer rein then than now; isn't that true?

A. Yes, sir, that is true.

Q. I think it is in the testimony of Mr. Kimbell how the capital account was formerly made up by the railroads before these rules went into effect.

I do not think there was anything wrong about it, but the managers of his road thought that that was proper and wanted it done that way. But now under these rules there is a check upon it?

A. Yes, sir.

4659 Q. These rules are largely the work of Professor Henry C. Adams with the aid and advice of many accounting officials of the various railroads and also of the operating men; isn't that a fact?

A. Yes, sir, and I might say that Professor Adams said when he started these rules, it was his idea to get the best American practice and that phrase was used very frequently.

Q. I think he had 25 of you accounting officers with him?

A. Yes, sir.

Q. And he also had many operating men with him in consultation?

A. Yes, sir.

Q. Professor Adams himself never had any operating experience?

A. Not that I know of.

Q. He was the Professor of economics or some chair of that kind in a college, was he not?

A. Yes, sir.

Q. He was a statistician and accountant?

A. Yes, sir.

Q. I will call your attention to the statement you made when you had read the testimony of the state's accountant and he said they would present actual facts as opposed to theories: I will ask you if it is not a fact he stated he would present the actual facts wherever possible; and when not possible they would use the factor

4660 most nearly approaching the actual facts. Isn't that what was stated most frequently in Mr. Wharton's testimony?

I think possibly there is a little difference in the way you stated and the way he stated it.

In other words, here is the point: Those things that were actually

ascertainable they attempted to get; and those they could not, they attempted (whether successfully or not is another question) to get the factor most nearly approaching the actual facts. Is not that the standpoint he gave?

A. I have not looked at that for a few days but my recollection is just as I have stated it here.

Q. Here is probably a fair statement that occurs many places in the testimony.

Mr. Wharton said in answer to the question:

"Do you mean the plan outlined in these exhibits are not based upon assumptions?

A. Yes, based upon assumptions but each assumption is treated separately and not as a whole.

Q. Are the divisions you have made here based on any knowledge and information you may have had in the actual operation of the railroad?

A. No, sir, I have no knowledge of the actual operations of the railroad.

Q. Is it based upon information you obtained from reading the testimony in this case?

A. Quite largely.

Q. And you have taken that as the foundation for the programme that is outlined or the method of division that is outlined in your exhibits?

A. Quite generally, yes, sir."

4661 And further on he stated he obtained all the information he could from operating men.

Don't you recognize and do not the exhibits show (whether successfully or not we are not discussing) that there was an attempt made to get the actual facts where they could, or to use the factor most nearly approximating the true conditions: is not that the way you understood the exhibits?

A. As I say, Judge Hill, my answer to the question regarding this matter,

"I have read the testimony regarding these exhibits, and as I recall it the opening statement was that they would present actual facts as opposed to theory."

Now that is a matter of recollection, either by Mr. Ludlam or by Mr. Wharton. And as you say the term "actual facts" perhaps has a modification all through. But I refer in my testimony to that opening statement.

Q. Taking it as a whole, you understood what was meant, did you not, that they intended to take the actual facts were obtainable, and get the maintenance of way and maintenance of equipment and take the factor most nearly approaching the actual facts. Was not that the way you understood the state exhibits?

A. I understood it, as I stated, that there were no actual facts presented in the state exhibits.

Q. They had wages and fuel and loss and damage?

A. That is only for one month. Those are not actual facts for six months.

4662 And loss and damage were not actual facts for one month, but only a statement for one month.

Q. That is what you mean by your statement here, that you do not find any actual facts?

A. Yes, sir.

Q. And then this is a criticism of the method?

The point I am making, is that you understood from these exhibits what the effort was. You did not understand they were trying to get actual facts as to maintenance of way?

A. Here is what I understood:

In my direct testimony, in my opening statement I frankly said it was an impossibility to actually divide operating expenses between state and interstate traffic.

And Mr. Ludlam in his opening statement stated that I set up a "snow man" and knocked him down. And then followed that up by stating that he proposed to show actual facts.

Now I understood that the state witnesses as opposed to the frank statement I had made, that the expenses could not be actually divided, but that we were making the best approximation we could, were now attempting to make an actual division based upon actual facts.

That is the way I understood it.

Q. That is the way you understood it?

A. Yes, sir.

4663 Q. Well, the testimony speaks for itself. I just wanted to get your understanding.

In criticising this general plan of dividing between local and through you stated, as I remember it, that after they had got the division between local and through trains as to the proportion of interstate and intrastate freight carried on each of those freight trains, they still had the problem before them as to state and interstate as they had before them when they began:

Is that a correct summary of what you said?

A. Yes, sir, that is substantially what I said.

Q. That is the way I remembered it?

A. Yes, that is correct, substantially.

Q. You know Mr. Doddridge, I presume?

A. Yes, sir.

Q. He was put on as a witness in this case on behalf of the railroads in their case in chief. He testified he had been general manager of both these railroads and had served as advisor to counsel in this case and in the Missouri Rate Case.

He testified at page 59 vol. 2 as follows:

"Q. Is not the only difference in cost of the intrastate and interstate freight carried on the same train, the one of the extra terminals? A. There is no difference in the cost of one kind of freight or another kind of freight, arising from a distinction in the terms "state" or "interstate." If the conditions are the same there would be no difference in the cost.

Q. Take freight carried on the same train? A. Well, I say, if the conditions are the same; that is, the kind of freight and all of

the other elements that enter into it, there would be no difference arising from the terms "state" or "interstate".

4664 But the conditions must be the same to say that there would be no difference in the cost, because there might be a difference in the conditions. The character of the freight, the weight, and other things.

Q. Take it, the same kind of freight and of the same character, carried on the same train, where is the difference except in the terminals? A. There would be no difference in the train cost.

Q. I want to read you your testimony in the Frisco Case. I wish to read this statement made in answer to a question:

"So far as the particular freight is concerned, carried on those particular trains, there would be no greater cost in transportation for interstate freight than state freight, except the terminal charge.

In order to ascertain the results correctly, you would have to take into consideration the amount of state freight that is carried upon that train, as applied to the total state freight carried on the other train.

In other words, what I mean to say is, we have to take into consideration all the trains and find out what relation the state freight bears to the whole".

Then he says that is a correct analysis. Do you agree with Mr. Doddridge in that?

A. Yes, sir, substantially.

He says all the conditions must be the same, in order for the cost to be the same.

The division on the ton mile basis at the end for the local trains puts carload and less than carload all together and assumes it costs the same per ton mile to transport a ton of coal as it does to transport a ton of show cases, for instance.

So the conditions are not the same, as Mr. Doddridge points out, and, therefore, the ton mile basis could not be applied.

4665 Q. You are assuming there would be a difference in the character of the state and interstate traffic carried on local trains or carried on through trains?

A. Yes, sir.

Q. I believe I can safely say, Mr. Nay, that in this case there have been a great many witnesses who have testified that that traffic goes hand in hand and that there is no substantial difference between them. I think Mr. Doddridge is one who testified to that, probably preceding this portion I have read to you from his testimony:

In view of that, is it not true that if that freight is of the same character there is no difference in the cost other than extra terminal, and when you get the proportion that is carried on each class of trains you have worked out your problem?

A. I think it would be remarkable, Judge Hill, if the character of the tonnage was the same on both state and interstate; and if all the conditions surrounding it would be the same.

Q. That is a disagreement with this other testimony to which I have referred.

But assume that to be true, that the traffic does go—as the other

witnesses have expressed it—hand in hand and is relatively about the same thing on each of the trains, then is not the conclusion irresistible if that be true it is just a question of the terminal and the proportion of freight on each class of train?

COL. MOORE: Do you mean to imply in that question that
4666 the traffic is the same and the conditions the same or that the traffic alone is the same?

JUDGE HILL: I speak of traffic alone, in the way I put my question?

A. Well, of course, I agree with Mr. Doddridge that if proper allowance has been made for terminals so you have under the direct train costs, that is, cost of transportation, which would be the wages of the train crews, the fuel used in the locomotives, and the train supplies and expenses; and the character of the interstate freight is just the same as the character of the state freight, certainly the cost of transporting a ton of state freight one mile, under those conditions, as regards this particular expense, would be no more than of the interstate freight.

But those conditions would have to be all the same and we would have to assume a proper allowance had been made for terminals, so what was local in there was strictly train cost.

But, as I have pointed out in here (indicating testimony) the figure left in there is not the train cost. Because maintenance of way and a large number of items, perhaps 90% in my judgment, are items which are not train cost.

Q. This is not speaking just of train cost, but is speaking of the whole cost.

There is not any difference in maintenance of way, whether a ton of freight is being carried as a state ton or as an interstate ton, is there, as to its effect on that expense account?

4667 A. No, sir, the tonnage has little to do with maintenance of way.

Maintenance of way expenses are caused by deterioration and the necessity of renewal from time to time, because they have lived their life—the bridges, ties, rails and so on.

So the tonnage has very little to do with maintenance of way expenses.

And the tonnage does not govern maintenance of equipment expenses.

What I say is that the strictly train expenses, wages of the train crews, fuel and so on, that come under the head of strictly train expenses, excluding maintenance of way and maintenance of equipment and some items of transportation expenses, are the ones where the cost would be the same.

Q. These maintenance of way expenses were all kept up in order to haul this tonnage, of course. They are not kept up for ornamentation or philanthropy or anything of that kind?

A. No, sir, they are kept up as necessities.

Q. You have discussed at a good deal of length the question of lap-overs.

You pointed out the objections to using October as a representative month on account of the lap-overs that would exist, going into the following month and were doubtful whether the lap-overs from the preceding month would be equal to that: I believe that is about the substance of your objection on that score to the use of that
4668 month, is it not?

A. That is a part of the objection.

Q. I say, on that score?

A. Yes, sir, on the score of lap-overs.

Of course, I object, Judge Hill, to taking the largest month as representative, irrespective of lap-overs.

Q. I am going to discuss that with you later. But I am speaking of the lap-overs now.

For that to be an effective objection to it, the lap-overs would have to exist in one class of traffic that did not exist in the other. You would have to assume there would be more lap-overs of intrastate or interstate, for instance, or for lap-overs in the intrastate than in the interstate.

If the two classes of traffic went hand in hand, there would be as much lap-over in the interstate as in the intrastate, wouldn't there?

A. It would be an accident, I think, if there should be.

In fact, Judge Hill, if I were compiling figures where I wanted to present an actual statement, I would investigate the lap-overs at the beginning of the month and at the end of the month; and know what they were, or else I would compute the figures for the entire six months.

But on the lap-over questions it seems to me it is up to the man who originally compiled the figures to satisfy himself that the lap-overs did offset each other and offset each other in the two classes of business, also. Otherwise their figures would be entirely wrong.

4669 Q. I am putting you this proposition: there is much evidence here that these two classes of traffic move along hand in hand, a car of coal in the intrastate and a car of coal in the interstate, in their proper proportions. A car of lumber intrastate and a car of lumber interstate, and so on. And merchandise probably more nearly so than with the others.

With these classes of freight moving hand in hand, they move along together at all times.

Now, if this question of lap-overs should affect it there would have to be a difference in the relative movement of the two, wouldn't there?

A. If I understand your question, it is supposing 15% of the total traffic was intrastate traffic during the month of October; that 15% of the lap-overs from September into October would be intrastate; and at the end of the month 15% of the lap-overs from October into November would be intrastate?

Q. No, that was not my question. But that would illustrate the point, probably.

A. I am trying to see if I understand the question.

Q. The point is this: Suppose the intrastate traffic is 15% and the interstate traffic is 85%: the testimony is that that 15% and that 85% would move along coincidently:

Now say there were 15% of lap-overs from one month into the other, would not that 10% of lap-overs reach equally into the 85% and the 15% representative of the two classes of traffic?

A. It might or it might not.

4670 Q. There would have to be a disturbance of that 15% or of that 85%, for the 10% of lap-overs to affect the proposition, wouldn't there?

Col. MOORE: You are assuming in that question that the 15% state and the 85% interstate would move coincidently:

Do you mean in regard to delays, if one was delayed the other would be delayed; and if one did not get into the auditor's accounts the other did not get into the auditor's accounts?

Judge HILL: That is just one of the details.

Col. MOORE: I disagree with you. There is no evidence on that proposition.

Judge HILL: I am assuming that the state and interstate traffic moved coincidently.

Col. MOORE: You cannot assume that on any evidence here so far as lap-overs are concerned.

Judge HILL: I am simply trying to make clear my understanding of the evidence. There is no use arguing it here.

A. I am not positive now, Judge Hill, because in order for these percentages to be of value, supposing every other condition has been met outside of the lap-overs and that they are correct in every other respect except the lap-overs: In order for them to be of value, considering the lap-overs it would be necessary not only for the state and interstate traffic to move coincidently, as you have said, or be delayed coincidently—if there was a congesteion, but it would

4671 be necessary for them to move coincidently on local and through trains.

That is to say, if the traffic is delayed traffic, that moves on through trains, it must be delayed in the same proportion as the traffic that moves on the local trains, because only the traffic on local trains has been computed and the traffic on through trains has been arrived at by deduction.

Q. If you will let me interrupt you there, Mr. Nay, I think we can clear up one phase of that a little:

I do not understand this lap-over proposition is one of delay, necessarily. That question of delay might enter into it. It is freight that gets onto the train too late to finish its journey in that month, in the performance of their work.

A. I am familiar with the practical conditions since 1883, when I started with the Missouri Pacific System.

Q. We will discuss the detail later: I am giving you only the broad proposition now, but I will give you full opportunity later to discuss the detail.

In the lap-over it is a question of not finishing the movement, no matter how well it may move, as well as a question of delay?

A. A shipment may move forward expeditiously and not be delayed at all and still form a part of the lap-overs. But the delays also cause lap-overs.

Have you understood me that delays alone caused lap-overs?

4672 Q. I rather understood you that the delay proposition was the only one that caused lap-overs and I want to call your attention to the fact that that was not the only feature of these lap-overs.

A. Oh, no, not at all.

I still feel that delays must be more in October than in almost any other month of the year, because the business is heaviest in October.

Q. Is not that lap-over proposition existent in the six months period, also?

A. Yes, sir, but as I explained in my direct examination it is a much smaller proportion compared with a six months' business than with a one month's business.

Suppose you take the six months from July to December, the lap-over from June into July is just the same. Whether you consider that as a six months' period or whether you consider the one month of July.

Suppose 10% of a month's business is lap-over. That is 10% of the business of one month, but now to take it for six months of lap-overs instead of being 10% you have for this one month say 1/6 which would be 1 2/3% of the total.

Q. It changes the divisor and lessens the degree of the lap-over?

A. Yes, sir.

Q. But the lap-over is still there, for any given period?

A. Oh, yes, there is no question about that.

4673 But, as I have said, when this question of lap-overs is applied to six months or one year, the effect is lessened, and if you apply it to one month it may distort the figures very largely.

Q. Suppose you are taking the six months to represent a six year period, would not the same proportion hold good there as if you took one month to represent the six months' period?

In other words, it would be as far from representing the actual facts, with six months representing six years than with one month representing six months, wouldn't it?

A. I suppose that would be true. I never figured an a six years' proposition.

My own personal opinion is, that a year's business should be taken, because there are conditions in each month of the year, and in each portion of the year, that do not exist in other portions of the year.

The six months ending December 31st in the southwest are the most prosperous six months. It is the period of the year when net earnings are greater than in the other six months of the year.

Q. You do not think it would be fair to take the last six months of the year to be representative of the whole twelve months?

A. I think it is not fair to this extent; that the net earnings during the six months will be greater in proportion than they will for the twelve months.

4674 Col. MOORE:

Q. For which six months?

A. For the six months ending December 31, 1907, or any six months ending in December, the net earnings will be greater for the six months ending in June.

So it is unfair to the railroads. The railroad side of the case would make a better showing—and by better showing in this instance I mean a less proportion of net earnings—a better showing for this case—than by using the last six months of the year.

Q. You would not think the six months representative?

A. No, sir, not representative of the year's business.

Q. Would you consider that one year would be sufficiently long a period to wipe out the lap-overs?

A. Well, it is a long enough period to make the amount of lap-overs what we called in the Missouri Case "a negligible quantity".

What I mean to say is, Judge Hill, if the lap-overs are 12 per cent of a month's business they are only one per cent of a year's business: that is the point.

Q. You have objected a good deal in your direct examination to the use of one month as representative of a six months period, or of a years period, as testing state and interstate results:

You do not believe it is fairly representative for that purpose, as I understand you?

A. No, sir, I do not.

Q. I want to read you the testimony the railroads brought
4675 out in this case while Mr. Kimbell was on the stand. Mr. Moore asked these questions and the answers are given by Mr. Kimbell:

"Q. Mr. Kimbell, did the operating officers of the St. Louis Southwestern Railway Company make a test at any time after this litigation was instituted, for the purpose of ascertaining the relative cost of conducting state and interstate transportation? If so, I wish you would state what was done in that respect? A. A test of that kind was made under my direction.

Q. What period did it cover? A. The month of October, 1909. The temporary injunction was granted in St. Paul on September 3, and the month of October was selected for the purpose of making this test, on account of it being the first full month following the injunction. October is rather a heavy month, but for a test of this kind, in my judgment, it fairly represents the general conditions.

Q. Would it represent, fairly, a year's business? A. I should say so. It would represent relatively, the difference between the two classes of traffic."

Do you agree to that?

A. No, sir.

Q. Dr. Nay and Dr. Kimbell do not agree on a proposition of that kind?

A. I understand that Mr. Kimbell took all the trains. He did not take the local trains and deduct from the total.

Q. That is another proposition, Mr. Nay. The proposition now

before you is taking October—that is, taking one month to represent a year's business as fairly representative.

A. I do not like to disagree with my friend Mr. Kimbell, but I will have to in this case.

Q. A little further on he gives reasons and it is only fair that you have before you the reasons he gave.

4676 "Q. Do you think that one month would fairly represent the business of your line for a year? A. I think for the purpose of a test of that kind, determining the relative difference between the two classes of freight, that one month is perhaps as good as another.

Q. Why did you select October? A. As explained it was the first full month after Judge Van Devanter granted the injunction. He granted it in September, September 3rd; we wanted to make this test as soon as possible, so we selected the first full month.

Q. In your judgment, a test of this kind, made for the month of October, would fairly represent the operation for a year, or for a series of years?

A. I should say so.

Q. Well, do you think that would be affected by the fact that this was after the panic, when the normal conditions of affairs was not fairly resumed? A. I don't understand that the month of October was after the panic.

Q. That was when the panic, began? A. Right along in there we began to feel it.

Q. Well, do you think that matters had fairly resumed themselves; so that you could make a fair test of that year? A. I think so. I believe that under almost any conditions, good times or bad, the relative difference between the two classes of freight would travel uniformly. In other words, if we have poor business, it is going to affect both classes of traffic.

Q. And you think that any one month they completely worked up, would fairly represent those conditions? A: I do; yes, sir."

I think that is in full all that Mr. Kimbell has stated on the subject. I wanted to put before you in full all his reasons. Do you agree with him?

A. I do not. I want to say that the doing of this kind of work is a very great burden and, as he stated, Mr. Kimbell used the month of October not because he selected it as a representative month of the year, but because it was the first month after the injunc-

4677 tion was granted.

I want to say further, after I found out what Mr. Kimbell was doing, I attempted the same thing on the Rock Island for the month of November, but we gave it up before we completed it, finding out that so many conditions entered into that sort of a computation that the lgures would be valueless, and we never completed it.

Q. You know Mr. Doddridge?

A. Yes, sir.

Q. He was general manager while you were in the auditing department of the Cotton Belt road?

A. Yes, sir.

Q. He ought to be fairly familiar with the conditions on the Cotton Belt and on the Iron Mountain?

A. Yes, sir.

Q. At page 43 he was asked the following question and made the following answer:

"Q. Do you think that the test of one month's operation would be fairly representative of the entire year?

A. I think in this case that it would be representative as to the relative proportions of the different kinds of business, for the reason that the month of October, 1908, was one of the heaviest months of the year, and considerably above the average 12 months, probably.

The main purpose in making this test was to determine the average relation that one class of business bore to the other and if the business of the road was lighter in a subsequent month the chances would be more than likely in favor that the relative proportions would remain pretty near the same."

Now, what do you say to Mr. Doddridge's opinion on that matter?

4678 A. I say just the same, that personally I do not consider one month as representive of six months or of a year.

Of course, Mr. Kimbell and Mr. Doddridge both are more familiar with the detail conditions on the Cotton Belt than I am.

But, as a general proposition, I feel, after considerable experience of my own, that one month should not be taken to represent a year's business.

Q. Would not Mr. Doddridge be more familiar with the Iron Mountain than you ever were?

A. Yes, sir.

Q. You have served on the Cotton Belt road, as I understand you?

A. Yes, sir. I served 15 years on the Cotton Belt.

Q. But not on the Iron Mountain? You never served on the Iron Mountain?

A. I worked one year for the Iron Mountain, the first railroad work I ever did.

Q. In view of the testimony of these two very distinguished gentlemen, who are so thorough familiar with these two roads, do you think the state is subject to criticism for taking one month's business as representative of six months?

A. That is an embarrassing question, the way you have put it to me, but my judgment is they are.

Q. Notwithstanding Dr. Kimbell and Dr. Doddridge differ with you?

4679 A. You press it so it makes it rather embarrassing to answer.

Q. That is a fact?

A. I think I have stated it before. I would like to agree with everybody but I cannot.

Q. There is another question I think would be fair to ask you, Dr. Nay:

You have spoken a good deal in your testimony of the consistency of our position: What do you think of the consistency of the railroads here, proving by these distinguished witnesses in their case in chief that one month was fairly representative of a year's business; and then proving by an equally distinguished gentleman, who is now on the stand, that in his opinion it is not:

Is not there some degree of inconsistency in that?

A. The testimony shows that the witnesses do not agree in every point. In fact, if witnesses agreed on every point it might look as if they had all been coached and told what to say, in advance.

Q. Certainly. But isn't there an inconsistency in the positions I have stated to you?

A. I don't understand just what you mean. There is a difference of opinion.

Q. The proposition is just this: In making its case in chief the railroads put on these two distinguished gentlemen thoroughly familiar with affairs on those roads and proved by them that
4680 honestly in their judgment one month was representative of six months or of a year's period, or of a series of years, as between state and interstate traffic; and now they put on another distinguished gentleman, honest in his opinion, to prove that is not the case:

Is not that an inconsistency?

A. I think it is a difference of opinion, because I think each man has been consistent throughout.

When I spoke of inconsistency I spoke of the same man using one method in one division of expenses and then switching to a different method for a division of a similar expense.

Now, I do not understand that that is the case in the question you are asking?

Q. I am removing the personal equation and putting it as to the railroads:

Both these gentlemen are entirely consistent and so are you. But here is the railroad proving by one set of gentlemen, who are consistent, who held one view, and then in their rebuttal testimony they are proving by another consistent gentleman another opinion, on the same point in the case.

A. I do not think I should be asked to pass upon the position of the railroad. I think the court can do that.

Q. I think the question rather answers itself, anyway.

Just what are your reasons that using that one month is not fairly representative of an entire year? Why should not one month be representative of an entire year's business?
4681 I am not speaking of any particular month but on the general proposition?

A. One reason is that the lap-overs are not the same one month as compared with another.

As I stated in my testimony, the Rock Island changed its method of computing the operating cost because we found that the lap-overs were so entirely different in one month than what they were in another.

Another reason is that the character of the business is not the same. In the Fall of the year, in the southwest, the cotton traffic moves. That is, when cotton predominates.

Q. I asked you not to take any one month. I asked you just on the general proposition.

A. I said in the Fall of the year. I do not think I mentioned October.

Q. Proceed.

A. In the summer months, April or May, of the spring months, are the two lightest months of the year. The traffic is lighter in those months than in any other.

Then, again, during the summer months, when the traffic is light, it is very frequently the case that that is when the very heaviest maintenance work is done.

At certain seasons of the year the passenger business is heavier than at other seasons.

It is frequently the case and I think is the result of good management, to repair the passenger cars and incur expense of that
4682 character when the passenger traffic is the lightest.

So we have all those combinations, certain seasons when the traffic is heavy and other seasons when it is light. The character of the traffic being different in different seasons.

And I am of the opinion that the only way to get the true result is to take 12 months in succession, which will reflect the various conditions that exist during the year.

Q. Do not all those various things you have mentioned practically affect state and interstate traffic alike?

A. Well, they might. But owing to the difficulty of separating expenses, the impossibility of actually separating the expenses between state and interstate, it is hard to say, whether they affect them alike or not.

For example, in 1907, was when we had the biggest blockade on the Rock Island that we have ever had in my recollection.

The great trouble then was with the grain; grain which was moving from Nebraska and Kansas into Little Rock and through Little Rock and beyond. The great trouble we had was with the grain, at that time. That was the thing that was delayed more than anything else. And that was all interstate business.

Q. That was an abnormal condition you are speaking of now?

A. Yes, sir, I am saying it was the greatest delay we ever had.

4683 Q. That delayed other business?

A. Yes, sir.

Q. It delayed the local business?

A. Oh, yes.

Q. Would it not have a corresponding effect on all business?

A. No, sir, I do not think it would have the same effect on the state business.

The movement of state business is short, as is evidenced by the short average haul. It would not be subject to all the delays that affect interstate business. That would be my judgment.

Q. That is the time when the short haul would be cheaper than the long haul, wouldn't it?

A. I am not sure about that.

The relation between the two would be affected by these conditions.

Q. The cost of the long haul would go up and relatively the cost of the short haul would go down, under such conditions?

A. Relatively, yes.

Q. Did you not recently, in a hearing before the Examiner for the Interstate Commerce Commission, present one month as a fair index of the year's business of your road?

A. No, sir.

Q. Did you not present one month as a fair index, and add to that the revenue for three weeks succeeding that one month?

A. That made seven weeks.

4684 Q. But your total expense and income was for just one month, wasn't it, as shown in that statement?

A. Yes, sir. If you will read my testimony, Judge Hill, you will find I stated there that that was all we had and I gave the last week we had.

That was in the early part of September, before we had even the fourth week of August, and we gave them everything we had.

They asked me then, might not the earnings be a great deal more than those seven weeks would indicate, and I said "yes, they might." I said also "They might be a good deal less." I said "This is all the evidence we have got up to this time."

I have never selected one month or seven weeks, where more time was available, Judge Hill.

Q. Here is the point, isn't it a fact that you selected one month completely worked up, and supplemented that with three weeks revenue and presented that as a fair index of a year's business.

A. No, sir, I presented that as the best idnex we had.

Q. Didn't you say it was a fair index?

Col. MOORE: Have you his evidence there, Judge Hill?

Judge HILL: Yes, I have it here.

Mr. NAY: If you have it there, please read it.

Judge HILL: I will read from your evidence given before the Examiner for the Interstate Commerce Commission at Chicago recently, as shown at page 849: This was in regard to

4685 Exhibit "C":

"Q. Will you please state what is shown by this exhibit?

A. This exhibit is a copy of the report for the month of July to the Interstate Commerce Commission, which was mailed to that body yesterday. It shows the operating revenues and operating expenses and taxes and outside operatings for the month of July, 1910, compared with July 1909. It shows that the freight revenues for July, 1910, decreased $110,620.06 compared with July 1909. It shows that the operating expenses during the same month increased $281,454.03. It shows that the deficit from out-side operations decreased $491.15. It shows that taxes increased $42,959.32 and that the

operating income for July, 1910, compared with July, 1909, decreased 378,901.68.

And to continue the history down to the latest date we have, which is our estimated gross earnings for the three weeks ended August 21st, there is a decrease for those three weeks in freight revenues of $243,272, which makes the total decrease for this fiscal year, for the seven weeks in this fiscal year of which we have any record, as to the freight revenues, of approximately $355,000. It also might be well to point out that the report shows that the principal increase in operating expenses is in transportation expenses, and not in maintenance of way where Mr. Melcher testified he would like to spend the money.

Q. Mr. Nay, using the exhibit last introduced in connection also with your estimate for August, for a certain week in August, using this as a basis, what do you think is the outlook for the fiscal year 1910-1911?"

Then you gave an answer about that which is hardly pertinent to our question in this case, unless you wish to hear all of that read.

You remember there was quite a discussion about your views in there.

Then you were questioned by Mr. Thorne (page 908):

"Mr. THORNE: Your volume of business has been increasing as a general thing from year to year during the past ten years, has it not?

A. No, sir—during the past ten years, yes, sir; but as
4686 stated yesterday in my direct examination, the volume of business decreased for the month of July, and has continued to decrease for the three weeks in August concerning which we have definite information, and based on that,——

Q. What exhibit is that shown on?

A. That was stated on Exhibit 6, and also stated in connection with my direct testimony concerning Exhibit No. 6.

Q. Is it your opinion that is a fair index, that increase for one month is a fair index of the volume of traffic or earnings or expenses for the year as to whether it is greater or less than the prior year?

A. I have no other basis to go on than past experience by which to judge the future.

Q. And you would say that that was a fair index, whether one month is higher or lower than the same month for the prior year, is a fair index as to what the earnings or expenses would be for the entire year?

A. This is more than one month, begging your pardon.

Q. And two weeks, then.

A. One month and three weeks.

Q. All right, one month and three weeks. Do you think that is a fair index for the year as to whether it should be greater or less?

A. As I said before, it is the only index that I have before me.

Q. Did you ever make any effort to find out whether that was a fair index by examination of the same item in prior yeares.

A. I do not understand just what you mean.

Q. Did you ever make any effort to ascertain whether that did

prove to be a good index as to whether the earnings increased or decreased for the year?

A. Yes, sir, providing conditions remain the same. Of course, Mr. Examiner, no one can foretell the conditions."

Then you go into a discussion.

A. Right there is where I made the explanation. You will notice I said there:

4687 I will continue reading:

"Three years ago, in 1907, at this period of the year I would have stated, if I had been asked the question that we would have had a very large increase in revenue for the year ended June 30, 1908, but when the panic times came in 1907 the revenue went to pieces and that would have destroyed my judgment. Now good times may come, or worse times may come. The only information I can give is based on the experience up to the latest available data.

Q. I am going to ask you Mr. Nay, to read into the record at this time the net operating revenue of the Chicago, Rock Island and Pacific Railway Company for the months of July, 1907, to June 1908, inclusive, as shown in the reports you have given to the Commission.

I can say this, I do not want to burden the record with a great mass of statistical reports, but this will help me in my cross examination at this particular point."

Then you take up and read into the record a lot of data which I will omit. Do you remember that?

A. Yes, sir.

Q. Further on the following occurs:

"Q. Now, Mr. Nay, considering the fluctuations you have stated there, do you still think that the net operating revenue, whether it is higher or lower for any given month is any index for the entire year?

A. Yes, sir."

A. You notice that question is "any index" and I said "yes." But I did not say it was a fair index. I qualified every answer, all the way through. There is not a single answer where I say that it was a fair index. I said I had given every bit of information I had, up to the very minute, and I gave them a copy of the report sent to the Interstate Commerce Commission, which had been sent to them just the day before. I gave them a copy of the esti-

4688 mated weekly expense which we get out every week and I gave them the latest information we had.

I qualified that by further saying "Good times may come so the earnings may be more than I now expect, and bad times may come and the earnings may be a great deal less."

I gave them that as the best and latest information we had, up to that minute.

Certainly if six months or twelve months had been available I would have given them the six months or the twelve months.

Q. You put that exhibit in there believing it had value as a fair index, did you?

A. No, sir, not as a fair index.

The last question asked me was "is it any index". And I said "Yes, this is any index".

Q. You put it in as any index but not as representative at all.

A. I gave them the earnings and the operating expenses for thirteen years, beginning with 1888 and ending with June 30, 1910.

These had been compiled during the month of August, and then before the trial came on on September 2nd—in the meantime I had sent forward the report for the month of July on the first day of September—and I supplemented that thirteen years' statement with the very latest information we had; and submitted it for what it was worth, to show the trend of the earnings, at the very latest period.

Q. And gave your opinion, and judgment, in your testimony as to the future based upon that seven weeks' exhibit?

4689 A. Yes, sir, qualified by the statement that better times might come and it would be increased; or worse times might come and the showing would be worse.

Q. Has not the Interstate Commerce Commission in some of its hearings indicated that for a year's business they wanted two months, and indicated those months to be September and March?

Col. MOORE: For what purpose?

Do you mean the volume of business or the profit or what?

Judge HILL: I do not know the detail of that but I think Mr. Kay does.

A. I can explain that. The proposed increase in rates would yield a certain amount of increased revenue; and in order to show an approximation of the increase in the amount of revenue that would be created by these increased rates, the Interstate Commorce Commission designated September, 1909, and March, 1910, as the months that should be taken to compute this one item of increase in freight revenue that would be produced by the proposed rates as compared with the rates that were actually in existence during these two months.

I have talked with one of the representatives—I forget now just who it was, but I think it was Mr. Lutz who is Assistant to Professor Adams—and he picked those out as being perhaps average months; not being the largest months nor the smallest months.

4690 Q. Would there be any difference in principle in taking one month as an index of six months and taking two months as an index of twelve months?

A. No, sir, but understand those two months were taken as an approximation of simply the one item of increased revenue.

The exhibits that were presented there representing the earnings and operating expenses, taxes and so on, were all for a period of years, from five years up to thirteen; and the exhibits that are being compiled by the Interstate Commerce Commission (proofs of which I have seen) in connection with this rate case, covered a period of ten years from 1901 to 1910 inclusive.

Q. And you would not think it would be safe to take one month

as representative of six months; or two months as representative of twelve months, to get at the fair representation of the whole business of a railroad over a series of years?

A. Not for any final determination where accuracy was required. For an approximation where special accuracy was not needed, two months or one month might be taken.

Q. While I have this in mind—it is a little diversion but I believe I will take it up now—

I notice in your testimony there before the Master you stated you had a formula for dividing expenses between freight and passenger which had been in use on your road for some eight or ten years, I believe.

4691 I wish you would state just what that formula is.

A. I could not state that offhand. It comprises several pages.

Q. Give us the substance of it, the principle involved in it.

Col. MOORE: If you are going to try to get anything of that sort in the record you should get it in correctly.

Judge HILL: I think Mr. Nay can give it correctly. I do not know that the detail would be important but I want to get the important details, that he considers important.

Col. MOORE: A man trying to put in a matter that covers several pages might omit some detail that would be very important. I have no objection to it being put in in its entirety.

A. I was going to suggest that we have a formula in print, and I could send a printed copy to Judge Moore to be embodied in the record.

Judge HILL: I shall be glad to have it but in the meantime for the purpose of this examination, I would like to have you explain the general propositions involved in it?

A. I would rather not do that unless you insist, because I have found out that upon the witness stand if a person's recollection of a detailed formula like that, is not accurate and if he omits something, a great deal is made of it.

Q. I want simply the general principle.

4692 If you have been operating under a formula for dividing freight and passenger for a great many years, you are familiar with the general principles involved in that and you have discussed at some length in your direct examination the general principles for dividing those.

I do not care for the details but I wish you would give us the general principles.

A. The general principles are these:

In the first place all items that can be assigned directly to either passenger or freight traffic are so assigned. That is to say, the repairs to passenger cars are assigned to passenger traffic; and repairs to freight cars are assigned to freight traffic.

The expenses of passenger traffic offices, like the general passenger agent and the division passenger agent and the soliciting passenger agents are all assigned to passenger traffic.

Similar employes in connection with freight departments are assigned to freight traffic.

The wages of station men at freight stations are assigned to freight traffic, and those at passenger stations are assigned to passenger traffic.

The wages of crews on passenger trains are assigned to passenger traffic; and those on freight trains are assigned to freight traffic.

Loss and damage to baggage, goes to passenger traffic; and loss and damage to freight goes to freight traffic.

4693 All the way through the items that definitely represent passenger or freight expenses are so assigned.

Then we go back and take up the items that cannot be definitely assigned, and make an approximation of the items of that character on different bases.

In some cases it is on the basis of train mileage; in some cases on the basis of engine mileage; in some cases such as for yard expenses, we get an approximation which is the result of the switch engine mileage, from our operating officials, as to the relative amount of passenger and freight switching.

I think roundhouse expenses are divided on the basis of the engines housed, engines in passenger service and engines in freight service.

But these are the principles: We endeavor to apply to our common expenses (and by common I mean those that cannot be definitely assigned as between freight and passenger) the thing that seems to have the closest relation to the expense.

Q. You take the factor which in your judgment most nearly approximates the actual conditions?

A. Yes, sir.

Q. Take maintenance of way, what factor do you use there to divide between passenger and freight?

A. We have been using—I am speaking now of the formula we use for our operating statistics which we furnish to the Interstate Commerce Commission—we have been using the passenger and freight train mileage.

4694 Q. You think that a fair approximation of maintenance of way expenses as between freight and passenger?

A. Well, it is the fairest we have been able to find, which was available at the time we compiled those figures.

Our operating men say that the greater speed of the passenger trains offsets the greater weight of the freight trains. So that it is fair to assume the passenger train mile may be considered the same as the freight train mile.

Q. For that class of expense, between those two rather radically different kinds of traffic, you consider the train unit?

A. Yes, sir, and I would like to say this: that these statistics are compiled for comparative purposes. They do not purport to cover the actual separation between freight and passenger of these common expenses. But by using the same unit from month to month we are able to make comparisons of one month with another. That

is the same basis of apportionment. And those figures are compiled purely for comparative purposes.

Q. I would infer from that you do not regard it as producing actual results or very close to actual results—I am referring to maintenance of way and so on.

A. We do not claim they produce actual results but we claim they produce the fairest results for the purposes of comparison, that we are able to compile.

Q. Would a division of maintenance of way expense between freight and passenger on a train mileage basis be fairly ac-
4695 curate?

A. From the testimony I have heard from operating men I think it would be as accurate as anything that is available at the time these statements are compiled.

Q. Did you make your statements to the Interstate Commerce Commission in these various exhibits based on that formula.

A. Yes, sir.

Q. Now, right in that connection, I want to ask you: In the numerous exhibits you filed in that case which I believe was a case where you were seeking to get an advance of interstate rates granted by the Interstate Commerce Commission—that was the purpose of that hearing, was it not?

A. Yes, sir.

Q. Did you make any separation of state and interstate business?

A. No, sir.

Q. Your system runs into ten or twelve states, does it not?

A. Fourteen states. That is, the company, the C. R. I. & P. runs only into twelve states. The lines in New Mexico and Texas are under separate corporations.

Q. The one before that hearing operated in twelve states?

A. Yes, sir.

Q. You had no separation of state and interstate, or income and expenses, in those statistics you presented to the Interstate Commerce Commission, showing the necessity for an increase of your rates?

4696 A. No, sir. The reason for that was because it was a human impossibility, Judge Hill. It would have taken a force of say 100 or more men two or three years to have compiled that information for a representative period for the twelve different states—the entire business of the company.

I stated that in my testimony at Chicago, that the compilation for one state was a small matter as compared with the compilation for the twelve states.

We simply gave the best we had. In the length of time we had to prepare the testimony it was impossible to compile state and interstate information for anything like a representative period.

Q. You have separated in some ways your state and interstate business in quite a number of these states, have you not, where you have rate cases pending?

A. We have in Arkansas, Oklahoma and Nebraska.

We have some started in Missouri but they were two or three years old. We did not continue the separation after the case was closed.

Q. Does this railroad run into Minnesota?

A. We were not in the Minnesota case. We abided by the decision as to the others. I prepared no statements for that case.

Q. You prepared no separation of state or interstate in Minnesota?

A. Not in freight.

Q. Did you in passenger?

A. Yes, sir.

4697 Q. As I understand your method of preparing separate statements for state and interstate business, in any given state, under the revenue theory (which you adhere to) you show a great deal increased cost of operation of the state over the interstate business, do you not—per ton per mile, I mean?

A. By separation of state and interstate business you mean state and interstate expenses, I presume?

Q. Yes.

A. Yes, sir, it shows an increased cost per ton mile of state over interstate.

Q. I believe you testified in that case, speaking roundly, that your state business was about 20% of your whole business, isn't that true?

A. That was a guess pure and simple, based on these four states we had prepared statements for.

Q. That was your best judgment?

A. Yes, sir. The word "guess" came up in that case and I looked it up in Webster and found the definition about as follows: it is a tentative conclusion based on experience without detailed information.

Q. And that was your "guess" that the Rock Island interstate traffic in twelve states based on the statement for four states, is 20% of the whole?

A. Yes, sir, and it might prove to be not over 10 or 12 per cent or it might be 30 per cent.

Q. When you presented your total expenses and total revenue for twelve states and ignored the much greater expense of con-
4698 ducting intrastate business than interstate business, and you were presenting these figures to the Interstate Commerce Commission looking toward an increase in interstate rates, do you think you were entirely fair in ignoring this proposition?

Col. MOORE: We are not trying interstate rates in this case.

Judge HILL: No, but we are trying the intrastate.

Col. MOORE: Whether it is fair or unfair in that case is not material in this case.

Judge HILL: I think it a pretty fair test. I think that is a proper question I asked the witness.

Col. MOORE: Of course, I am objecting to all of this testimony as irrelevant.

Previous question read.

A. As I recall it, this proposition was not entirely ignored because the very question you have referred to, and which led me to "guess"

at 20%, was a question concerning the separation of state and interstate traffic and I said candidly on the stand that the reason why it was not done, was because of the amount of work involved prohibited it being done within the length of time we had.

But I do think it is entirely fair to present all the information that we had. And, furthermore, I had the privilege of having seen proofs of certain statements that are being compiled by the Interstate Commerce Commission employés themselves, and they are
4699 making no separation and are attempting to make no separation and have not called for any separation.

But this case was tried, not as to any individual rates, that was determined in advance, the Examiner said that the rates on coal would not be investigated separately or the rates on grain or this, that or the other thing, but this case was tried on the broad principle that the railroads needed more money than they had.

And when I showed that the total operating revenue for the year ending June 30, 1910, the last of a series of thirteen years, after paying operating expenses, taxes and so on, left a return of only 3.77%, on the book value of the property, which was more than one hundred million less than the operating officers said the actual value was, I felt it was fair to ask for an increased revenue on that showing.

That with the small amount of intrastate business, even allowing for the increase expense, the return would not be increased above what might be termed "compensatory"; or, rather, would not be increased to an undue return.

Q. Let us see about that, Mr. Nay:

If your contentions were true, that it costs three to seven times more to do the state freight business than the interstate; and that was true in twelve states, representing 20% of your business: and now if you had charged off say even three times your expense of that 20%, three times greater to the state business—would it not have made a material difference in the general result which you showed to the Interstate Commerce Commission?

4700 A. I don't think so.

Q. Is not that a matter of mathematics.

If you take 20% of all your business and increase the expense of that by three times, thereby relieving the expense of the interstate corresponding, and run that into twelve states: would not that make a great deal of difference?

A. Do you maintain that the cost of intrastate business is three times the cost of interstate, on the revenue basis?

Q. I don't maintain that but a great many of the railroad witnesses have maintained it was three to eight times. Usually they are speaking of it on a ton mile basis but they generally put it at twice or three times on the revenue basis.

A. Three times would be putting it higher than the railroad men do on the revenue basis.

Q. They put it at three to seven?

A. On the revenue basis?

Q. No, sir, on the tonnage. And two to four times on the revenue basis.

That is about the average, isn't it, Col. Moore?

Col. MOORE: About that.

Judge HILL: I take it in that difference they are saying that the state revenue is double that of interstate.

Reflect upon that a moment and see if that would not make a material difference, if you had adopted the position taken by the railroad men, and which you recognize in your testimony as a material factor; although you have not mentioned any particu-
4701 lar figures; but accepting the opinion of the general manager, the vice-president and so on, that it was three to four times on the revenue basis and three to seven times on the ton mile basis?

A. Well, my own judgment is, it would not have made a material difference in our case, because while I do not recall the exact book value of our property, it was a little less than three hundred million—say $295,000,000.

To make one per cent of that would require $2,950,000 difference, and we needed even to go up to six per cent (which I understand is the minimum amount the courts figure on as a fair return) we needed more than two per cent or in round figures six million dollars more money. And I am certain that the difference in figuring—well, I could not determine it without knowing the exact figures—would never have made that difference of six million in the interstate results.

Q. Probably it would not have made that difference but would not it have made a difference?

A. It would have made a difference.

Q. And a very considerable difference, would it not?

A. I do not think it would have made what could be termed a very considerable difference.

Because the interstate revenue is so very much greater than the state revenue.

Take it in Arkansas, for the six months ending December 31, 1909 the statement which I compiled for Mr. Wharton shows that the intrastate was 12.9% of the total state and interstate freight revenue.

4702 Q. But, Mr. Nay, you are taking the revenue basis (of which you are an advocate) you would say you would set aside 20% of your property and assign it to state business?

A. On the theory that 20%—well, no, 20% of the freight proportion of the property. We are talking about freight.

Q. Yes, we are talking about freight.

If this ran into all of it, it would be the whole, but speaking of freight it would be 20% of the property devoted to freight purposes?

A. Yes, sir.

Q. When you set aside 20% of the value of the property and are seeking a return on the other 80%, through the rulings of the Interstate Commerce Commission; and this 20% which is set aside would reduce—take the expenses and multiply them by three on that and

deduct that from your aggregate expenses of the 80%, do you think that would make a considerable difference in the showing?

A. It would make a difference but as to how much difference would have to be determined by actual figures.

Apparently in this case the other side were satisfied with the explanation, because they have never called upon us for any figures or even any approximate figures such as you have asked for recently.

Q. Possibly these gentlemen do not know it costs this extreme amount for doing the state business. They are dealing with
4703 interstate. It seems you did not inform them in this hearing about the cost of this state business. You gave them no information in this hearing as to the extra cost of state business, did you?

A. I don't know that I have ever testified as to the amount of extra cost. The operating officials are the ones who testified as to the amount of extra cost of state over interstate.

Q. You do not take the judgment of the operating officials as to the extra cost of intrastate, when you were preparing those figures?

A. We had no figures to apply it to. There was no necessity for getting extra cost when we had no figures to which to apply the extra cost.

As I say, the obtaining of those figures was prohibited in the time we had. It would take two or three years with a large force of men, to work up representative figures as to the cost of state and interstate traffic for the Rock Island road.

Q. You made some statements about October being a congested month, of a congested period; was not all the last six months of 1907 a congested period, more or less?

A. I think there was more or less congestion until the slump came about the later part of October or about the first of November. I do not think there was much congestion, after that time.

4704 Q. I think some of these operating men have testified that it took quite a while for that panic to affect that freight traffic.

A. Of course, they would know better than I as to that.

Q. Things were pretty well started before that panic came on?

A. How is that?

Q. The movement was pretty well started, contracts made and freight on the way before that panic came on, I mean?

A. I am not posted on that. But all I know is we were running to our capacity and having complaints of delay, until the panic came; and then the complaints ceased. The difficulty then was to get the empty cars home.

Q. Would you consider the last half of 1907 a normal period of railroad operation?

A. As I said a while ago, I would not consider the last half of any year as a representative period.

Q. This is a different question: would it be a normal period? I understand your former answer but I think there is a difference between that proposition and this one.

A. Do you mean by "normal" the ordinary conditions that exist from month to month and year to year?

Q. Say the last half of a series of years: I understand that point made about using the last half of any year but I am testing the last half of that year with a series of year- and I ask you preceding
4705 that if that would be normal?

A. I should hardly say normal because I think, if my recollection serves me aright, it is the half year in which the largest business of the history of the country occurred.

I think notwithstanding the slump that came in the first of November or the latter part of October and continued for some time, that the business hauled during those six months was heavier than during any six months in the previous history of railroading.

For that reason I do not think it would be just normal.

Q. If there is a congested condition of affairs in one month, or in six months, where would you find the expenses that represent that congested condition reflected—in what accounts?

A. I hardly think I would be competent to testify on that.

Q. You handle all the accounts, do you not?

A. Yes, sir. But I have not made any study as to which accounts are affected by congestion.

There is one that occurs to me now, that has been impressed upon us, and that is, loss and damage, freight; that actually occurs during that month. Frequently it is settled later.

Of course, where there is a congestion there is a delay to freight and claims made on account of perishable freight spoiling.

For instance, we had a lot of wheat heat in the cars and
4706 spoilt and a lot of corn did the same thing; during that period on the Rock Island. And the loss and damage account—and I am referring to loss and damage which actually occurred during that period, and which would be settled later, is one of the accounts.

Q. Those would be settled in later months—or probably later years, isn't that true?

A. Well, that would depend, of course, upon the promptness with which freight claims are settled. We are trying to settle ours as promptly as we can.

Q. I am not intending to make any criticism on your road in that respect. I think it is better than some others I know of. But there is a good deal of delay in the settlement of freight claims, isn't there; and a good deal of litigation over them: isn't that true?

A. Yes, sir, that is; and it is not always the fault of the railroad company. Claims are presented for a great deal more than is actually due and the railroads cannot accede to all those things.

Q. It is one of those things you cannot forecast, isn't it?

A. Yes, sir.

Q. You criticised the use of these October figures, I believe, in this particular regard: that these claims that would be paid in October would not be reflective of the damages that occurred in October: isn't that true of any period you would take? Say a six months' period, the same thing would be true, would it not?

4707 A. Yes, sir. It is just like the lap-overs, Judge Hill; the effect of that is minimized the longer the period you take—

or, rather, reduced. This is minimized by taking the longest period and reduced by taking the longer period.

In the six months' period a great many of the claims caused by damages occurring in those six months would be paid during those six months and charged to that account. While I think very few of the damages occurring in any one month are paid for in time to be charged off in the accounts of that month.

Q. But you take a six months' period and take loss and damage paid during that month, it would not represent the result of expense of operation in that account for those six months?

A. No, sir, but would more nearly represent it than in any one month.

Q. That is unquestionably true, and would largely depend upon the promptness with which the claim department investigated and settled claims?

A. Yes, sir.

Q. I do not recall whether you discussed the passenger side of that proposition, but I assume the same principle would apply to that, would it not?

A. Yes, sir, as to claims for personal injuries to passengers. That is what you refer to?

Q. Yes, the claims for personal injuries—the corresponding accounts to this in freight.

A. Yes, sir, they would be subject to exactly the same delay.

4708 Q. It is likely there would be more delay in regard to personal injuries than in regard to freight claims: It is a matter of more litigation, more protracted, is it not?

A. Well, I would not say it was more, Judge Hill.

We have many personal injury cases, and one case might be drawn out and become the subject of a good deal of notoriety; and perhaps that one case might be considered representative; while there are hundreds of cases that are settled promptly, which would be forgotten, and not thought of.

I do not believe personal injuries, are as a rule delayed more than the freight claims.

Q. There is that element of delay in both of them?

A. Yes, sir.

Q. And that would reach through any period and would depend upon the length of the period as to how far it departed from actual conditions: that is correct, is it not?

A. Yes, sir.

Q. That would not be affected either by the method of dividing those expenses, would it?

A. You mean either on a revenue basis or some other basis?

Q. Some other basis.

A. No, sir.

Q. That criticism would be equally applicable to any basis that would be used for dividing those between state and interstate?

4709 A. Yes, sir. If the revenue basis was applied to one month's figures it would be subject to the same criticism as any other basis.

Q. It is practically the same thing about maintenance of way: you discussed that in criticising the division of maintenance of way expenses on the car mile basis and stated, as I recall it, that the car mileage would have no relation to the wear on the rail, because that may have occurred as far back as twenty or thirty years before; and for ties seven years before, and so on.

That same criticism can be applied to any basis of division of maintenance of way expenses between state and interstate, can it not?

A. Oh, yes. That is to say, that criticism would be reduced the longer the period taken.

Q. I am not speaking of the length of the period. I am speaking of that element. As I recall your testimony, you were criticising the division of expenses on a car mile basis and stated that the car mileage during those months had no proper relation to the wear on the rails and ties and so on:

Is not that criticism equally applicable to the revenue theory or the ton mile theory or any other theory for dividing those expenses between state and interstate?

A. I don't think it is equally applicable to the revenue theory.

4710 I did not quite understand your question at first.

I think the expenses are incurred during the period under consideration and must be paid for out of the revenue of that period. It is not paid for out of the revenue that accrued in previous years, because the revenue that was received in previous years is reflected in the accumulated profit and loss account; and the revenue received during the current year is reflected in the current income account, to which these items must be charged as operating expenses. They must be taken out of the revenue for the current year, and, therefore, I do not think the criticism applies with equal force to the revenue theory.

Q. But the revenue that is earned in these six months has nothing to do with the rotting of ties and the wearing out of rails and flood damages, and all those things, has it?

A. Nothing to do with the rotting, but it must be used to renew them.

Q. That is the source of the money to renew them.

But the question is now, does this revenue during this given six months represent the wear on that rail, to use that as an illustration?

A. No, sir, it does not and it is not the reason that the revenue theory is used.

Col. MOORE:

Q. What is the reason?

A. The reason that the revenue theory is applicable to maintenance of way expenses is that the expenses must be met out of this revenue.

4711 That cannot be charged back to profit and loss, where the accumulated revenue is carried.

Q. It is using the revenue of one period to pay for the wear of a previous period, is it not?

A. Yes, sir, and that is required by the Interstate Commerce Commission rules.

Q. I am not discussing the propriety of it, Mr. Nay. I am merely discussing the fact, whether the revenue would represent the injury any more than the car mile would represent that injury.

A. No, sir, it does not. But the expense must be met out of this revenue.

Q. Why, certainly, I understand that.

Speaking of the car miles as the unit for measuring the expense of maintenance of way between local and through trains, isn't that a unit that is used in common practice of railroads where they have joint tracks, to determine the method of apportioning the expense of those joint tracks between the given roads?

A. That is one of the methods that is used.

Q. It is very commonly used, Mr. Nay, isn't it?

A. There are three methods used, Judge Hill:

There is the train mile, the car mile and the wheel mile. And in some cases an arbitrary basis of one-half or one-third and two-thirds; and in other cases the revenue basis is used. All of those units are used.

4712 Q. I understand from the operating men, like Mr. Gray, that the car mile and the wheelage bases are synonymous; that the car mile basis is a term that originated from the old method of counting the wheels but now they call it the car mile basis:

Is that your understanding?

A. Yes, sir, that is done largely to simplify the proposition.

But we are still using wheel miles in many contracts today. And the latest contract made was on the revenue basis.

Q. In one of these states where you have rate litigation?

A. No, sir, in New Mexico where we have never had any rate litigation.

Q. Where you are getting ready for it?

A. No, sir, we have never had any trouble down there or any pleasure of this kind.

Q. I believe these learned doctors who have disagreed upon some other proposition on this Iron Mountain and Cotton Belt Railroads, have agreed upon the car mile basis for paying maintenance of way expenses on the joint track that the Iron Mountain uses with the Cotton Belt:

My point is this: it is a common basis used among railroads in their own affairs, is it not?

A. Yes, sir. But I wanted to make it clear, Judge Hill, that it was not the only basis but that there were these other bases, too.

4713 Q. Didn't you state there was practically no difference so far as freight cars are concerned, between the wheelage basis and the car mile basis?

A. In these contracts there is no difference made.

Q. As a matter of fact, is there any difference of any moment?

A. I do not think there is any great difference, no, sir.

Q. That would be one of these "negligible quantities" we stop at?

A. Yes, sir, because there is really only about 10% of the expense that is at all affected by car miles or wheel mileage.

Q. I believe the doctors have disagreed on that from 75 to 90%.

A. Yes, sir.

Q. While talking about wheels—it is a little digression but I will ask you this question:

Did you ever ascertain about the relative weight of an average locomotive, loaded with coal and water; and the average freight car, loaded with the average load; and find out that the locomotive was about 2½ times the weight of the loaded car?

A. I think I have, offhand. And then, subsequently—I think it was in the Nebraska rate case we made a computation. I intended to bring with me our roster, which shows the weight of the locomotive and cars, but I forgot to bring it. I do not recall what that is. I do not know that I have anything here that would show.

4714 Q. Did you testify in that case it was about 2½ times?

A. No, sir, I ascertained that in preparing some data for cross examination of the state's witnesses. (After examining paper) No, sir, I have not anything here that would give that.

I have the average weight of a Rock Island locomotive on the drivers, 74 tons.

I have not the average tare weight of our freight cars, but I think they will average not to exceed 20 tons.

Of course the average weight on the drivers would not include the tender. I think it would be a much greater disparity in weight if it were looked up.

Q. I just wanted to know and was under the impression you had it?

A. I haven't it here.

Q. You refer to the lighter loading of the cars in the local train, making less difference in the repairs of maintenance of way on that acount; that would be, if an error, an error against the local train in this case, would it not?

A. Yes, sir.

Q. Now, Mr. Nay, I want to call your attention to your testimony at 436 of the record. I wish you would turn to it. I do not understand it. You were asked this question:

"Q. Referring to the allowance of 50% for station switching in this connection, do you think it would be proper to charge as large a proportion of it to interstate business, that is, business com-

4715 ing into and going out of the state from another state, as you would charge to intrastate?

A. No, sir, I would not. That is to say I think a greater portion of that charge if we could ascertain what that is, should go to state business than to interstate."

If you look at that exhibit I think you will find that the station charge is measured between local and through and not between state and interstate: is not a fact?

A. Yes, sir.

Q. I confess I do not understand your answer there at page 436.

Col. MOORE: If you allow me I can explain exactly what it is.
Judge HILL: He made the answer there.

A. The question is:
"Do you think it would be proper to charge as large a proportion of it to interstate business, that is, business coming into and going out of the state from another state as to intrastate business"——
and I said:
"No, sir, it would not."

Col. MOORE: That is the 50% allowed to the cost of local trains?
Judge HILL: You see the 50% is not 50% for state or interstate but 50% allowed to the local train?

A. Yes, sir. But my answer still answers the question asked me.
Q. How does it answer the question?
4716 A. The question was, would it charge as much to interstate business as to intrastate and I said, no.
Q. They are not charging it to interstate or intrastate; they are charging it to local and through; they are charging it to the switching of that local train.
A. Yes, sir.

Col. MOORE: Read back there and see the context.

Judge HILL: I did not so understand it in this record.
A. That is the reason I answered the question as I did. The question asked between state and interstate and not local and through.

Judge HILL:

Q. And the allowance to which you refer applied to local and through and not between state and interstate?
The whole point is this: you have not made your position clear to my mind. If that answer has done it, it is due to my dullness and I would like you to explain just what your view is upon that subject.
A. I think I understand the point of your question now. That is, that this 50% that is added to the local trains adds that much to the state and interstate traffic alike that is carried on the local trains.
Q. Yes.
A. And Judge Moore asked me as follows:
"Referring to the allowance of 50% for station switching in this connection, do you think it would be proper to charge as large a proportion of it to interstate business; that is, business coming into and going out of the state from another state, as you would charge to intrastate business." And I said: "No, sir."
4717 That is to say, I think a greater portion of that charge, if we could ascertain what that is, should go to state business than to interstate business.
While this addition of the 50% to the local adds it to the state and interstate alike.
Q. And you do not think that is correct?
A. No, sir.
Q. If I recall correctly the testimony of the numerous operating

men here it is that freight after it gets on the local train, whether state or interstate, is handled exactly alike.

What would be the difference in the handling of the two classes of trains, in the switching of the interstate, on the local they would be handled alike?

A. I think undoubtedly they refer to the direct labor and expenses that it receives and incurs en route.

Q. The testimony will show it is a good deal broader than that. But that is the point I wish to get from you, whether you disagree with that view, and that is the point to which you were referring?

Col. MOORE: I cannot entirely agree with your assumption as to what the operating men have testified to. I understand they testified that all conditions being the same, there would be no difference in the handling of the two classes of freight on the local trains.

But all of them have testified that the conditions are not
4718 the same and everyone of them have testified that the larger part of the expense of the local trains grew out of the difference in the handling of state and interstate freight, and assumed that the larger part of it should be charged to state freight. On account of the difference in haul and many other matters of that sort.

Judge HILL: My recollection of the testimony of Mr. Whitenton—I am speaking from memory as I have not it before me, was that he said after freight gets on the local trains there is no difference in it.

Take the local train from Fort Smith that has five cars of interstate freight that came in from St. Louis, say, to be distributed upon that road; and they have five cars on there to be loaded on the industrial tracks, or from the Rock Island: the handling of that they say would be the same, after it gets on the local train.

That is the point on which I wish to get your views.

Col. MOORE: The contention is there would be no difference, they say.

Judge HILL: There would be a difference, of course, but my point is to get how Mr. Nay looks at it.

A. My understanding is that this allowance we are speaking of is an allowance for extra switching at local stations, and not the handling en route.

That is why I said a while ago that these operating men who spoke of the expenses being the same, meant the expense en route.

4719 This extra allowance for station expenses by being applied to both state and interstate alike, and then subsequently divided on a ton mile basis, does not in my judgment assign enough to the intrastate business, because each intrastate shipment has two terminals within the state and is handled at two stations; while an interstate shipment has this terminal switching at only one point in the state.

Q. That is taken care of in another movement, the two terminals proposition:

But we are now down to your interstate freight being put on the local train?

A. I do not understand this 50% which it is said is added for local station switching and not for the hauling between terminals.

That station switching is supposed to represent the additional repairs under the head of maintenance of way, that will be caused by the local switching.

The point I make is, that I claim there is more local switching per ton mile to state shipments than there are to interstate shipments.

Q. But not in the same train, is there?

Col. MOORE: You mean maintenance of equipment, don't you? You said maintenance of way.

A. No, sir, I mean under maintenance of way.

Q. That comes under maintenance of equipment doesn't it?

A. No, sir, it is under maintenance of way and structures.

4720 Mr. HILL:

Q. Here is the point where I think you do not quite gather the movement we are now referring to:

Suppose a car of merchandise from St. Louis was brought into Little Rock over the Iron Mountain rails and set out into a local train at Argenta. And a car was brought in over your line from Forrest City or Brinkley, or some point on your line; and they were set into the local train, both going up to Morrillton:

Would not the switching on those, the one being a state and the other an interstate car, if they both found their way up on that local train in the same manner, be the same?

Now, would not the movement on the local train—now I am not referring to the additional terminal at Forrest City, or in St. Louis on the other shipment which would not be in this case—but I am referring to the movement on the local train after those two cars were put into it: would not this item be the same for both?

A. If they were going to the same industry?

Q. Yes.

A. Yes, sir, the local switching at Morrillton.

Now I understand this 50% is added for the local switching that is necessary to be done at Morrillton. He based it on the local engine switching, as there is no switch engine at Morrillton.

Q. That is true.

A. The instance you have cited speaks of an interline shipment and a state shipment.

4721 If you had taken a car from a point on the Iron Mountain beyond Little Rock, say at Camden—they may have a switch engine at Camden—but at some point below Little Rock.

Q. That will do.

A. Suppose they have no switch engine at Camden, and take a car coming from Camden to Morrillton, that car would receive that local switching at Camden.

Q. And that mileage would be on the local train and not on the one going up to Morrillton?

A. You don't treat them as trains, but add 50% to all the mileage of the local trains.

Q. But we get all the local trains?

A. You add 50% to the mileage of all local trains and in the end divide that 50% on a ton mile basis.

Here is a car we will say going from a point say 30 miles south of Little Rock to a point 30 miles north of Little Rock; that would be 60 miles. That receives two terminal handlings. If there are 20 tons in the car the tonnage contained in that car would be 1200 tons one mile.

Now, if you have a car coming from St. Louis to this same point through Little Rock, the car we will suppose will travel 200 miles in Arkansas, and have the same weight that is to say, twenty tons. The ton mileage on that car in Arkansas would be 4,000 ton miles, as against only 1200 miles on the car that received two terminal handlings.

Therefore, the car that received only one terminal hand-
4722 ling in Arkansas would be charged with 3⅓ times as much under this method (indicating exhibit) as the car which received two terminal handlings in Arkansas.

That is why I claim this addition of 50% to both state and interstate is unfair.

Q. Don't you think that is taken care of on the other train—in the illustration you have given—by the allowances that have been made for the terminals and all the switching down there?

This proposition we are now after, is after it gets on to the local train.

You see that movement may represent a half dozen, but each of those is taken care of.

You see that 4,000 ton miles you referred to is not 4,000 ton miles in that local train, but that is found reflected in the other train, and it is properly taken care of.

A. Suppose then, it travels the same distance——

Q. Take my illustration and I believe it brings out the point.

A. Let us take my illustration and reduce it to the basis of the local train.

Suppose this travels the same distance as the car in the local train, it will have the same ton mileage and have the same terminal handling charge to it. And in that case——

4723 Judge HILL:

Q. It would not on that train but it would be on the other train. If you study that out you will see that it is taken care of. I do not really think there is any difference between us, if we understand each other.

A. I think there is 100 percent difference between us. Let us take this while it is fresh in our minds.

Take it in a case where the interstate shipment is hauled exactly

the same distance and in the same train—and I assume that is what you are driving at, is it not?

Q. Yes.

A. If the weight is the same there will be exactly the same ton miles for the state as for the interstate shipment.

A. Yes.

A. (continued). And that will assign exactly the same expense to the intertsate shipment which has only one terminal switching as to the state shipment which has two terminal switchings.

Q. It would not be two on that train?

A. It would be two on the same mileage.

Q. No, Mr. Nay, you are mistaken.

A. My illustration is, they are handled the same distance on the same train.

Here is a shipment which originates at Little Rock, say for example. It is destined sixty miles south of Little Rock and is taken out on a local train running south from Little Rock.

4724 Here is a shipment which originates at St. Louis and comes to Little Rock on a through train and is there put on a local train having the same destination as the local shipment. Each shipment travels (supposing the weight is the same) the same distance on that local train and has the same number of tons one mile; and each one would receive the same charge for this additional terminal service; while one has two terminal switches and the other one only one.

Q. The interstate shipment would have a terminal switching at Little Rock, taking it off the through train and putting it on the local train; would not that be the same switching as if it were taken off your line or picked up off the industry track? There is the point you overlooked.

A. No, sir, I do not think it would be the same, because the industry switching would be more.

Q. There is some evidence on that subject here—a whole mass of it. But for the purposes of this question, this switching, whether for the same degree, in some cases it might be more and in some cases less; but taking it that there is switching service performed in Little Rock to get it off of the through train from St. Louis and put it on the local—say it was going to Malvern—and taking the local car and putting it on that local and taking it to Malvern—that would be the same thing, would it not?

A. That would be similar. But how about a car picked up between Little Rock and Malvern?

Q. State.

4725 A. It would necessarily be state.

Q. There would be no interstate car you could pick up to parallel that.

You are speaking now of the comparative switching of the two?

A. No, but there might be an interstate car come into the train at a junction point.

Q. It would be taken care of just like the other.

Let us stick to our illustration first.

Take the switching done on a car brought from the through train onto the local train, and one picked up from an industry track and put on the local train, and both put out at Malvern:

Is not there the treatment just alike, and properly so?

A. Those two cars I think would be treated alike.

Q. And properly so?

A. I am not so sure about that.

Q. The point of difference is the amount of switching I suppose you have in mind?

A. That would be one point of difference.

Q. There is a good deal of conflict in the evidence on that point. I do not care to go on that. We have a lot of switchmen who have testified on that. I suppose you will acknowledge their superiority to you in that respect?

A. Every time.

4726 Q. I don't care to discuss that matter with you, but the method of taking care of it in the accounts I wanted from you.

A. Any state cars that are taken up on local trains and set out at local stations would have two terminal switchings for each shipment.

Q. There is no doubt about that.

A. While the interstate shipment would have only one.

Q. But you cannot get your interstate shipment on to that train without switching it onto that local train, is what I mean. Don't you see that?

A. It can be set in at the terminal point—say at Little Rock. It can be put into the train.

Q. That is a switching service?

A. Yes, sir, but that is not switching by a local train.

Q. It is not switching by the local train?

A. No, sir. And this 50% is added for switching by local trains.

Q. Would not that be done by the local train?

A. No, sir.

Q. If I remember it correctly, these switchmen testified it was.

A. At Little Rock?

Q. Yes. I am speaking from memory now and I may not be accurate.

A. If the local engines do their own switching at Little Rock, of course that would be true. But that would be an unusual

4727 condition.

Col. MOORE: That is not a fact. A switching engine is maintained there at Little Rock.

A. But here is a case: take this car which goes from St. Louis to Little Rock, and goes 60 miles south of Little Rock to a station; that 60 miles with 20 tons of freight makes 1200 tons one mile and has one terminal expense.

And here is a car which is picked up 30 miles south of Little Rock, by this local train, and hauled 30 miles south of the distance at the south point, it moves sixty miles, weighs twenty tons, and has 1200 tons one mile.

This first interstate shipment has the same number of tons one mile and receives the same amount of this extra charge of 50% as the shipment which moved from this point 30 miles south of Little Rock to a point 90 miles south of Little Rock; while the second shipment unquestionably has two terminal switchings by that local train; and the first shipment had only one terminal switching by that local train; and yet the ton miles in each instance are the same.

Now it is cases of that kind which I was trying to get at, which would work an injustice to the intrastate traffic.

In other words, under the most favorable circumstances there might be an even break; but under circumstances such as I have indicated, the intrastate business is relieved of a large part of the expense with which it should be charged.

4728 Q. I believe we can show you a large part of that has been taken care of,——

Col. MOORE: I would like to call the attention of Mr. Nay to one of the instances you have recited .

Mr. Hill has put a hypothetical case, where state freight would originate at Forrest City, go to Little Rock and then go on to Morrillton; and compared that to an interstate shipment.

In the light of the evidence in this case I understand the state shipment would have the terminal service necessary to properly load it and so on, at Forrest City; then be put in the local train running between Forrest City and Little Rock, and then go on to Morrillton.

A. Yes, sir.

Q. If you call the transferring of a car like that "terminal handling" it would mean that the car would receive three terminal handlings, would it not?

A. Yes, sir.

Q. The car shipped from St. Louis would receive its first terminal handling at Little Rock on the transfer of it to the local train; and the second at Morrillton: if you should treat transferring it from one train to another as a terminal handling, there would be three handlings of that as against the two handlings of the interstate freight.

Judge HILL: That would be two on the Iron Mountain, but there would be another terminal handling on the other road.

A. In his first question he assumed the haul to Little
4729 Rock would be on the Rock Island road.

Judge HILL: I compared it to the St. Louis shipment where the first terminal handling would not be in this case at all. In the other case it would be on the Rock Island road.

4730 Cross-examination of FRANK NAY, continued, as follows:

By Judge HILL:

Q. I believe we were playing switchmen, when we quit, weren't we?

A. We were doing local switching.

Q. Suppose a case like this: State freight hauled on a local train,

which originated at a point where the local began its run, say Little Rock for instance, or which was put on a local train and which was destined to a station at the other end of the local train's run: That is, where the state freight was run from one terminal to the other:

What about the switching on that proposition?

A. There would not be any local switching.

Q. No station switching?

A. No station switching by a local train on that.

Q. That might compensate for some of these possibilities you have conjured up here this morning, might it not?

A. I think when you speak of the possibilities conjured up——

Q. I do not mean that offensively at all, Mr. Nay.

A. I think that is putting it pretty strong.

I think the illustration I gave is one that would happen every day in a local train.

Q. I do not agree with you on that, but that is more of
4731 a switching proposition than a local train one.

But if there should be such as that it would be like the one I have mentioned?

A. Yes, sir, it is my understanding cars like that are more apt to move on through trains, in the ordinary course of business, a car going from one terminal to another.

Q. More ordinary than practical?

A. No, sir, I think every practical railroad man would put that car right on a through train to go straight through to the next terminal; and I think that would be more of a conjured up case than the one I gave.

Q. I don't think so. But the conductor's wheel report would show that.

The Iron Mountain has, and I think the Cotton Belt, but I do not know so much about the Cotton Belt as it is a kind of "second fiddle" in this case—with due deference to Mr. Kimbell—it had switch engines at several points other than the terminal points; and any state freight destined to such point, originating or destined to a division terminal from such points, would have no station switching done for it at all by the local train, would it?

A. No, sir, and I should imagine in those cases the same thing would be true as is true of cars moving between regular terminals, that the through trains would handle the cars, largely.

Q. Do you mean by that that the local division would be the same feature as the through division?

4732 A. No, sir. I mean by that, that the through trains would more than likely stop at those local termini and pick up and set out cars that were destined thereto, and the very fact that they had switch engines there would no doubt make that move. Of course, the operating men could tell better as to that, but in my experience that is usually the case.

Q. The local division points, for instance, between Fort Smith and Little Rock and Russellville, I think at one time it was a through division and at another time it was made a local division.

That frequently occurs, that there will be a local division point that is not a through division point; and there is a great deal of traffic handled at such points; it is not an insignificant matter. Isn't that true?

A. Yes, sir.

Q. And the situation I have stated to you here would occur in such cases as that, would it not?

A. Yes, sir, it would occur. But I think the regular operation of the road from day to day would show that the cars which moved between division points, local and through, would be hauled very largely by the through trains.

Q. That is a matter of detail.

You were just speaking generally of the way it should be done, on the theory that as it should be done that way it was done that way.

A. As I say, that is a matter of good railroad practice.

4733 Q. Because you think it was the usual practice you think the Iron Mountain Company did that?

A. I do not know that their practice is worse than others.

Q. You are assuming they followed good railroad practice?

A. Yes, sir.

Q. You have no knowledge directly as an operator, yourself?

A. No, sir.

Q. I believe you testified in the Chicago case you were a bookkeeper who recorded history and did not make it?

A. Yes, sir,—or words to that effect.

But I also testified I had been on the road considerably and observed operating conditions, and when I speak of these cars being picked up or set out at these local division points, I am sure that is the practice—of course, that is a matter of history, too, because the train reports show that.

Q. Mr. Nay, I find on page 438 of your testimony this question:

"It is an addition of 50% mileage to provide for possible extra maintenance expenses due to yard service. The accountant, Mr. Wharton, who filed this, stated it was an arbitrary assumption; that they had no information or no means of obtaining any information. What do you think about that method of proceeding to make such a division of this class of expense."

And this was your answer:

"Making an arbitrary assumption, without anything to base on, might or might not lead to true results, and is more apt not to, I think."

4734 Col. MOORE: Is that maintenance of way you are speaking of, Judge Hill?

Judge HILL: I think it is, yes, it is maintenance of way.

Q. Now, I want to call your attention to the testimony of Mr. Wharton. I believe you said you had read it.

At page 576 he said:

"Q. I see you added 50% to the engine mileage of local trains, on account of station switching: Where did you get that per cent?

A. That percentage was worked up after consultation with Mr. Hamilton and with others, and was simply an arbitrary percentage added.

Q. That was simply an arbitrary assumption?

A. Yes, sir; an arbitrary assumption.

Q. You had no knowledge or information which qualified you to——

A. Except such as I just stated, discussing the matter with Mr. Hamilton and others.

Q. And you had to adopt some basis—an arbitrary one—just like it has been said in this case that the revenue basis was an arbitrary one? You had to have a basis and you had to take something for that basis?

A. We felt that something should be added to local engine mileage for that purpose.

Q. But you did not know whether 50% or some other figure should be added?

A. No, sir.

Q. Then you added 150% for each engine mile to make it equal a car mile: why did you do that?

A. We added 150% to each engine mile, also after consultation with Mr. Hamilton and with others, as representing the difference in the weight of the engine and cars.

Q. Did you weigh an engine and car for the purpose of ascertaining from actual weight what the difference was?

A. No, sir.

4735 Q. Then what reasons were given in your consultations—if you had consultations you must have developed some reasons—for adopting that per cent? What was the reason, that is, what I want to ascertain, because this is the foundation of your figures?

A. Well, if hearsay testimony is not competent I would not be able to say.

Q. So you are unable to make an explanation?

A. Except upon information I gathered in consultation with men who were qualified to pass on that."

Q. Now, Mr. Nay, in view of that testimony, do you think it is fair to say that an accountant has filed a statement and he had no information or no means of obtaining information upon, when he says here he took that figure not from personal knowledge but from information received from men whom he believed to be qualified to pass upon it?

Col. MOORE: Is not that maintenance of equipment. There is only one 50% added on to maintenance of way.

Judge HILL: It is on page 576 I read from.

Col. MOORE: You refer to his adding an additional 50%.

Judge HILL: You questioned him about both those propositions and he answered them both, that he gathered it after consultation with men he relied upon as competent to pass on it and not from personal knowledge.

A. Well, what I said is this:

"A. Making an arbitrary assumption, without anything to base it on, might or might not lead to true results, and is more apt not to, I should think."

Q. But that answer, taken in connection with the way the question was put to you, would indicate that the accountant had
4736 filed this statement as an arbitrary assumption; that he had no information or any means of obtaining information upon the subject.

Now my question is, do you think you, in answering the question in the way you did, and the question itself, was a fair criticism, in view of this testimony?

A. I think so, yes, sir.

Q. Have you any knowledge yourself, personally, from your own knowledge, of the extra cost of handling state over interstate business?

A. Now, just what do you mean by that? It is switching we are talking about.

Q. No, I mean the broad proposition of extra cost of state over interstate business as has been testified to in these rate cases as being three to seven times: Have you personal knowledge, yourself, of that proposition?

A. I have personal knowledge of the fact that a shorter haul involves a greater expense than a longer haul; and that it costs more to handle less than carload business than carload business, and things of that kind.

Q. Why, certainly.

A. And that the average length of haul for intrastate business is much less than the average length of haul of interstate business. That is a matter of record.

And coupling that with the first statement, that the shorter haul is more expensive than the longer haul, as the average haul for intrastate is less than for interstate, then the intrastate business must be the more expensive.

4737 And as the greater percentage, ordinarily—it is true in the case of the Iron Mountain—of the traffic of the intrastate business, consists of less than carload business, than is the case with interstate traffic, it follows that——

Q. Without going into the details, Mr. Nay, have you an opinion of your own from your own knowledge, as to the extra expense of state over interstate business?

A. As to the entire percentage, no, sir, I have not.

Q. You rely upon the opinions of the operating men in whose judgment you have confidence?

A. Yes, sir. I understood your question, but I have some knowledge on the subject.

Q. I say, as to what this extra cost is.

A. Yes, sir, and my answer gave some of the knowledge I have. But I do not claim to have sufficient knowledge of the details of operating conditions to say that the percentage should be so much.

Q. That is what I had assumed from the stand you had taken?

A. Yes, sir.

Q. You made up statistics in this case—at least they were made up under your directions

A. In which case do you refer to?

Q. In these various rate cases, when your road has been involved in them?

4738 A. Yes, sir.

Q. And you have added 150 and 250 and various other percentages there upon the opinions of operating men, haven't you?

A. Yes, sir.

Q. Of which you had no personal knowledge but which you derived from men in whom you have confidence and who have knowledge of the subject?

A. Not exactly that.

I testified I had some personal knowledge of these conditions but not sufficient to determine the percentage.

But that additional percentage is based upon the testimony of men in whom I have confidence, as having had experience in operating railroads.

Q. But you do not seem to be willing to accord to Mr. Wharton the right to have that same confidence in the men whom he consults, do you, Mr. Nay?

A. Well, I do not know the men whom he has consulted. As I recall it, they were not named in the testimony.

Q. No, but you did not give in the testimony the names of the men you consulted when you made up your statistics. You consulted with men in whom you had confidence and it is fair to assume that he consulted with men in whom he had confidence—because he said so.

A. I stated these were men of long years of operating experience in railroading.

4739 Now, I do not know whether it is the same class of men Mr. Wharton consulted or not. He consulted with Mr. Hamilton and others.

Q. He says "who were qualified to pass on it." He may be mistaken in his judgment, as you may be mistaken in your judgment of the men you consulted; but when you have consulted men you esteemed as qualified to pass upon those questions and took their judgment upon it, don't you think you have acted fairly in doing so?

A. Yes, sir, but I have given candidly the experience of the men on whose judgment I based my figures. And as railroad men who have had operating experience have uniformly testified to this great increase of the expenses of state over interstate, it is hard to believe that men of the same experience and in the same line of business would testify to something entirely different.

Q. What Mr. Wharton testified to here was men who were qualified to pass upon these particular items in question.

I have used the broader question to you as a general proposition.

A. What was the experience of these men?

Q. I don't know. He simply said, men whom he considered

qualified to pass upon this question of the extra switching and so forth.

When he has done that, do you think he is subject to the criticism that this question and answer implies?

A. I think he should give the kind of experience the men
4740 have had in whom he reposed this confidence.

Q. Turn to page 444 of your evidence, Mr. Nay.

"You will find yard locomotive expenses divided on the basis of double the number of cars handled in each class of service.

I don't know, so I am asking you the reason there could be for that difference?

A. I don't know. One is based on the cars handled and the other on the car mile."

Did you look at the Cotton Belt exhibit on that same proposition as the Iron Mountain?

A. I do not know.

Q. That is on the basis of four where the Iron Mountain is two. And it is explained in there, as on account of the difference in the length of the haul. Do you remember that?

A. I think I do recall that.

Q. You seem to have treated that as if it were a question of state and interstate handling instead of a question of length of haul. I supposed you had misunderstood the purport of the exhibit there.

A. I do not believe I understand this.

In each case there seems to be 50% added for extra repairs and 75% added to the local mileage for extra mileage in repairs.

Q. I do not think that is the item?

A. I thought you said locomotive mileage.

(Examining paper.) That question and answer referred to the different bases used for locomotive and cars; the terminal yard switching—or, rather, to the repairs incident to yard work; being
divided on the basis of the cars handled, and the terminal
4741 repairs for freight cars being divided on the basis of car miles.

He asked me if I could see a reason for that difference and I said I could not.

Q. In the record on page 444 you will find this question:

"Q. The state accountants have allowed double handling in ascertaining the expense of terminal handling of the cars, but they made no such allowance in the case of yard locomotives. Is there any reason for that distinction in your opinion?

You will find yard locomotives expense divided on the basis of double the number of cars handled in each class of service. I don't know, so I am asking you what reason there could be for that difference?

A. I don't know. One is based on the cars handled and the other on the car miles."

I want to call your attention to the fact that that doubling is not for the purpose of helping that matter but to correspond to the length of the haul of the two, as shown in the Cotton Belt exhibit where the same proposition is handled on the basis of four, on ac-

count of the difference in the length of haul. Do you catch the point?

A. The length of the haul of the local and through cars?

Q. The average haul of the two trains in the Iron Mountain is practically the same as the division haul; and on the Cotton Belt it is practically double that. That has been explained in the evidence.

A. (After examining exhibits.) That does not give me any
4742 light yet as to why my statement should be questioned; because in the first place there are certain repairs to locomotives that were found to be assignable under that method to yard switching, yard service or terminal service, as it is called; and those repairs to locomotives were divided on the basis of the cars handled at terminal points.

Now, when it came to the question of similar repairs for freight cars, those repairs which they found were due to the terminal handling, instead of dividing them on the basis of the cars handled, they were divided on the basis of the car mileage modified by multiplying by two in the case of the Iron Mountain and I understand you to say multiplied by four in the case of the Cotton Belt.

The point I was making was, that I could not see why, if the basis of cars handled was a correct one in the case of repairs to locomotives, the same basis should not be used with regard to freight cars.

Q. Do you understand that that doubling there was due to the difference in the run, taking charge of it and so on?

A. No, sir, I do not understand why it was doubled.

Q. That is what I supposed from your answer.

A. But the run is not double. The average run shown on these statistics for local train is 63.10 and for through trains 70.8.

Q. I said a while ago it was nearly the same and that was about double?

A. Yes, sir.

4743 Q. Mr. Nay, turn to page 445 of your testimony where you refer to station expenses under the general head of "Transportation Expenses."

A. The paragraph reading "the large item of station labor, what we call platform labor, loading, unloading and checking, is in connection with the carload business"—that should read "in connection with the less than carload business."

Q. That is the point I was getting at. You are referring to the less than carload business there?

A. Yes, sir.

Q. Your statement is that it is not fair to divide the expense on the basis of tons handled, including the less than carload business?

A. Including both less than carload and carload.

Q. Mr. Nay, in order to get the record straight I wish you would restate your proposition right there, will you?

A. My answer should have read like this:

"The tons that are included in the basis for this division, with the trans-state omitted, includes both carload and less than carload

shipments. Practically all carload traffic is loaded and unloaded by the shippers and consignees, so the only item under the head of "Station Expenses" that refers to carload business is office expense, the expense of billing, recording and so on.

The large item of station labor, what we call platform labor, loading, unloading and checking, is in connection with the less than carload business.

Therefore I do not think it is fair to divide the expense on the basis of the tons handled, including the carload business, be-
4744 cause a greater proportion of the state tons handled is less than carload business than in connection with the interstate traffic. That being the case, the basis used does not charge a sufficient proportion of this expense to the state traffic, and charges too much to the interstate traffic."

What I am trying to say there is, that of the total state tons handled, a greater percentage is less than carload than in the case of the interstate business.

That being the case, the basis used does not charge a sufficient proportion of this expense to the state traffic, and charges too much to the interstate traffic.

Q. Now, Mr. Nay, please turn to Exhibit 26 of the Iron Mountain Road; that is for October, 1907, and make a calculation (I think you can do it in a moment; you need not carry it out to its fine points) as to the state and interstate carload and less than carload tons.

A. (After examining exhibit.) It looks as if somebody had figured it out for me in advance.

Q. Better not take any doctor's figuring. We have all sorts of doctors here.

A. It is shown that for the month of October, 1907, the carload tons of interstate freight, not including trans-state, were in round figures 270,000; and the less than carload 20,000, the less than carload being about 7%, as it is figured here (and it is not far from that).

For the intrastate the carload tonnage is in round figures
4745 128,000; and the less than carload 8,000, or in round figures 6%, as it is figured out here.

Q. This difference between state and interstate on that proposition does not work out according to those October figures as you supposed, do they?

A. No, sir, they do not. This October figure shows that the conditions for the month of October, 1907, are slightly the reverse of what I have supposed.

Q. Take the test month on the Cotton Belt, January, 1909?

A. (Examining exhibit.) This shows a similar condition, a difference of about 1%: 13% of the total interstate tonnage being less than carload and 12% of the intrastate being less than carload.

Q. So far as I know those are the only statistics in this case by which you can get a statement as to the comparative percentage of less than carload state and interstate tonnage. And taking the

only data we have in the case, your views here are based upon a mistaken premise on that point, are they not?

A. If these two months are representative of the entire period. I would not recede from my view without having the figures for a representative period.

Q. That is what I stated in my question. So far as I know—like your statement to the Interstate Commerce Commission—we have given you the best we have got, and that seems to be all there is in the case.

4746 A. No, sir, I beg your pardon. It is possible to get a whole year here, 1908 or 1909 or 1910, could have been compiled. But in the case of the Interstate Commerce Commission hearing we gave them the figures for 13 years and then up to the minute, so there is no parallel at all.

Q. The railroads could have compiled it, but in my question I say I am putting before you all the data we had.

A. I presume the state could have compiled it, too.

Q. In the course of time, probably. But the state is not a moving party here, either. You have referred to that proposition several times in your testimony, not only on this proposition but in several others, I believe, as one of your reasons for attacking the correctness of these figures.

Q. If these two months are representative of the business of these two railroads in Arkansas, so much of your testimony as is based upon the other proposition would be erroneous?

A. Yes, if those two months are representative of the entire business. But I would not believe that, though, until I saw the figures for the entire period.

Q. Turn to page 448 of your testimony: You criticise the division of fuel expenses, using the percentage obtained in a test made on the Cotton Belt in October of 1908:

I want to read you the testimony of Mr. Doddridge on that point, reading from page 107 of the record in this case.

4747 "Q. Fuel, I presume, is another one of the chief items as you worked that up in the Cotton Belt case. Would the actual figures you worked up on fuel cost between local and through trains on the Cotton Belt, apply generally on the Iron Mountain?

A. I presume that those proportions would be applicable in a general sense to the Iron Mountain, or it ought to be.

Q. That is, you mean the relation in the cost between the two classes of trains?

A. They ought to be unless there is some difference in conditions on the Iron Mountain that might change the relations.

Q. Do you know any conditions between those two roads (you have been general manager of both) that would change the relation of the fuel cost between them, as to the proportion consumed on the local as against the through, or the through as against the local?

A. I do not know of any conditions that would change those relations on the main line of the Iron Mountain as compared with the Cotton Belt—the Cotton Belt Railroad is mostly main line. The Iron Mountain main line is a very similar road through Arkansas,

as to grades and other things—I guess the Iron Mountain is a little better than the Cotton Belt, some parts of it—and of course, the Iron Mountain has other divisions, like your road from Little Rock to Fort Smith, that used to be very different from the Cotton Belt. I guess it has been improved now.

Q. It has all been improved. You must not indicate that anything going out of Fort Smith has not been improved, or we will have a falling out.

A. In a general way the test on the Cotton Belt ought to reflect the general average conditions."

Now, Mr. Nay, would not Mr. Doddridge, having served as general manager and having been in the operating department of both those roads, be better qualified to pass on that question than you are?

A. Was he general manager during these months?

Q. I think not.

4748 Col. MOORE: Not for years before that.

Judge HILL: I understood he had the test made. Mr. Kimbell directed it. It was done at the instance of Mr. Doddridge and Mr. Doddridge testified that he understood the statistics of those two roads very thoroughly.

A. I would not like to answer that question direct.

But I still adhere to my view that no one month on the same road, and within the same period, can be taken as representative of the entire period. And to take a test made on another road in a month entirely outside of the period might represent far from the actual conditions.

Q. You do not agree with Mr. Doddridge, in other words?

A. No, sir; I do not.

Q. While we are talking about Mr. Doddridge, at page 91 of the record he testified as follows:

He was asked how he would figure out the cost of terminal expenses on passengers (he is now discussing the passenger terminal matter, and a little later I will show he applied it to both passenger and freight) he was given a quotation from some testimony he had given in the Missouri case and was asked if that was correct and he said "no." The answer reads as follows:

"Since I made that statement I, of course, have gone into the subject further, and I don't think that covers all of the elements—that is what I am getting at.

Q. What method have you got that got at that terminal expense, if you cannot take this method?

A. I find among my memorandums a method that we de-

4749 signed for that purpose, or formula. I did not give it in my reasons, because the information necessary, upon which to predicate it, is absent, but I will read the example; it is self-explanatory:

Take the St. Louis Southwestern Railroad for the year ending June 30, 1908; they carried 928,313 state passengers; double this number to compensate for two station handlings. The number then indicates ninety-two percent of the total passengers handled.

The interstate passengers handled were 145,351; allowing one

handling for each passenger, this constituted 8% of the terminal cost.

The intrastate passengers produced 55 percent of the passenger miles and should be charged with 92% of the terminal expense.

Now, if you know the terminal expense in dollars and cents, it is a very easy matter to arrive at the extra cost, on that account, per passenger—either class of passengers."

And further on, at page 96, he testified he would substitute the ton for the passenger, and apply the same principle in freight traffic, and I ask you what you think of that as a fair method for determining terminal expenses?

A. For passengers.

Q. Yes, and then for freight. He applied the same principle in both cases.

A. By "terminal expenses" do you mean station expenses just now? Because I understand you divide station expenses only on the basis of tons.

Q. That is true.

Col. MOORE: You read on page 91?

Judge HILL: I did not read it but just referred to what was said there.

4750 Col. MOORE: Then you should call Mr. Nay's attention to what he said on page 92, as follows:

"Q. You think that is a good, fair basis for ascertaining the extra terminal cost for passenger service?

A. It would be somewhat more than fair to the state, for the reason that there is a certain percentage of these 145,351 passengers that do not make any terminal expense at all in the state.

Q. It is the best method on the subject that you know of, isn't it—better than this Missouri method, or any other?

A. I think so; this is the result of the reflection and consideration, and this shows it figured out to a conclusion, using hypothetical figures, that the state terminal cost upon this road, and, based upon these statistics, amounts to ten to one."

Judge HILL: That is what it amounted to on the Cotton Belt?

A. That does not change my mind any. I still think if you get a less than carload business for a representative period there would be more of it.

Q. I am not asking you about that. I am putting this proposition to you:

On Mr. Doddridge's testimony here, if you agree with his method of dividing the terminal expenses, both passenger and freight, by doubling the station expenses in that terminal handling?

A. I understood we had already gone over the freight expense before, and that is the reason why I stated I have not changed my mind on that.

Q. What do you say on passenger?

A. I say the same as in direct examination, that there are

4751 certain trans-state passengers included in there that involved no station expense at all; and this method does not assign enough to the state.

Q. You do not agree with Mr. Doddridge?

A. I do agree with him. He pointed out the same thing.

Q. He said, taken altogeth r it was the best he knew on the subject?

A. I think his own answer indicated that a better method would be to eliminate the trans-state passengers.

Q. While on that subject let me tell you about some of the evidence in this case:

Memphis is treated as an Arkansas point in this case. The expense is all charged up to Arkansas. Of course, all the travel is interstate and from Memphis to Texas would be called trans-state.

A. From Memphis to Little Rock is interstate.

Q. Yes, and the expenses of Memphis are treated as if incurred in Arkansas.

A. That is by some arrangement between you?

Q. No, sir. I have been kicking against it and am still kicking. It is by "force of arms" that that is in here in that way. But those are the facts, there is no dispute on that point, and that the traffic from that point is interstate traffic.

The same thing is true of Fort Smith, but to a lesser extent. Two passenger trains, run over the bridge which makes it inter-
4752 state. All of the freight traffic is interstate as they do not use the bridge at all for the freight but only for the two passenger trains.

So far as the Cotton Belt is concerned I believe the yards in Texarkana are in Texas: isn't that true Mr. Kimbell?

Mr. KIMBELL: Yes, sir.

Q. You know the travel out of Texarkana on the Cotton Belt and out of Fort Smith and Memphis on the Iron Mountain would be a large volume of traffic.

Col. MOORE: You mean trans-state?

Judge HILL: I am speaking of the traffic. It would be all interstate or trans-state and as to all of it there would be two terminals in Arkansas and on trans-state there would be one, out of each of these points.

Would not those facts modify to some degree at least, your objection to this method?

A. Yes, sir, that would modify it to a degree. But what I had in mind when I spoke of trans-state—I did not have in mind particularly Fort Smith or Memphis or Texarkana, but passengers from St. Louis to Texas points.

Q. I understand that. And that is why I call your attention to the local conditions and ask you if those local conditions would not modify your position?

A. Yes, sir, but there would still be certain trans-state passengers in these 145,000; say passengers from St. Louis to San Antonio or from the southeast going into Oklahoma.

Q. Of course there would be some, but in these there
4753 would be the interstate passengers from Fort Smith and Memphis to Little Rock that would have two handlings under this method of accounting and they are only charged with one.

A. Possibly those might offset each other so the difference would be "negligible".

Q. If anything it would be in favor of the state. There is a pretty heavy travel out of Fort Smith and Memphis and Texarkana, as you know, don't you, Mr. Nay?

A. Especially out of Memphis and Fort Smith.

Q. Did you say that the stuff from the southeast to Oklahoma would be trans-state? That would get a Memphis handling, too, wouldn't it?

A. Yes, sir, say from a point like Nashville, Tennessee, to Oklahoma, that would certainly be trans-state.

Q. It would go through Memphis?

A. Yes, sir.

Q. And would have one terminal handling in Arkansas, so far as this case is concerned?

A. Yes, sir, I see your point—no, there would be no terminal so far as station expense is concerned.

Q. All Memphis station expenses are charged up as if incurred in Arkansas?

A. I know, but the passenger does not incur any station expense in Memphis. He buys his ticket at Nashville, and gets on the sleeper and stays on there until he gets off in Oklahoma.

4754 Q. Do you know of any through trains from Nashville, Tennessee, to Oklahoma through Memphis, in that country?

A. I am not familiar with the situation but I know there are sleepers on the run there, that do not stop at Memphis. There is one that starts from Chicago and goes to Hot Springs.

Col. MOORE:

Q. What terminal service would he get?

A. He does not get any station service.

We are apt to get confused between those termed "terminal expense" and "station expense". Station expenses are the wages of the agent and ticket sellers, and baggage, checkers.

Q. And for the heating and lighting of the station?

A. I don't know whether that is a station expense or not. I do not know whether you have included that in station service or not.

Judge HILL:

Q. Have you, Mr. Johnson.

Mr. JOHNSON: Yes, sir.

Q. And cleaning? You have to clean that station. You have the porters, watchmen, guards and all that sort of thing. This fellow gets some benefit of that delightful Memphis station, does he not?

A. Some, but it would be pretty small, I think.

Q. About the only thing he would not get would be another ticket

and probably rechecking his baggage: isn't that about the only difference?

A. I don't know what he would get under "station serv-
4755 ices" at Memphis. He would get out on the platform, out of one car and into another car.

The train conductor, the brakeman, or the train porter would probably assist him off and show him what train to go on. I do not think he would get any benefit of the station expenses at Memphis.

Q. You testified, I believe at page 474, as follows:

"I heard the testimony of some of these same witnesses in the Missouri Case and it was to the effect that the extra cost of state over interstate business on a ton mile basis would vary from 10% minimum, to 50% maximum.

Now, this compilation presented here, which is complicated and produces a result which shows 86% increase cost, indicates that the state's witnesses realized that they were mistaken in the Missouri Rate Case in putting the extra cost so low. But it is still below what the railroad operating men testified to."

I call your attention to the fact that Mr. Ludlam (and I think he is the only one who testified in both cases) said he had made that estimate in the Missouri Case and that he thought it was still true, that there was a difference in the conditions in Missouri and Arkansas. Isn't that a fact? You said you had read his testimony?

A. I do not recall that, Judge Hill. Of course, the record would show it.

But there is such a mass of testimony in this case that I hope I would be pardoned if I do not remember everything exactly as it was.

Q. It seems to me when you go to quote anybody it would probably be better to quote him exactly.

4756 A. I think I have quoted him exactly in the Missouri Case. 10 to 50 and I think probably he was pretty easy on the 50; he thought that was probably too high.

Q. Isn't it further true that they have not produced this 86% as being the exact increased cost but merely the result of calculating according to this formula in which they say (whether you agree with them or not) that they have used the maximum and if that was true it would indicate that the actual conditions would be less than the 86%, wouldn't it?

A. Yes, sir, if it is a fact that they had used a maximum in every case.

But I think an analysis of their figures would indicate they had not used the maximums in every case.

Q. Yes, I know the doctors have disagreed on that proposition.

Turn to page 479 of your testimony. You say at the bottom of that page:

"Again, the car miles in local trains, which carry no Pullman cars, are treated just the same as those in through trains which do carry Pullman cars;"

Are you familiar with what are local and what are through trains on the Iron Mountain?

A. No, sir, I cannot say I am.

Q. Are you under the impression that the local trains do not carry Pullmans on the Iron Mountain road?

A. I am under the impression that they run many local trains that do not carry Pullmans. I am sure of that, because I have ridden on some of them.

4757 Q. The evidence in this case on behalf of the railroads, put in by Mr. McPherson, is that there are eight through trains on the Iron Mountain and 48 locals:

Isn't that right, Mr. Johnson?

Mr. JOHNSON: I know it is eight through trains.

Q. Eight through and forty-eight locals.

And of those through trains, one of them is the fast mail that carries just a sleeper and no other passenger coaches.

I do not know exactly how many of the locals carried Pullmans in 1907, but approximately it was thirteen. I may be off one or two trains on that because I have not a timecard for that period. I looked at the timecard of a more recent date and it was 15. But I presume that is approximately correct.

So there are really eight through trains carrying sleepers and 13 local trains carrying sleepers:

Would not that modify materially the objections you have made to some of these divisions?

A. It might be that those local trains that carried sleepers are the kind I have in mind as through trains.

Q. This information is given in Mr. McPherson's Exhibit 46?

A. There are trains included in this list of local trains, which I had in mind as through trains.

(Witness refers to Exhibit 46).

4758 Q. That is what I supposed.

A. For instance, "Number 8 from Texarkana to the state line a run of 305 miles": That is the kind of train I had in mind as a through train.

Q. Now, after seeing that exhibit, Mr. Nay, don't you think the state was justified in carrying forward a division between local and through trains?

A. No, sir, I cannot say so, Judge Hill.

They might possibly have adopted a different term—after looking at this statement the short runs which is really what the local train is, it is a short run which serves each station on the run.

Now, if a division had been made of some class of passenger trains, short trains which serve each station on the run.

Q. But you see the division the railroads made of it. The state did not make that division.

A. I understand that. And the railroad did not make any division between local and through expenses.

Q. They gave a great deal of testimony.

A. Did they?

Q. Yes, a great deal as to the difference between the local and through.

A. I have not seen that.

Q. And, so we will have no misunderstanding as to what was local and what was through, we asked Mr. McPherson to file an exhibit of what was local and through, and this exhibit 46 was the result of that request.

4759 That is an entirely different situation from what you thought it was when you gave your testimony, isn't it?

A. It is different in this way: Mr. McPherson's classification of local and through is not the same classification I had in mind.

Q. That is what I supposed.

A. But it would be just as easy to work up the figures on the classification I had in mind as it would on Mr. McPherson's classification.

Q. But unfortunately we did not have your classification and we did have Mr. McPherson's.

This statement I have called your attention to on page 479 would lose its force, wouldn't it?

"Again, the car miles in local trains, which carry no Pullman cars, are treated just the same as those in through trains which do carry Pullman cars; and that works an inaccuracy, because it does not assign a sufficient proportion of the expense to the traffic carried in local trains, although no division has been attempted here between through and local."

A. You will notice I said "local trains that carry no Pullmans": that expression indicated that I understood that some local trains did carry Pullmans.

Q. I did not so understand you.

A. You will find from the expression it is so worded.

Q. I understood you to mean local trains carried no Pullmans and that through trains did carry them.

I might have misunderstood but that is the impression your testimony made on my mind.

A. I think you will find it is not so.

4760 Q. I do not care to discuss it if you say that was your intention.

A. I intended to say the locals that did not carry Pullmans, because I had in mind the fact that some did carry Pullmans.

Q. But the fact that more of the locals did carry Pullmans than you supposed would change your opinion, would it not, on the point in which you criticised the exhibit on the Pullman proposition?

A. No, sir, I don't think so, because I had in mind the fact that some of those locals did carry Pullmans.

Q. Some of those locals did carry even three Pullmans—that Texas train for instance.

Col. MOORE: Where did you get the information that some of the locals carried three Pullmans?

Judge HILL: From the time card. I have already stated I did not have a time card of that period but a recent time card.

Col. MOORE: Do you recall what local carries three Pullmans?

Mr. HAMILTON: It is Number 8.

Mr. JOHNSON: It is the local train from St. Louis to Texas.

Judge HILL: It is the one that is listed as 305 miles through the

state of Arkansas and the time card I examined shows three Pullmans.

4761 Col. MOORE: Isn't that an interstate train?

Judge HILL: Not according to Mr. McPherson. He did not divide between interstate and state. He divided between local and through.

Col. MOORE: If it is from St. Louis to Texas it is not a local Arkansas train, is it?

Judge HILL: None of those Memphis trains are local.

Is not my information about the Texas train correct, Mr. Johnson?

Mr. JOHNSON: I don't know how many Pullmans it carries.

Judge HILL: A recent time card shows it had three. I don't know whether that was true in 1907 or not.

Previous question read to the witness as follows:

Q. Some of those locals did carry even three Pullmans—that Texas train for instance?

A. I don't think so. Because the fact that they carry Pullmans would indicate they were doing interstate business.

The state's witnesses have estimated 25% only of all passengers carried in Pullmans to be state passengers; and another reason is that the trains I had in mind were those local trains that do in my judgment the majority of the state business, and that carry no Pullmans. Those were the ones I had in mind.

If a separation had been made between those trains that carry no Pullmans and do this local business, stopping at every station; and on the other hand including the trains that do the through

4762 business, whether they are classed as local trains in this exhibit or not, the effect of that kind of a separation which in my judgment would be similar to the separation between the two kinds of freight, would have thrown a greater proportion of the expenses into the state traffic than is thrown by the method of consolidating them.

Q. But if you would use the method of division Mr. McPherson has used, of local and through, that would not be the case would it?

A. It would not be the case to such an extent, Judge Hill; but I think even using the division he uses would assign a greater proportion of expense to the state than is assigned by the consolidation plan.

Q. I notice, Mr. Nay, you and Mr. Ludlam have differed very widely as to the application of the revenue theory, and have exchanged compliments on the question of whether a "snow man" has been set up and knocked down. I would not question you doctors of accountancy on a proposition of that kind, but I just want to ask you this:

As I understand your testimony, in the final analysis the revenue theory has to be supplemented by the testimony of operating men as to the cost of intrastate over interstate operation, so what need is there to use the revenue theory at all, if the testimony of these operating men is to determine the final analysis.

A. Well, the revenue theory is needed to make the first sepa-

4763 ration of operating expenses between state and interstate traffic.

Q. If that is going to be determined upon the opinion of the operating man; why need to make that separation?

A. I do not see how you can figure it out without some basis of separation.

Q. But the separation, after it is obtained, as I understand it, is of no value until supplemented by the opinion of operating men: Is not that the substance of it?

A. That is Mr. Ludlam's opinion. It is not mine.

Q. I am asking if that would not be the substance of your opinion, where you say you have supplemented the division on the revenue theory by the testimony of the operating men?

A. Well, I don't understand Judge Hill, just what you refer to. I stated in the very beginning, I guess it must be six months ago, that there could be no actual separation between state and interstate of operating expenses, for the reason that the traffic is carried on the same trains and in the same cars by the same train crews, handled by the same agents and same laborers, over the same track, and all that sort of thing; so it could not be actually separated.

But some traffic costs more than other. Some kinds of traffic—that is some kinds of state traffic; carload traffic costs less than less than carload. Short haul costs more than long haul.

The revenue reflects those different conditions of cost and
4764 therefore, the revenue basis was the better basis or the best basis, because I know of only three, for making the first separation, before adding the extra cost,——

Q. Now, if you will allow me to interrupt you there, my point is this:

If the question of ultimate cost of state over interstate is to be finally determined by these operating men, why not settle it arbitrarily by three times or five times. What is the use of separating it on a factor you are not going to use?

A. You have to have something. You say "five times as much" and you cannot say five times as much without something on which to base that.

Q. You stated in your testimony that they did not base it on the revenue but just said "five times as much" from their standpoint. They are not using the revenue basis, are they?

A. No, sir. As I said, candidly, they are thinking of the tons and ton miles.

The tons cannot be used because that does not take into consideration distance at all. The ton basis takes into consideration only the weight.

The ton miles adds only one more element, and that is distance. The revenue basis combines all the elements of cost for getting the original sub-division. There must be an original sub-division because you cannot say five times as much without saying five
4765 times as much as something.

Q. You say they are not using the revenue basis, and they are saying five times that?

A. Yes, sir.

Q. And as I understood your argument for the revenue theory,

it took, either consciously or unconsciously, the question of cost into consideration?

A. Yes, sir.

Q. If cost is not taken into consideration you have to depend upon the opinion of these operating men; and if cost is already taken into consideration why do you need to do that; isn't that a fact?

A. If the entire difference in cost was taken into consideration in the rates, yes that would be a fact.

Just as I said in my testimony, if in the commercial business a thing costs three times as much as another, it should sell for three times as much.

If the state business costs five times as much as interstate, and the receipts are five times as much, of course, that would end it.

Then the revenue basis would be conclusive, without any additions.

Q. But the point you make is that the cost has been taken into consideration but it has not been sufficiently taken into consideration: is that about the idea?

A. That is the idea. Due very largely——

4766 .Q. This deficiency of the cost is a question that must be supplemented not from any records but from the opinion of operating men?

A. Yes, sir, from the opinion of operating men, and that deficiency of cost is not taken into consideration because the rates have been reduced or fixed—in many cases by statute or Commission, without any refrence to the cost at all.

Q. And by commercial conditions and competitive conditions, without any reference to cost at all?

A. I would not say "without any reference to cost, no, sir.

Redirect examination.

By Mr. MOORE:

Q. Mr. Nay, what was the main object of the classification of railroad accounts prescribed by the Interstate Commerce Commission: was it not to bring about uniformity in railroad accounting, more than anything else?

A. That I think was the prime object, to bring about uniformity.

Q. Counsel for the state questioned you in connection with the lap-overs from month to month, in the freight handled, and the manner in which such accounts are kept of the freight movements in the Auditor's accounts.

He assumed state and interstate freight moved co-incidently, and asked you questions based on that assumption:

4767 I wish you would look at the statement filed by Mr. Roth in this case yesterday of freight traffic on the Missouri Pacific System, as a whole; and the Iron Mountain intrastate in Arkansas, by commodities, showing the tons one mile and the revenue earned and the percentages of the total. That is the heading of it.

State from an examination of that exhibit if it is true that com-

modities moved coincidently in state or interstate traffic, or in the state of Arkansas, intrastate, called "company traffic"?

You will find this column to which I call your attention is the percentage of the different commodities on the system, and over here (indicating) is the percentage of interstate business.

A. No, sir, the percentages are quite different.

As for example, the percentage of total tons one mile for the system of grain is 13.43% of the total of all commodities; while the intrastate tons one mile in Arkansas of grain is only 1.56% of the total of all the intrastate commodities in Arkansas.

All the way through there are similar disparities between the percentages of the tons one mile for each commodity for the system and the percentage of tons one mile in Arkansas.

Q. From a comparison of the percentages that appear upon that sheet, what is your judgment as to the coincident movement of the system and intrastate traffic in Arkansas?

4768 A. I would say they do not move in the same relative proportion.

Q. Mr. Nay in the investigation that has been going on before the Interstate Commerce Commission and in which you testified and prepared some statements to which your attention has been called on cross-examination, the railroads were contending, weren't they, that the expense of handling traffic has been continually increased for a number of years?

A. Yes, sir.

Q. And that it had increased out of proportion to the revenue—that is, more largely?

A. Yes, sir.

Q. That was the matter of contention there?

A. That was the basis of their contention, Judge Moore.

Q. And the statements to which you referred covered several years?

A. The statements I submitted covered 13 years.

Q. As I understand the particular purpose of that was to show that the expenses had been increasing during that period more largely than the revenue had increased?

A. Yes, sir. Those statements showed, briefly, this: That from the beginning of the period up to the year ending June 30, 1907, there had been increases in expenses all along due to increases in wages, increases in prices of material, that were offset very largely by increased train haul and increased carload: that is, increased efficiency, so that up to that point, the railroads were able to over-

4769 come the increases in operating expenses by increasing their train loads and carloads; that is, increasing their efficiency. But that since 1907, during the last three years, the increase in operating expenses have gone on just the same, that is, wages have increased, but the increased efficiency seemed to have reached its maximum in about 1907, and the train load today is not much more than it was three years ago; and the carload is not much more.

On the Rock Island, as I recall, it is slightly less, in each case.

That being the case, the necessity for more revenue was apparent to meet largely the increases in wages.

Q. Had there been a recent increase in wages?

A. Yes, sir. Increases have been granted on the Rock Island within the last year that will aggregate more than $1,000,000 per annum increased pay to the employees.

Q. Would not the period of time you used, seven weeks, I believe, to which your attention was called, for the purpose of showing the relation of expenses to revenue, reflect to an extent that recent increase in wages?

A. Yes, sir. The seven weeks, however, Judge Moore, covered only revenue. We did not have the expenses for the last three weeks. We had the expenses for only one month, but the statement showed an increase of expenses of nearly $300,000 for the month of July, with a decrease in the revenue.

4770 Q. Did that reflect the effect of the recent increases in wages? I mean the effect of that increase in wages upon the revenue of the company?

A. Yes, sir, a part of that increase, but not all of it, was due to increase in wages. Part of it was due to the increase in the price of coal. We had a coal strike on, which was compromised about the first part of September—at any rate the early part of September, which resulted in an increase of wages to the miners that our operating men say will cause a permanent increase in the price of coal of about 15 cents per ton. That was their testimony in that interstate case.

Q. As I understand you, your purpose in introducing these exhibits was to show the relation between the increase in expenses, including the wages, prices of materials, and so forth, and the decrease in revenue of your company?

A. Yes, sir.

Q. It did not require a comparison between periods to do that. Did not the application of increased cost of your traffic, with the showing of the revenue made, demonstrate that or tend to do that?

A. Yes, sir. For instance, if there was an increase in the wages of switchmen, which there was, and which amounted to as I recall it something like 8%, you know without taking any period into consideration that the wages for switchmen after that are going to be 8% more than they were before, with no additional service and no additional revenue derived.

4771 The purpose of that exhibit for one month of July, for operating expenses, revenue, taxes and so on, and for the three weeks, was to offset the statements that were being made that the country was now in such a prosperous condition that our earnings were ample for all our needs.

And I was giving the information up to the very latest available date to show that was not the case with the Rock Island.

Q. Were statements of that kind furnished by all the lines concerned in that investigation?

A. I do not recall. I was not present at all of the hearings.

Q. You do not know about that?

A. No, sir.

Q. You stated on cross examination that the Interstate Commerce Commission had taken the months of March and September for some purpose in connection with revenue:

What was that statement? I do not recall it exactly?

A. That was a statement in connection with this interstate rates case, where we compiled figures showing increase in revenue due to the proposed rates.

You understand the railroads had proposed to increase certain rates on commodities and had filed their tariffs with the Interstate Commerce Commission, showing those increases. Those tariffs were suspended pending this hearing.

The railroads were continuing to charge the old rates.

4772 What we did was to take the business of those two months, September, 1909, and March, 1910, and draw it all off in detail, from and to stations and apply the old rates that were in effect at that time and compute those in one column and then apply the new or proposed increased rates and compute that in another column; and subtract one from the other, to find out what the increased revenue would be, assuming that the shipments would have moved just the same under the increased rates as they actually did under the old rates.

Q. Is there any other way you can get at the increase in revenue?

A. No, sir. No other way by which it can be done, accurately.

Q. You stated on cross examination that the revenue does not represent the expense of maintenance of way, any more than the car miles:

Do you mean by that to say that that expense is not represented by either?

A. Yes, sir, I mean that neither one causes the expense.

Q. That class of expense is shown by the evidence in this case to grow largely out of causes other than operation: The testimony shows that 75 to 90 per cent of it is caused by the elements and other independent causes:

Now, in that view there is no connection or relation between that and car miles to the extent that it is not caused by operations.

That is true, is it not?

4773 A. Yes, sir.

Q. You have already stated that?

A. Yes, sir.

Q. If it is true, it is more or less of an overhead expense rather than direct expense of transportation, is it not?

A. Yes, sir, I should think it might very fairly be treated as an overhead expense.

Q. If you had to divide it on some other basis I believe you stated it is your view it should be divided on the revenue basis?

A. Yes, sir.

Q. But if you had to plan some other basis than the revenue, what basis would you take? How would you treat it?

A. My second choice would be to treat it as an overhead expense and divide it on the basis of the direct expense.

Q. I believe you stated that the last half of the year produces larger returns than the first half?

A. Yes, sir, that is, the last half of the calendar year.

Q. You mean the last six months of the calendar year?

A. Yes, sir.

Q. If you were undertaking to ascertain the results of a year's business, and you had ascertained the business of the last half, would you say the first half of the fiscal year, running from July to December, would you think it proper to ascertain the net
4774 return for the year by doubling the return you counted for the first six months?

A. No, sir.

Q. You think allowance should be made for the difference in the return produced in the two different periods?

A. Yes, sir.

Recross-examination.

By Judge HILL:

Q. Please look at statement 3 (*b*) Exhibit 8, the corresponding one you will see is for the six months ending December 31, 1907, and the other is for the period ending June 30, 1907:

Please state the gross operating revenue and expenses for those two periods?

That is for freight, I understand?

A. This shows operating expenses, maintenance of way and structure and so on.

Q. It is summarized. Give the gross revenue and operating expenses?

A. This shows the gross freight revenue in the state of Arkansas for the Iron Mountain Railroad, for the six months ended December 31, 1907, $4,896,272.91.

Operating expenses, $3,253,034.86.

Net operating revenue, $1,643,238.05.

Q. Now turn to the corresponding figures in the other statement, Number eight.

4775 A. This shows the results for the Iron Mountain in the state of Arkansas for the six months ending June 30, 1907:

Freight revenue, $4,729,412.64.

Operating expenses, $2,795,474.37.

Net operating revenue, $1,933,938.27.

Q. Those figures do not agree with the opinion you expressed a few moments ago, do they?

Col. MOORE: Get the Cotton Belt figure before answering.

Judge HILL: Let us get through with one at a time.

A. What opinion do you refer to?

Q. That the last half was the better half of the year.

Col. MOORE: He would better have the other figure before him.

Judge HILL: He can have both before him.

Col. MOORE: Here are the Cotton Belt figures for the last half of 1907 and the first half of 1908.

Judge HILL: I should like that separately. Take up this one first:

What do you say to that?

A. (After examining figures.) That shows a greater operating revenue during the six months ending December 31, 1907, than during the six months ending June 30, 1907.

But it shows less operating expenses for the six months ending June 30, 1907, than for the six months ending December 31st.

Q. The net result was better on the first six months?

A. Yes, sir, that is true.

4776 But I do not think that would be true from year to year.

Q. Now you may put in the Cotton Belt figures if you wish:

What figures are you putting before him, Mr. Kimbell?

A. The last half of 1907 and the first half of 1908.

Judge HILL: That is the year the panic came on. You are not going to treat that as a normal period, are you? If you have the figures of the Cotton Belt for the first and the last half of 1907 I shall be glad to have you put them in; but I do not think that it is fair to put in the figures of the last half of 1907 and the first half of 1908.

Col. MOORE: If you would rather I did not have it go in now I will wait and ask him that later.

Judge HILL: You may have it in now, but I want to put in that objection.

A. It is the Cotton Belt revenue and expenses for the six months ended December 31, 1907 for the state of Arkansas:

Freight revenue, $1,795,355.49.

Operating expenses, (this includes taxes and rentals) $925,594.20.

The net in round figures $870,000.

For the first six months ended June 30, 1908 the similar figures would be:

Freight revenue, $1,431,374.07.

Operating expenses, $859,680.85.

The net being in round figures $572,000.

4777 For the six months ending June 30, 1908 as compared with the net of $870,000 for the six months ended December 31, 1907.

Q. Would you regard the first half of 1908 as a fair period to compare with?

A. I think about as fair as to take the last half of 1907 and compare it with the first half of the calendar year 1907, because the panic began the latter part of October, 1907.

Q. I understood from these operating men that it did not affect the freight business until along about the last part of December or January of the next year: is not that your information about it?

A. That is not my information on the Rock Island. On the Rock Island the slump showed up in November.

4778 HUBERT ROTH, recalled, testified as follows:

Direct examination.

By Col. MOORE:

Q. What is the mileage of the Missouri Pacific, including the Iron Mountain?

A. I have not the figures right here, Mr. Moore. I cannot say, off hand.

Q. You will put that in?

A. Yes, sir, I will prepare that. It is about seven thousand miles.

Q. It is about seven thousand miles, is it?

A. Yes, sir.

Q. In what states does the system operate?

A. I think it is eight states.

Q. How far westward does that system extend from St. Louis?

A. As far as Pueblo, Colorado.

Q. What is the distance?

A. 903 miles, I think it is.

Q. How far does it extend in Nebraska, to Omaha?

A. To Omaha, but I do not think that is the furthest point. I think Prosser, Nebraska, is the furthest distance from St. Louis.

Q. What distance is that from St. Louis?

Judge HILL: Why do you not file a map, if you want to get in physical characteristics of the Missouri Pacific System?

4779 A. Prosser is 601 miles from St. Louis.

Col. MOORE:

Q. How far does the system extend west from Fort Smith?

A. West from Fort Smith? I have not the exact distance on that.

Q. State it approximately. I do not care whether it is exact or not.

A. From the Arkansas State line west of Van Buren it is 789 miles to Pueblo. That would be the longest distance.

Q. And how far from Fort Smith to Omaha, or the end of the line in Nebraska?

A. To Omaha would be 559 miles and to Prosser, Nebraska, 665 miles.

Q. Was there any mileage added to the Iron Mountain Railway in Arkansas between 1907 and 1909, inclusive, both years?

A. No, sir.

4780 R. E. KIMBELL, recalled, testified as follows:

Direct examination.

By Col. MOORE:

Q. I wish you would state what the mileage of the Cotton Belt System of railroads is?

A. I don't believe I can give you that accurately. About 1558 miles, as I remember it. That includes the Texas line.

Q. Is the Texas line a part of that system?

A. It is a separate corporation and operated separately.

Q. What is the line north of Arkansas?

A. The line north of Texas, you mean?

Q. No, north of Arkansas I want.

A. It is very little.

Q. I want to know what it is?

A. We operate 152 miles in Missouri and under joint trackage rights 138 miles from Thebes Bridge to St. Louis. That comprises all of the line north of Arkansas.

Q. That is your line from St. Louis to the Arkansas line?

A. Yes, sir.

Q. And that is all you have north of the state line of Arkansas?

A. Yes, sir.

Q. Is that a compact system or is it a scattered system?

A. I should call it a small system and somewhat compact.

Q. How does it compare in compactness with the Missouri Pacific System?

4781 A. It is vastly different.

Q. Is the Missouri Pacific System compact or scattered?

A. The Missouri Pacific System, as shown by the map, is a very scattered system.

Q. How many states does the Cotton Belt System operate in?

A. Illinois, Missouri, Arkansas, Louisiana, and Texas; five states.

Q. In Illinois and Missouri is the line from the northern border of Arkansas to St. Louis, Missouri?

A. Yes, sir.

Q. And that part in Illinois is where it crosses the Thebes bridge?

A. Yes, sir.

Q. You have filed an exhibit in this case, showing the earnings and return on the Cotton Belt property in Arkansas for the last half of the year 1907:

How would the return for that part of the year on that line compare with the entire calendar year of 1907, in your judgment?

A. We had no——

Q. You are unable to compare them?

A. No, sir, not without a great deal of labor.

Q. From your knowledge and information in the Auditing Department of that road, what is your judgment as to how it would compare?

A. I am familiar in that respect with the net earnings.

Q. Well, the net earnings?

4782 A. The net earnings for the last six months of the calendar year on our line, approximately, under normal conditions, is 20% greater than the net earnings for the first six months.

I will say approximately, because I have no definite figures on that subject right now.

Q. Has there been any addition made to the mileage of the Cotton Belt line in Arkansas since 1907?

A. No, sir.

Q. Exhibit G filed by you, I think at the request of the state, showed an increase of 96.1% in interstate revenue between January, 1909 and the six months ending December 31, 1907, which was explained by you as due to the shifting in the character of the tonnage handled, and as not brought about by a change in the rates:

Have you prepared a statement showing the revenue under the current rates from November 1, 1908 to January 1, 1909, and the Commission rates?

A. I have.

Q. Will you file that as an exhibit in this case and make any statement you wish in explanation of it?

A. Yes, sir.

Col. MOORE: We offer in evidence the statement prepared by Mr. Kimbell.

The paper referred to is marked "Complainant's Exhibit 58."

Said paper is in the words and figures following to-wit:

4783 For Exhibit 58, see Volume 8, page 5742.

A. I have heretofore given some testimony, and testimony has also been given by others, to show that the increase in the average revenue per ton per mile is not absolute evidence of an increase in rates. That this average could change materially, due to the shifting in the character of the tonnage handled, without any change whatever in the rates.

And that there was a material change in the character of the tonnage handled in January, 1909, as compared with the six months ending December 31, 1907.

The exhibit now filed as Exhibit 58 is a statement showing the revenue from intrastate freight and passenger traffic, under both current and inhibited rates from November 1, 1908 to December 31, 1909.

The temporary injunction in this case was granted September 3, 1908, and this company put in new rates as early as practicable thereafter; the three cent passenger rate going into effect on October 19, 1908 and the freight tariffs on November 1, 1908.

By reference to this exhibit it will be noticed that for the month of January, 1909, which was the month Judge Hill decided on when he requested me to prepare Exhibit "G," the revenue actually received on the intrastate freight traffic handled in that month was 13916.26.

The application of the inhibited rates to the actual traffic movement for that month showed that the revenue would have been, under the inhibited rates 20,863.89;

4784 The increase is 10,052.37 or 48.18%, which it will be noted is about one-half of the percent which Judge Hill directed me to prepare Exhibit "G" on.

The correct way to determine the percentage of increase in revenue for the six months ending December 31, 1907 had the rates in effect in January, 1909, been in effect during those six months, would be to apply the latter rates to the actual movements for the six months'

period; and figure the increase in the revenue so obtained over the actual revenue.

On account of the magnitude of the task this has not been done. However, under order of the Court this company is keeping a record of the amounts collected under the current freight and passenger tariffs, pending a decision in this case, and by applying the inhibited rates to the actual movement for each month we are able to arrive at the actual revenue increase and the percentage of increase, of the results under the "current" over the "inhibited" rates.

It will be noted that for the month of January, 1909, the percentage of increase is 48.18.

Even this percentage is no doubt greater than the percentage would be based on the application of the railroad rates to the actual movement for the six months ended December 31, 1907. I think the percentage Judge Hill should have used was about 48.

4785 Judge HILL:

Q. What I was interested in is something you do not seem to have there, is the relation between state and interstate. Have you anything on that?

A. I do not know that I could induce our management to spend enough money to make up the interstate on two bases.

Col. MOORE:

Q. Mr. Kimbell, you have a statement there which shows the increase for the six months beginning June, 1909, under the court tariff; that is the time that tariff took effect; as compared with current rates and the inhibited or commission rates.

What is the average increase shown by that statement for six months?

A. The average increase from June, 1909 to November, 1909, was 29.61%.

Q. And what was the average increase for six months from November 1, 1908, which covered the first six months after the voluntary railroad tariff went into effect?

A. You will notice that is seven months.

Q. Yes, I see it is.

A. The average increase was 46.83%.

Q. How much is the increase in passenger?

A. The passenger, under the three cent rate from November 1, 1908, to December 31, 1909, a period of 14 months, was 37.20%.

Q. Is there anything else you wish to state in connection with that exhibit?

4786 A. No, sir, I think it is self-explanatory, to a large extent.

Q. Have you prepared a statement of loaded trans-state cars moved through the State of Arkansas, for the first 15 days of October, 1908?

A. I have, yes, sir.

Q. Will you file that as an exhibit in this case?

A. I will.

Col. MOORE: I will offer in evidence the statement referred to which was prepared by the witness.

Said statement is marked "Complainant's Exhibit 59."

Said Exhibit is in the words and figures following to-wit:

For Exhibit 59, see Volume —, page —.

4787 Col. MOORE: Make any statement you wish in regard to Exhibit 59, Mr. Kimbell.

A. Mr. Hamilton for the state, made an investigation of the time consumed in moving trans-state cars through Arkansas on the Iron Mountain road; but made no investigation on the Cotton Belt.

I have, therefore, prepared a statement of loaded trans-state cars moved through the state of Arkansas for 15 days from October 1st to October 15, 1908, October being the month in which the test of train cost was made by this company; showing the actual time consumed within the state of Arkansas as compared with the scheduled time of trains.

This statement shows a total of 934 cars southbound, of which 433 moved from the Missouri border on the north to the Texas border on the south, a distance of 349 miles and an average of 28.2 hours each, or at an average speed, including all stops en route, of 12.04 miles per hour. While the scheduled time is 25.6 hours or 13.6 miles per hour, including all stops.

114 cars moved from the Missouri border to the Louisiana border, a distance of 344 miles in an average of 30.4 hours each, or at an average speed, including all stops en route, of 11.3 miles per hour; the scheduled time being 25 hours, or 13.6 miles per hour including stops.

4788 40 cars moved from the Missouri border to Stamps, Arkansas, for delivery to the Louisiana and Arkansas Railway, a distance of 315 miles, in an average of 26.9 hours each; or at an average speed including all stops en route of 11.7 miles per hour. While the scheduled time is 22.8 hours or 13.4 miles per hour, including all stops.

120 cars moved from Fair Oaks, a junction for our Memphis freight, to the Texas border, a distance of 246 miles in an average of 19.1 hours each; or at an average speed including all stops en route of 12.9 miles per hour, while the scheduled time is 13.8 miles per hour, or 12.9 miles per hour including all stops en route.

The item under southbound, reading "from various" "to various", in Exhibit 59 represents 277 cars coming on and going off this line at various junctions; the average time consumed being somewhat less than for the cars heretofore mentioned, which were handled in a practically continuous movement.

The bulk of this movement is lumber from Louisiana and Arkansas Railway at Stamps, destined to and via Texas points; the movement on this line being but 34 miles. And the delay apparently due to slow local train service.

The northbound movement consists largely of lumber, which is not given a preferential train service according to the southbound trains, much of the latter being of a perishable nature.

This exhibit particularly the southbound movement, in my judgment, corroborates the testimony of Mr. Doddridge, regarding the movement of trans-state freight over the state.

4789 Q. What was that statement?

A. It was, in substance, that it moved without any extra terminal handling in the state, as a general proposition. There are exceptions, of course, to it.

Judge HILL:

Q. You have not a bridge on the Cotton Belt? Is that the idea?

Col. MOORE:

Q. Counsel for the state has called your attention to a statement made in your evidence to the effect that October, 1908, the month in which a test was made on your line, would represent relatively the difference between interstate and intrastate traffic: You recall the reference to this which counsel made? Do you wish to make any statement in connection with that?

A. The testimony I gave in direct and cross-examination concerning the test made on this road in 1908 has been frequently quoted by the state in connection with its action in using the figures for October, 1908, in apportioning expenses for a six months' period.

I do not know whether I have been misunderstood in this matter or not, but I would like to make my position plain.

This test was made for the purpose of determining the cost of the labor and fuel on local and through trains and the relative handling of state and interstate business on each class of train.

As I stated in my direct and also on cross examination it was a very laborious task to make this test, and to cover a period of more than one month would be almost prohibitive, on account of

4790 the labor and expense required to do the work.

I testified in direct examination that so far as this test was concerned it would represent relatively the difference between the two classes of traffic. I also testified on cross examination that I thought for the purpose of a test of that kind, to determine the relative difference between the two classes of freight, one month was perhaps as good as another. And that under almost any conditions, good times or bad times, the relative difference between the two classes of freight would travel uniformly. In other words, if we are going to have poor businss it is going to affect both classes of traffic.

I did not intend to convey the impression, nor do I think the testimony indicates that I did, that the month of October or any other month would fairly represent the character and volume of business for the period of six months or a year.

One month may reasonably be taken as a guide in determining the relative amount of state and interstate freight handled by the two classes of trains. And for that purpose it would seem, perhaps, that one month is as good as another.

The results of this test are embraced in Exhibit- 19 and 20 as illustrating the relative cost per ton per mile, intrastate and interstate, for

wages and fuel, and are not used in any of the other computations included in other exhibits filed by this company.

Q. You ascertained the actual amount of freight carried
4791 on each class of train?

A. Yes, sir.

Q. You did not arrive at the tonnage hauled by the through trains in the manner used in the exhibits prepared by the state?

A. This test was the actual tonnage handled on both classes of trains, local and through, from the first day of the month to the last, irrespective of the dates of the waybills.

Q. Mr. Kimbell, have you prepared any exhibits showing what result would be produced by the application of the theories contained in the state's exhibits "R" to "V" inclusive, with modifications on the basis of the testimony of the operating men introduced by your company in this case?

A. Yes, sir, I have.

Q. Will you file that statement?

A. I will.

Col. MOORE: We will offer in evidence the statement referred to.

The statement referred to is marked "Complainant's Exhibit 60."

Said Exhibit is in the words and figures following to-wit:

For Exhibit 60, see Volume 8, page 5746.

4792 Q. Mr. Kimbell, I have asked Mr. Johnson in detail to explain the changes that were made by him, and I suppose the changes made by you were made in the same way: that is correct, is it not?

A. Yes, substantially so, with one or two minor changes.

Q. And you have sought in the changes you have made to apply the modifications which you think have been shown by the operating men, that should be made in the state's theory?

A. Yes, sir.

Q. I will not ask you to make any detailed explanation of this exhibit, as I understand it will be practically the same as that made by Mr. Johnson in connection with the Iron Mountain exhibits.

By consent the cross-examination of the witnesses R. E. Kimbell, Hubert Roth and F. P. Johnson is deferred until such time as the sur-rebuttal testimony is taken.

[End of Volume II.]

(22,889.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1911.

# No. 813.

---

ROBERT P. ALLEN, GEORGE W. BELLAMY, AND WILLIAM F. McKNIGHT, RAILROAD COMMISSIONERS OF THE STATE OF ARKANSAS, APPELLANTS,

*vs.*

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

---

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE EASTERN DISTRICT OF ARKANSAS.

---

VOLUME III.

---

INDEX.


| | Original | Print |
|---|---|---|
| Testimony of defendants in surrebuttal | 4793 | 2083 |
| Testimony of Walter Nash | 4793 | 2083 |
| D. L. McNew | 4825 | 2098 |
| Mord Roberts | 4843 | 2106 |
| K. P. Alexander | 4955 | 2158 |
| J. A. Simmons | 4976 | 2168 |
| Hubert F. Jernigan | 5024 | 2189 |
| D. Harston | 5038 | 2195 |
| A. Paulette | 5059 | 2204 |
| Carl R. Gray (recalled by complainant) | 5079 | 2213 |
| H. R. V. Rosing (recalled by complainant) | 5089 | 2218 |
| F. P. Johnson | 5091 | 2219 |

| | Original | Print |
|---|---|---|
| Stipulation of counsel agreeing that complainant may revise Exhibit No. 56 | 5152 | 2249 |
| Testimony of T. A. Hamilton | 5154 | 2250 |
| Maurice Wright | 5180 | 2262 |
| Charles S. Ladlam | 5189 | 2267 |
| Complainant's exhibits to testimony | 5235 | 2289 |
| Exhibit 1—Map of the Missouri Pacific system (omitted in printing) | 5235 | |
| 2—Statement of track mileage, St. L., I. M. & S. Ry., December 31, 1907 | 5237 | 2290 |
| 3—Statement of the earnings and expenses of the St. L., I. M. & S. Ry. Co. in the State of Arkansas for six months ending December 31, 1907 | 5239 | 2292 |
| 3a—Assessed value of property divided between freight and passenger traffic for six months ending December 31, 1907, and interest at various rates | 5256 | 2317 |
| 4—Bases for ascertaining the cost of State business | 5260 | 2320 |
| 5—Miscellaneous statistics relative to the business handled during six months ending Dec. 31, 1907 | 5266 | 2327 |
| 6—Comparison of averages based upon statistics published in the last annual report to the Interstate Commerce Commission (1907), with averages based upon the business handled by the St. L., I. M. & S. Ry. Co. on its entire line and in the State of Arkansas for six months ending December 31, 1907 | 5269 | 2329 |
| 7—Assessment of the State board of railroad commissioners for the year 1907 (omitted in printing) | 5271 | |
| 7a—Assessment of the Arkansas board of assessors for the years 1907-8-9 | 5273 | 2329 |
| 8—Statement of the earnings and expenses of the St. L., I. M. & S. Ry. Co. in the State of Arkansas for six months ending June 30, 1907 | 5275 | 2332 |
| 8a—Assessed value of the property divided between the freight and passenger traffic for six months ending June 30, 1907, and interest thereon at various rates | 5281 | 2340 |
| 8b—Assessed value of the property divided between freight and passenger traffic for the year ending December 31, 1907, and interest thereon at various rates | 5284 | 2343 |
| 9—Map of the St. Louis Southwestern Railway lines (omitted in printing) | 5287 | |
| 10—Statement of number of miles operated by St. Louis Southwestern Railway Co. | 5289 | 2346 |
| 11—Statement of operating revenues, operating expenses, taxes, and rentals of the St. Louis Southwestern Ry. Co. for the year ending June 30, 1908 (omitted in printing) | 5291 | |

| | Original | Print |
|---|---|---|
| Exhibit 12—Statement of operating revenues, operating expenses, taxes, and rentals, showing results from handling State freight and passenger traffic after excluding revenues, expenses, taxes, and rentals for interstate freight and passenger traffic, and all of mail, express, and miscellaneous, for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5294 | 2348 |
| 12a—Statement of operating revenues, operating expenses, taxes, rentals, and outside operations, etc., for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5297 | 2353 |
| 13—Statement showing how the extra cost of handling State traffic in proportion to revenue is arrived at for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5299 | 2355 |
| 13a—Statement showing how the extra cost of handling State traffic in proportion to revenue is arrived at for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5302 | 2359 |
| 14—Miscellaneous traffic statistics for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5304 | 2361 |
| 15—Statement of assessed valuation of property in the State of Arkansas for year 1908, and proportion assignable to State freight and passenger traffic on basis of the revenue for the year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5306 | 2362 |
| 16—Statement of assessed valuation of property in the State of Arkansas for the year 1909, and proportion assignable to State freight and passenger traffic on basis of the revenue for the year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5308 | 2364 |
| 17—Bases used in dividing operating revenues between freight and passenger and between States—St. Louis Southwestern Ry. Co | 5310 | 2366 |
| 18—Supplement A to circular 360—St. Louis Southwestern Ry. Co | 5312 | 2367 |
| 19—Statement of ton-miles of commercial freight handled on all through and local trains in the State of Arkansas, etc., during month of October, 1908—St. Louis Southwestern Ry. Co | 5320 | 2375 |
| 20—Miscellaneous train statistics, State of Arkansas, month of October, 1908—St. Louis Southwestern Ry. Co | 5322 | 2377 |
| 21—Statement of gross revenue for year ending June 30, 1908, showing proportion accruing to Arkansas and percentage thereof to the total; also miscellaneous statistics—St. Louis Southwestern Ry. Co | 5324 | 2380 |
| 22—Statement of operating expenses, taxes, rentals, and outside operations for year ending June 30, 1908—St. Louis Southwestern Ry. Co | 5326 | 2382 |
| 23—Answer to Judge Hill's example | 5330 | 2389 |

| | Original | Print |
|---|---|---|
| Exhibit 24—(Also marked Exhibit 1)—Map of U. S. (omitted in printing) | 5333 | |
| 25—Employees' time-table, St. Louis Southwestern Ry. Co, in effect August 16, 1908 (omitted in printing) | 5335 | |
| 26—Statement of trans-state, interstate, and State freight handled during the month of October, 1907—St. Louis, Iron Mountain & Southern Ry. Co | 5350 | 2391 |
| 27—Average rate of pay per hundred miles in freight service and per day passenger and switching service, as per schedule—Missouri Pacific Ry. Co | 5352 | 2392 |
| 28—Average price paid for various commodities in the year 1909 compared with the year 1898 and per cent. of increase—St. Louis, Iron Mountain & Southern Ry. Co | 5354 | 2393 |
| 29—Average yearly actual and relative prices of commodities, report Bureau of Commerce and Labor, bulletin 75, March, 1908—St. Louis, Iron Mountain & Southern Ry. Co | 5356 | 2395 |
| 30—Graphic chart showing taxes and comparative prices of cross-ties and 29 other materials, ten classes of railway labor, and rate of railway freight transportation—St. L., I. M. & S. Ry. system (omitted in printing) | 5358 | |
| 31—Comparison of averages based upon statistics published by the Interstate Commerce Commission's bulletin No. 1, showing revenue and expenses of steam roads in the United States for six months ending December 31, 1907, with similar averages based on the operation of the St. L., I. M. & S. Ry. Co. for the same period | 5360 | 2396 |
| 32—Statement of operating revenues, operating expenses, taxes, and outside operations for six months ending December 31, 1907—St. Louis Southwestern Ry. Co | 5362 | 2397 |
| 33—Statement of operating revenues, operating expenses, taxes, rentals, and outside operations, showing results from handling State freight and passenger traffic, etc., for six months ending Dec. 31, 1907—St. Louis Southwestern Ry. Co | 5364 | 2399 |
| 34—Statement showing how extra cost of handling State traffic in proportion to revenue is arrived at for six months ending Dec. 31, 1907—St. Louis Southwestern Ry. Co | 5366 | 2401 |
| 35—Miscellaneous traffic statistics for six months ending Dec. 31, 1907—St. Louis Southwestern Ry. Co. | 5368 | 2403 |
| 36—Contract between Missouri Pacific Ry. Co. and Pacific Express Co., May 1, 1886 | 5370 | 2404 |
| 37—Intrastate mileage rates in effect in 1907 in States mentioned, on commodities as listed | 5376 | 2406 |
| 37a—Intrastate mileage rates in effect in 1907, in the States mentioned, on commodities as listed | 5378 | 2407 |

| | Original | Print |
|---|---|---|
| Exhibit 38—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing) | 5380 | |
| 39—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing) | 5382 | |
| 40—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing) | 5384 | |
| 41—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing) | 5386 | |
| 42—Map of the Wabash system (omitted in printing) | 5388 | |
| 43—Map of the St. Louis Southwestern Railway Line (omitted in printing) | 5390 | |
| 44—Analysis, mail earnings in Arkansas, six months ending Dec. 31, 1907—St. Louis, Iron Mountain & Southern Ry. Co | 5392 | 2410 |
| 45—Statement of gross earnings per mile of road—St. L., I. M. & S. Ry. Co | 5394 | 2411 |
| 46—Statement of relative stocks of passenger trains in Arkansas, time-table of May 12, 1907 | 5396 | 2412 |
| 47—Statement of capital stock and dividends, fiscal years ending June 30, from 1904 to 1909, inclusive—St. L., I. M. & S. Ry. Co | 5412 | 2421 |
| 48—Fixed and obligatory charges, fiscal years ending June 30, 1906 and 1907—St. L., I. M. & S. Ry. Co. | 5414 | 2432 |
| 49—Western classification No. 47, effective November 1, 1909, page 5416 (omitted in printing) | 5416 | |
| 50—Class rates to Little Rock and Pine Bluff | 5679 | 2432 |
| 51—Statement of rates from Memphis, Tenn., to towns named | 5681 | 2433 |
| 52—Terminal handling of loaded cars on through trains, October, 1907—St. L., I. M. & S. Ry. Co | 5683 | 2434 |
| 53—Statement of inbound train 55, etc. (omitted in printing) | 5690 | |
| 54—Statement of intrastate freight traffic—St. L., I. M. & S. Ry. Co | 5722 | 2447 |
| 55—Results of operation in intrastate traffic in Arkansas for six months ending December 31, 1907—St. L., I. M. & S. Ry. Co | 5724 | 2449 |
| 56—Statement showing the results of operation on the St. L., I. M. & S. Ry. Co. in the State of Arkansas for the period of six months ending December 31, 1907, etc | 5726 | 2451 |
| 56*a*—Statement showing the results of operation on the St. L., I. M. & S. Ry. Co., as reported in Exhibit 56, after certain changes had been made in the passenger miles carried in Pullman cars | 5737 | 2471 |
| 57—Statement of passenger traffic, St. L., I. M. & S. Ry. Co., State of Arkansas | 5740 | 2474 |

| | Original | Print |
|---|---|---|
| Exhibit 58—Statement showing revenue from State freight and passenger traffic under both current and inhibited rates for fourteen months ending December 31, 1909 | 5742 | 2476 |
| 59—Statement of all loaded trans-state cars moved through the State of Arkansas for fifteen days, first to fifteenth, in October, 1908, showing actual time consumed and miles made within the State, compared with the schedule—St. L. S. W. Ry. Co. | 5744 | 2479 |
| 60—Statement showing results of operating freight service in the State of Arkansas for the period of six months ending December 31, 1907, etc.—St. L. S. W. Ry. Co. | 5746 | 2481 |
| Defendants' exhibits to testimony | 5760 | 2489 |
| Exhibit A—Statement of trans-state, interstate, and State freight handled during the month of January, 1909—St. L. S. W. Ry. Co. | 5760 | 2489 |
| B—Changes in the Commission's tariff since July, 1903, to April 15, 1908 | 5762 | 2500 |
| C—Statement | 5770 | 2506 |
| D—Statement | 5772 | 2508 |
| E—Answer to Judge Hill's queries on April 19, 1910 | 5778 | 2511 |
| F—Comparative rates from Memphis to points on White River Branch of the St. L., I. M. & S. Ry. against rates for equal distance, Commission tariff No. 3 and court tariff | 5781 | 2513 |
| G—Statement covering six months ending December 31, 1907, prepared in answer to request of Judge Hill, showing assumed revenues, etc. | 5783 | 2514 |
| H—Statement supplementary to Exhibit No. 33, prepared in answer to request of Judge Hill, showing operating expenses, taxes, rentals, etc., for six months ending December 31, 1907—St. L. S. W. Ry. Co. | 5785 | 2515 |
| I—Freight statistics, October, 1907—St. L., I. M. & S. Ry. Co. | 5787 | 2516 |
| J—Statement of freight operating expenses in Arkansas for the six months ending December 31, 1907, divided between local and through train service and between intrastate and interstate business—St. L., I. M. & S. Ry. Co. | 5790 | 2519 |
| K—Bases used in arriving at cost of local and through service and intrastate and interstate freight business in Arkansas for the six months ending December 31, 1907—St. L., I. M. & S. Ry. Co. | 5792 | 2521 |
| L—Statement of passenger operating expenses in Arkansas for the six months ending December 31, 1907, divided between train and other costs and between intrastate, interstate, mail, and express business—St. L., I. M. & S. Ry. Co. | 5801 | 2532 |

| | Original | Print |
|---|---|---|
| Exhibit M—Bases used in arriving at cost of intrastate and interstate passenger, mail, and express business in Arkansas for the six months ending December 31, 1907—St. L., I. M. & S. Ry. Co. | 5803 | 2533 |
| N—Statement of revenue, expenses, and net earnings in Arkansas for the six months ending December 31, 1907, etc.—St. L., I. M. & S. Ry. Co. | 5809 | 2540 |
| O—Summary of revenue, net earnings, and expenses in Arkansas for six months ending December 31, 1907, divided between intrastate, interstate, mail, and express business—St. L , I. M. & S. Ry. Co | 5811 | 2540 |
| P—Freight statistics, October, 1908—St. L. S. W. Ry. Co. | 5813 | 2541 |
| Q—Statement of freight operating expenses in Arkansas for six months ending December 31, 1907, divided between local and through train service and between intrastate and interstate business—St. L. S. W. Ry Co. | 5815 | 2544 |
| R—Bases used in arriving at costs of local and through freight service and intrastate and interstate freight business in Arkansas for six months ending December 31, 1907—St. L. S. W. Ry. Co. | 5817 | 2546 |
| S—Statement of passenger operating expenses in Arkansas for six months ending December 31, 1907, divided between train and other costs and between intrastate, interstate, mail, and express business—St. L S. W. Ry. Co. | 5826 | 2557 |
| T—Bases used in arriving at costs of intrastate and interstate passenger and mail and express business in Arkansas for the six months ending December 31, 1907—St. L. S. W. Ry. Co. | 5827 | 2558 |
| U—Statement of revenue, expenses, and net earnings in Arkansas for six months ending December 31, 1907, with miscellaneous earnings, etc.—St. L. S. W. Ry. Co. | 5832 | 2562 |
| V—Summary of revenue, expenses, and net earnings in Arkansas for the six months ending December 31, 1907, divided between intrastate, interstate, mail, and express business—St. L. S. W. Ry. Co. | 5834 | 2562 |
| W—Tonnage capacity of engines in freight service as shown by official time cards, etc.—St. L., I. M. & S. Ry. Co. | 5836 | 2563 |
| X—Statement of station expenses—St. L. S. W. Ry. Co. | 5840 | 2565 |
| Y—Statement of station expenses—St. L., I. M. & S. Ry. Co. | 5843 | 2567 |
| Z—Comparison of revenue and expenses per train mile from the years ending June 30, 1897 and 1908, as shown by the Interstate Commerce Commission reports for those years | 5846 | 2569 |
| A[1]—Freight conductors' wheel report—M. P. Ry. Co. (omitted in printing) | 5848 | |

| | Original | Print |
|---|---|---|
| Exhibit B[1]—Form of way bill—St. L., I. M. & S. Ry. Co. (omitted in printing) | 5851 | |
| C[1]—Graphic chart showing class rates from Memphis, Tennessee; St. L., I. M. & S. Ry. tariff compared with class rates from Memphis Bridge Junction, Arkansas; standard distance tariff No. 3 (omitted in printing) | 5853 | |
| D[1]—Graphic chart showing rates from St. Louis, Mo.—St. L., I. M. & S. tariff No. 5179*a* (omitted in printing) | 5855 | |
| E[1]—Statement showing the ton miles and percentages of freight taken up on the company's books and records during the month of October, 1908, and the ton miles and percentages of freight actually transported during that month, as shown by Exhibits 19 and 20—St. L. S. W. Ry. Co. | 5857 | 2570 |
| F[1]—Freight and passenger statistics compiled from the reports of the Interstate Commerce Commission for the entire United States, group 8, St. L., I. M. & S. and St. L. S. W. Ry. Co. for the period of ten years ending June 30, 1907 | 5859 | 2571 |
| G[1]—Cost and net earnings of intrastate freight business in Arkansas for the six months ending December 31, 1907, etc.—St. L., I. M. & S. Ry. Co. | 5861 | 2573 |
| H[1]—Cost and net earnings of intrastate freight business in Arkansas for the six months ending December 31, 1907, etc.—St. L. S. W. Ry. Co. | 5863 | 2574 |
| I[1]—Affidavit of E. K. Voorhees (part omitted in printing) | 5865 | 2576 |
| J[1]—Sketch showing main track in city limits of Fort Smith, Arkansas—St. L., I. M. & S. Ry. Co., etc. (omitted in printing) | 5880 | |
| K[1]—General instructions No. 16*a* of the Missouri Pacific Ry. Co. (omitted in printing) | 5885 | |
| L[1]—Graphic charts ( " " ) | 5886 | |
| M[1]—Graphic charts ( " " ) | 5897 | |
| N[1]—Railroad Commission standard freight distance tariff No. 3, in effect June 15, 1908 (omitted in printing) | 5899 | |
| Opinion of Judge Trieber, May 3, 1911 | 5957 | 2580 |
| Stipulation to use testimony in both cases, etc | 6077 | 2648 |
| Order that court tariff remain in force pending appeal | 6078 | 2648 |
| Order of severance as to Henry Leigh and George L. McLean | 6078 | 2649 |
| Order allowing appeal, etc | 6079 | 2649 |
| Assignment of errors | 6081 | 2650 |
| Prayer for appeal and allowance of same | 6088 | 2656 |
| Bond on appeal | 6090 | 2657 |
| Order filing citation | 6091 | 2658 |
| Citation and acceptance of service | 6092 | 2658 |
| Order extending time to file record | 6093 | 2659 |
| Clerk's certificate | 6094 | 2659 |
| Original citation | 6095 | 2659 |
| Stipulation as to printing record | 6096 | 2660 |

# VOLUME III.

No. 813.

ROBERT P. ALLEN et al.
vs.
THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

4793 WALTER NASH, being first duly sworn and examined, testified as follows:

Direct examination.

By Mr. HILL:

Q. Will you state your name, age, residence and present occupation?

A. Walter Nash, 32 years old, in the real estate department of Mercantile Trust Co.

Q. Residence, Little Rock?

A. Yes, sir.

Q. Have you had any railroad experience?

A. Yes, sir.

Q. I wish you would state what it has been, just give a history of your experience.

A. My first experience was watching the bridge at the Iron Mountain bridge here, letting teams backwards and forwards, and I don't remember just how long I was there; I believe I went from there to firing an engine on the Iron Mountain, and I fired an engine for about nine months, and I went to the Rock Island, and went to braking, and I was promoted to conductor; I broke about three or four months, something like that, possibly longer than that, and then I was promoted to conductor, and given charge of steam shovel and construction work on the Eastern Division.

Q. What road was that?

A. The Rock Island. I was at construction work about 18 months, and then put in the freight service; I think I was
4794 in the freight service three or four years, something like that.

Q. As conductor?

A. Yes, sir. And then I went into the passenger service, and I was in the passenger service about two or three years, I don't remember just what, as conductor.

Q. Is that all of your railroad experience?

A. Yes, sir.

Q. With what roads has that experience been?

A. Been with the Iron Mountain and Rock Island; it was the Choctaw & Oklahoma & Gulf then.

Q. Now the Rock Island.

A. Yes, sir.

Q. Your experience was all in the State of Arkansas?

A. Yes.

Q. How many years of that experience was with the Iron Mountain and how many with the Choctaw, if you can recall approximately?

A. I guess there was about in the neighborhood of six years with the Rock Island, and altogether, the time that I worked for the Iron Mountain, I was off and went back to work for them again—I guess it was about four years; I am not certain about that; that has been a long time ago, and I don't keep track of those things very well.

Q. I just wanted to get an approximation of your years of experience with each road; when did you leave the railroad experience?

A. I think it has been about five or six years ago.

Q. Prior to 1907, was it?

4795 A. Yes, sir; if you want those dates, I think my old train books and other things, I could dig it up.

Q. I don't care about that; I just want to show your experience; you left prior to 1907, did you?

A. Yes, sir.

Q. We have got a question in this case of a division of expenses between local and through freight trains; in making the division, the State in its Exhibit allowed 50% extra mileage for the switching done by local trains, or in other words, if the local ran 100 miles 150 miles was counted, taking 50 miles as consumed in switching.

Mr. Gray, one of the witnesses for the railroad, testified in rebuttal that was not sufficient allowance for switching done by local trains. I wish you would state your opinion based upon your experience as to the proper allowance?

A. I would judge somewhere between 25 and 50%, not over 50%.

Q. I wish you would explain why it is that you have reached that conclusion; explain your process of reasoning in reaching that conclusion; of course, I am asking all these questions based on your experience.

A. Yes. Well, you take, as I understand now,—I am a Rock Island man; I never ran a train on the Iron Mountain, but you take over there, an average freight run will run somewhere between 12 and 16, may be 17 hours a day; we were supposed to work 16 hours before we would tie up; in case we were somewhere near a terminal, or near through with our work, we would not mind putting

4796 in extra time; we would not tie up at any point; we would want to get somewhere where we could get food, and have a place to rest before we tied up.

Take a local train, say on a 100 mile run, you could figure the time in there, it would run something like 50%. In this time you would lay out, you are the most inferior train on the road—you

have got to get out of the way of everything and you lay in the siding, waiting for other trains to go by, and you have got to help other trains out when you are called on to do it.

You take on our run, the biggest part of our switching was at Brinkley. In switching, however, you never go very fast switching, and you take the time allowed for switching, a man walks when he is switching; he doesn't ride many cars; he goes into a terminal where he is going to do switching, and gets his switch list from the agent, and he has got to send his brakeman out to spot the cars where they are on the different side-tracks and different industrial tracks, and that takes considerable time, and the engine is standing still all this time, and then he figures out his scheme of switching and goes to work and does his switching.

I would say that the time that an average crew allows for looking over his switch list and spotting the cars for the amount of switching—that takes about as much time as the engine actually works.

Q. What speed does the engine usually travel in switching?

4797 A. I shouldn't think it would average over 5 miles an hour.

Q. You have stated these causes of delay, and the speed of your switching engine in switching; now I ask you how you apply that in making your estimate of from 25 to 50% of extra switching by local trains,—extra mileage in switching by local trains?

A. Let me figure it here a minute.

Q. Explain it out; we are after the reasons more than the actual facts.

A. When it comes to figuring percentages, I have to figure it over a little bit—take a through train——

Q. Through or local?

A. We are comparing the two?

Q. No, just cut out the through.

A. We will take a 100 mile local run, and we will say it will run 20 miles an hour between stations; that would be 5 hours it would be allowed to get over the division, if it made no stops anywhere; now we take that 16 hours you are on the division, somewhere between 12 and 17, we will say 16—that would leave 11 hours that you would be doing something else besides running on the road.

I would have to study to see about the delays there, but there is 11 hours difference right there; out of the 16 hours, there is 5 hours actual running time on the road; 11 hours' time, that is

4798 either delay, laid out by trains or switching, or taking water or coaling the engine or engine failures. There is 11 hours there. To get at the percentage there, between that and actual switching time, I would judge about somewhere in the neighborhood of half of that 11 hours would be switching, and the other half from laying out by trains and engine failures, and helping other trains out on the road, and such things as that.

I would put in half of the 11 hours say——

Q. And to get the mileage, do you use the speed you have testified to,—five miles an hour?

A. Yes, sir. There would be five hours and a half of actual switching time at 5 miles an hour, would be 27½ miles that I would switch on the 100 miles.

Q. Is that illustration you have given, a fair illustration of an ordinary run of a local freight?

A. Yes, sir, I believe that is fair.

Q. I mean an average; of course, I understand from this case there would be exceptional cases.

A. Yes, sir, averaging up for spring and all the time——

Q. That would be your judgment of a fair average?

A. Yes, sir.

Q. Mr. Gray testified in regard to this, on page 703, that in his judgment that no one could tell what would be a proper amount. and that he had no method of arriving at a proper amount of switching for a local freight. I will ask you what you think of that, as to whether that is correct—or whether in your ex-

4799 perience in handling local freights, there is, you think, a fair average that can be made?

A. I believe a fair average can be made. I think any man that has run a freight train until it becomes a kind of second nature to him—there is lots of things about running a freight train that a man really couldn't think of them all; his orders and his switching and his little bills here, and his shorts and overs yonder, and everywhere; it is kind or drilled into him until he does lots of things automatically; that is the way it seems to me; I believe a man could get this average very well; a man gets it drilled into him until it is a *man* of second nature.

Q. In other words, he knows what he does on a local freight train?

A. Yes, sir.

Q. Now, Mr. Ward puts the same proposition, page 609 of this thing—"No operating man that I know of could determine with accuracy as to whether that division was correct or incorrect"—that is referring to this 50%.

I will ask you, who, in your opinion, would be the best man to determine the matter of this kind, the general manager of a railroad or the man who is running the local freight?

A. I believe the man on the ground would be the best one.

Q. With all due deference to the general manager?

4800 A. Yes, sir, with the highest respect in the world to him; we are taught that too all along the line.

Q. You are taught that?

A. It kinda becomes nature to respect our officials.

Q. These general managers, I will say for the benefit of the record, are most excellent gentlemen; you think that no matter how excellent these gentlemen may be, that the local freight man would know a little more about it?

A. I believe the local freight man and the man on the train, is better familiar with all conditions than anyone else. I think the same is true of either freight or passenger men.

Q. In making up the exhibits in this case, and dividing the ex-

pense between local and through trains, the State allowed a stop every five mile for a local train and every twenty for a through, and made certain statistics based upon that.

The railroads have put in an exhibit which is #56, in which they use the same method of arriving at this cost, but take eight times—that is, that the local train stops eight times to where the through stops once, as against four to one used by the State.

I want to call your attention to this matter of the eight times and ask you, if in your opinion that eight times, stopping of local trains, is a fair estimate. I believe you have testified you have had experience on both local and through?

4801 A. Yes, sir. I figured on two runs I once ran on; I am just figuring on a local run from Madison to Little Rock, and the fast freight train from Madison to Little Rock, and I find that the local run would average about 15 stops between there and Little Rock or Argenta, and the other one would run about eight stops.

Q. How does that run out; just complete your calculation?

A. That will run out—the local would be 8/15ths.

Q. Figure it—8 to 1 or 5 to 1 or 4 to 1.

A. If I would stop the local another time, and make it 16 times, it would be 1 to 2.

Q. You would not agree*d* with this 1 to 8?

A. No, sir.

Q. You say that was on two runs you made?

A. Yes, sir, that I once ran myself.

Q. What is your observation and experience of those two runs, compared with the ordinary run of state and through trains in the ..ate of Arkansas?

A. The locals just about average up; in the winter time, you would make, say four more stops on that run; in the summer time, you would lose four may be, because you understand the business is heavier; that is about the way I figure it up.

Q. You have taken that, averaging it up one season to the other . the local?

A. Yes, sir, and for the through train; that is for one through train only.

4802 That is the best train they had at that time; I believe the first number of the train was 9, and then it was changed to 31, and then to 83; that is their fast train.

Q. You contrasted the local with their fastest train?

A. Yes, sir.

Q. There is a lot of other throughs——

A. If you would rather, I will tell you how I get at this?

Q. I want you to make a full explanation.

A. I started in at Madison with 83; the first thing, we doubled the hill; most always in those days, we doubled the Forrest City hill.

Q. That is 83, your through train?

A. Yes, sir; we got to Forrest City, and we set out from 1 to 4 ars there, for Forrest City. We got to Goodwin and *take* water;

we got to Brinkley and set out from 1 to 4 or 5 cars, along there somewhere; we go to Biscoe and meet #4; it was then going east—taking the siding for the passenger train, and then we would take water at Hazen sometimes; we generally stopped in there somewhere to get by a train; we couldn't meet a train at De Vall's Bluff; we would stop at Biscoe or somewhere in there; then we stopped again, sometimes at Lonoke for orders, but I don't believe I counted Lonoke; I think my next stop on the train would be the crossing out there at the Dixie Mill.

4803 On the local, I started in at Madison, and I stopped at Forrest City, and I stopped at Palestine, and I stopped at Wheatley, and I stopped at Brinkley, and I stopped at Biscoe, and I stopped at De Vall's Bluff, and I stopped at Hazen, and I stopped at Prairie Center or Cuneo, and I stopped at Carlisle or Lonoke, and I stopped at Galloway or Dixie Mill, making 16 stops.

Q. Go back to the question as to whether these runs you have just given, of local and through, would be fairly representative of average conditions in Arkansas, according to your experience?

A. If all the through trains were as good as #83, this high ball train, that would, but that is the very best through freight train they have; they don't ever have a train going east as good as this.

Q. Conceding for the purpose of this question, that all the trains make the time, and there is no more stops than on their best train—put it on that basis?

A. I think this is fair then; I think that is a fair estimate between the two trains.

Q. Do you think those conditions would apply on the Iron Mountain and Cotton Belt?

A. I shouldn't think it would vary much; I have never run a train over there; I don't want to take the responsibility to say what the other fellow does, but I would judge that would be right.

4804 Q. You fired an engine on the Iron Mountain?

A. Yes, sir.

Q. I have assumed in that question, and you have in your answer, that all the through trains would make the same time that that fast train made, and make no more stops than that fast train; is that a true condition?

A. No, sir, as I said, this is the very best train we had in those days, on the Rock Island; the opposite of that, say this is 83; the other train east was 84; it was supposed to be as good a train as this; it had the same rights on the time card; it didn't have as many loads; this was all loads; no empties on this train at all; on the same train going east, it was supposed to be as fast a train, sometimes we would have three-fourths of the train empties, to peddle out at different places.

Q. A great many stops?

A. Yes, sir.

Q. Are you familiar with Train #55—the Texas Red Ball on the Iron Mountain?

A. Not very.

Q. You know what the train is?

A. I know what it is supposed to be.

Q. What is it supposed to be?

A. Supposed to be their fast train; the same thing that 83 would be on the Rock Island; you understand I don't want to mislead anyway here; where I get my ideas about different trains, is just through association with other railroad men; we met in the
4805 same division point, and about the only sense a railroad man has got, is railroading, and that is what we talked about.

Q. I am asking you generally, your knowledge of this train and from your railroad experience, how it would be handled; I understand you to say it would be handled on the Iron Mountain like #83 would be handled on the Rock Island?

A. Yes, sir.

Q. In other words it is the fastest train that either of those roads run?

A. The fastest freight train.

Q. I expect our Iron Mountain friends would claim #55 was better than #83 and our Rock Island friends might claim #83 was better. I am just using those two as types of the best trains they run, not asking you to compare them.

In the testimony of Mr. B. W. Moore, he was yardmaster of the Iron Mountain, he puts in an exhibit in this case, #55, I believe it is, showing how this Red Ball train moved through the terminals; puts that in as type of their through traffic, and based upon his exhibit he testified in substance, as I recall it, that the through trains get very little handling in terminals.

I wish you would give your opinion, first, as to whether the handling that one of these Red Ball trains would get in a terminal is a fair test of what a through train would get in a terminal; all
4806 through trains, I mean?

A. No, sir.

Q. Explain your reason, we want reasons more than the calculations.

A. Take 83 again; that is supposed to be made up in station order all the way through; for instance, when we get to Forrest City, we find a number of cars to set out there; we find them on the head end next to the engine; we had to make a drop of those cars at Forrest City; when we get to Brinkley, we would find cars for Brinkley next to the engine again; that made it convenient to switching.

When we got to Little Rock, we would know by our train book, in making out our switch list, that all the Little Rock cars were next to the caboose; they were made up that way in the yards at Memphis by the switch engine. I believe I would say about 50% somewhere about there—better make it 40% of the cars, of the remainder of the train, would be set out here, and then there would be 60% to go through; that 40% would be placed next to the caboose; they would be placed together in the train, so that one switch would throw these out. In the balance of the train, there would be cars for Howell, Oklahoma City, Shawnee, and different points up there—Haleyville. They would fill that train out with what

cars we would set out at Brinkley, and Forrest City; that would cut the tonnage down about half; well, they didn't pull as
4807 much tonnage on the west end as they did on the east end, they would put in half as many cars as they would set out—just about that; some of those cars would be for Haleyville, some for Howell, some for Shawnee, and some for Oklahoma City, and the switchman would take the switch list, and he would be supposed to be in the train—for instance, he had a Haleyville car in the middle of the train; he could tell that from the switch list I gave him; he would know that on track so and so, he had a car for Haleyville, and that he would have to put them together, and that he had a car for Shawnee on the switch list and two or three other cars over here for Shawnee, and he would get them together.

That train would not be a fair train then, because you take most of our other through trains over there, sometimes they are made up in toto right here in the terminals.

Q. You would not think that these fast Red Ball trains would be a correct type and their performance would not be a fair representation of the terminal handling that cars get?

A. No, sir.

Q. From your observation and general information as a railroad man, would you say that the explanation you have given of that Red Ball on the Rock Island, would be true in more or less degree of this Red Ball on the Iron Mountain or any other railroad operated in Arkansas?

4808 A. I should think it would be somewhere in the neighborhood of correct.

Q. Did you ever have switching service—I don't remember what you stated in your evidence?

A. I learned how to brake switching,—I didn't draw no pay for it; I was what they call a cub in those days.

Q. You know something about switching cars?

A. Yes, sir.

4809 Cross-examination of Mr. NASH.

By Mr. MOORE:

Q. When did you say you quit the railroad service?

A. I think it was between five and six years ago.

Q. That would be in 1904 or '5?

A. Yes, sir.

Q. Do you remember when you first went onto the Choctaw which is now the Rock Island?

A. It was first the Choctaw and Memphis and then the Choctaw, Oklahoma and Gulf, and then the Rock Island.

Q. You began braking on that line?

A. Yes.

Q. When was that?

A. I am unable to give you that. I began working on the old mud line, just after the old Choctaw bought it.

Q. That was 1898?

A. They hadn't connected up their line with the west; I had been on there about eight months when they connected up.

Q. What character of work did you begin with? Braking?

A. Yes, sir.

Q. I believe you said you were engaged in that two or three months?

A. Yes, sir.

Q. Then you were put on the steam shovel?

4810 A. Yes, sir.

Q. How long were you engaged in steam shovel work?

A. About 18 months, I believe, something like that; I dug up about 76 acres of ground about 20 feet deep, and put it out on the track.

Q. That was during the construction of the line west and re-construction of the Memphis line?

A. Yes, sir, I was on the re-construction.

Q. Then what was your next service on that line?

A. The next service was in freight service, running a freight train.

Q. Had the lines gotten connected up when you began running a freight train?

A. Yes, sir, they were connected up long before then.

Q. That must have been about 1899 or 1900.

A. I know I was still down in the mud when the new passenger cars came over, and I had the same awful bad track down there.

Q. How long did you work with freight trains as a conductor?

A. I don't remember; if you had asked me just after I quit railroading, I wouldn't have known; I could dig it up for you.

Q. At any rate, it was along in the early days of the Choctaw Oklahoma & Gulf?

A. Yes, sir, I ran a passenger train over there about two years,—must have been in the freight service about three——

4811 Q. And that would bring it somewhere to about—you quit in 1904 or '5?

A. Yes, sir.

Q. And you ran a passenger about three years?

A. Yes, sir.

Q. That would take it back to 1901 or '2, that your freight service continued?

A. Yes, sir.

Q. Had they gotten that Memphis & Little Rock Railroad repaired and completed at the time you quit the freight service?

A. Yes, sir.

Q. Just about that time wasn't it?

A. I was about the last man to finish up down there; when I finished up with my steam shovel, the road was in good shape then, and then I ran a freight train after that.

Q. How long did you run a freight train after the through traffic commenced over the connected lines of the Choctaw?

A. All my time in freight service was way after they connected up.

Q. That at that time, was practically a new road?

A. I believe it was then—six months after I took charge of the steam shovel construction over there, they had the trains running through; then there is another year I still continued in the steam shovel service at different points along there, and then I

4812 went in freight service, and I must have run a freight about three or four years.

Q. That line was opened up then, about the time or a little before you began freight service?

A. Yes, sir, about a year before.

Q. It was then prior to that time or had been just a short line from Memphis to Little Rock?

A. Yes, sir.

Q. And did very little business while it was in the hands of the receiver?

A. I don't know what it did; it was the Choctaw & Memphis when I went over there.

Q. The traffic on that road had not been fully developed while you were on it?

A. Our traffic was pretty heavy when I went over there, because we had a lot of material coming over it——

Q. I mean the revenue traffic?

A. I didn't know anything about that until I got in the freight service.

Q. How many revenue freight trains did you run—local trains—did you run each way, while you were running freight trains?

A. On the time card, we had a local each way a day, and two through freights a day, and that was all that was on the time card, and then most of the other was done by extras.

Q. How many passenger trains—just one each way, wasn't there?

4813 A. No, sir, I know we had two passenger trains each way, and I am satisfied we had three.

Q. Did you have a through train at that time, when you were in the freight service?

A. Yes, sir, through passenger service, we had two passenger trains each day from the west—Booneville and out there, and we ran a Hot Springs each way and then we had a local each way.

Q. That was three trains each way?

A. Yes, sir; I was still in the freight service then.

Q. The traffic on that line at the time you were there, was nothing like as heavy as it would be on the Iron Mountain?

A. I shouldn't think so.

Q. You never ran a train on the Iron Mountain?

A. No, sir.

Q. You stated and I will read your testimony—you stated on your run the biggest part of your switching was at Brinkley?

A. Yes, sir.

Q. There wasn't a great deal of switching done at those little side stations besides Brinkley?

A. Let me see; at Lonoke, we had considerable switching; we

had an oil mill and house track and gin; we had some private tracks that we switched quite a lot on, and De Valls' Bluff, we had lots of switching; we had an car factory and then other industries around there.

4814 Q. Besides those three places, there was very little switching?

A. I will call off the places that most of the switching was at; there was Lonoke and De Vall's Bluff, and Hazen came in there—sometimes we had a right smart of work to do in there; we will leave that out because that wouldn't be classed as heavy switching. Lonoke, De Vall's Bluff, Forrest City, Brinkley and Madison.

Q. How were the house track, side-track, passing track and industrial spurs arranged at those stations, take Lonoke for instance, just to illustrate it or Brinkley either one, I don't care which.

A. The house track and stock track were all the same at Lonoke, laid right by the side of the freight depot; I don't know whether I am getting at what you want or not,—and the oil mill—I don't know whether it was an oil mill or gin we had to work, and that laid up about two or three telegraph poles; and at Hazen, we had all straight tracks to work on there, and at De Vall's Bluff, that was a bad place to switch, most of the spur tracks we said nearly all of them ended in the river.

Q. Was there a house track at De Vall's Bluff?

A. Yes, sir.

Q. How many spur tracks did you have connected with the house track?

A. I believe there were four.

4815 Q. Were there any spur tracks connecting with the passing track there?

A. There was none then; there is now.

Q. A side-track and four spur tracks connecting with it?

A. Yes, sir, four or five.

Q. That complicated the switching proposition somewhat?

A. Made it very bad.

Q. How was it at Brinkley?

A. At Brinkley, the switching was all good—the tracks were nicely arranged.

Q. Have any spur tracks?

A. Yes, sir.

Q. Had a house track there?

A. Yes, sir.

Q. How many spur tracks did you have?

A. I don't believe I can tell; you see there was a White & Black River line that came in there, and the Cotton Belt,—I don't believe there was but about five spur tracks.

Q. How was it at Forrest City?

A. That was mostly all spur tracks there on the hillside.

Q. Was there a house track there?

A. Yes, sir, it was a spur too.

Q. Was there also a passing track?

A. It was not considered a passing track right there; it was a

house track connected at both ends, but the passing track was in the cut.

Q. How many spur tracks did you have connected with
4816 that side-track?

A. That side-track, I don't think there was but one spur.

Q. Side or passing?

A. I believe there were five besides the house track, that was connected at both ends; in the olden times, we hadn't passing tracks, before they had long trains.

Q. How was it at Madison?

A. There was lots of spur tracks there.

Q. You had a side-track in Madison also?

A. No, sir, it was all a big spur with other spurs running off to it.

Q. The spur track and then spurs running into that?

A. Yes, sir.

Q. How many spurs were there that ran into the main spur track there?

A. I think two was all, but there were two spurs—one goes to the box factory, and one to the saw-mill—one on one side of the main line and one on the other; one was a straight spur and the other had other spurs on it.

4817 Q. Do you remember how many there were?

A. I think two was all that came in there. I think that is it.

Q. Where there were a number of spur tracks running out from the House Track or Main Track—main spur, it complicates the switching by having to move them all?

A. Sometimes it does, at Forrest City it didn't—I don't remember whether one spur track lead off from the house track or not, at Lonoke it did not, but at Duvall's Bluff it did, because the main lead ran off from the depot and in working all the industrials below there, you had to move all the house cars—move them to some spur while you did your switching, and then pick them up and spot them back again.

Q. Now you say that part of that mine—the time you were laid out on that local train, you were laid out by other trains and by engine failures and by meeting other trains out on the road?

A. Yes, sir.

Q. Now what do you mean by meeting other trains out on the road?

A. Sometimes we would possibly change engines—someone would come along with a better train than we had and just take our engine and we would have to take the sorry engine.

Q. Speaking about engine failures, what are they?

A. They are usually for steam failures and sometimes a break down.

Q. Just the usual incidents?

4818 A. Yes, sir.

Q. Then by laying out of trains—you mean the meeting of trains?

A. Yes, sir.

Q. A good many more trains ran on the Iron Mountain road than there was on that line at that time?

A. I should think there would be, but I was not especially familiar——

Q. You have a general idea of the traffic of the Iron Mountain?

A. I imagine they ran more trains.

Q. A great many more trains considering the volume of other traffic, wouldn't you think so?

Mr. HILL: What part of the Iron Mountain are you referring to?

Mr. MOORE: I mean the Iron Mountain main line, the Fort Smith lines, and those old lines that have been used a long time?

A. I should think they would be running more trains on the main line, but I would think we do more business than they would on the Fort Smith or Valley Divisions.

Q. How about the Knoble Branch?

A. I am not acquainted with the Knoble Branch or the Helena Branch, I don't think they had but a freight train each way.

Q. How was it on the Bald Knob Branch?

A. I think they had a pretty good business over there, but I don't think they done the business over there we did, that is as a
4819 whole. You see we crossed the Helena Branch at Forrest City and the Bald Knob Branch at Bridge Junction.

Q. Your estimate of the division of time which you made was just general estimate based upon your recollection I suppose?

A. Yes, sir.

Q. You would not undertake to be definite about it would you?

A. It is just according to which way you would mean definite, I thought over it after I got out of here the other day, got to figuring and trying to figure out the trains and the other things, and I was pretty well satisfied.

Q. I refer to the 11 hours that you divided between switching and meeting other trains on the road and engine failures?

A. Yes, sir.

Q. I suppose that is like these other matters—your memory is not very good about them?

A. There is little details that you cannot remember so well, but there are certain general things that you can remember tolerably well.

Q. The conditions and character of the labor to be done in switching is continually varying from day to day, depending on the traffic isn't it?

A. State that again.

Q. The switching you have to do at different stations varies?

4820 A. Yes, sir.

Q. And it wouldn't be the same on different lines of road?

A. No, sir, I should think every station would be different.

Q. Whose orders does the conductor of a freight train act under in switching?

A. He acts under the agent's orders at the station.

Q. The agent transmits the orders to him?

A. Yes, sir, he gives him the switch list.
Q. Who do they come from?
A. Usually from the despatcher.
Q. Who does the despatcher work under?
A. You are getting in too deep water for me.
Q. The superintendent of the division is the general head of that sort of operation?
A. Yes, sir.
Q. And it really originates and eminates from him—the orders in regard to switching?
A. Yes, sir—wait just a minute about those orders eminating from him, you understand he is over everything on that division, but there is certain shipments laid out he wouldn't know where you were, where you were switching or on what track you were, the despatcher looks after that, he keeps after cars so that he knows these things, the conductor renders him a report from blind sidings.
Q. In describing some of the services that you rendered in switching, you spoke of setting the cars out—four or five cars at cer-
4821 tain places, you also picked up cars didn't you?
A. Not on that run, rarely ever, the only cars we picked up that run, the only thing I ever remember picking up, and I don't believe I picked up that, was picking up a car of stock that went west—I know that has been done.
Q. Wouldn't there be cars to take out?
A. No, sir, I was speaking about our No. 9, 31 or 83.
Q. What was the particular run you were testifying about?
A. This is one train, our No. 9, 31 or 83, those were our High Ball trains, and we set these cars out but we didn't pick any up.
Q. Who picked them up?
A. That was their destination.
Q. These cars would be picked up and taken away from there some time?
A. Yes, sir, the empties would be picked up and taken away.
Q. Who picked these empties up?
A. Sometimes they would be picked up by the local and sometimes set on the siding and loaded.
Q. The locals had to get them out of there?
A. Sometimes—last night I was down to the depot and there came an engine and caboose by there going out, and they will pick up loads all the way from here,—that is a through train, that is an extra, it is not a local.
4822 Q. The other trains picks them up at Terminal Stations but doesn't at local stations?
A. Yes, sir.
Q. Then it isn't a through train if it is doing that kind of service?
A. It is not on the time card as a local.
Q. Isn't it one of the distinctions, and so far as its operation is concerned, a very important distinction between locals and through trains, that the through trains do not do that kind of work—pick-up work and the cars are taken away from it at the terminal station, and the local does the work at stations?

A. That is generally the way.
Q. It wasn't worked that way when you were running?
A. It was generally worked that way.
Q. You would leave a car to be unloaded and then it would have to be hauled out of there empty, or if there was another load put in there, they would have to be hauled out on your local?
A. Generally so they did, for instance, Brinkley is a pretty good point, and we have a branch off the White and Black River——
Q. You would call that a kind of a terminal? Terminal station?
A. If you want to consider it that way.
Q. That is not the kind of work that through trains do at way stations?
A. Not considered so.
4823 Q. Was the practice different on that road from what it generally is in that respect as between picking up by through trains at way stations?
A. I don't know about that, most every official has his own way.
Q. You couldn't tell by your experience on that road what the practice would be on another?
A. No, sir, not positively.
Q. Do you know about how it would compare with the Iron Mountain?
A. No, sir.

Redirect examination.

By Mr. HILL:

Q. In referring to orders about switching, would the train despatcher give the orders for switching at a station or would the station agent?
A. The orders that we usually had was just a switch list.
Q. That was given to you by the agent?
A. That would be handed to us by the agent.
Q. Do you know whether the train despatcher would direct the agent to make up this switch list?
A. I know if we refused to do the agent's switching then he would get orders from the Train Master for us to do it.
Q. You would get orders as to the switching from the
4824 station agent?
A. I believe our book of rules had something of that kind in it, it has been a good long time since I looked at it, I think there was a rule in the book of rules that we would apply to the agent for the switch list.
Q. That was the practice?
A. Yes, sir.
Q. He would tell you where to put in the cars and where to take them out?
A. Yes, sir.

Recross-examination.

By Mr. MOORE:

Q. And he would get his orders from the Train Master I suppose—or the train despatcher?

A. I should think that is where he would get his orders, the despatcher kept track of the cars.

Witness excused.

4825 D. L. MCNEW, being first duly sworn and examined testified as follows:

Direct examination.

By Mr. HILL:

Q. Mr. McNew, please state your name, age, residence and present occupation?

A. D. L. McNew, age 48, I live in Little Rock, and am in the Real Estate business.

Q. Have you ever had any experience in the Railroad service Mr. McNew?

A. Yes, sir.

Q. Wish you would give a little history of your railroad experience, beginning first—at the first of it, give the various capacities in which you have served, how long, and with what roads?

A. I began—I don't remember dates very well, I may make some mistakes of several months.

Q. I am not caring about that, I want you to give us approximately the history of your service.

A. I began in 1882 as messenger boy for the Monan at Mitchell, Ind. I worked at that station about a year in different capacities for about a year for two different railroads,—the Monan and the Ohio & Mississippi; I worked for several months in the Road Master's office as clerk; in 1883 and the beginning of '84, I worked for the Vandalia,—clerk at Greenville, Ill. During the summer of 1884 I worked for the Frisco Railroad out of St. Louis, and for the Southern Kansas Railroad in Kansas as brakeman, that was my
4826 first experience as a brakeman when I first started—I worked a while for each one of them. I came here in the fall of 1884 and went to work for the Little Rock & Fort Smith as brakeman. From that time until about March 1889, I worked on the Little Rock & Fort Smith and Iron Mountain railroads most of the time as brakeman. From March 1889, for three years and seven months, I was night Yard Master for the Old Memphis——

Q. That is the present Rock Island?

A. Yes, sir. I had charge of the switching at nights, and part of the time in the day time—probably a month of so at a time. I was then out of Railroad service probably about six months, when I went to work for the Iron Mountain as conductor.

Q. As Freight conductor?

A. Yes, sir, freight conductor on the Valley Division, I think I

worked for them two years down there; and from there I went to the Cotton Belt at Pine Bluff, worked four years as freight brakeman and conductor,—most of the work I did was between Pine Bluff and Texarkana and Shreveport.

I was then out of the service of the Company probably six months, and then I went to work for the Illinois Central at Central City, Ky., as Yard Master, and I held that position about ten months, then I transfer-ed to the Evansville District as freight conductor, and I worked there about four or five months.

4827 While working there I was appointed Night Yard Master for the Old Choctaw Company here at Little Rock, came here on the 10th of January, 1900, and I was in the service of the Company until March 1906 as Yard Master and conductor.

Q. Freight or passenger conductor?

A. Freight most of the time, passenger conductor part of the time.

Q. Did you ever run on local and through freights?

A. Yes, sir.

Q. You had experience with both of them?

A. Yes, sir.

Q. You quit the service I believe you say in March 1906?

A. Either the latter part of February or the first of March, about that time.

Q. You haven't been in railroad service since?

A. No, sir.

Q. We are trying this case, Mr. McNew, as for 1907, you were then out of the service at least then a year before our questions come up.

Did you have service as brakeman in the days when the link and pin were used and hand brakes?

A. Yes, sir, that is nearly all the braking that was done by me except on the Cotton Belt, we had a few air cars—well we had a good many patent couplers, they come a little earlier than the airs did,—I probably had four years with the link and pin couplers as brakeman.

4828 Q. You had observation and experience in the use of the automatic coupling and air brake in the yards and also on the road?

A. Yes, sir.

Q. Mr. McNew, in make- a division of expenses between local and through trains in this case, the State has filed exhibits in which they have made an allowance for damage to equipment from starting and stopping and from switching—they base their exhibits upon a table prepared by Wellington, an authority upon railroad matters, in which he puts these two cases of injury to equipment at 35 per cent of all the injury to equipment. Now I will not ask you to pass upon that percentage,—I understand in this case it is not disputed that was the correct percentage in the days of the link and pin and hand brakes, but several witnesses have testified, owing to the change of equipment from link and pin to automatic couplers, and from hand brakes to air brakes, that this percentage should be changed—that

it should be greater, assuming that 35 per cent was the per cent in the old days—that it should be greater, I wish you would give us the result of your opinion, based upon your experience as to that?

A. Of course I know nothing about the percentage——

Q. I say, assume that was the correct percentage, I want you to give the comparison of the damage to equipment in the days of the old equipment as compared with the damage to the equipment—the cars, under modern equipment—that is the point I want your
4829 opinion on. Assume that the percentage is correct, or any other percent—or just an average comparison of the injury to the cars under that system as compared with the injury to the cars at the present.

A. Well there is no question about where the equipment would be part of the old and part of the new mixed, there probably would be more damage, on account of the strength of the engines—the strength of part new equipment, there might be more damage than there would be under the old, but take all new equipment, I don't think the percentage would be raised any—The cars are not handled as carefully by the men as they used to be, because they don't deem it necessary, for they are so much stronger and can stand more rough usage, but my observation is, the percent of damage would really not be as great,—I don't think it would—as it would under the old equipment.

Q. Take starting and stopping, separate those two things—these have been considered together, starting and stopping on the road and in switching,—let us consider them separately. Take starting and stopping on the road about what damage would there be under the present equipment as compared with the damage under the hand brakes and link and pin?

4830 A. I don't think the present would be as great, from the fact the old equipment had a great deal more slack, and in starting trains forward on heavy trains especially, the old engines would start and invariably back the train up and then start, and that would take the slack out, and in going over the roads, going over the rough places, they would be pulling out drawheads, and I don't think they would have so much of that probably under the new equipment—they can't get any slack much with the new equipment, and I don't think the percent of damage would be near as great under the new equipment as it was on the old on that account.

Q. Now Mr. McNew, we have another problem here for switchmen and trainmen. The State in its exhibits has allowed fifty per cent for switching done by local freight on the road. That is considered on mileage basis—in other words, if there is a run of 100 miles, they have counted it 150 miles, allowing 50 miles for switching done by that train. Several of the witnesses for the railroads have testified that this is not sufficient allowance, and that it is not feasible or practicable to ascertain how much switching is done by a local on the road. Now I would like for you to give your experience on that as to whether you can make an approximately accurate esti-

mate of that, based upon experience and upon the general average conditions?

4831 A. Well, I would like to say that every run I ever run on would be different from every other one, I don't think I ever was on a local run that there would be fifty per cent additional mileage made in switching.

Q. How do you get at that, you have an idea it wouldn't be that much, I want your reasons, I want to know how you get at that proposition?

A. Well that is pretty hard for me to do, except just from my experience and knowing the distance we have to travel and set out our cars and doing the switching at different stations—like this, you might ask me how many men in this house, I know there is not fifty, but I don't know how many there is without counting them.

Q. Can you illustrate that by taking some run with which you are familiar, and consider the number of stops that are made and the amount of switching that is done and the speed that you make in switching?

A. Well, I might figure like Mr. Nash did, I never have done that, of course that would put a limit to the number of miles and the time consumed.

Q. You heard Mr. Nash's testimony and his estimates based upon his experience?

A. Yes, sir.

Q. How do they compare with your experience?

A. I believe Mr. Nash's speed is too high, I don't believe he can average five miles an hour—it wouldn't average five miles an hour.

Q. I believe he took five miles an hour speed actually

4832 made while engaged in switching?

A. Yes, sir.

Q. I don't know whether he stated the maximum or not.

A. You might take a state where you have no freight to unload and nothing to do but switching, and nine times out of ten you would switch an hour, and you wouldn't travel five miles in doing that much work, taking every thing into consideration, looking up the cars, coupling them up, and there is always more or less delays you can't explain, you couldn't explain it to the train master.

Q. The engine wouldn't run up and down the track all the time?

A. No, sir.

Q. Here is the point I want your opinion upon. Can you take various local runs on any other railroad, take men familiar with the business and the usual way business is run, can you,—taking all these features into consideration—arrive at any fairly accurate estimate of how much switching is done by a local freight?

A. You mean the amount of miles run by the engine?

Q. Yes, sir.

A. Yes, it would be figured out accurately, I could make a trip and tell you without keeping cases of every little move I would make.

Q. You think it is something that can be worked out accurately?

A. Yes, sir.

4833 Q. Did you hear the quotations I read from Mr. Gray's testimony and Mr. Ward's testimony?

A. No.

Q. I believe I have stated in my previous examination, that they didn't think that was a matter that could be worked out. These two excellent gentlemen who testified that fact were General Managers, if you were going to work out that problem, who would you go to—the General Manager, or, what men would you go to to get that information?

A. Taking that from a General Manager's standpoint, his answer is correct, but taking that from being on the ground and from experience, his answer is not correct.

Q. Who would know most about it the General Manager, or the brakemen or men running the train?

A. I don't think—I don't see how any body could know that except the people right on the ground.

Q. Mr. McNew, in an exhibit filed by the Railroads, No. 56, they have made certain calculations on the expense of the local and through freights and have counted the *the* local train stops eight times to one stop of the through freight—I am speaking of freight trains, I will ask you what is your opinion upon that?

A. Well, that is like the other question, it is different on different divisions, you take the division I run on, I run on the local between Hopefield and here, Hopefield is near Memphis.

4834 Q. On the Iron Mountain?

A. No on the Rock Island.—I don't know that I ever made every stop, it is a hard day that you make every stop, there are about forty stops on there for a local, and on the through freight—it makes, I would judge about eight—that would be about five to one, if the local would make every stop, they ever make and the through freight would make their ordinary stops that they always make, the local would stop about five times to the through freight's one.

Q. Now is that anything like the usual conditions that the local would make every stop?

A. No.

4835 Q. Out of the possible 40 stops, how many, under general average conditions, would you make?

A. Probably 30.

Q. How many did you say for the through?

A. 8 stops, I think; that is for water, crossings, and not taking into consideration any stops for passenger trains?

Q. That would be the maximum stops of the through?

A. Yes, sir, I think they would make eight, if there were no other trains on the road besides that.

Q. Speaking of the through, are you speaking of the fastest through or the general average of through trains?

A. I was speaking of what we call our Red Ball freight train.

Q. That makes the best time and fewer stops than any others?

A. Yes, sir, it is in a class to itself.

Q. You say the average local would stop 30 times out of a possible

40; take the average through, not considering the Red Ball, but all other; how many times would they stop on an average—I am trying to get a natural average condition.

A. They would probably stop half as many times as the local or there would be trips when they would not stop any more.

Q. What I am trying to get at is an average condition, year in and year out, season in and season out; have you had ex-
4836 perience on other runs besides that of the Rock Island to Memphis?

A. Yes, sir.

Q. Have you had experience on the Iron Mountain?

A. Yes, sir, but that has been several years ago; I never did much local work on the Iron Mountain; I was nearly always on through freights.

Q. Are these figures you have given, on the run from Hopefield to Little Rock, on the Rock Island, would they fairly represent the general conditions; of course, I understand that one division will differ from another; what I am trying to get at is the general condition, would that be fairly representative of general conditions in the State of Arkansas?

A. Yes, sir. I think there is probably part of this road between here and Memphis, on the Rock Island, where there is as much local work as anywhere.

Q. Taking it large and small, you think that would be fairly representative of general conditions?

A. Yes, sir.

Q. Speaking of that fast train, are you familiar with #55, Red Ball on the Iron Mountain?

A. No, sir.

Q. You know all the roads run one fast train at least.

A. Yes, I understand that nearly all the roads have that fast freight train; it is classed maybe one or two runs higher; it is classed higher than the other through freights.

4837 Q. Assuming for the purpose of the question, you say you haven't personal knowledge of it, that this fast train of the Iron Mountain,—St. Louis to Texas, on its main line, you would know from your general railroad experience how that would be handled, I presume?

A. Yes, sir, they would have the necessary stops to make at all railroad crossings, and water tanks.

Q. I wasn't going into that; I am just assuming that you know general conditions about the fast train on the road; I want to ask you this question:

Would that fast train receive the same terminal handlings, or rather the cars in it, receive the same terminal handlings at division points, that other through trains on the same road would receive; in other words, would the fast train be fairly representative of the amount of handling that would be accorded the through train in division terminals?

A. No, sir, I would think not.

Q. Explain the differences between the fast freight that is run,

between other through trains that run, so far as division handling is concerned?

A. Those fast trains, every preparation is made to save delay to them; where there is any pick-ups, they are always fixed, placed first out, or in a place where they can be picked up with the least delay, even in big yards. Very often a man's position depends on whether he does delay that train or not; while the other trains, ordinary dead freight, it don't seem to have any particular

4838 thing to do with the handling of those trains,—not so much at least,—probably it will be composed of lumber or cotton, or something that is picked up by locals or through freights on the road, brought into the terminals, and used to fill out the engine's tonnage with, on either those fast trains or some other through trains.

Q. And they would all be switched in the terminals?

A. Yes, sir, probably stored; some may stay around for several days.

Q. You have had experience as yardmaster and know how those are handled?

A. Yes, sir.

4839 D. L. McNew, being recalled for cross-examination, testified as follows:

By Mr. Moore:

Q. Your service as Night Yard Master on the Old Memphis & Little Rock was here at Little Rock?

A. Yes, sir.

Q. This was the terminus of that road wasn't it?

A. Yes, sir, of the Old Memphis & Little Rock,—my service with the Choctaw Company was when they first organized their forces—when they first commenced runinng through.

Q. This became a terminal station?

A. Yes, sir,—always has been I suppose for through trains. I would like to say in that connection though, that during my service as conductor, I have often been detailed to different yards, and I didn't keep any record of that, because it was just detail work for a conductor—I have been Yard Master at three or four different points on the Iron Mountain at small stations like Pine Bluff, Monroe, Alexandria and Wilmot, and also on the Rock Island at Hot Springs, I went over there two or three different times—especially during the rush business—during the races, I was over there two or three different times when I was running a local train on the White & Black River—I was sent over to Hot Springs and handled the yards during the races, and all that time I was classed as conductor, but simply on detail service.

4840 Q. You were asked whether you had service in the days When the link and pin and hand brakes were used, and you testified, "Yes, sir, that is nearly all the braking that was done by me except on the Cotton Belt, we had a few air cars." Now when

was that, what was the date of your service in which you state was the time when they had a few air cars?

A. I believe I went to work for the Cotton Belt in 1894—we had a great many—we had mixed couplings, I expect a majority of them were automatic at that time, but not many air cars.

Q. Most of your experience was with the hand brakes?

A. As a brakeman, yes, sir, but I was a pretty good brakeman when I was a conductor most of the time.

Q. Are you familiar with the automatic equipment?

A. You mean the coupler?

Q. Yes, sir.

A. Yes, I think so.

Q. What amount of space is there between the head of the draw-bar and the dead-wood in that coupler?

A. Well, I don't know what the standard is,—of course the coupler—the springs may become weaker——

Q. I just mean—I don't mean in exceptional matters—there is a spring in both that gives play in back of the draw bar?

A. Yes, sir.

Q. Now there is about the same play in connection with
4841 that spring in the two kinds of bars—that is what I want to call your attention to?

A. Well no, there is more play in the old bars.

Q. How much more do you think there would be—now we will consider they were all in good first class order?

A. There would probably be—I will say this, we will take two cars, put automatic coupler between them, all in first class order, and we will put the old couplers between them with the ordinary link and pin, and there will be a difference of from one to two feet—anyhow one foot—I will approximate it as one foot, the difference in the amount of slack in the old couplers, there would be that much more.

Q. Mr. McNew, what is the space when it is at tension between the ends of the two—old style draw bars?

A. I couldn't answer that.

Q. It is no more than 2½ inches between the ends of the draw bars—I am talking about between the drawheads.

A. The Draw heads?

Q. Yes, outside the pin,—you know the link is held in by the pin in the opening in the draw-bar, and the draw-bar still projects beyond that. Now I want to know how much space is there between the draw heads?

A. Oh, at times, there would be—owing to the length and of course the size of the pin hole, and all these things, and in the time we had these old draw heads, there was hardly ever any two of them alike—every road had its different patterns, one road
4842 would have five or six different patterns maybe, and there would be probably a space between the draw-heads of about two or three inches.

Q. Then the additional play was given by the back springs of the draw bars?

A. Yes, sir.

4843 MORD ROBERTS, being first duly sworn and examined, testified as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would state your name, age, residence and present occupation?

A. Mord Roberts, 57 years of age, residence in Argenta, Pulaski County, Arkansas. I am in the sand business; I have a dredge in the Arkansas River, producing sand for commercial purposes.

Q. You have had long and varied railroad experience, I understand; I wish you would give, as briefly as you can, to develope the experience you have had, a little biography of your railroad experience, commencing at your first work, and with what railroads, and approximately the length of time you worked for the different railroads, and the capacity in which you worked?

A. I am a machinist by trade, learned my trade in the City of Philadelphia, in the Baltimore Locomotive Works, transferred to the Pennsylvania Railroad Co. 1873, as machinist, and after a year and a half's service as machinist, went on the road, firing a locomotive ten months; promoted to the position of locomotive engineer,
4844 ran a locomotive there until July 12, 1876. Dismissed for collision Centennial Yards in West Philadelphia; reached St. Louis July 16th, 1876, and took service with the St. Louis, Iron Mountain & Southern Ry. as machinist, July 17, 1876. Continuously in the employ of the St. Louis Iron Mountain & Southern Railway from that date until May, 1899, as machinist, locomotive fireman, locomotive engineer, travelling engineer, general foreman of shops, De Soto, Missouri, Master Mechanic at Little Rock; for last six months service, general master mechanic, Iron Mountain Railroad, with offices at De Soto, Missouri; two years as General Master Mechanic, Louisville & Nashville Railroad, headquarters Louisville, Kentucky; three years Superintendent of Machinery, Kansas City Southern Ry., part of the time with headquarters at Kansas City and the remainder of the time headquarters, Pittsburg, Kansas; leaving the railroad service entirely, August, 1904.

Q. That was your last railroad service?

A. Yes, sir.

Q. The state has made an effort in this case to divide the expense between State and interstate traffic, and in doing so, in dividing the expenses of freight traffic, they have started with the expense of the local and the through trains, in order to arrive at a proper division between state and interstate.

It is in evidence here that the local train stops ofterner than the through train. There is a conflict in the testimony on that
4845 point, but it is undisputed that it stops oftener.

The State's accountants have made up exhibits in which they have put that at four times to one. It is, I believe, an established fact, that stopping and starting of freight trains is a contributing cause and probably a large one to the injuries of freight

cars, and it is also in evidence that switching is a contributing cause and probably a large one to the injury of freight cars.

In order to take care of that item of expense that was heavier on the local train than the through, the State adopted percentages laid down by Wellington in his work on Railway Location of Expense, in which he gives a table of the distribution of the cost of freight car repairs to its various contributing causes.

He attributes to starting and stopping 21½% and to switching 13½%, making a total of 35% on these two items; these percentages were used by the State.

The railroad, in rebuttal testimony, introduced considerable testimony to the effect that while Wellington was a standard authority and recognized as such, that this table to which I have referred was prepared many years ago; it was based on experiments and tests made on the Pennsylvania Railroad, and was probably made in the early stages; at any rate, it was made while hand brakes
4846 and link and pin couplers and equipment were used.

Railroad witnesses have testified that owing to the difference in change of equipment from hand brakes to air brakes, from link and pin to automatic coupler, and various other improvements in mechanical devices and safety devices, that this table is now unreliable, and that instead of being the percentages given therein, that the percentages for these causes, stopping and starting and switching, should be much greater than they were under the old order of equipment.

I wish you would express your opinion, based upon your experience, as to the effect of the latter day equipment, to which I have referred, as contrasted with the link and pin equipment and the hand brakes, insofar as it affects injuries to freight cars?

A. Does that refer to the item of stopping and starting?

Q. I have included in my question both of them; probably you had better answer them separately, stopping and starting is one item, which Wellington gives at 21½, and switching, which he gives at 13½; they are grouped together in this exhibit as 35; I expect it would be better to treat them separately.

A. It was my experience, while connected with the railroad, that the application of the vertical plane coupler, with the improved draft gear, and also the completion and application of power brakes, to the train, had eliminated largely the damage accruing
4847 from stopping and starting in the train, local or through, and I believe I am familiar with Mr. Wellington's table, and as you stated, we all looked upon that as authority in its day, but that would not apply now to the changed conditions.

Draft gear and car underframing, has been designed and reenforced with a view to eliminating that damage; I remember very distinctly, when at almost any freight yard or at any intermediate terminal along the Iron Mountain Railroad, during the days of the link and pin coupler, that at nighttime, you would need a lamp to get through it and keep from falling over drawbars, and draft timbers, pulled out in the ordinary handling of trains.

The item of caboose chains or car chains in cabooses—we used

to have to re-enforce springs in our cabooses and to carry chains to chain up cars that would be damaged on the road by pulling out of draw bars; that was largely due to the braking of trains, all from the hind end of the train. They used to have a very severe brake in the caboose, and they would set that up, with the immense amount of slack that there was in the link and pin coupler, and if the train was of any length, it would very often pull out a draw-bar, and the contributary damages, as a result of that—of the drawbar dropping down on the ties—perhaps would not come out of
4848 the socket entirely—I have known of many very severe and expensive freight wrecks, as a result of that, which is almost, or was when I left the service, an unheard of thing, and we have knowledge of those things and I believe it is fair to presume that Mr. Wellington's figures today would be 50% too high for the item of expense due to stopping and starting of trains.

Q. Assuming that his table was correct, as near as such tables could be in the day it was written, of 21½ per cent to that cause, you would now ascribe what percent?

A. Not to exceed 12½, and I think 10 would be nearer the figure.

Q. What do you say on the other proposition—assuming that 13½% would be correct for switching, under the old order of things, what would be the difference now?

A. It is very evident that cars are handled very rough, as a result of switchmen not being compelled to go between the cars to couple them, which applies also to cars broken on the road, but as I stated in the other case, owing to the design of the draft timbers and rigging generally, which was all taken into consideration when the changes were made, the yard damage is not near so great as it used to be; that is due to the fact that the cars are built very much stronger—to take the cars that we used to operate, fifteen years ago, and handle them the way they handle them now, why you wouldn't need anybody only the switchmen, to break them up; they
4849 wouldn't stand it at all, but the expense to build those cars, to fit them for the purpose of resisting the rough usage, has been very much greater, but with a view, of course, to reducing the cost of maintenance.

Q. That additional expense would be reflected in the capital account, not in the repair account?

A. No, sir, that would not be taken into the repair account, and my judgment is that Mr. Wellington's figures are 25 to 40% too high, as applicable in these days.

Q. To be precise about it, our inquiry is as to the year 1907, as to the condition of affairs then?

A. 1907, the conditions had no doubt improved some in the way of more modern equipment, a larger percentage being in use than it was when I left the service.

Q. And I have used throughout in my questions, the present tense; I am really in error in doing that, because the exhibits in this case are made up on the repair accounts of 1907; I want to call your attention to that and ask you if your answers would be correct, applying your answers to the repair accounts of 1907?

A. My statements, I will state, are based on my experience, in the last years of my service.

Q. I presumed that, but I wanted to be accurate in the testimony; I should have stated that earlier.

Now, has your work been such as would particularly call
4850 your attention to these matters, of which you have just testified?

A. Yes, sir, I had charge and was responsible to the management for that work being properly done, and economically done.

Q. Necessarily you learned the contributing causes and their effect?

A. Yes, sir.

Q. You would not have held your job if you hadn't?

A. They discharged me then—the Iron Mountain did.

Q. There has been introduced in evidence, a table made up of contributing causes of damages, prepared by Mr. Berry, at one time chief engineer of the Union Pacific; now, I believe, chief engineer of the Rock Island. It was an address delivered before the Maintenance of Way Association, in which he based upon several years' investigation of the affairs of the Union Pacific, following the Wellington table, brought it down to that date, which was 1904, about the time you quit the service; I believe he reduced the stopping and starting somewhat and increased the switching a small percentage, making a total on these items of about 1% above what Wellington did; the point I want to direct your attention to, is this: If Berry's table were correct in 1904, which as I understand was somewhat of a transition period from the old equipment to the new, what would be the effect in 1907 of his percentages?

4851 Objected to by Mr. Moore because Mr. Roberts' service and opportunities of observation had ceased before 1907?

Mr. HILL:

Q. Since you left the railroad service, have you given attention to your old work?

A. No, sir, I have tried to forget it.

Q. You have not kept up with the changes?

A. No, sir.

Q. You do know, as I have presumed, that 1904 was rather a transition period in changing of equipment?

A. Yes, sir.

Q. I want to ask you this further question, in regard to Mr. Berry's table: How would stopping and starting and switching on the Union Pacific compare with those elements on the Iron Mountain?

A. I am not sufficiently familiar with the contour of the road or the nature of the business on the Union Pacific road to answer that question.

Q. You have been out on it?

A. I have been over it.

Q. Mr. Gray, one of the witnesses for the railroad testified in rebuttal, stated in substance this, as I recall his testimony, that if

it be conceded that the local stops four times, and the through train once, yet the element of damage for starting and stopping, multiplied by four, would not represent the real injury by that cause, because he stated there was a material difference in the dam-
4852 age to starting and stopping of local and through trains; to be accurate about that, I expect I had better read you Mr. Gray's testimony on that; page 712:

After this proposition was explained to him, he was asked to state if he thinks a sufficient allowance has been made there for starting and stopping of cars in local service, and this is his answer:

"There is as wide a variance as it is possible to conceive, between two similar things, between the stop of a local train and the stop of a through train in everyday practice.

"The stop of a through train is most frequently for transportation or operating reasons; that is, it is to stop to take a siding for or to meet and holding the main line for the opposing train. It is usually unaccompanied by any more work than taking of the sidetrack or holding the main line while the other train takes the sidetrack. The local freight train performs the greatest amount of functions in connection with a stop of that kind; it may be hours' duration or it may be short; it is all dependent upon the work required at that local station, as differentiated from a through train which has no work whatever to do.

4853 "I would say that an allowance of four times which is predicated solely upon the fact that the stops are four times as frequent, is wholly unfair. I am not prepared to say what it should be, but it should be several times that."

Q. I will ask you your opinion of those statements, based on your experience?

A. It occurs to me, if I might suggest there, that Mr. Gray has got two items mixed; it is the switching that he has reference to, that adds to the expense that the local would have.

Q. I am inclined to think you are right, but I don't know; I am just giving you in his own language, his entire statement on the subject.

A. The damage in stopping the train with the air brake, is to each individual vehicle in the train, which includes the wear on the wheels, brake shoes, and the brasses, and the local trains, as a rule, are light tonnage trains, and not near as many vehicles in the local trains as there is in the through train, and the damage to stopping a local train could not possibly be any greater than it would to a through train, and with the damage based upon each individual vehicle, if the local train had more cars than through trains, the damage would be greater, and if it had less cars, the damage would be less.

Q. For your information, I will state, that the statistics
4854 show that the average local train is 16 cars, and the average through train is 32, and on one road, 33. We are referring, of course, not to the expense per train, but the expense per car.

A. The expense per car should not be any greater.

Q. From this cause to any one train over the other?

A. The cost of stopping and starting, the greater expense would be to the train that had the greater number of vehicles in it,—the greater tonnage, simply because the strains and stress would be that much more severe on the cars nearest the engine; that is my way of looking at it, and that has been my experience; I don't think, in the damage to starting and stopping, we can consider the damage or cost of station switching.

Q. In the maintenance of way expense, the State has counted the locomotive as 2½ times the engine miles of the car, or to put it in another way, they have counted that a locomotive running 40 miles, there is as much injury to the way as a car running a hundred; that would be the practical effect of the division. In discussing that, Mr. Gray says at page 703:

"It takes into account no distinction between classes of lading, weights of lading, between the car where the tare is a large proportion of the loading on the rail and where it is a light proportion.

4855 It assumes that the cost is equally proportioned for a car handled five miles as it is for *for* a car handled three hundred or five hundred miles. The further inclusion of caboose mileage only accentuates this difference.

Above all that, however, is the fact that two and one-half times a car mile is not sufficient for a locomotive mile as it affects maintenance of way expense. The locomotive, with its shorter wheel base, with its greater axle load, with its connected drivers, with its constantly present problem of counter balancing, with its constantly chan-ing load, on the tank, due to the taking on and using up of coal and water, the known tendency of the engine tank to derail, out of proportion to all other carriages, the damage that a locomotive frequently does to the track itself, while it is on the track, and the greater proportion of damage it does if derailed, none of these facts are taken into consideration."

Those are his reasons for objecting to this allowance of forty miles of the locomotive as against one hundred miles of the freight car, including the caboose; I wish you would give us your opinion as to the reasoning of Mr. Gray there?

A. Owing to not ever having any experience in that line, I never took that matter up, never made any investigations in that direction; I don't believe I am competent to express an opinion.

Q. Do you know Mr. Gray's experience?

4856 A. Well, I am somewhat familiar with it; it is a question that even great minds might differ on; my judgment is, a properly constructed and designed locomotive, operated at a proper speed, is the easiest vehicle that goes over it.

Q. Give us your reason for that, that is what I want to get at, not percentages, but your reasons for contrasting these cars——

A. What I would say would be just merely from a mechanical and practical standpoint, not having made any investigation in that direction, never gave it any thought, but I have operated a locomotive and always considered the locomotive the safest vehicle in the train on any track, and I have run a locomotive over the Iron Mountain Railroad, parts of it and you could look back over the

train and actually you would be frightened; them cars looked like sheep going over a fence; the locomotive would be going along pretty fair.

A locomotive is derailed, excepting the tender less than any vehicle in the train, and owing to a locomotive being counterbalanced, the weight equalized so that it can transfer from one wheel to the other, to take care of the irregularity of the track, which is not the case with a freight car,—we take a one hundred thousand capacity freight car, load it with one hundred and ten thousand pounds of lading, weighing about one hundred and forty thousand pounds of itself, only eight pounds contact on the rail, distributed from center to center—perhaps about 25 feet,

4857 and the very fact of being familiar with the construction of different vehicles, my judgment is, a proper designed locomotive, operated at a proper speed, will not damage the track or right-of-way to the extent that a heavy loaded freight car will.

Q. Take it on a system of general averages, which we have to get at or should get at in this investigation, not taking the best locomotive or worst car, but taking the general average conditions of locomotive and car, I wish you would express your opinion, based upon your experience in the line of work you have done, as to the comparative injury to the way?

A. I don't believe that I am competent to do so.

Q. You just prefer expressing your opinion generally as to the situation?

A. Yes, sir.

Q. Now, there is another point testified to by Mr. Gray and several other witnesses here, as to the comparative cost of repairs, per engine mile, of a local and through engine; that is, an engine pulling a local and through train; I wish you would make a comparison between those two, based upon your experience in repairing locomotives; I am still referring to freight.

Mr. MOORE: I object to that on the ground that it is not proper rebuttal.

4858 A. My experience is that nearly all local freight trains are handled by locomotives that owing to defects or their weight, they are unfit for service in through freight and they are put—even after the flues get leaking, and anything that would cause detention to through freight, the engine is put in local freight service—was in my time, and for the reason that the tonnage was not heavy and the engine could be operated there very satisfactorily.

The expense for keeping the engine in service should be no greater than to keep a through freight engine in service.

Q. These calculations are made on the engine mile basis?

A. Yes, sir, well that engine mile basis, where the engine is not given any credit for the mileage made, and switching at stations, the ordinary care that the engine would receive at the roundhouse, would perhaps increase her cost per mile, actual miles run.

Q. The engine house service comes under another division.

A. This is shop repairs and maintenance that you have reference to.

Q. Yes, sir, and the road service under that head.

A. The engine has practically been 75% worn out in through freight service, as a general rule, and it is put in local freight service to be utilized there before going into the shop, to get all out of the engine that could be gotten out of it.

4859 Now, when the engine goes in the shop, if the expense of the repairs made to that engine is not distributed over the total mileage she has made since in the shop before, but charged direct to the last service she was in, yes, it would look as though she cost an enormous amount, but the actual figures would not show necessarily that the engines cost any more per mile for repairs than an engine in through freight service; I cannot conceive of any reason for it.

Q. Right on the same line, there is testimony here about the expense of maintenance of yard locomotives, as compared with a locomotive on the road; what is your opinion about that?

A. The yard engine, their repairs, owning to the low mileage allowed per car, which used to be with us only six miles per hour,—repairs show very high per mile, or show very high per mile.

Q. Could you estimate how much more they would be than a locomotive on the road?

A. They would be perhaps three times as much as locomotives on the road, on a mileage basis, simply because an engine working 12 hours, would only get 72 miles.

Q. That six miles, I believe, is the usual allowance that is made in the accounts, is it not?

A. Yes, sir; different roads have different methods; some allow six, that I have been on, and some allow as high as eight and a half.

4860 Q. Regardless of the allowance of six miles, taking the actual mileage, what would you say of the comparative injuries to them, or cost of maintenance of them?

A. The cost of maintenance, I would think, would be at least two and a half per cent greater.

Q. On the actual mileage?

A. I don't mean two and a half per cent, I mean two and a half times.

Q. Taking the arbitraries, you would put it at 3 times?

A. Yes, sir.

Q. There would be a difference of course, in the different types of locomotives that are in the yards, as compared with the road; what is the general class of the yard locomotives?

A. It is the general practice, that there is an engine specially designed for that service.

Q. In this case, Mr. Doddridge caused a test to be made on the Cotton Belt Railroad, for the month of October, 1908, of all the expense in the freight traffic—the fuel consumed by the locomotive in the through and in the local service was carefully obtained

from actual figures showing the consumption of each; the result showed that the fuel consumed by the through locomotives was 3½% more than that of the local, on the locomotive mileage basis.

The accountants for the State in this case, used those same percentages on the Iron Mountain. Mr. Gray, in rebuttal testi-
4861 mony, criticises that; he said at page 717:

"It is the application of a six months' operation on the Iron Mountain, with its varying conditions, branches and main lines, with a test on another railroad, without any comparison being given for the benefit of the witnesses, as to the engines used on the Cotton Belt as distinguished from the engines used in the several classes of service on the Iron Mountain, and no information as to the relative number of cars handled on the two railroads, the length of the local, and such as the amount of work done by the two, and my conclusion is that it is not a fair basis upon which to divide the expense of the Iron Mountain road."

Now, it is also in evidence here, from the exhibits in the case, that the trains, local and through, on the Cotton Belt, are practically the same number of cars as on the Iron Mountain, during our test period.

From your general knowledge of this question of fuel consumed on the Iron Mountain and Cotton Belt system, I would ask you what is your opinion as to the fairness of using percentages obtained on one road, and applying them on the other?

A. If the tonnage handled or cars handled, were the same, I consider the conditions and contour of the country very similar; I would be willing to accept the test made on the Cotton Belt as a fair
4862 representation of what could be done on the Iron Mountain or vice versa.

Q. In regard to the engine house service, the State has assumed that the local freight locomotive gets no more round house service per trip to the round house, than the through freight engine, and that assumption has been criticised in rebuttal. I wish you would express your opinion on that.

A. Do I understand the question right—the local engine receives greater attention and more repairs at the round house than through freight?

Q. The State assumed that the local freight engine gets no more round house service per trip to the round house, than the through freight engine,—cleaning, knocking fires, etc.,—whatever round house service would embrace, and that position has been criticised; I want to know your views on the subject?

A. Unless conditions have been changed very materially, since I was in the service, the poor local does not receive the same attention as the through does.

Q. In your opinion, there would be no more service rendered to the through traffic?

A. No, sir, on the other hand, the through traffic would be getting the best of it; the cost of caring for the local engine is no more than the through freight, but less.

Q. Turning to the question of passenger equipment, the problem

in this case is to separate the mail and express service from
4863 this passenger service, mail and express being carried on passenger trains, the state having no jurisdiction over that matter, and that not being one of the elements of controversy in this case.

It has been deemed necessary to apportion the expenses incurred by the mail and express service and then divide the passenger expense between state and interstate traffic, and in doing so, the car mile basis has been used, which, of course, would put the expense of the mail and express carried, on an equality with the expense of coach and baggage car per mile run; that is, set the coach and baggage car on the one side, and the mail and the express on the other side.

Now, that division has been much criticised as being unfair. I wish you would give us—I would like for you to give it fully—your opinion on the comparative cost of maintaining these various kinds of cars, mail, express and baggage and coach, per mile run, leaving out the Pullman, as that is taken care of;—it is in another account—by the Pullman Company.

A. The cost of maintaining a vehicle in a passenger train varies considerably owing to the size or dimensions of the vehicle; that is, if it was a passenger coach or baggage car or express car; the express cars, baggage cars and mail cars are usually closest to the engine;
the greatest amount of damage and expense to maintaining
4864 the draft gear, underframing and trucks, is usually applicable to the cars that are handled closest the engine, for reasons that is obvious, I guess to you; in the first place, those cars have to take all the shock and stress, due to starting of trains, and the damage to roofs and exterior finish, as a result of cinders and gasses from the locomotives; but other than those damages, the coach has a damage that does not enter into the baggage car or express car, and that is the damage to interior finish, lamps, and sash locks, and upholstering damaged sometimes by passengers, and as I said before, they pro rate this cost between the cars; it doesn't take as much labor or varnish to cover a 50 ft. car as it does a 70 foot car, and where the dimensions were practically the same, I would not make much difference between the kind of vehicles in the train, for I believe the damage to the cars nearest to the engine, as a result of the items I have just mentioned, is compensated for by the interior damage done to the passenger coach by the travelling public.

Q. Taking it by large and by small, you think one would about equalize the other

A. I believe they about equalize each other.

Q. There has been a question raised in here, as to the cleaning of coaches; it is a rather negligible quantity, but still it is a quantity
and should be considered: I wish you would explain the sys-
4865 tem of coach cleaning and train cleaning and by whom that delectable service is performed, and how it is managed?

A. To divide the differences in cost of cleaning the different kinds of vehicles?

Q. Not so much a question of division; I want you to explain the system, and what these men do, and how it is generally handled on the Iron Mountain road?

A. In my time, it was generally handled on the Iron Mountain Railroad at our terminals, where we had an organization like our union station here. There is a certain number of men carried as oilers and cleaners, and then some men as laborers that handle the ice, and those men's duties were many; they were to do anything that was necessary to be done in that passenger yard.

Q. Just enumerate, if you can think of them, their various duties?

A. Well, they sometimes take out defective wheels and apply replacement wheels and brasses, wipe the trucks, re-ice the trains, and give them water, clean the lamps, fill them, and sweep out the coaches, dust them, and oh, numerous things.

Q. I presume that there would be no doubt that they spend more time cleaning a passenger coach than they would a mail or express car?

A. Yes, sir.

Q. But could you tell by these various duties that this force would be employed in, how much it would really cost the
4866 company to clean a coach?

A. No, sir.

Q. Were any time slips ever made in which they would say, so much on cleaning, so much on icing, putting on new wheels, oiling and various things?

A. No, sir, that was just bunched and distributed through the number of cars that were handled through the station during the month.

Q. Now, I used to have a friend out on the Greenwood Branch, that had various duties to perform, among others a very perfunctory sweeping out of the coaches, how is a thing like that handled in a place like Greenwood?

A. During my time with the Iron Mountain, we had several points similar to that, and in the summer time, we had an engine watchman there who swept the coaches out, and did whatever was necessary to do to the coaches; we used to run into Van Buren in daylight, and there it was inspected by the regular car inspection force, and brake shoes were applied, if required, and we never kept any car force there excepting in the winter time; in freezing weather, we would give our engine watchman help to keep the fires going in the coaches and keep the coaches warm.

Q. About how much would you pay that friend of mine up there for his multifarious duties?

A. When I left here, we were paying him $45. a month; he was a good man.

Q. Yes he was; how would you divide that up on the
4867 time—the $45. a month, the time he spent in cleaning that coach?

A. I am free to confess I don't know; he was carried as engine watchman.

Q. Didn't you have clerks that were carried as car cleaners or to perform various numerous duties, among others, cleaning cars?

A. Yes, sir.

Q. I have used this Greenwood matter as an actual illustration,

but was that unusual in such a station as I have called your attention to there?

A. No, sir, not under the conditions that existed on the Iron Mountain at that time, it was not; we had several branch trains handled the same way; we had our trains at Wynne, Ark., used to be handled the same way, and up here at Bald Knob,—the Memphis trains at that time, some of them didn't run through to Little Rock; they cut out at Bald Knob; the same was true at Knobel, and the division between the car department and locomotive department was made in the office by the chief clerk and I don't recall how it was done.

Q. These car cleaners are like a pooh bah.

A. When you have nothing else, you can charge the expense to that, or employ a man to work in the office, you just hire a fellow and call him a car inspector or car cleaner and put him in the office to help out.

4868 Q. I would like to know what these fellows do that go in *in* the trains and sweep over us every time we go in there; they come in and sweep the dust over the passengers—is that part of the car force?

A. That is part of the car department there.

Q. Do they do anything else?

A. I think they find something for them to do around the freight yard there.

Q. I have been anxious to dispense with those fellows if they have no other duties; that is just one of their numerous duties?

A. Yes, sir, to sweep the papers and snuff cans and one thing and another out of the second class coaches.

4869 Mr. ROBERTS, being recalled for cross-examination, testified as follows:

By Mr. MOORE:

Q. I believe you stated that you quit the railroad service in 1904?

A. Yes, sir.

Q. I think you state also that you had give- no attention to railroad matters since that time?

A. No, sir.

Q. Your testimony then is based on conditions as they existed in 1904?

A. Yes, sir.

Q. Now, the link and pin coupler, consisted of—just state what the coupler was when in use, when you went into the railroad service?

A. In freight service, they universally used an open mouth coupler, admitting the link, made of about 1¼ iron, the mouthing permitting the entrance of the link, about 4¾ or 5 inches wide, and we used a pin an inch and a quarter by an inch and a half—was about the section; an inch thick and a- inch and a half the other way.

Q. And that pin dropped in it?

A. Dropped through the coupler; there was a pin hole in the coupler.

4870 Q. A pin hole above and pin hole below?

A. Yes, sir, it was continuous.

Q. What was the length of the link?

A. Usually about from 10½ to 13 inches—different lengths by different roads.

Q. What was the space between the ends of the draw bar and the cars when at tension, straightened out?

A. Between the draw bars when the tension was on them?

Q. Yes?

A. Probably from two and a half to four inches, depending upon the length of the link.

Q. The links then were not of uniform length?

A. No, sir, neither was the distance from pin hole to face of the coupler; that distance was not uniform either.

Q. What do you mean by face of the coupler?

A. Where the two come together.

Q. The two ends of the draw bar came together?

A. Yes, sir, where the ends of the two draw bars went on each car.

Q. From the pin hole to end of the draw bar?

A. Yes, sir.

Q. How much play did the draw bar have? Wasn't there a horn or some shoulder of some sort on the draw bar that would strike against the dead wood?

A. In some cases, but not universally used.

Q. Did they go in universal service?

A. No, sir, they never were.

4871 Q. What is the dead wood?

A. Dead wood or dead block, is a timber across between the draft timbers, just over the draw bar.

Q. What is the purpose of it?

A. The purpose is to be used in connection with the coupler as a dead stop and the horn or off-set——

Q. There was the horn that would go back and strike that dead wood?

A. Yes, sir.

Q. The entire coupling apparatus consisted of two draw bars, one in the end of each car, and when the cars approached, there would be a draw bar in the end of each approaching car?

A. Yes, sir.

Q. Describe that draw bar will you?

A. Which type do you want me to describe?

A. I mean that used in connection with the link and pin?

A. There was as many of those as there is letters in the alphabet.

Q. Take the ones in use then, take the ones in use on the Iron Mountain Railroad, during the time of your service there?

A. The link and pin coupler——

Q. I call it the draw bar.

A. Do you want me to describe it?

Q. Yes.

A. Well, it was made of cast iron, over all approximately 32 inches from the face to the rear end of the shank, looking
4872 at the end of the shank, at a round hole in it about an inch and a half in diameter. and at a later date, the pattern was changed so it had a key through the shank.

Q. Is the shank that end of the draw bar that is under the car?

A. Yes, sir, and connects with the draft rigging.

Q. Go ahead.

A. The hole in the center, a key way was to make it applicable with different types of draft rigging; we had in freight car equipment, about as many different types of draft rigging as there was types of couplers or draw bars; used very extensively on the Iron Mountain was what was known as the American Continuous Rod; those were rods—that is what this key way was in the shank of the coupler for; that key way was made to take a key about 7/8ths of an inch by 4½, just put in flat, and on the American continuous rod was a loop that slapped over the key, and that connected the two couplers together, supposed to take the shock of the car.

Q. Let me see if I understand—what is the length of the draw bar, of the solid casting?

A. They run from about 28 to 32 inches.

Q. At the rear end of that, speaking with reference to the front end of the car, and I mean the end that was under the car, was there a spring that it connected with?

4873 A. There was, as I have explained, there is many types of draft rigging that the bar connected to.

Q. Was there usually a spring there?

A. Yes, sir, in all cases.

Q. Was it attached to that spring or was there a plate separated it from the spring?

A. In one type, there was a follower going on the rear end of the draw bar, what we call a follower.

Q. What is that?

A. It was a plate, a given distance from the end of the draw bar, for the spring to go in there.

Q. Then there was a spring ?

A. Yes.

Q. That spring was what gave the draw bar play back and forth?

A. No.

Q. Wouldn't the draw bar, when it was driven in under the car, strike the plate between it and the spring and compress the spring, and in that way, make the play?

A. The spring was there to take the shock from the car.

Q. What was the working of the spring; what was the purpose of that spring?

A. The purpose of that spring was to take the shock and stress from the car proper.

Q. In what way did that spring operate in that manner?

A. Simply because the spring was between the draw bar
4874 proper and the draft attachment.

Q. The word spring implies there was a give in there, which would play back and forth?

A. Yes, sir, it was a cushion.

Q. The effect of that was to give play back and forth?

A. No, sir, the effect of that was to take the rigid shock——

Q. When the draw bar came back, if the draw bar had been against a stationary object, that was solid and immovable, there would have been no cushion and no play there?

A. No, sir.

Q. When it struck that spring, that spring gave way and the draw bar went back farther in the car than it would if the spring had not been there?

A. It went back farther than if the spring had not been there, unless the draw bar had butted up against part of the framing there.

Q. So, unless the draw bar butted up against deadwood or the frame that it works in connection with, there would be a play there, caused by the compression of that spring, when it would strike the spring, the spring would give?

A. There would be a compression of the spring, yes, sir.

Q. That would give play to the draw bar, and have the effect of absorbing the shock?

A. Yes, sir.

Q. Was there a yoke of some sort attached to the rear end of the draw bar, inside of which that spring worked?

4875 A. Certain types, yes, sir.

Q. Was there a plate at the front and rear end of the spring, what you called a follower a moment ago?

A. Yes, sir.

Q. The spring and the follower or plate, at each end of it, worked inside of the yoke?

A. Yes, sir.

Q. That yoke was bolted on the insides of the draw bar, at the back end of the draw bar?

A. Yes, sir.

Q. And when the draw bar was shoved with sufficient force back under the car, it would go against the plate and the plate would go against the spring, and the spring would give, and in that way, it would break the shock, absorb the shock?

A. Yes, sir.

Q. How was the draw bar,—in what way was the draw bar attached to the car?

A. By draft timbers.

Q. Explain those draft timbers; what were the draft timbers?

A. Well, with the link and pin couplers, all we had——

Q. First, what were they attached to?

A. They were attached to what we called the center sills.

Q. Now, if I understand you, the center sills mean this; there are sills that run longitudinally the length of the car?

4876 A. Yes, sir.
Q. And the center sills are the inner sills?
A. Yes, sir.
Q. How far are they apart?
A. In different construction, they differ, from 12 to probably 18 inches.
Q. And these draft sills to which the draw heads were attached, were strapped onto them?
A. Yes.
Q. Did they rest under them or along side of them?
A. Along side of them; sometimes under them, depending on the construction of the car?
Q. It was usual to place them underneath?
A. Usual to put them between them.
Q. They were bolted to what you call the center sill?
A. Yes, sir.
Q. That is the way in which the draw sill——
A. The draw timber.
Q. Were attached to the car?
A. Yes, sir.
Q. How was the drawhead attached to the draw sill, you had to attach it to the draw sill in order to fasten it to the car?
A. Yes, sir, the draw head was attached to the draft timbers.
Q. In what way?
A. By carriers and bolts.
4877 Q. I wish you would use plain words that people who are not familiar with mechanics will understand; I don't know what you mean by carriers.
A. A carrier would be the plate underneath the draw bar, bolted across between the two draft timbers and separating——
Q. Let me see if I understand that; the draw timber is bolted to the center sill?
A. Yes, sir.
Q. The draw head is bolted to that?
A. Yes, sir.
Q. Now, those draft sills are on the sides of the draw head, are they not?
A. Yes, sir, they are on the sides.
Q. So the draw head is bolted through the side of the draft timber, isn't it?
A. Where a yoke coupler is used, where the American Continuous draft rigging is used, it is a different attachment.
Q. What is that?
A. Which one do you want me to explain?
A. I refer to the American.
A. The American Continuous?
A. Yes.
A. The American continuous draft timbers, this key that I had reference to——
Q. Wait a moment; what is that key you spoke of?

A. The key going through the shank of a coupler passes
4878 also through the timbers.

Q. Do you mean a bolt when you say key?

A. No, sir, I just mean a flat piece of iron, about 7/8ths of an inch thick, and 4½ inches wide, by about 24 inches long; that passed latterally through the draw bar, and passing through these draft sills——

Q. Do you mean it passes at the side of the draw bar?

A. Right through the center, centrally through the bar, taking the bar longitudinally.

Q. Do you mean now that the key was inserted in the bar, or was it ar attachment at the side of the bar—I don't understand what you mean?

A. It was an attachment that went through the bar.

Q. Was there an opening through the center part that that attachment worked in?

A. Yes, sir.

Q. How was that key fastened to the draw bar?

A. It wasn't fastened to the draw bar.

Q. How would it retain its connection with it, if it wasn't fastened?

A. Simply because the key passes through the draft timbers and carried with it the bar at its proper heighth, and these keys were tied together at each end of the car, by continuous rods.

Q. What did those rods pass through?

A. They didn't pass through anything; they just tied the two couplers together.

4879 Q. I understand you then, that the one you are describing now, the American, the draw head at each end of the car, at each end of the same car, are connected by this rod you spoke of?

A. By the two rods.

Q. Are those rods connected with the solid casting of the draw bar, or with the yoke in which the spring works, in other words, I want to know if it is yoked in any way with the spring of which you spoke awhile ago?

A. No, sir, those rods are just connected to the key that passes through the shank of the draw bar.

Q. Those rods connect the two drawheads of a car and run longitudinally from one end of the car to the other.

A. Yes, sir, that is from one draw bar to the other.

Q. How are they fastened to the car, those rods you speak of?

A. They are not fastened to the car.

Q. They are under the car?

A. Yes, sir, they are carried by being attached to these keys, pass through what we call needle beams.

Q. Will you explain how this spring or cushion works in connection with those rods you speak of, in that type—how this cushion or spring works in the type of drawhead you have been describing?

A. I just don't catch the question.

Q. You stated awhile ago, that connected with the draw-
4880 head, and back of them, as I understand, was a cushion, that would absorb the shock?

A. Yes, sir.

Q. Now, in what way, did they operate in connection with the type of drawhead you have been describing?

A. The yoke running at the rear end of the draw bar, the end that is under the car, had two springs, coil springs with a follower in the center—that is, between the two—that follower——

Q. You mean by that, a plate?

A. Yes, sir. That check went down between two check plates that was bolted to the draft rigging, and there was a recess in those cheek plates that the follower slipped down in, and when the spring transmitted the shock to these cheek plates and the cheek plates to the draft timbers, and from the draft timbers to the center of the car——

Q. What was the purpose of those rods connecting the two draw heads?

A. I never believed that they served the purpose that the inventor of them believed that they would. It was his intention and it was expected by a great many mechanical men in the early days, that the type of draft rigging—that there would be a continuous tension from the forward end of the train to the rear end, without any strain on the structure; that is, the structure of the car, like as though it was one chain from one end to the other, but
4881 it didn't work out that way.

Q. Those rods, as I understand you, connected the drawheads at each end of the car?

A. Yes, sir.

Q. What effect did they have in the stability of the drawhead, preventing it from pulling out?

A. If you broke a key in one end, your other end was just as bad off.

Q. But before you could pull a draw head out of that type, the rods and key would have to break?

A. Or a rod break.

Q. Or the rod you speak of?

A. Yes, sir, and it would leave the entire pull on the small bolts that bolted the cheek plate to the draft timber.

Q. In other words, as long as the rods remained intact, in order to pull the drawhead out, at one end, you would have to disturb it at the other end of the car?

A. Yes, sir.

Q. There is another type of drawhead, wasn't there, which was attached to a draw sill that was at the side, and that was bolted there,—a wooden draw sill at the side of it?

A. Yes, sir.

Q. Is there any name for that?

A. Well, there was several types of those; I don't know just which one you have reference to.

Q. Take the one that was in use on the Iron Mountain
4882 road and describe that?

A. There was several in use at that time.

Q. Describe one that would represent them in a general way?

A. The Butler draft rigging, and the Minor draft rigging, they were all used in connection with the link and pin coupler.

Q. They were attached to a draft sill, which was strapped or bolted underneath the center sill on either side of the draw bar?

A. Yes, sir.

Q. And the draw bar was bolted, fastened by a bolt, attached by a bolt to that draft sill?

A. Running down through the center sills, and the draft sills, where they were bolted underneath the center sills.

Q. Now, there was on the inner side of the draft sill, a casting between that and the drawheads?

A. In some cases.

Q. And the draw head was bolted on that through the wood and the casting?

A. Yes, sir.

Q. Then the drawhead itself would work back against this plate or follower and then the plate would come in contact with this spring you speak of, and at the opposite end there was also a plate or follower?

A. Yes, sir.

Q. And the yoke which includes the spring, was bolted
4883 onto the casting or solid part of the draw bar?

A. Yes, sir, the shank of the draw bar.

Q. All those types, you say were used on the Iron Mountain while you were there?

A. Yes, sir.

Q. When did the automatic coupler or what you call the vertical plane coupler come into use, when did it began to come into use?

A. There was types of them introduced as far back as about—as near as I can recall, about 1888, but they were not perfected, so that they were interchangeable, and could not be applied indiscriminately on all roads until about 1894 or 1895—I am not positive about those dates for the reason that the automatic or vertical plane coupler could not be used on all heights of cars; that is, where the center height*h* of the draw bar was not the same from the rail or practically the same,—like you could with the link and pin.

Q. That would prevent it being used interchangeably.

A. Yes, sir, and they would become uncoupled in movement; I might ask Mr. Rosing to refresh my memory—what year did the Master Mechanics and Master Car Builders Association adopt a maximum and minimum heighth for center draw bars,—and explaining that, it was necessary to do that before the Interstate Commerce Commission could enforce the application of them with safety.

Q. I see the point you make; not being the same height
4884 they could not be worked together?

A. They would slip by each other.

Mr. Hill: My recollection of that act provided that this Safety Appliance Act provided that these appliances should be put in according to the regulations of this Car Builders Association.

Mr. ROSING: There was always a standard height*h* of draw bar for link and pin coupler, back as far as I can recall,—33½ inches was the old standard for freight cars, for the last 45 years, and then when the Master Car Builders' coupler came into use, which was to interchange with all classes of equipment, of all railroads of the United States and Canada,—that came into effect in 1893, giving a certain length of time to make the change; the standard height*h* was laid at 34½ minimum empty and 31½ maximum loaded; there was a variation then and there is a variation allowed today; I think that was about the time the Safety Appliance Act was passed or the application of automatic couplers was made.

Mr. ROBERTS: I think perhaps it was adopted at the convention at Saratoga.

Mr. MOORE:

Q. What was the object of requiring that uniformity of height*h*?

4885 A. The object of requiring uniformity of heighth was to obviate the difficulty of cars becoming uncoupled in transit, through the irregularity of the track, one car raising up a little and one going down, they would slip.

Q. After this regulation had been complied with, did it become so you could use the two interchangeably, the vertical and the link and pin?

A. No, sir, they were never interchangeable.

Q. Go ahead now.

A. I have got away off.

Q. I will bring your attention to it then; the question I asked you was when they came into use, and that is what you are attempting to describe?

A. They didn't come into general use—they were not perfected unttil about 1891 or 2.

Q. You spoke in your statement awhile ago, about their being used interchangeably, what do you mean by that?

A. If I did, it must have been in error; they could not be used interchangeably with link and pin couplers.

Q. I understood the link and pin coupler—what do you mean by that reference—that was your language?

A. I don't know.

Q. I suppose what you meant was that the draw heads were used interchangeably with the old draw heads; that is, you would take one of the automatics, a draw head with an automatic on it

4886 and substitute that for a link and pin draw head, but you would have to do that on both cars?

A. When the first vertical plane coupler was made, so it could be used in connection with link and pin couplers, it had a link slot in it, and with the pin hole.

Q. What was the purpose of that?

A. That was so they could use them in connection with the link and pin coupler, simply because it was an almost impossible thing to do, to change out all the link and pin couplers.

Q. Do you mean by that, so they could connect a coupler,—link and pin coupler, with one of the automatic couplers?

A. Yes, sir.

Q. That is perhaps what you meant when you spoke about using them interchangeably in connection and together that way?

A. I don't remember having that thought in view.

Q. That was a fact at any rate?

A. Yes, sir, I guess about 1897——

Q. Was it practicable to work them together that way?

A. Yes, sir, of course, it didn't fully comply with the Safety Appliance Law.

Q. I am speaking of practical railroad operation, what time did you say they began to come into general use?

4887 A. About 1893 or 4.

Q. Were any other changes made in draw bars besides that at the end of it?

A. In some cases,—not necessarily; the shanks were made to replace the M. C. B.—Master Carbuilder's—interchangeable coupler.

Q. Was it practical to convert the link and pin coupler into an automatic?

A. Yes, sir.

Q. Where did the difference occur between the old draw-bar link and pin and the draw bar that had the automatic coupler?

A. The difference was largely—practically all the difference excepting re-enforcing and improving of the draft rigging, is in the head of the coupler.

Q. To convert it from link and pin into the device that would work automatically?

A. Yes, sir.

Q. Was there any difference in the shank of the draw bar?

A. Not necessarily.

Q. Did the automatic type have the cushion behind it also?

A. Yes.

Q. And have the spring and yoke just as you have described it in the other type?

A. Many of them did, and many of them had what they called the twin or tandem spring; thus, for your information I

4888 would state,—this safety device, especially the vertical plane coupler, brought about wonderful changes in our draft gear.

Q. How were the draw bars attached to the draw sills—I mean in connection with the automatic coupler.

A. We didn't change the draft sills if they were in good condition; if all other draft attachments were in good condition, our draw bars were made to suit our equipment.

Q. And you bolted them through as you did the others?

A. Yes, sir.

Q. Were the connecting roads used with the draw bars that had the automatic couplers as with the link and pin?

A. I don't think they were with the Iron Mountain, but I did find them on the Kansas City Southern; the American Continuous Rod used in connection with the automatic coupler.

Q. The draw bar of the automatic coupler then consisted as I understand you, of the devices in the front, which constituted the coupler, then it ran back,—a casting at the shank—it was attached to a yoke, inside of which was a spring together with the front and rear plates, as you described it awhile ago, that is what the draw bar consisted of, wasn't it?

A. The only part of the draw bar that is in the automatic, it is either malleable iron or steel.

Q. It is a solid piece from the front where the link and
4889 pin or device for automatic coupling is, to and including the end you call the shank?

A. Yes, sir, excepting the hook, the knuckle that is attached with a pin, that is what makes the automatic connection, instead of the link and pin, that hook goes around.

Q. What I asked you is, if the part was the same as it was with the link and pin, except the changes made in the front end of it?

A. The shank is made the same as the link and pin, the master car builder's coupler.

Q. Then you say it was attached, in the Iron Mountain equipment here, attached to the draw sill or to the same timbers?

A. Yes, sir, attached very similar.

Q. Is that a complete description of both types of draw head?

A. I hardly — how *how* to answer that question; I think it is a very crude description; I could describe it better if you would let me take a pencil and a piece of paper, simply because if Mr. Rosing will put the questions, I will describe it because he is a mechanic and will describe how to put them; I would make a very poor job examining Judge Moore on the law.

Q. Any crudeness there is in it is owing to my ignorance of the subject.

A. I am trying to explain so you will understand it.

Q. What are the contributing causes to that part of the
4890 expense of car maintenance, which is chargeable to starting and stopping?

A. Is it your idea to separate the two; what is the causes of damage from stopping, and the causes of damage in starting—they are different.

Q. State them separately, if they are?

A. The greatest difference caused by stopping the train to the vehicle, with our power brake, is the brake shoes, wheels and brake attachments, such as levers, and pins, and the car brasses.

In starting a train, all those parts are at rest practically; there will be your draft rigging in starting,—all draft attachments, and the body bolsters, their center pin connections, the truck, etc.

Those are the principal parts damaged in those two operations, but they are not similar; the parts affected in stopping are not the parts affected in starting.

Q. You spoke of center pins, what do you refer to?

A. That is where the car body bolster—there is two body bolsters in the car and two truck bolsters; the center of the body bolser sets down on the truck bolsters; there is where they get their greatest

thrust, unless they get off the track—is in starting, simply because there is where the car body has to move the truck.

4891 Q. Which contributes more largely to the cost of maintenance,—starting or stopping?

A. Maintenance of equipment?

Q. Yes?

A. Starting.

Q. Why is that so?

A. Simply because it throws the stress or tension on the entire draft rigging, and parts connected to it, which in the stopping is absolutely released.

Q. To what extent is that strain that you speak of affected by the weight of the loads, the cars?

A. That is increased very materially. I had made or joined in making some tests of that nature, Col. Moore, but the data escapes me now.

Q. Just state in a general way?

A. To make it intelligible, I would not undertake to express an opinion of what ratio of increase of expense would be attached to the increased tonnage.

Q. Is it negligible or considerable?

A. Where the variance in increase of tonnage of train is concerned, it is considerable, between the minimum and maximum,—very considerable; as I stated in my examination yesterday, each individual vehicle in the train has to take their proportion of the damages that applies to stopping; in starting, it is not the case.

Q. In the damage in starting, the damage grows fundamentally out of the strain produced by the great weight that is necessary to be moved.

4892 A. Yes, sir.

Q. And I take it from what you said just now, as that weight is increased the strain would increase proportionately?

A. Yes, sir.

Q. Take a train of ten cars, each car weighing 20 tons and put it opposite a train of the same number of cars, each car weighing sixty tons—that may be extreme but it illustrates what I want; I suppose that the strain and the injury from starting, liable to accrue in the two cases, would be very much larger in the train that was made of cars weighing 60 tons than the cars weighing 20 tons?

A. That would depend largely on the construction of the car; if the 20 ton car—if that was its mazimum capacity.

Q. I am just talking about the car itself; leaving out all loading; I don't give that as the correct weights of the cars; I give it to illustrate.

Mr. HILL: Go ahead and complete your answer.

A. Ten cars of 20 tons each.

Q. And 10 cars of 60 tons each; I mean the cars themselves weighing that.

A. I don't think there would be very much damage in either case in starting those.

4893 Q. Whether it is much or little, I want to get whether it would be relatively to the weight?

A. To what,—to the cars?

Q. Yes?

A. It would not be any greater damage to start a sixty ton car than a twenty ton car.

Q. Wouldn't it require a greater force in motive power, in the power that starts it, to start a train weighing a thousand tons than it would require to start a train weighing one hundred tons?

A. But where you are speaking of the car and the car weighing sixty ton, that is built in proportion, and it won't suffer from being started, any more than the car that only weighs 20 ton.

Q. You don't understand the point of my question; the question I asked you is this; what is the effect of increasing the weight of the car or car's contents—of increasing the weight of the car, upon the strain involved in starting it?

A. It requires greater effort.

Q. And doesn't that greater effort produce a greater strain on the car?

A. It produces a greater strain on the car, but where there is that difference between the weight of cars, and if the car is built to stand that increased strain, and simply because a twenty ton and sixty ton car are stopped, there is a factor of safety in each case,—a

4894 sixty ton car won't be damaged any more in starting than a twenty ton car.

Q. What is the initial—the original cause of strain that is put upon the several cars embraced in the train,—what causes or brings about the strain put upon cars in starting?

A. The effort required to start the load.

Q. What represents that effort?

A. The locomotive.

Q. That is the visible representation of the effort?

A. Yes, sir.

Q. What effect would the differences in the power necessary to be exerted between moving a light and a heavy load, have upon the strain that is put upon the cars?

A. Well, there would be a difference, but what the ratio would be, I couldn't tell you off-hand.

Q. In point of fact, it is true, isn't it, that the strain and resulting damage, if you confine it to damage—to cars from starting, depends in its ultimate analysis upon the amount of force that is employed in moving it?

A. Not entirely, no, sir.

Q. I didn't say entirely; that is one of the elemental properties that enters into it?

A. Yes, sir.

Q. Isn't it the largest element?

A. No sir.

4895 Q. What is it that is more important?

A. The abuses it is subjected to.

Q. What do you mean by abuses?

A. I mean by abuses, rough handling, and irregularity in the track.

Q. Assume that it is handled properly, and the track is properly constructed, isn't the initial force exerted in moving an object, any standing object, the primary cause of the strain, and the largest element of strain that is put upon it?

A. Yes, sir.

Q. What I mean is that; if you have a train of cars—say 20 cars, loaded to their capacity, and in front of those cars you have an engine with a given tractive power,—you have another train made up precisely in the same way, the same cars, and same weight, and upon a track exactly similar, with in front of it another engine, with double the tractive power of the one I first mentioned, which would make the greatest strain in moving that train, the engine with the lighter or greater tractive power.

A. Same train, same weight?

Q. Yes?

A. I cannot see that there should be any difference.

Q. Why not?

A. Simply because it is not necessary for the engine because it has the power, to exert it.

4896 Q. Suppose the power is exerted?

A. I cannot see that.

Q. It may seem not reasonable to you?

A. It is impracticable.

Q. You have one train that requires a given tractive power to move it?

A. Yes, sir.

Q. And you have another train with precisely the same conditions, as far as track is concerned, which requires three times the tractive power to move it, and therefore, an engine to exert three times the tractive power of the one I mentioned, which one will put the more strain on the cars to move it?

A. The one that has three times the tractive power, that requires three times the tractive power to move it.

Q. What is the ratio of difference between them?

A. I don't know what the ratio is.

Q. Take the two cases I cited to illustrate; one train that can be moved with a tractive power which we will call one and another train that will require tractive power which we will call three; what I ask you is, which will put the greater strain upon the cars in the train #1 or 3?

A. Number 3.

Q. Why.

A. Because it requires it to move it.

4897 Q. And that additional exertion of force will necessarily put a larger or greater strain upon every part of the object which is resisting the movement?

A. Every part that is brought into use, as a part of the draft rigging and attachments, yes, sir.

Q. Of course, there is the necessity for the power; that is exerted

in moving any standing body, which is the resistance that that body itself affords; the greater the resistance, the greater the power necessary to be exerted in order to overcome it?

A. Yes, sir.

Q. And the strain increases correspondingly upon those parts that make or exert the resistance?

A. Yes, sir.

Q. And the strain or its effect will be proportionate to the increased tractive power necessary?

A. The strain will, yes, sir.

Q. Now, we'll take up the next element—you have spoken of starting, now the next element is stopping; express your views on that question; I asked you how the damage is produced and you have taken up starting and you referred to that, giving how the damage is produced on that.

A. The parts generally that receive wear and tear and damage in stopping—I do not call that damage but cost to maintain, as a result of stops.

Q. I am speaking of cost of maintenance as a result of stopping.

4897½ A. Brake shoes and wheels and brasses and brake rigging, levers and pins.

Q. Take those up in detail and explain how the damage is sustained on each one, say the brakes?

A. I don't know what you want me to say.

Q. I want you to tell me how the brasses are affected by the stopping of the train of cars.

A. The brakes being applied on the outside of the wheels, or on the inside, whichever the case may be, when the pressure comes against the wheels, it changes the position of the journal in the bearing entirely, simply because if you have an inside brake, you will press both wheels out, just like driving a wedge in between them, and if it is an outside brake, you are pulling the wheels together, which is not their normal condition when the car is either standing or moving, without the brake set.

Q. Is that increased or diminished by the momentum or weight of the object to be stopped?

A. Yes, sir, to some extent; I would give it as my opinion that it was increased.

Q. By both?

A. By the greater weight of the car, and the greater speed.

Q. The brakes now, how are they affected?

A. The contact of the brake shoe and the wheels, the wheel
4898 and the brake shoes both wear, as a result of the brake shoe being in contact with the wheel in stopping the train; that is what wears the brake shoes out, and of course, the pressure being transmitted to the wheel, through the brake shoe, from the brake lever, and from the brake beam, naturally throws the shearing strain on the parts.

Q. Do you mean that that is a factor in that way?

A. In the stopping, yes, sir.

Q. Does that effect increase or diminish by the momentum and weight of the body to be stopped?

A. Yes, sir, the wear is increased by the high velocity which the train is moving, and the greater weight when the brakes is applied.

Q. What effect does the slack, what you call slack in the train, have upon the force necessary to be exerted in starting a train?

A. Well, it has a helpful effect to the head end, but a very damaging effect to the hind end.

Q. Explain that now.

A. If there was no slack in a train of 40 cars containing 1200 tons, with a locomotive attached to it, it would be almost impossible to get a locomotive of sufficient power to start those 1200 tons without some slack.

Q. That is what I want you to explain to me, how the slack helps it?

A. The slack assists the locomotive in starting the train, and a small amount of slack, I don't think is a damage to the train,
4899 but excessive slack, that was the result of the link and pin coupler, contributed very largely to the damage and wrecks.

Q. Explain to me how it did, in what way it contributed to it?

A. You take a cord and lap it between your fingers and you haven't enough strength between your two arms to break it—you take a cord that has a maximum strength to resist all the power you have in your two arms—but you take it and give it a quick jerk, and it will break; that is my illustration.

Q. I thought you said the slack paid out gradually and avoided that jerk?

A. No, if I did—I say the slack helps the locomotive.

Q. Isn't it this; isn't the greater injury which you say accrues, to the more remote cars from the engine, the result of increase of force that bears on it by reason of the momentum and velocity of the cars before it, in connection with the power of the engine?

A. I don't understand that question.

Q. What I mean is this: You exert the power necessary in your engine to start the cars next to it; those cars gain a velocity; then directly they gain a little more momentum, and that power is added to the power of the engine, and as you go back, there is a larger power produced upon the rear cars than the front, isn't that what produces it?

A. No, sir.

4900 Q. What is it?

A. If you have slack and slack extends all the way to the rear of your train, your locomotive perhaps has not power—the slack between the locomotive and the first car is not sufficient to pull the locomotive away from that car, but as she starts four or five, the slack increases, and as you go back a number of cars from the engine, you have the weight of the locomotive and all those cars on the others behind that slack, that has already increased, and that is just what I illustrated by the piece of string.

Q. That is just exactly what I submitted to you a minute ago; that is precisely the illustration I gave you.

A. But you have no slack with the vertical pin coupler.

Q. I am not talking about that; I am talking about slack; what kind of force would be required to move a train of 50 cars, that had no slack—50 loaded freight cars, that had no slack?

A. On level track?

Q. Just the ordinary track.

A. That is a mathematical question that is unfair to ask, unless you will give me time.

Q. I don't mean for you to answer it in figures; I mean, a greater or medium or low?

A. I don't know; I have pulled 110 cars with a locomotive 19x24, ten wheel engine, only carrying 160 pounds of steam, stop-
4901 ping and starting.

Q. The point I want to get at is this, whether a smaller tractive power would move a train where there is slack and where it pays out gradually from one car to another, than would be required if it was all made up with cars without slack?

A. It is possible to move more cars with the same engine or a greater tonnage, made up of a number of cars that has slack, than it is if the tension is tight up between them.

Q. I understood you to say awhile ago, if I misunderstood you, you can correct me, that assuming you wanted to move a train of 1200 tons on tension, without any slack you could hardly imagine the power that would be required in an engine to do it?

A. Yes, sir.

Q. Did I understand you correctly?

A. No, sir, I asked you, could you imagine it?

Q. What do you mean by that; didn't you mean it would be a difficult thing to do?

A. No, sir, because it is done every day, I expect, because the heavy tonnage trains with large tractive force in the engines, the question of slack is one that assists the engineer, but it is very injurious to the railroad company sometimes.

Q. In order to clear up any misunderstanding there is between us, would it require more power to move a given number of
4902 of cars in a train where there is no or very small amount of slack, than if it would with a larger quantity of slack?

A. To start them, yes, sir.

Q. Would it be practicable for you to give me an idea as to your view as to what the ratio of power would be, in such a case?

A. I couldn't do that; wouldn't attempt to do it, without a thorough test to get the draw bar pull.

Q. Are there any tables to cover that?

A. No, sir, but it could be ascertained by the use of the dynamometer car; those draw bar pulls, under different conditions are worked out accurately by an instrument made for that purpose.

Q. There is no fastening or attachment between the draw bars where you use the automatic couplers, such as there was with the link and pin?

A. Not to my knowledge, only as the connection is made between the center sill or draft sills.

Q. At the point where they couple together, at the point where the draw heads couple together, there is no connection——

A. No, sir, only the friction.

Q. If a draw bar is pulled out, one of the draw bars pulls out, it necessarily invariably falls on the track in the automatic draw bar?

A. They might if the yoke broke; there is a yoke or

4903 carrier that runs underneath the draw bar, just behind the coupler head proper, that carries the weight; if the shank broke off, it could slip over that yoke, but if the spring yoke was on the end of the shank, it could not.

Q. What I want to bring to your attention is this; when a draw bar pulls out, with the automatic coupler, it is more liable to pull out and fall on the track than the link and pin coupler?

A. No indeed.

Q. Isn't the link and pin coupler attached together; even if one of the ends should draw out, does not the link with pins hold them together?

A. They do sometimes, but they break.

Q. They do sometimes; it cannot possibly ever occur that way with the automatic coupler?

A. No hardly; I wouldn't think it could.

Q. What I mean is this; if a part that is entirely detached from another part breaks off, it cannot be held up by the other part?

A. No, sir.

Q. That is exactly the condition when one of the ends of a draw bar in the automatic coupler breaks?

A. I never recall of seeing an automatic draw bar pull out, but I have seen them broken off; the head broken off in the neck and fall down on the track.

Q. Hasn't there been very many devices patented to pre-

4904 vent vertical coupler devices falling down on the track when they break?

A. Not to my knowledge.

Q. You don't know that is a fact?

A. No, sir.

Q. You spoke yesterday about the increase in size of the cars, what has been the average increase in size of cars, what had it been up to within ten years, during the ten years before you quit railroading in 1904?

A. Their carrying capacity had been doubled, I will say, judge. Ten years before I quit railroading, a sixty thousand capacity car was considered practically the maximum—when I quit railroading, it was no uncommon thing,—in fact, I guess the greatest bulk of new freight equipment that orders was placed for, were specified a hundred thousand; probably in box car construction, eighty thousand.

Q. Forty to fifty tons?

A. Yes, sir, one hundred thousand gives a miximum loading of one hundred and ten thousand.

Q. The maximum loading ten years before that, would have been about sixty thousand or thirty tons?

A. When?
Q. I understand you to say ten years before?
A. Yes.
Q. There was an increase from six to ten?
A. Yes, sir.
4905 Q. That would be 3/5ths, I believe, in capacity?
A. Yes, sir.
Q. What increase in weight of the car was represented by that?
A. As a rule, in as great a ratio as the increase of the car capacity. The efforts of the designers of the Mechanical department was to design a car that required as little dead load as possible; the ratio of deed load as compared with the revenue tonnage was reduced, to the lowest possible limit; a sixty thousand capacity car, built about 1894, of course the type of cars, the weights would vary differently; that is, a gondola car,—coal car—would be very different from a box car that is the same capacity; a sixty thousand capacity box car would weigh about from 26,000 to 31,000.
Q. 26 to 31, you say?
A. They would run from 26 to 31. Metal construction has entered into that a great deal; a hundred thousand capacity car, of course, the dimensions would affect the weight considerably, 40 foot long, would weigh about from 38,000 to 42,000.
Q. That was an increase then of from 26 to 38 and 31 to what?
A. From 37,500 to 42,000. However, I think my friend Rosing will be able to give you more specific data in that direction
4906 than I can.
Q. What changes have been made in the construction and tractive power of engines, to enable them to pull those largely increased weights that are carried in cars having a capacity of 50 tons.
A. The tractive power of locomotives of general design, high steam pressure, has necessitated that, the weight be economized as far as possible, to save the structures; the tractive power of locomotives has been increased in about the same ratio or perhaps even greater ratio. While I wouldn't assume to be exact on that, simply because I have been away from those things for six years——
Q. I am speaking about the time you went out of the service?
A. Yes, but I have not been thinking about those things.
Q. I want to get at your idea about how the ratio of increase in tractive power of engines, compares with the ratio of increase in capacity of car?
A. Well, giving the people in charge of the mechanical departments on different railroads in the country—I would give them credit for exercising the proper judgment and increasing the tractive power to take care of the increased tonnage they were expected to handle.
Q. If the increased capacity of cars exceeded, as you said
4907 awhile ago, and was in larger ratio than the increase——
A. Not the increase of weight of the car proper.
Q. It would require—a larger ratio of increase in the engine than there would be required in the weight of the car, wouldn't it; I

mean, in the tractive power of the engine than in the weight of the car?

A. No, sir, I don't see any connection between the two.

Q. The engine has got to pull a given load, the load has nothing to do with the weight of the car, except as it adds to the total weight of the car and its contents?

A. Yes, sir.

Q. If you increase the weight of the car, we will say, 5%, and thereby increase its capacity 10%, you will have increased the weight of the car and its contents in a greater ratio than you have of the weight of the car alone; the engine has to pull them both, and what I want to ask you is, if it wouldn't require a larger ratable increase.

A. I cannot see where that applies, if you would call it all car load and all, what would be the difference.

Q. The difference that occurs to me is this; you might have a load that one horse can pull; you might have a load too large for one horse and it takes two—when you get a load that is too large
4908 for one, you *you* add another,—as you increase your load, you have got to increase your power to move it, as you increase the load of your cars?

A. The load of the train, but the load of the individual car you are speaking of, is two different propositions.

Q. I speak now of a train composed of cars?

A. The weight of the equipment is taken in consideration when they are loading the locomotive.

Q. Take two trains, one of which weighs 1200 tons, and the other one weighs 600 tons, which will require the largest tractive power to move it?

A. The one weighing 1200 tons will require the greatest amount of power exerted.

Q. If you increase the capacity of the cars, and don't increase their weight in proportion, you have got to increase the tractive power of the engine to cover both increases, haven't you?

A. No, sir, you don't have to increase the tractive power of your engine; you just cut a car off. I cannot understand where the connection comes between the car—it is my ignorance perhaps—where the connection comes between the individual car and the locomotive or the construction of either.

Q. I imagine that locomotives are constructed and changes in the construction of locomotives, are for the purpose of increasing their capacity; that is for the same reason as in cars—that is
4909 to pull the largest amount of cars that can be pulled by an engine?

A. The largest amount of paying tonnage.

Q. That is why you increase the capacity of the car; the question I asked you—you stated awhile ago, that where the capacity of the car is increased from 60 to 100 tons, the proportion is not preserved in connection with the weight of the car?

A. Yes, sir, the carrying capacity.

Q. I say you built an engine to carry just the number of loads

of that kind that is practical to operate an engine in front of, in order to do that, you have got to adjust the tractive power of your engine to the loads it hauls; if the tonnage is increased in a larger ratio than the weight of the car, isn't the power of the engine increased in a larger ratio than the weight of the car—of the several cars that make up the train?

A. I cannot see the connection.

Q. I will put the question another way; if the capacity of a car is increased and the weight of the car is not increased in proportion to its capacity, wouldn't it be necessary to increase the power of the engine in greater proportion than the increase in weight of the car?

A. I didn't mean to say that the capacity of the cars were increased in greater proportion than the weight of the
4910 car.

Q. That is what you said?

A. Well, yes, sir, I said it, but I want you to understand, and then I will answer your question—I won't attempt that now.

Mr. HILL: Go ahead and make your explanation.

A. My friend Rosing is trying to get Col. Moore to trip me; Mr. Rosing knows that he has staid up nights figuring on how to construct a car to increase her carrying capacity without increasing the dead weight of that car at the same ratio as he did the carrying capacity; that is what railroads sometimes keep people to do.

Now, in answer to Judge Moore's question here, it is necessary to increase the tractive power of a locomotive, just because they have increased the carrying capacity of a freight car,—I yet cannot see any connection whatever.

Mr. HILL: Let me ask one question there; are you speaking of that from a maintenance standpoint or from the operating standpoint?

A. From the standpoint of the best interests of the railroad company in every particular, both in first cost of maintenance and earning capacity. That aint the way they done on the Illinois Central though.

4911 Mr. MOORE:

Q. Were the 12 wheel engines in use on the Iron Mountain when you quit service?

A. Yes, sir, nearly all our freight engines were 12 wheels in two types,—ten wheel engines with six drivers——

Q. How did the power of those engines compare with the power of the engines used in 1890?

A. On this division, in 1890, when I came here as master mechanic, they had no—did you ask me 12 wheel locomotives or ten?

Q. 12 wheels?

A. I am in error, we had no 12 wheel locomotives.

Q. At what date do you speak of?

A. At no time during my connection——

Q. Were the 12 wheel locomotives in use at the time you quit?
A. No, sir.
Q. Were you acquainted with the 12 wheel locomotive?
A. No, sir, not in a practical way.
Q. You don't know their capacity?
A. No, sir.
Q. Did they have ten wheel locomotives?
A. Yes, sir, ten wheel consolidation type, eight driving wheels and one pair of pony trucks, and another type with six drivers and four wheel trucks.

4912 Q. When did you begin railroading?
A. In 1873.

Q. How did the engines you mentioned in your last answer, compare in power and capacity with those in use when you begin railroading?
A. They were about 30 years ahead of the west; in 1874, I was messenger on two locomotives that went to Renova, Penn., that were the same type of locomotives they are buying—I see new engines come in on the Iron Mountain now,—except they are larger now; they were the consolidation type, four driving wheels, and one pair of pony trucks.
Q. Is the air brake which you referred to awhile ago, applied on one or both trucks of a car?
A. Good practice is to apply it to all wheels.
Q. How was it with the old hand brake?
A. The old hand brakes, some had single and some double brakes; sometimes one applied to one truck, and sometimes,—depending largely on whose road the cars belonged on.
Q. How was it with the Iron Mountain?
A. The Iron Mountain cars—their owned cars, were nearly all equipped with what we called the double brake, the brake connected with both trucks.
Q. I believe all freight trains now are equipped with air brakes, that is the universal practice on large roads?

4913 A. Yes, sir, I believe so.
Q. This brake attachment, these brakes are attached to each car in the train, are they not?
A. Yes, sir.
Q. Will you state how many parts of machinery, the air brake on each car consists of?
A. Two air brakes, hose and couplings, consisting of 16 parts; two angle cocks, consisting of 16 parts; one train pipe, consisting of two parts; one strainer, consisting of five parts; one cut out cock, consisting of five parts; one triple valve, consisting of 34 parts; one air reservoir and brake cylinder, consisting of 16 parts. One retaining valve, consisting of 7 parts; one release valve on reservoir, consisting of 6 parts; one branch pipe, consisting of two parts; 4 clamps to secure train pipe, consisting of 8 parts; one pipe from triple release to retainer, 2 parts; one release pipe union, consisting of 3 parts; total 122 parts.

Q. Does the sheet I hand you contain a cut of the triple valve?
A. Yes, sir.

4914 (Here follows cut marked p. 4914, omitted in printing.)

Mr MOORE: It is agreed that copies of cut referred to in the last question and answer, will be furnished the clerk to be used
4915 in making up the transcript, if it should be necessary to prepare a record for appeal in this case, and that the duplicate copies may be used in the record.

Q. This brake is for the purpose of conducting and applying compressed air, is it not?
A. Yes, sir.
Q. Do the parts necessarily have to be made and maintained air tight?
A. Yes, sir.
Q. And all those parts you have mentioned are attached to a car—that is every freight car?
A. Yes, sir.
Q. All those parts perform a service every time the brakes are set to make a stop, do they not?
A. Yes, sir.
Q. This air brake has all been added to the cars since the day that Mr. Wellington wrote his book in 1877?
A. The automatic.
Q. I speak of this device I have called your attention to?
A. Straight air was used before, but it was not applied to freight equipment.
Q. These appliances I have called your attention to, have been added to freight cars since that time?

A. Yes, sir, all air equipment,—has been added within
4916 the last twenty years I guess.

Q. Have you ever read Mr. Wellington's book, are you familiar with it?
A. Yes, sir, but it has been several years since I read it, not having any occasion to.
Q. You spoke of contributory damage, on account of drawing out of drawbars, and that you had known severe and expensive freight wrecks as a result; you are referring to freight wreck damage?
A. Yes, sir.
Q. What is the wheel base of the large freight cars now?
A. Do you mean the total wheel base, or the wheel base of the truck?
Q. The total wheel base?
A. I don't know now.
Q. Didn't you state yesterday the trucks were about 25 feet apart?
A. From center to center, I said practically.
Q. The wheel base would be counted from center to the outer wheel?
A. Yes, sir.
Q. That would make it about 32½ feet.

A. I don't know what the centers are—33 inch wheel, the truck oughtn't to be more than 5 foot six and the centers,——

Q. That would be 30½?

4917 A. Yes, sir.

Q. What is the wheel base of the engine, the driving wheels of the engine?

A. The total or driving wheel?

Q. Driving wheel.

A. The consolidation engine, the driving wheel engine base is about 13 feet six, or 13 feet; it depends upon the diameter of the wheel.

Q. You stated in your examination in chief, that a locomotive is derailed, excepting the tender, less than any vehicle in the train, owing to its being counter-balanced and the weight equalized; now in view of the wheel base that you have given of the car, as compared with that of the engine, can you say that the weight is as well equalized on the engine as it is on the car?

A. Did I state it in that way?

Q. Here is your testimony.

A. It is in there, but not in the way I understood you to read it; the "locomotive is derailed, excepting the tender, less than any vehicle in the train, and owing to a locomotive being counter-balanced, the weight equalized, so that it can transfer from one wheel to the other, to take care of the irregularity of the track, which is not the case with a freight car, load- *it* with—I

4918 didn't say that was the reason it was derailed less, I just made the statement that it was derailed less than any other vehicle in the train.

Q. Is it a fact that the weight is equalized, in view of your statement of the relative wheel base of a car and engine, as well on the engine as it is on the car?

A. That is misleading. The weight of a locomotive is better equalized on its wheels than it can possibly be on a freight car; there is nothing said about the distribution in that.

Q. What is the distribution then?

A. The distribution on the track or on the structure, a given length of track has to maintain a greater load under a locomotive than it does under a freight car, but owing to the system of equalizers, and springs, the wheels compensate themselves; the load don't shift, but the wheels shift; the wheel will come up and the locomotive won't come up; if the freight car wheel goes in a hole, the car goes in a hole.

Q. Is the car without any springs at all?

A. No, sir, it has springs too but no equalizers.

Q. What is the equalizer?

A. It is that, that transmits the depression from one point to another.

Q. Describe it to me?

4919 A. That represents the three wheels of a locomotive on one side; there is a spring on top of the box; those are equalizers running from one spring to the other; these saddles running

down through the spring to the driving box, which rests on the wheel; when the wheel goes in a hole, this spring goes down, but the locomotive don't go down, simply because these two holds it up. I have seen those in that position, but your locomotive is standing level, simply because the locomotive is swung on a spring,—that is, on these equalizers; the car construction is altogether different; the car sets on a four wheel truck, on a bolster that has springs, and they have no connection with the wheels at all; the springs are nothing only compression springs.

Q. A very much large- number of cars, of course, are used in freight service than engines?

A. Yes, sir.

Q. Do you say that more cars are derailed in proportion to the number of cars used, than engines in proportion to the number of engines used?

A. Yes, sir.

Q. You stated yesterday, in the same connection, that "Take a one hundred thousand capacity freight car, load it with one hundred and ten thousand pounds of lading, weighing about 140,000 pounds of itself; it has eight points in contact on the rail, distributed from one center to the other."

You meant to state there, didn't you, that the car and
4920 contents weigh 140,000 lbs.?

A. That is what was contemplated.

Q. So the weight of that car and its contents is 140,000 lbs.?

A. Yes, sir.

Q. Now, that is a modern car you are talking about?

A. Yes, sir.

Q. What would be the weight of the old type of car and its capacity, before their capacity was increased and its contents according to its maximum capacity; I want to get the increase of the weight of the car and its load?

A. A 60,000 capacity car, as I stated,—box car, and gondola cars vary, there is a difference between the dead weight of the car for a given capacity.

Q. Well, say 20 years ago, 25 years ago, in the times that Mr. Wellington wrote, 1877.

A. 25 years ago, there were no 60,000 capacity cars on the Iron Mountain.

Q. What were they?

A. Most twenty and thirty and forty thousand capacity.

Q. What would be the weight of the car itself?

A. I don't remember; the most of the Iron Mountain equipment 25 years ago, freight equipment was not to exceed twenty to thirty thousand capacity.

Q. What was the weight of the engine of those times?

4921 A. The weight of the engines those days, was about sixty thousand pounds, from 26 ton- to 35 tons.

Q. Now, the cars have increased until they have a capacity and weight with their contents that you mentioned in the latter part of your testimony I quoted you awhile ago, 140,000 lbs.?

A. Yes, sir.

Q. Isn't it a fact that the weight of those large engines now, is over 200,000 lbs.?

A. Yes, sir.

Q. So the weight of the engine has been increased in a very much larger ratio than the weight of the car and its capacity?

A. I guess they have.

Q. I hand you a circular, called general instruction #16-*a* of the Iron Mountain Railroad,—Missouri Pacific and Iron Mountain Railroad, classifying the lines over which various locomotives on the system may be operated,—the bridges have been divided into four classes; the number of the engines which may run over each class of bridges are given; "Engines not listed in this table shall not be run over these bridges without special authority from the Chief Engineer Maintenance of Way."

Will you attach it as Exhibit K-1 to your deposition?

A. Yes, sir.

4922 For Exhibit K-1, see Vol. 9, page 5884.

Q. Why is that classification made?

A. Owing to the condition of the structures, I suppose.

Q. Look over it and explain to me in what way the condition of the structures would render it necessary to issue that circular?

A. I am not familiar with these locations.

Q. Isn't it because there are certain parts of the line, and certain structures, in the way of bridges, that it would not be safe to run certain classes of engines over, which are excluded from certain parts of the line and bridges over them?

A. It is because the condition of the structures won't warrant operating that heavy a locomotive over it.

Q. Is there any such classification or exclusion in regard to cars?

A. Not that I know of; I don't know of any such instructions being issued.

Q. Did you ever know of such instructions in regard to cars?

A. No, sir.

Q. What do you refer to when you speak of a locomotive being counterbalanced?

A. I mean the wheel made so to counteract the weight of the crank pins and the proper proportion of the weight of the rods, that is attached to the pins in the wheel.

4923 Q. Why is it necessary to make any particular construction for that purpose, why is there any construction of an engine that renders that necessary to counterbalance it.

A. There is not anything in the construction of the locomotive that renders that necessary, but for a locomotive to be constructed properly, it is necessary for that feature to receive care and attention.

Q. That is the question I asked you, why is that necessary?

A. That is to avoid the hammer blow, that would result from that part of the wheel coming down and hitting the rail.

Q. That is what you call pounding?

A. It is generally termed the hammer blow.

Q. I frequently hear the expression made as pounding; Mr. Alexander used it yesterday; that is what is referred to when they say an engine is pounding?

A. If I would speak of an engine pounding, I would think that was in the machinery of the engine, pounding in the boxes.

Q. You call it hammering?

A. I call it the hammer blow on the rail.

Q. What effect does that have, what tendency does that have toward derailing engines?

A. It might contribute to derailing by breaking of rails—
4924 something of that kind, but I don't think that that would have any tendency to derail the engines.

Q. Do engines bend rail?

A. Yes, sir.

Q. Do cars?

A. I don't know, not to my knowledge.

Q. What causes that hammering, that you say has to be remedied—you said but for this counterbalancing it would produce a hammering on the rail?

A. It would produce a hammer blow upon the rail from revolution of the wheel.

Q. What is it that produces that?

A. Becaues one side of the wheel is heavier than the other.

Q. Why is that?

A. Because it carries the crank pin and proportionate weight of the rod that carries the crank pin.

Q. Tht destroys the balance of the wheel?

A. It would, if it wasn't properly balanced.

Q. Unless it is guarded against, it will destroy the balance of the wheel?

A. Yes, sir.

Q. What is the weight of that crank and rod?

A. I don't know; you give me the specified engine, and I will give you the weight.

Q. I mean the usual engine—just take an average?

A. I cannot tell you; I don't think it is fair to ask that
4925 kind of question either. There is a question there about the bent rail, I would like to ask you when you ask about a bent rail, in what direction is the rail bent?

Q. I don't know; you can state the direction yourself.

A. Locomotives have bent new rails laterally and the bending vertically is done by soft track and weight of the cars or locomotives either, where the ties are bad, or not properly supported.

Q. If a locomotive bends a rail laterally, it is——

A. That is a defect in construction.

Q. Does that not sometimes result in derailing the engine?

A. I never knew of it; it destroys the rail.

Q. Do the builders of locomotives design their wheels for the purpose of counter-balancing the weight of the driving rod,—side rod?

A. Yes, sir.

Q. What do they do that for; in what way is that done?

A. By adding an increased amount of metal in the rim of the wheel, or between the spokes at opposite points.

Q. This side rod revolves, doesn't it, on the driving wheel?

A. No, sir.

Q. Doesn't the crank revolve?

A. Yes, sir.

Q. And the driving rod follows it up and down?

A. Yes, sir.

Q. And the end of the rod goes up and down with the revolutions of the crank?

A. Yes, sir.

4926 Q. What are the reciprocating parts of a locomotive?

A. The piston, cross heads and main rod—one half of the main rod, the weight of it is usually added in to the reciprocating parts.

Q. Now does that have any effect on the balance of the wheel?

A. Yes, it all has to be taken into consideration.

Q. What is the excess of balance created in that way—isn't there about 66% of excess of balancing created by these reciprocating parts—the piston and cross head and the piston rod?

A. I don't recall just what the ratio of weight is now.

Q. How does the piston rod move—it moves back and forth doesn't it?

A. Yes, sir.

Q. Now in view of these conditions to which I have called your attention, I want to ask you if it isn't practically impossible to produce a perfect balanced wheel?

A. For all builds, yes, sir.

Q. Doesn't that want of balance and want of reciprocation or want of balancing growing out of this rod and these reciprocating parts always produce that hammering of which you speak?

A. Should not.

Q. Did you say that engines that are used to-day, even properly constructed engines are free from hammering or pounding?

A. If the engine is properly constructed—counter-balanced for maximum weight, it should not do any pounding—should

4927 not deliver that hammer blow to any perceptable extent without operating it at a speed in excess for which it is counter-balanced for.

Q. Isn't it a fact that on account of this counter-balancing, that in practical operations railroad tracks are frequently very badly damage- by the pounding or hammering of the engine?

A. There was a time before the locomotive builders and railroad mechanics began to recognize that defect and cure it by proper counter-balancing the engine.

Q. Mr. F. P. Ward, the General Manager of the C. B. & Q. road testified in this case a few days ago, and Mr. Carl Gray, General Manager and Vice President of the St. Louis & San Francisco R. R. Co. also testified in this case afterwards, and both of them testified that was the case, and that the track was frequently very

badly damaged, and it may cause many times more damage than might accrue to it from any other causes by reason of improper balancing of the wheels producing the hammering—would you say these gentlemen were not speaking correctly—either advisedly or in any other way?

A. No, I would not, but I would say this, if such is the case, that locomotives were being operated at a speed in excess for which they were counter-balanced, over which Mr. Gray or these gentle-
4928 men have no control—I am speaking not only as a mechanic, but as a locomotive engineer. Take the same locomotive and run her over a bridge, especially a metal bridge on a frosty night, is when you will hear the hammering blow, you will never hear it going up hill.

Q. Isn't it a fact that this excess which I am informed is 66%, is divided between the driving wheels, on account of the reciprocating parts, does necessarily result in preventing any engines from being perfectly balanced at any time and at any speed it may be running?

A. No, sir, I don't think so.

Q. Isn't that excess balancing always in the wheel at any speed it may be going?

A. Yes, sir.

Q. Isn't it that which causes the hammering?

A. Yes, sir.

Q. You stated in your examination in chief that the engine has practically been worn out in through freight service, as a general rule, and it is then put in local freight service to be utilized there before going into the shop, to get all out of the engine that could be gotten out of it. You say on the same page that the expense for keeping the engine in service should be no greater than to keep a through freight engine in service?

A. Yes, sir.

Q. How can you reconcile the statement that an old engine
4929 that has been worn to the extent of 75% can be kept in service at as little an expense as an engine in through service—as the class of engine and the condition of engines that are used in the through service, as you have described there?

A. Simply because the service is not so severe.

Q. You say this, that an old engine which has been three-fourths worn out can be maintained at less expense in local service than the same engine put in new and up to the time it was put in local service could be maintained in through service?

A. I did not say that.

Q. I am asking you that now? Did you say that?

A. I did not.

Q. Isn't that the effect of your statement?

A. No, sir, I said it would not cost any more.

Q. What did you refer to when you say—what character of service in pulling through trains, did you refer to when you say the service is less severe on the local trains?

A. Not nearly so heavy tonnage, and practically operated in the

day time when the rail is good and the time is not so fast—the local freight service is slow schedule.

Q. You are the only witness, except Mr. Alexander, who has testified in this case on either side, who has made that statement, all the other witnesses on both sides have stated that between stations
4930 the local freight runs faster than the through freight. Isn't the speed of the engine—isn't it the speed of the engine that does it the damage rather than its load within its pulling capacity?

A. No, sir, not necessarily.

Q. What effect does the switching service have upon the engines that pull local trains?

A. They only have a very few cars—that is not severe service, and we could not put them in our terminals and take hold of heavy trains and switch with them.

I will give you an idea where I take a great deal of this from; I was an engineer in local freight service on the Iron Mountain road, and didn't go to a shop in a year. I did all the repairs, in fact, most of the engineers that were in local service that led away from shop terminals those days had to do that—did all the repairs themselves, even washing out their own boilers, and I know I am speaking from actual experience, both in operating locomotives and in after years careing for them.

Q. How long ago was that?

A. 1884.

Q. What road was it on?

A. Iron Mountain road.

Q. The character of the service the same as it is now?

A. There might be a few more stations on the same territory now, that was between Bismark, Mo. and Popular Bluff, Mo., over
4931 the hilliest part of the Iron Mountain railroad—a 17x24 engine, I ran her there for 13 months and she never was at a shop.

Q. She must have been an exceptionally good one.

A. They all did it them days. You spoke of Mr. Gray, whom I used to know very well, and also Mr. Ward,—I don't believe either one of them ever ran a locomotive or ever made repairs on a locomotive, or if they were supervising it, would know whether it was properly done or not.

I do not put myself up against them in their testimony, but what I say here, I say nothing but what I know, and if I don't know it I will decline to answer.

Q. Doesn't the operating man who is in charge of, and who is responsible for the expense of operation, while he doesn't run a car or doesn't fire an engine, does he not necessarily, if he is efficient in the discharge of his duties as operating official, keep a close watch on the operating expenses, or operation of the various departments, and in its application to various departments?

A. As a total, yes, but in detail, no.

Q. Do you say that Mr. Gray doesn't know what the cost is of the various branches of service that he superintends and directs?

A. I will answer that by saying this—Mr. Gray's reputation is no

better than Mr. J. T. Harahan's, and there was six million dollars that was reported that was charged up to repairs on the Illi-
4932 nois Central Ry, and they never discovered it.

Q. Who was General Manager at that time?

A. Mr. Harahan's son, I guess.

Q. Why didn't they discover it?

A. I don't know.

Q. It was reported to them?

A. It was reported the money was spent, and no doubt he would come up and swear it cost that much to maintain freight cars in that year.

Q. Do you believe that Mr. Carl Gray, from what you know of his character, would not have discovered that and remedied it, if he was in the position of the officers who ultimately discovered it?

A. I will say this, that Mr. Carl Gray has got to refer to figures that he receives from some one else.

Q. You are speaking about the officials to whom the information was taken that the peculation to which you refer was going on, and were informed, did not discover that, do you believe Mr. Carl Gray wouldn't have discovered it?

A. I am not putting it in that way.

Q. That is the way you did put it.

A. No, I did not.

Q. The evidence in that case shows those things were reported——

A. I know J. T. Harahan would never have permitted
4933 a thing of that kind if he had been cognizant of it—a man whom I have known for thirty years, and he didn't like me at all, but he would not have had a thing of that kind going on. He is reputed to be as bright as any railroad man we ever had in this country too.

I know from my own experience, the man who spends the money is not permitted to distribute it—distribute the expense. I, as Master Mechanic over here, was not in position to say that so much money was spent maintaining such and such a locomotive, but it was bunched by reports, go to St. Louis—those reports are consolidated in the Auditor's office and they distribute such expenses, so much to switching, so much to local and so much to through freight, so much to passenger and so forth, that was my experience here. A general Manager in all good faith could say those figures were so and so, but they would not be so, because they do not reflect the actual expenditures.

Q. Do you know how these accounts and expenditures were kept in 1907 on the Iron Mountain Railroad—you have just now stated everything was bunched?

A. No, I do not, I wasn't here.

Q. Isn't the superintendent of a road—I don't mean the General Manager, but I mean the superintendent,—on the road back and forth on his line all of the time, and isn't he in a position to acquire a knowledge of the details of the business—I am referring now to Division superintendents.

4934 A. Never on any road that I was ever connected with.

Q. These gentlemen you have spoken of went up through all the various grades—I don't remember now, but Mr. Ward was in a great number of grades, Mr. Gray in not so many, Mr. Gray was Division Superintendent of a railroad, and Mr. Gray testified that his experience justified him to testify about these matters, would you say his statement in that respect was not true?

A. No.

Q. That was his own statement.

Q. I would just say that it was just an error in his judgment, that is all, I don't believe Mr. Gray would testify to anything he believed was untrue.

Q. When you were Master Mechanic of the Iron Mountain Railroad, didn't you distribute your expenditures to the different accounts?

A. Yes, sir.

Q. You knew what they were?

A. Yes, sir.

Q. You reported them?

A. Yes, but the Auditor's report to the General Manager did not reflect the report I made to the Superintendent of Machinery's office.

Q. How do you know that?

A. Because the General Manager in ninety days used to furnish us with a report.

Q. That service ended on the Iron Mountain in 1899 with you?

4935 A. Yes, sir.

Q. Do you know what the conditions have been since then?

A. No, sir.

Q. You take something that has become familiar now, more familiar to the public than a railroad locomotive—if you were to buy an automobile and run it until it was three-fourths worn out, what effect would that have upon the expenses or current maintenance?

A. It would depend largely on how much service I subjected it to.

Q. Suppose you subject it to just such service as would relatively obtain as compairing an engine in through freight service with an engine in local service?

A. Now an automobile is something I never owned and had anything to do with.

Q. I refer to that because an automobile is made up of machinery——

A. Yes, but the conditions under which it is operated is no comparison, simply because it never goes over the same road the second time, and is run over bumps and ditches largely——

Q. It runs over the same kind of bumps as it did when it was new?

A. Not necessarily.

Q. I imagine it does,—we will assume it does, because we know that an engine runs over the same bumps, if it runs on the same road?

A. No, I don't think the illustration or comparison is a
4936 fair one.

Q. Lay that comparison aside, do you think on reconsideration, it is fair to say that an old three-fourths worn out engine can be kept up at the same expense that a new engine, or an engine that is in use when it is in its better days——

A. I mean to say that a locomotive totally unfit for through freight service, on account of defects, leaky flues, treadworn tires, can be operated in local service just as cheaply as a good locomotive can in through freight service.

Q. And run at the same or higher rate of speed?

A. I don't understand that—I don't understand Col. Gray says that.

Q. Assume that it does?

A. I don't assume that.

Q. For the purpose of the question, assume that it does run at a higher rate of speed between stations, would you say that would contribute anything to the cost of repairing a locomotive?

A. It might contribute to the cost of repairing switches and rails on account of the worn condition of the tires.

Q. Is it not more damaging to the locomotive in running at a high rate of speed than at a low rate of speed?

A. Not necessarily, unless she is run at an excessive rate of speed and creates excessive friction.

Q. Does it require any more fuel to enable a locomotive to pull 32 loaded cars than it does 16?

A. I should think so.

4937 Q. How much more do you think it would require?

A. I would have to know the conditions under which the locomotive was operated—start two locomotives, one following the other and running a given mileage, one following the other, one with 30 cars and another with 16, the one with 16 cars would burn less fuel.

Q. Can you give me in a general way the percentage of difference?

A. No, sir.

Q. Do you believe that 3½ per cent would cover it?

A. I can't say because I never have had a case of that kind under my observation, and of course I would not attempt to state what the percentage of difference would be.

Q. You said the conditions on the Iron Mountain Railroad in Arkansas were about the same—the physical conditions—as the Cotton Belt; Do you know anything about the White River Branch of the Iron Mountain?

A. I did not mean to say that, I don't know that I testified as to the physical conditions of the other road.

Q. "If the tonnage handled or cars handled, were the same, I consider the conditions and contour of the country very similar; I would be willing to accept the test made on the Cotton Belt as a fair representation of what could be done on the Iron Mountain or vice versa."

A. That was operating conditions, not physical conditions.

Q. Wouldn't the physical conditions have some effect on it?
4938 A. I wasn't taking that into consideration.
Q. Take that into consideration now and say whether they would have any effect?
A. I say it is a fair test.
Q. Was your attention called to the fact that one of these tests was made in October, 1908, and the period to which it was sought to be applied was in another year—different year?
A. Yes, sir.
Mr. HILL: Corresponding month though Mr. Moore.

By Mr. MOORE:

Q. You said: "Unless conditions have been changed very materially, since I was in the service, the poor local does not receive the same attention as the through does."
Now you were in charge of that service when you were on the Iron Mountain Railroad were you not?
A. Yes, sir.
Q. Why did you neglect the local?
A. I didn't neglect anything intentionally.
Q. Why did you speak of it as "The poor local" not receiving the same attention—local engines are always in terminals at nights?
A. Our shops, as a rule, are not operated nights, we just run a Round House force, to do what you call running repairs. On through freight engines and passenger engines that are in there at night, they are given preferred attention, because a defect that would delay a through freight train—heavy through freight
4939 train or passenger train, would have to be given attention, that if the same defect existed on the local engines, they could be allowed to go for another trip without any necessary delay. All the employés in the round house are given to understand they must give the engines for immediate service, preferred attention—or used to be.
Q. This is Round house expense?
A. Yes, sir.
Q. And it is just simply to cover the attention that is given trains—engines in passing?
A. No, sir, running repairs—an engine comes in this evening we will say at seven o'clock, and they are due out to-morrow morning at 7:30, the shops are not in operation, and there are only those repairs that can be made—hand repairs.
Q. The shops are not required to do hand repairs?
A. They do a great many repairs in the day time that the work is done in the shop, except the application of it.
Q. These repairs that you speak of—conditions that you speak of, that is given to the engines in actual service while they are laying off between times, while they are not in the service—take the local, it comes in at night and goes out in the morning?
A. And the through freight and passengers—the through engines come and go in the same way.
Q. The local train doesn't run at night?

A. We never had any night locals when I was with them.

4940 Q. So the local would be in the Round House 12 hours, from seven in the evening until seven in the morning?

A. Those were not the conditions that prevailed when I was over here. Our locals were on the road a good many hours—leaving one time perhaps in the morning——

Q. I am not caring about the regulation as to the time they should run, but they would be there during the night?

A. Yes, the local schedule was about 12 hours.

Q. Take the through cars, did your through cars lie there that way?

A. Through freight engines came in any time during the 24 hours. When I was there, our through freight engines was in what we called "chain gang," that is, we had no regular crews for them, and when a through freight engine would come in, there was a train waiting for her, just as soon as we could get her out. Her work report was gone over, an inspector was put on the engine to make an inspection of it, of the driving boxes, brakes, and such things as were necessary, and any repairs that were necessary, all that was perceptible, that would contribute to the delay or liable to contribute to the delay of that engine, was done.

Q. Your chain-gang perhaps was there for the purpose of having a gang ready for that engine?

4941 A. No, sir, the chain-gang was necessary, because we did not have a sufficient number of engines to handle the business——

Q. You wanted to get it out as quick as you could, and therefore you did not detain it any longer than necessary to get it out of the Round House?

A. I said we made a close inspection and examined the engineer's work report, and our help was concentrated on that engine to get the work done—every thing done, every defect that was apparent, that was possible that would operate against that engine making a successful trip; while the same defects operating on an engine in local service would be allowed to go until she came back again.

Q. How long would you keep an engine in through service in the round house?

A. Just as soon as you could get them ready to go.

Q. The idea was to get them in and get them out as soon as you could?

A. As soon as you could make repairs.

Q. You wanted them for service as soon as you could get them?

A. I have seen eight trains waiting with only one engine in sight.

Q. In view of that condition with respect to the time that you could spare the engine pulling the through freight in through service as compared with the all night lay over of the engine in local service, notwithstanding you might have felt the impossi-

4942 bility of keeping your engine in through service up, didn't you have more time and more opportunity with your night

round house crew during the entire night to get the local train running?

A. No, sir, it wasn't many times the local engine ever came into the round house at all, we would just put her on the turn table and turn her around, so as not to obstruct the cinder pit and delay the through freight engines, and we would back her over on some dead track.

Q. What did that service consist of, wiping and cleaning her down, and things like that?

A. No, sir, there was very little wiping done. The service consisted of any repairs that was necessary, very often found from the inspection or the report of the engineer.

Q. What is the character of the injury to passenger coaches, express, mail and baggage cars, to which you refer, when you spoke about the expense of maintenance in connection with—you spoke about the order in which these cars were in the train, and about the expense and damage accruing, to what part of the cars is that expense applied?

A. The draft gear, underframing and trucks, and the exterior finish—roofs, damaged as the result of cinders, and the varnish.

Q. What is the most perishable part of the car or coach?

4943 Q. Of the exterior—outside of the interior?

A. I would consider the varnish.

Q. How about the platforms and vestibules?

A. Under recent construction, the platforms and vestibules——

Q. Take it as to the time you were in the service?

A. The modern cars built when I was in the service?

Q. Yes, sir.

A. Owing to the changed construction—steel platforms, very little expense was attached to maintaining passenger coaches—that part of them——

Q. What does the impact of stopping the trains tend to have upon the platforms and vestibules?

A. Well, stopping a train——

Q. That is very wearing on cars?

A. Yes, sir.

Q. And have no support?

A. Yes they are supported.

Q. Except by projecting appliances—what I mean is they have no foundation as the body of the car has?

A. The recent construction had, and built like the old ones, the intermediate sills in some cases ran through but with the passenger train—there is where the iron brakes comes in again—there is no reason why that the tension of the springs in the passenger trains, that the stopping of the trains should damage them, simply because when the brakes comes on one car, they come on them all. I think in the passenger train,—like a freight train, the greatest damage is done in *in* starting, since we have had the power brake——

4944 Q. Where is that done?

A. At the draft gearing and attachments, of course the severest stress is on the cars nearest the locomotive.

Q. Why is that?

A. Because they have to take the greatest strains, pulling the greater load.

Q. I don't understand just what you mean by that—suppose a baggage car, mail car or express car is loaded less heavily?

A. Yes, but they have to pull the coach, and it is loaded, and the passenger car has no connection with the locomotive only through the baggage car and mail car——

Q. There is *of* platform on those cars?

A. No, sir.

Q. Are the trucks or wheels, are they connected with the body of the car?

A. No, sir.

Q. Practically separate?

A. The car floats on it.

Q. You spoke of the damage to trucks and things like that, do the trucks really receive any strain in moving, don't they move, you might say, almost automatically with the body of the car?

A. In stopping the truck stops the car, and in starting, the car starts the truck, simply because the brake is attached to the track, and the draft power is attached to the body.

4945 Q. Why are the superior cars of the passenger cars—Pullman cars and parlor cars of these fast fine trains you find on the eastern roads, and all roads as far as that is concerned, put in front close to the engine?

A. I don't know.

Q. Isn't the only reason in order to avoid cinders?

A. I don't know.

Q. Isn't the deposit of cinders worse a few cars back than on those immediately up close to the engine?

A. They will keep rolling over the cars until they fall off, but they hit hardest up close to the engine.

Q. Haven't you known persons to go from the rear car up near the front in order to avoid cinders?

A. No, sir, I have never heard tell of such a suggestion before. The first time they hit, they cut the hardest, that is when they hit the hardest.

Q. The direction of the cinders depends upon the wind doesn't it?

A. No, sir, the smoke does to a large extent.

Q. Don't you know the cinders also go with the wind? What was it that burnt up all this cotton at New York a few years ago, except the wind blowing across the track?

A. To qualify my statement there, that depends upon the velocity of the locomotive.

Q. Wind too I reckon?

A. Yes.

4946 Q. So you may say it is about as uncertain as the wind?

A. A passenger engine running at an ordinary speed, the wind doesn't have much effect on the cinders.

Q. Don't know whether you ever have played golf or not, but if you ever have—my friend Judge Hill will testify on the point—if

you ever played golf you know when you strike your ball it goes up some considerable distance before it comes down; with me it will go about 50 feet, with Judge Hill, probably three or four hundred yards; doesn't it come out of the engine and do the same thing, when it comes out it comes with great force and rises and don't the greater part of them go further back than these cars immediately in front before they fall?

A. I never played golf, but you don't knock that golf ball and guide its force, and therefore, don't put as much force into it, the cinders out of a locomotive are discharged from a tube, and it really guides its force.

Q. Are the cinders not propelled from the smokestack with greater force, and upward?

A. Yes.

Q. How does the wear and tear on a passenger coach compare with the baggage and mail and express car, I mean the expense, considering the character of the operations, if they are to be kept up and maintained?

A. What would you be allowed to take in, in that wear and tear?

Q. Take in everything.

A. The entire car?

Q. Yes, sir.

4947 A. That is maintaining the car in service?

Q. Yes.

A. Not including the repairs when the car goes into the shop, that is just for maintenance?

Q. Yes, I mean to include everything.

A. Well, owing to the greater length, the greater amount of glass and lamps, etc., the coach, if a first class coach, for the same number of miles, covering a period of years, would cost more to maintain it than a baggage car, but there is really not very much difference excepting when you take in the difference of length and your inferior finish of the coach, and the baggage car being about 50 feet long and the coach about 75 feet.

Q. You state in your examination in chief, you made this statement, referring to cleaning and handling cars and service of that sort, I quote from your testimony at the bottom of page 56, you were asked if the cleaner was not like a pooh bah, and you said when you had nothing else you could charge the expense to, you could charge it to that, and employ a man to work in your office—you just hired a man and called him a car inspector, or a car cleaner and put him in the office to help out. Did you follow that practice while you were Master Mechanic on the Iron Mountain road?

4948 A. Yes, sir.

Q. You stated yesterday that you were discharged by the Iron Mountain road?

A. Yes, sir.

Q. Wasn't that one of the things that caused your discharge?

A. No, sir.

Q. Do you call that proper practice?

A. That is obeying instructions of your superior.

Q. Does any such practice as that exist on the Iron Mountain railroad today?

A. I don't know.

Q. Wasn't complaint made about that matter, among other things, at the time you were discharged?

A. In justice to myself, I think I am entitled to an explanation of why I was discharged, since you have brought the subject up.

I was discharged for obeying the instructions of my superior to transfer of money, both labor and material expended in building road devices—charge them to locomotive and cars without authority from the Auditor's office. Mr. Reardon gave me verbal instructions that all in excess of what the road work we were doing, would cost over what it would cost if done with a steam shovel was to be charged—distributed amongst locomotives and cars, which I done. When the monthly expenses came in for labor and material, in my own handwriting, I made a lead pencil distribution, a certain percentage to passenger engines, a certain percentage to freight
4949 engines and freight cars, the distribution clerk exposed it.

Mr. Dodridge was the inventor of the road device. I was building them at his request, and on orders from the Superintendent of Machinery. Mr. Warner wanted the work done with the steam shovel—reducing the grade line. Mr. Warner told me that I did that under instructions from Mr. Dodridge, and I told Mr. Warner I did not, and he discharged me, as he stated, for lying.

Q. Mr. Warner was the Auditor wasn't he.

A. Mr. Warner was the General Auditor and Vice President, I think.

Q. That was brought about as to whether you did it through instructions or whatever way you did it, because the Auditing Department wanted it distributed properly?

A. No, sir, the Auditing Department didn't approve of that and wanted every item of expense charged to the proper account.

Q. Where it properly belonged?

A. Yes, sir.

Q. And it was a question of disregarding that of which they complained?

A. Yes, sir.

Q. And you replied that you dis-regarded that because of the orders of your immediate superior?

A. I was instructed by my immediate superior, but Mr. Warner thought Mr. Dodridge instructed me to do it, but it was not.

I have letters right in the office, or did have, asking for
4950 increased clerical help, and I would get a letter from the Superintendent of Machinery's office, "Increase your number of car cleaners or inspectors."

I suppose they have reformed all over the Iron Mountain railroad today, and I don't suppose anything of that kind exists.

Redirect examination.

By Mr. SMITH:

Q. If I understood you correctly about the matter of your discharge that Mr. Moore brought up, they were after Mr. Dodridge, and thought he was the man that had given you those orders when he had not?

A. No, sir, Mr. Warner told me Mr. Dodridge gave me the orders.

Q. And you could not convince him that you did not get them from Mr. Dodridge?

A. No, sir, and I wouldn't tell him who did give them to me.

Q. You took as an illustration of another matter that you referred to in your testimony of padding of equipment accounts on the Illinois Central, as I understood your testimony on that, you regarded Mr. Harahan as being of the same high character as Mr. Carl Gray?

A. I looked upon Mr. Harahan as a man of as high up-right character as any man on earth.

Q. And you don't think Mr. Harahan would have permitted the padding of car accounts for a moment?

4951 A. No, sir.

Q. And you don't think Mr. Gray would?

A. No, sir.

Q. If Mr. Harahan received his car reports, including these padded reports, he would naturally form his opinion that these were the cost of maintaining that equipment?

A. Yes, sir.

Q. So if the General Manager of this road would receive your reports, if the Auditor had not checked them, he would have received the impression that this was the cost of maintenance?

A. Yes, sir.

Q. That is the way I understood your testimony, that the General Manager did not know the details of the cost of maintenance?

A. That is the information I wanted to convey.

Q. Mr. Moore had you to put in a beautiful picture here in the record of a triple valve, a very complicated and beautiful piece of machinery, according to this picture. I find on the opposite page in the book this was taken from, as the cost of this triple valve, as shown on the catalogue from which it is taken, to be $20.00. This beautiful piece of mechanism composed of 34 parts costs $20.00?

A. Yes, sir.

4952 Q. Now there was 122 parts of the air brake that you and Mr. Rosing agreed was correct, and I will not take up the details of them, but I want to call your attention to some of the parts that are shown in this beautiful picture. They run from one cent to $8.00, several of them are one cent, two cents, five cents, and so forth, is that a fair illustration of the cost of this air brake?

A. Yes, sir, the total cost of the freight car equipped was $30.00—isn't that right Mr. Rosing?

Mr. ROSING: The cost of the brake on the car is about $90.00.

WITNESS: It wasn't that years ago.

Mr. ROSING: To put on the brakes, you had to put on metal beams?

WITNESS: $40.00 a car is what we used to pay for it.

Mr. ROSING: Just the air brake part costs $40.00.

Mr. HILL:

Q. All these 122 parts cost you $40.00?

A. Yes, sir, that is why I made the reference to the switch rope.

Q. What was that switch rope?

A. That was the rope that was carried in the caboose for re-railing the cars,—a big manila rope 3½ inches in diameter, with a hook in one end.

And the same way with the car chains, a caboose that went out without four or five car chains, the conductor was discharged if he had to set a car out because he didn't have chains enough to
4953 keep it going, these car chains are made up of 75 links I guess. If you want to delude some person with these figures, might I consider this as reasonable to bring in the switch rope we used to use and the car chains that they don't have to use now.

Q. This is very serious here, some of these 122 parts actually cost one cent and others, quite a number of them—does this imposing array of one cent parts and two cent parts and $1.50 parts, all amounting to 122 parts, costing $40.00, after your attention is called to it, change your opinion in the least as to what you have heretofore expressed about the effect of this air brake as compared with the hand brake?

A. No, sir, I had all of these parts in view.

Q. You had all of these things in view when you gave your testimony?

A. Yes, sir.

Recross-examination.

By Mr. MOORE:

Q. How many cars were in freight service on the Iron Mountain road when you were Master Mechanic?

A. I can tell you tomorrow morning.

Q. Just tell it as near as you can.

A. I cannot tell you how many locomotives we had, but I have got all of that at home.

Q. There were thousands of them?

A. Yes, sir.

4954 Q. And one of these devices was on all of those cars?

A. All air cars—all were not equipped when I left the service.

Q. They probably are by this time?

A. Yes, sir, if they are in inter-state service they have to be.

Q. If there were from forty to fifty thousand cars, each one of them would have those devices?

A. Yes, sir.

Q. And although it might not amount to but little in detail, it would amount to a great deal in the aggregate?

A. Yes, sir, these safety appliances and power brakes were an enormous expense to the railroads.

Redirect examination.

By Mr. HILL:

Q. You mean it was an enormous expense to install them?

A. Yes, sir.

Q. But the up-keep is less?

A. Yes, sir, it makes all contributory damages as a result of the methods that those things remove, very materially reducing not only personal injuries but everything else as well.

Witness excused.

Adjournment 7:10 P. M.

4955 K. P. ALEXANDER, being duly sworn and examined, testified as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would state your name, age, residence and present occupation?

A. K. P. Alexander, age 46, Division Sales Agent, McAlester Fuel Company.

Q. Your present residence is Little Rock?

A. Yes, sir.

Q. Mr. Alexander, you have had long and varied experience in railroad work, I wish you would give a little biography, for the benefit of the record in this case, of your services with railroad companies.

A. Do you want it as specific as Mr. Roberts gave you?

Q. If you can recall it all?

A. I have notes in my desk showing service in different capacities——

By Mr. MOORE: He can state it, and if I want to cross-examine him on it I can do it.

By Mr. HILL:

Q. Just speak generally without being specific as to dates.

A. I was a machinist about ten years, part of the time with the Missouri Pacific—machinist at St. Louis, Mo. Later I was with the Frisco as machinist and Division Foreman at Newberg, Mo., and at Fort Smith, Arkansas, about fifteen years.

4956 I was then Master Mechanic for the Fort Smith & Western Railroad Company in charge of all power and equipment, at Fort Smith, Arkansas,—office at Fort Smith, Arkansas, for the period of two years.

And in 1904, I went into the coal business, and since this time I have remained in the coal business.

Q. Your railroad service then terminated in 1904?

A. Yes, sir.

Q. I will state in this connection, that our case is made up as to the conditions of 1907 on railroads, and in asking questions, I may say now, in contrasting the former period with the present time, but I mean to say 1907.

You heard the questions as put to Mr. Roberts about starting and stopping and switching?

A. Yes, sir.

Q. I will repeat the question in shorter form. The State has used exhibits in this case showing tables prepared by Welling, an authority on railroad operation, in which he gives the distribution of the cost of freight car repairs as 21½% in starting and stopping, and 13½% in switching.

The railroad witnesses in rebuttal have recognized Welling as an authority on that question, but claim his tables were prepared while the link and pin couplers and hand brakes were used, and before the automatic couplers and air brakes, and that owing to the change in equipment, the percentage should be largely increased.

4957 Assume for the purpose of the question that the Wellington percentages were correct of his date,—and it is a fact that these percentages would compare with the statistics made up during the time the hand brake and link and pin coupler were in use,—assuming that is a correct percentage under that method of railroad operation, I would like to have your opinion as to what change, if any, should be made now?

A. 1907?

Q. Yes, sir.

A. From my observation and practical experience, I would say that the percentage should then be somewhat less, for the reason that all power and equipment was, during that time, and has previously been made much more substantial than it was during the time of the link and pin couplers, and during the time of the hand brake—all parts being strengthened to take care of the additional weights and additional lengths of trains and the heavier equipment, and I believe that the percentage would be possible one-half of the percentage of the link and pin percentage.

Q. You mean on both of these propositions, taking starting and stopping?—Assume 21½% under the old method, what percent would you give that under the new—in 1907?

A. I think 15% would have covered it.

Q. Well, on the switching, assuming that 13½% was correct under the old method?

4958 A. I should think it should be reduced possibly 20%, for the reason that the damage to switching now is not as great as it used to be.

Q. You would leave that at about ten in round figures?

A. Yes, for the difference in the rigging and the other appliances

that are used, the damage couldn't be as great now as under the old method of car construction and locomotive construction.

Q. Mr. Alexander, the State's accountants have used 2½ times for locomotives as against freight cars, in ascertaining the cost of maintenance of way on the per mile run basis—in other words, assuming that the engine in running forty miles would do as much damage as the freight car in running one hundred miles. I read here in your presence from the testimony by Mr. Gray in which that is attacked, I wish you would give your opinion upon that proposition, based upon experience and observation, as to the comparative injury to the way by locomotive contrasted to the freight car,—by that I mean taking the average conditions, year in and year out, season in and season out, big cars and little cars—I am trying to get at a general average condition?

A. Going into it I will have to go into it in a little detail, in order to make clear what my meaning is—The damage by a large furniture car would be greater than by locomotives,—the weight of the locomotives is upon a very much greater number of wheels distributed over a greater length of track surface than on any other car, having four wheels, or four wheel trucks, so that there
4959 is a greater amount of weight on the track under a heavily loaded furniture car than there is under the same length of track on any locomotive. Further, locomotives are always so constructed by the use of springs and equalizers and other devices as to nearly compensate for all the shocks or irregularities of the track, more than has been found profitable to use in constructing freight cars. It is true that not quite as much attention is paid to flat wheels on cars, which of course injure the track, same as a flat wheel on locomotives, the tires on locomotives, both the tread and on the flange, are watched by all Master Mechanics and engineers much more closely than it is possible to watch the tires and tread of wheels under cars. It is true that in the early days, not as much attention was given to the correct counter-balancing of locomotive driving wheels as was done in 1907.

Q. Mr. Alexander, I wish you would explain that in detail, some of the other witnesses have explained it, but as far as I have been able to gather, I have not quite understood it, I wish you would explain that from a technical standpoint?

A. So that the layman would understand it is what you desire?

Q. We have to try this case before Judges who know more about it than we do, but still we would like for you to explain it so the laymen would understand it, as far as we are concerned.
4960 A. In locomotive construction, there is what is known as the angularity of the main rod, which is considerable greater in short main rods than in long rods, and on account of the main in short main rods than in long main rods, and on account of the main rods and the side rods, certain counter balancing must be done to the driver wheels—the locomotive driving wheels.

The counter-balancing of the locomotive driving wheels was not very scientifically done until within the past six or eight years, but since then, by numerous experiments that have been made, the in-

correct systems of balancing have been almost wholly over-come. The effect of the incorrect balancing was—when the locomotives ran at a high rate of speed, it caused them to pound on the rail at each revolution which injured the track.

That pounding of course, was never true with reference to car wheels, and all locomotives are now supposed to be so constructed that this pounding effect no longer exists.

Q. Was that the condition in 1907,—you say now?

A. When I say now, I mean 1907 in all my testimony.

Q. Now I probably broke into your *tread* of reasons—I wish you would state further——

A. I would state further with reference to the pounding effect, what used to be true with reference to locomotives, that effect wasn't so great from local freight engines as from through freight engines, for the reason that the local engines, as a rule, run at a lower rate of speed than the through freights or fast freights, therefore the
4961 local engines would produce less damage to the track from improper counter-balancing, flat wheels, etc., than the through freight engines.

Q. Now taking it as a general proposition, applying the extremes on each side, taking an ordinary locomotive and an ordinary car, equalize the extremes, I wish you would give your best estimate of the proportional damage per mile, regarding the locomotive as one unit*e* and the car as the other unit*e?*

A. Basing the estimate upon the average of both?

Q. Yes, sir. Now in freight service I am speaking of.

A. Now in freight service, the only estimate I could give would be simply my judgment from observation.

Q. That is all we can ask you.

A. And merely as a guess, and from my observation, I should imagine that the 2½—that is it isn't it——

Q. Yes, 2½ times has been allowed, assuming the engine would run 40 miles and the freight car running 100 miles.

A. I would say two to one would be nearer fair.

Q. There is one other question, going back to the starting and stopping proposition. Mr. Alexander, are you familiar at all with the Union Pacific Railroad?

A. No, sir.

Q. Are you familiar with the transition taking place in 1904—from the old line of equipment to the new—I understood that was the transition period, along in there is when it occurred wasn't
4962 it?

A. Yes, sir, there were a great many changes made along then and since that time, as well as previous to that time.

Q. Are you familiar with the order of these changes—the safety appliance that has been added, the automatic couplers and so on, since 1904 up to 1907?

A. It is my recollection that all the equipment had automatic couplers by 1907.

Q. Mr. Alexander, assuming that cars were not equipped completely with automatic couplers and various other safety devices pre-

scribed by the Act of Congress, in 1904, but that the equipment was completed by 1907. I will ask you what would be the effect on the car damaged, say there was a table made up in 1904, the figures running back for three or four years prior to that time, would the percentage allowed in such a table still obtain in 1907?

A. On what class did you refer?

Q. I am referring to these starting and stopping, and the terminal handling and switching? The percentage of repairs or maintenance of repairs due to starting and stopping,—maintenance for equipment in starting and stopping—this table was probably made up in 1904 based upon experiments made for three or four years prior thereto, and a certain percentage given—say 16% for switching and 20% to starting and stopping, or, any other per cent—I want to get
4963 at a comparison, I say for the year 1904 would be this per cent, now for the same item in 1907 what would it be?

A. The percentage should be less, materially less than for 1904. I state that for the reason that all parts of cars that experience had shown to be weak, have been strengthened.

Q. Taking experiments based on three or four years prior to 1904, you would know there would be link and pin cars and hand brakes in the test made during these years?

A. There would be, almost exclusively so.

Q. Now Mr. Alexander, speaking from the shop standpoint and the repair standpoint of locomotives, taking the miles run, what locomotive has the most repairs, that hauling local freight or that hauling through freight?

A. In order to answer that question, it is necessary to explain, that as a rule on all, I think likely on all railroads, the best class of engines, and engines in the best repair are put on what is called the preferred runs,—or the through freight service, and after they have made considerable mileage, and they are a little bit run down in repairs, they are frequently put in local service, where they could get practically as good service as they would get from a newly overhauled engine, for after they have had a year or more service in through freight service, then the repair bill per mile run
4964 would be increased. So for that reason, it is not at all unlikely that the repair cost per mile run for local service would on that account show higher than the repair cost per mile run for engines in through freight service.

Q. That would be due, if I understand you, from the fact that it had deteriorated in through freight service and was dumped off on the local service?

A. Yes, sir.

Q. And for that reason much of this repair—the cost of the repairs should be attributed to its work in through service, and not take it as repairs done while in local service?

A. Yes, sir.

Q. Now here is another question right along that line, that is as to the engine house service. The State has assumed that the through freight locomotive gets no more Round House service per trip to the Round House, than the local freight locomotive. What is your

understanding—they have made allowances for extra trips—what I mean is the service per trip, wiping, knocking fires, and various other things the engines receive when they go into the round house?

A. Engines in local freight service invariably come in in the evenings and leave early—at seven o'clock the next morning, and the only repairs they get are of the emergency character,—repairs that must be made in order for the engine to make a successful
4965 trip to the other terminal, they are usually not wiped up, they get some attention, as far as the boiler wiping is concerned, they hardly ever give that, the hostler inspects the coal, and water and sand, looks after that, and it is possible that such machinist work as may be necessary to be done, and in that it may cost slightly more for the reason it is done at nights, that would be true only in such round houses as did not have regular men who would be paid the same rate for night work as the day men were paid for day work, so I doubt if there would be any additional expense per trip to a local engine then to the through freight engine, and I believe the expense per trip would be less, at least, that has been my observation.

Q. At any rate, you don't regard it as any injustice to put it on equality with the through traffic?

A. No, sir. And as before stated, the local engines having been partially worn out in through freight service and probably on that account they *were* probably require greater expense than the through engines would.

Q. That is getting into another account,—these accounts are made up according to the Inter-state Commerce Commission classification, and each account stands to itself. I understand this engine house is a stable you put your engine in. These other repairs come under the head we discussed awhile ago.

Now on the passenger side of the proposition, the situation in this case calls for the separation upon some base of the mail and
4966 express expense from that of the passenger, and after that is separated from the passenger business, then to ascertain the expense to be properly apportioned to State and inter-state passenger service, and in this case the car mile basis has been used, which, of course would be on the various equipment, on the mail, express and coaches, exclusive of the Pullman, that is taken care of by the Pullman Company, in another account.

They have been criticized on the ground they have done injustice to the mail and express in treating it on an equality—the expense as to the car mileage. I wish you would give your opinion as to the cost of repairs of the various kinds of equipment, mail cars, express cars, baggage cars and coaches, and then give us your opinion as to the apportion that should be made—taking the express and mail on one side and the coach and baggage on the other.

A. What expense do you want to figure in this?

Q. Car repairs.

A. Not painting and varnishing?

Q. I presume that is repairs under the classification that should be included.

A. Everything that is done to the car in the shop—now I

would state that is all pooled on the Iron Mountain and Missouri Pacific System——

Q. Now not taking the figures derived from the pool, but upon car mileage basis, per mile run, separating the express and
4967 mail from the coach and baggage, what is your opinion on that, that is what I am asking.

A. Covering the matter, what we generally call car repairs, I should think the greatest expense would be on the car nearest the locomotive, on account of it having to absorb the shock of all the loads or cars behind it, which would mean that there would be less damage to the coaches than there would be on the baggage cars or mail cars. Very little cleaning at terminals is done to the mail car, express car and baggage car——

Q. Cleaning, Mr. Alexander, goes in another account, that is not the car repairs, that goes into the transportation account, that doesn't go into the car repair account, so you can exclude that from your consideration.

A. Then you want just the car repairs, everything pertaining to repairs?

Q. Yes, sir.

A. I have no figures, never kept*ed* any figures on that point, and from my experience, I doubt if it is usually done, and I would hardly know how to estimate it.

Q. Which goes into the shop more often, the car next the engine or the coach?

A. The car nearest the engine, it would go into the shop oftener, for the reason it would receive all the shock of the entire train, and the gases of the coal burning in the engine, and the cinders,
4968 would damage the roof more quickly than it would do further back in the train, but I presume there would be some compensating elements on the other side, about painting, varnishing, putting in glass, and so on, in the coach.

Q. Taking it by large and by small—the general average condition, what would you say, what would you say as to the division of the car repairs, the mail and express on one side and the coach and baggage on the other—the damage to the baggage and coach as against the mail and express, what would you say as to the repairs?

A. Well the coaches are very much longer than the baggage or express cars, and the mail cars are usually also longer, which would require more painting and more varnish than for the shorter cars—the question is a little bit ambiguous.

Q. I will make myself clearer, the question is to separate and get the mail and express expense out of the passenger expense, and they have used the car mile basis and apportioned that expense, taking the mail and express on the one side and the baggage and coach and everything in passenger traffic from the other side—I understand your testimony is, the greatest injury to the cars would be to those toward the front—that is to starting and stopping and to paint and varnish?

A. Yes, sir.

4969 Q. On the other hand there would probably be more injury to the interior of the coach, the glass, upholstering, of the coach and things of that kind?

A. I think so.

Q. The question is this, treating them alike, has any injustice been done to either traffic,—treating them alinke on the car mile run?

A. I haven't ever kept any data on that, it is a very difficult question to answer, but then from my observation, I should imagine that it would be about fair.

Q. The coach would likely get more repairs, but wouldn't get into the shop as often? That would probably be about the situation?

A. Yes, sir.

4970 K. P. ALEXANDER, re-called for cross-examination, testified as follows:

By Mr. MOORE:

Q. Mr. Alexander, when were you in the machine shops of the Missouri-Pacific at St. Louis?

A. About 1881 or 1882.

Q. How long were you there?

A. About a year.

Q. What capacity were you working in then?

A. Machinist.

Q. What department were you working in?

A. Machinery shop—back shop.

Q. How old were you at that time Mr. Alexander?

A. I was born in 1865—about sixteen, somewhere about that.

Q. You were learning, in other words?

A. Yes, sir, I was just a young fellow.

Q. Then after that you went with the Frisco—some years after that as machinist and Division Foreman at Newberg—where is Newberg?

A. That is the first division point southwest of St. Louis on the Frisco.

Q. How long were you there?

A. About twelve years.

Q. When were you Master Mechanic on the Fort Smith & Western?

A. Do you want the years?

4971 Q. Just about—as near as you can recall, I don't care about being exact as to the year—as near as you can recall?

A. About 1902 and 1903, I think.

Q. Where is the Fort Smith & Western? Where does it run?

A. It runs from Fort Smith, Arkansas, and at that time to Guthrie, Oklahoma.

Q. How long had that road been in operation then, Mr. Alexander?

A. Since about 1902 or 1901.

Q. Did it have a large equipment when you went there?
A. Not when I first began, but when I left there it had about 14 locomotives and 1200 cars, possibly more cars than that.
Q. It was still in its modest state then?
A. I equipped the Mechanical Department there.
Q. You quit there in 1904?
A. Yes, sir.
Q. Did you quit railroad service then?
A. Yes, sir.
Q. What is the weight and capacity of a large furniture car?
A. A great many of them are 80,000 capacity, and some a hundred thousand capacity, just what their weight is I don't remember.
Q. It requires a pretty large car to carry one hundred thousand pounds of furniture?

4972 A. All cars are built to carry ten per cent over their stenciled capacity.

Q. You spoke yesterday about a furniture car, I suppose you mean it was of the class of cars constructed for the purpose of carrying furniture—furniture cars are usually longer—Mr. Roberts who testified in this case yesterday, said that 60,000 was about the maximum capacity, and weight 40,000.——
A. I am not prepared to say what the weight of a car is or was, I have not retained that in my recollection—but the capacity on furniture cars run up from 80,000 to 100,000 pounds, for instance, coal cars as now built carry 80,000 to 100,000 pounds capacity.
Q. I understand that coal cars are now built to carry 80,000 to 100,000, but it would require a very much larger car to transport 100,000 pounds of furniture than it would 100,000 pounds of coal?
A. Yes, sir.
Q. Aren't you mistaken in the statement if you intended to make that statement, that furniture cars have a capacity in carrying furniture of from 80,000 to 100,000 pounds?
A. Yes, sir, it is possible I am, because for the fact furniture is lighter lading.
Q. What is the weight of the heavy engines that are now in use?

4973 A. I am not prepared to give the weights on the engines, I have not kept these things in mind.

Q. You wouldn't be prepared to make a comparison?
A. I will state this, during the past six years I have been entirely out of the mechanical business. I have been trying to forget it as much as possible in order to concentrate myself more on my present business, and I am not as well prepared to give detail information on weights and dimensions and things of that character as Mr. Roberts, for during the time he has been out of railroad business, has been doing semi-mechanical work, as he has had the supervision of engines and boilers on steamboats——
Q. So you don't feel as competent to take up these matters as Mr. Roberts?
A. No, sir, not as far as weights and dimensions etc. are concerned.

Q. I use the word "now," I suppose you understand I mean 1907?

A. Yes, sir, I understand that in all cases you mean 1907.

Q. You are not familiar then with the changes in appliances used in operating railroad cars that have been made since 1904 to 1907?

A. Well, as a matter of fact, I think there were very few changes made in 1904 to 1907 that I have not observed. I will say further on that question, there has been some changes in the air brake apparatus that have been made since 1904 that I would not
4974 be thoroughly acquainted with now.

Redirect examination.

*Agreement.*

Q. It is shown here by the witness from the Interstate Commerce Reports for the year ending June 30, y904, that over 90% of the equipment had been supplied with air brakes and automatic couplers.

By Mr. HILL:

Q. Mr. Alexander, on this furniture car that Mr. Moore cross-examined you about, wasn't what is called a furniture car—a car that is constructed to hold furniture but also constructed to hold any other commodity?

A. Yes, sir.

Q. And would have a capacity much larger for other commodities than it would have for furniture, isn't that a fact?

A. I think that is correct.

Q. Suppose you take a furniture car and load it with pig iron, it would have a carrying capacity for pig iron very much
4975 more than it would have for furniture?

A. Greater in pounds.

Q. That is what I mean. Do you have any recollection of the capacities by the Western Classification of the various commodities, or did that come in your line?

A. No, I have no recollection of the weights of the different class of cars, I can get it—I have it in my office.

Q. Do you remember about what a furniture car was—I understand it is about 14,000?

A. I don't remember.

Recross-examination.

By Mr. MOORE:

Q. A car built for carrying furniture, used for carrying furniture—different character of freight, is it used for carrying pig iron, rock and coal and things of that kind?

A. I think there are usually stenciled instructions on the side of the furniture cars prohibiting their use for certain purposes. I am also of the opinion, that in some instances they are stenciled to the effect that they are to be used for furniture only.

Witness excused.

4976 J. A. SIMMONS, being first duly sworn and examined, testified as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, age, residence and present occupation?

A. Age 55, Ft. Smith, Ark., sand business.

Q. You have had a great many years of railroad experience, I wish you would give a little biography of your railroad experience, commencing at the beginning without going into great detail, and give generally the different service that you have performed in railroad work?

A. I commenced on the Missouri Pacific the 1st day of October, 1896, as track layer at Selina, Kansas; I wasn't there but a short time, and went back to Texas and then came back, and went to work as section foreman at Gipsum City, Kansas.

From there, I was transferred to Ft. Scott, Kansas, as section and yard foreman. From there, I was transferred to Joplin, Webb City, Carthage, laying track for the mines.

4977 From there, I was transferred to St. Louis, overhauling the yards, putting in new yards from Cabanne Avenue to 700 feet east of Ewing Avenue.

From there, I was transferred to the Arkansas Division, headquarters at Walnut Ridge, as assistant Roadmaster; remained there four years.

The 1st day of July, 1898, I was transferred to Van Buren as Division Roadmaster of the K. & A. V. Division—had it for a time from Little Rock to Coffeyville, a short time; remained there 8 years, was transferred from there the 1st day of July, 1906, to Ferriday, Louisiana, as Division Engineer. Had charge of seven divisions down there.

Q. That on the Iron Mountain in Louisiana?

A. Yes, sir, remained there a year and quit railroading, the 16th day of June, 1907.

Q. The period that we are inquiring about in this case is conditions in 1907; that was the time you quit railroading?

A. Yes, sir.

Q. Have you, in your experience, observation, studied the relative wear on the track and roadbed, made by locomotives and by freight cars?

A. Yes, sir.

Q. Has your duties in the lines you have above described made it necessary for you to study those conditions?

4978 A. Yes, sir, that was part of my business.

Q. I wish you would state your opinion, based upon your experience, and observation, as to the relative wear on the road, take the whole way, by freight cars and locomotives?

A. Well, I think that a hundred thousand capacity coal car, loaded to its limit, is harder on the track than an ordinary locomotive; for the simple fact that the car hasn't but two bearings, two trucks, and they get the full force of that car on the track at

one end of the car—for instance, a low joint, that car will go into a low joint more severe than an engine will. An engine has a pin through the pilot trucks that lets the engine work up and down, and it doesn't put the full weight of the engine on the track, in any one place.

Q. How about bridges?

A. On the bridges, I think that the cars are more severe on a bridge; I don't mean to say on a bridge but against a bridge; there is but few bridges but what is higher than the track approaching it; letting the cars and engine hit against the bridge, as well as on it, and my opinion is that the cars hit a more severe blow to the track or a bridge, than an engine does.

Q. How about the frogs?

A. Well, frogs in my estimation, is the week spot on
4979 track; they are short as a rule, some only four feet long, and some of them 16 to 20 feet long, and there is four connections to that frog instead of two, to the track, giving it a chance to vibrate more or less than a rail.

Q. What is the effect of a very large locomotive and very large freight car on the frogs?

A. Well, you take a locomotive with a worn driver, and they soon wear out the wing of a frog, as well as the point: those worn tires are more on switching engines than they are on road engines. They use sand on switch engines more than they do on road engines, because they are not connected up with air; switching the cars away from them all the time, and the frog has to be renewed very frequently. Very frequently we make a new wing and put on the frog points; that could be done with what we call a jim crow or rail bender, and the drill; a good foreman can make a wing of a frog and put it on—I have put them on myself.

Q. What is the effect of the average car on a frog?

A. Well, the car, I think it would come pretty near in line with a frog as it does with a bridge; it would have more effect on the frog, after the frog is worn some, than an engine does, because it is going down in there with a chug of the wheel.

4980 Q. Where do you find flat wheels oftenest. I don't mean the number of cars, but relatively, one car and one engine?

A. Yes, we very frequently find a flat wheel on a car and on an engine too.

Q. Proportionately, which do you find the flat wheel in the oftenest; the car wheel or the engine?

A. I believe I have observed the cars the most.

Q. What is the effect of a flat wheel on the track?

A. It is very detrimental on the track, on account of its pounding; it comes around and strikes the rail similar to a trip hammer; that flat base hitting the rail injures the rail, and of course, to a certain extent, injures the car.

Q. What would be the effect of a flat wheel on a low joint?

A. Very detrimental, if it should happen to hit there; if a flat base should hit a low joint, it would be very detrimental; otherwise, it would be the same as any other wheel.

Q. Now, there frequently happens, as I understand, in the loading of cars, brings down the side bearings—what effect does that have on the track? What I mean, it brings the car down on the side bearings?

A. I understand what you mean; a car that is not properly loaded, the car being more loaded in one end, for instance,
4981 than in the other, or is overloaded, weights the car down on the side bearings, and makes that car—especially going around a curve, hug the outside rail more so than it would if it was loaded properly, and is detrimental to the track, and where there is bad ties it—I have known of instances where it would turn the rail over. I don't mean to say, turn it entirely over, but turn it out on the outside rail, sufficient to let the wheel on the opposite side of the car drop on the inside of the inside rail. When it would drop down there, then the wheel on the outside rail would pass over the top, and cause a derailment; I have known that to happen frequently, especially in yards.

Q. You commenced in giving your biography of your service, with the Missouri-Pacific and Iron Mountain in 1886?

A. Yes, sir.

Q. Prior to that time had you had railroad experience in what line—without going into the detail; state generally what kind of service you had with any other railroads?

A. When I was quite a lad, I had service as a watchman on the Mattoon & Gravial, building that railroad, and then I was on the Santa Fe.

Q. In what capacity?

4982 A. I was on the Sante Fe under L. W. Lewis and Barney Langtrey, contractors, in the construction department; I had a gang sinking pits for abuttments for bridges; from that, I went into the water service on the Sante Fe; I was in the water service, I believe, about five years, from Kansas City to Dodge City Kansas. I had a gang there, I think I was there about 4 or 5 years; I don't remember just exactly.

Q. What other service; I just want to get your experience without going into the details of it, up to the time you went with the Iron Mountain and Missouri Pacific?

A. That was about all.

Q. Are you familiar with the operations of trains in the olden times, we might call it now, when they used hand brakes and link and pin couplers?

A. Yes, sir.

Q. Are you familiar with the operations of trains with the automatic brakes and air?

A. Yes, sir.

Q. Equipment that has been installed in them in recent years?

A. Yes, sir. Understand me though—I am not a practical man at handling that air, but I have been with the trains and train crews for twelve years continuous—for 13 years continuous.

Q. And your work as roadmaster and in various other
4983 capacities, you have practically lived on the trains and with the trains?

A. I was on the road continuously.

Q. Are you familiar with the injury that is caused to cars by starting and stopping?

A. Well, I have seen a great deal of it.

Q. Are you familiar with the injuries that are caused to cars by switching?

A. Yes, sir, saw a great deal of damage done.

Q. We have a question in this case, that I will state to you. We have prepared exhibits using a percentage that was obtained in the days of the link and pin coupler and the hand brakes, the percentage was 20½% for damage done to freight cars from stopping and starting; that is from all damage done to freight cars, that it costs the road to maintain them—20½ per cent was added to that cost, to cover stopping and starting.

A. That is the old link and pin——

Q. That old table was made up in that link and pin day, and hand brake day, 30 years ago, something like that; the question I want your opinion upon, assume that that 20½% was correct—assume that it would be a correct percentage of those days, I will ask you the effect of the change to the modern equipment, whether it would be more or less injury to the cars, from starting and
4984 stopping under the modern equipment than under the old?

A. My judgment is that if it was 20% or 21% with the old hand brake, 9 or 10% would catch it now.

Q. You would cut it in two and a little more?

A. Yes, sir.

Q. What are your reasons for that?

A. Well, take the old link and pin, take the different size cars, let a high car come back against a low car, it would go on top or in other words, the link, if it was in the standing car, would go under the draw bar, of the high car, and have a tendency to raise that draw bar up; that would be injurious to the dead wood, and vice versa, it would be injurious to the draft timbers.

Q. How about the effect of the air applied through the train, as compared with the force set by hand brakes, what effect would that have on the stopping?

A. Well, the train set by air is stopped more uniformly than it is by link and pin; a link and pin, the brakeman got out and set three or four cars—four or five, such matter, and the engine does the rest of the stopping, of course that would have a certain tendency of jamming the cars together.

Q. You said the link and pin, I think you mean the hand brake, in referring to stopping?

A. No, sir, just explaining on the link and pin, they would
4985 set four or five cars with the brake; the engine would do the rest; that would be detrimental to a certain extent, with the car.

Q. In your work as roadmaster, have you discovered the effect of the injury to cars, as evidenced by scraps on your road, as a result of the stopping and starting movement?

A. Yes, sir, it was part of the roadmaster's business to help repair cars; that is, have the foreman help repair them; they would send a man out from headquarters to put in a draw bar, repair a car that was off the center, it would be our duty to assist that car repairer to that extent, and when I took charge of the K. & A. V., the 1st of July, 1898, they were just gathering up the scrap for that month or had just gathered it up; Mr. McCloud, the man I succeeded and I remember very distinctly, he had two cars and Mr. McKey, the superintendent, told me——

Q. Don't repeat what he said; that wouldn't be competent.

A. I had to separate that scrap, take the car scrap and put it in one car, and the track scrap and put it in another, and it was forwarded then to the purchasing agent at St. Louis, and when I went to handling that myself, I sent out two cars, one for the car scrap and one for the track scrap, saving the trouble of transferring it and assorting it, and very frequently, we would get two and
4986 sometimes more cars of scrap on the 166 miles of track. We later on had the section foreman to bring the draw bars especially from the cars that were set out, would be taken in chained up—we had the section foreman to take the draw bars to the depot and the agent would bill those draw bars to the master mechanic at our headquarters at Van Buren, to be used again in the cars.

After we got the standard coupler and air, I don't suppose that there is a full car in three months on the division.

The section foreman takes that to the tool house, and we have a little landing made to throw that on, and the local stops and they throw that on and bring it to headquarters.

Q. Now, take the switching side of that proposition, you testified you were familiar with the injury to cars occasioned by switching; it is assumed in this case that 13½% per cent of all the injuries due to freight cars in the old link and pin, hand brake days, would be due to the use of cars in switching; assume that that is a true percentage, of those days, what should be the percentage now; I don't care so much about the percentage as a comparison—would it be more or less with the modern equipment?

A. It would be less.

4987 Q. In your judgment, how much less?

A. You say that is 13%?

Q. 13½% was the old percentage, I think.

A. I don't think it would go over 5 or 6%.

Q. It is in testimony here by some general managers, that it is and feasible or practicable to make any estimate or intelligible estimate or fairly accurate estimate of the switching that is done by a local on the run; I wish you would state whether in your opinion, any one thoroughly familiar with the run of a local freight train could make a fairly accurate estimate of the number of miles that that local freight engine would switch in its run—I don't mean in any one day, or two days, but general average conditions?

A. I don't see how they could get at it accurately, but I believe it could be shown up approximately what extra running they would do at each station, provided they stopped daily at each station.

Q. Illustrate that, state how you would get at it—take any division that you are familiar with—state your method of getting a fairly accurate approximation of the amount of switching that would usually be done by a local locomotive?

I hand you a work sheet of Mr. Wright that has been used in this case, that gives the various divisions, and I hand you the sheet that shows the Central Division, Van Buren to Russellville, that I know you are familiar.

4988 A. Now take Shibley, and start with Shibley; that has a 3,500 foot passing track, and from that passing track is a spur, a fruit spur; that business is all done, virtually all done by the train going to Van Buren, taking the load there. I presume that it is 2,500 feet from the head block of the spur to the north end of the passing track; they stop their train at the south end of the passing track, or pull their train in on the passing track, then pick up their car off of the spur, put it into their train, and pass out of the north end of the passing track.

Q. In making that movement, how much mileage would they make at that place?

A. They would not make over a thousand feet at this point.

Q. Take another point there to illustrate your idea, about how you would get at the switching?

A. Let's take Mulberry—Mulberry has a long passing track; invariably, the train south bound does the work at Mulberry; they have a house track takes off from that passing track, as well as a spur; they pull down to the station and cut their cars that they have to set out, and do their switching there; it is probably 2,000 feet from the head block of the spur to the end of the spur.

Q. What would be the mileage of the switching made in handling a car there?

A. If you had to put a car in there, and take one out, it would just simply double that length; that would be—provided he

4989 went to the end of the spur, they usually don't go to the end, I don't think it is 2,000 feet, but we will let it go at that; while I laid the track, I don't remember just exactly what it is.

Q. Say that would be 2,000 feet, then the maximum switching he could get, would be that run you have made, and it might be very much less than that because he might not have to run to the end of the track?

A. That would be my opinion about it; I know that is the way they handle it. Now, we will go down to Ozark, and the passing track is on one side of the depot and the house track is on the other side—opposite side. I should judge that the house track is 1,200 feet long——

Q. And how long is the passing track?

A. 3,500 feet; but they don't use the passing track there for switching purposes; now, if he had ten cars in his train, he would stop the caboose at the depot to go back on the house track; he would probably do a thousand feet of running there to get the cars; if he wanted to take a car out and put one in, of course, he would do twice that.

2173

Q. Suppose that at Ozark, taking the illustration—it is a pretty good sized town, how many cars have they marked there that would usually be set out?

A. 2.

Q. Take some place that has more than that, some that
4990 would average three.

A. Cabin Creek has three and Clarksville three.

Q. Take either of those; would the switching movement, the ordinary running of the train, require the three separate switching movements for three cars?

A. No, sir.

Q. How would that be made?

A. If he has three cars to spot in there, he would take hold of the three cars and go in and spot the farthest car from his engine first, pull a hundred feet, spot the next one, pull up 100 feet or whatever distance it might be and spot the next one.

Q. If you would take the mileage made by each of those cars, say three, and calculate it as if you were calculating it as 3 movements to switch one car at a station like Shibley, that would give a great deal more mileage than the engine would really do?

A. Yes, sir.

Q. And in the practice, it is done as you stated, and there would not be that mileage earned for three cars, of three times what it would be to put one car in?

A. No, they put three cars out with the same length of run as they would one.

Q. What is the longest track at a station?

A. I don't know.

Q. Take——

A. Main line stations?

4991 Q. I am not asking you the number of feet of the various tracks there, the passing track, house track and industrial track, but what is the longest track that is used at a station,—I am not asking you in feet,—what kind of tracks do the usual stations have—take Mulberry, how many tracks has it?

A. 3?

Q. What are they?

A. Passing track, spur and house track.

Q. Which is the longest of those three?

A. The passing track invariably, if that is what you want to know.

Q. That is what I wanted to know, what is the longest track at a station?

A. I thought you meant the longest track.

Q. I meant the general proposition,—what is the longest track?

A. The passing track.

Q. If you figured every car that has been switched at a station, as switched the length of the passing track then you would get an excess of switching mileage over the actual facts; in other words, if you were making a calculation as we have called for here, for a car that was set out on the house track at Mulberry, if you figured the run on the passing track, taking the length of the passing track to figure

your mileage, you would have an excess of what the locomo-
4992 tive actually did?

A. Yes, sir, for instance, they run by the south end of the passing track, and go up two-thirds of the way *of* the *on the* passing track, and do the work and go on through, they wouldn't have gone but about one-third of the switching of that passing track.

Q. Is that the general relation of the tracks,—the passing track is much longer than the others.

A. Yes, sir.

Q. That is at all places the maximum track at a station?

A. Yes, sir, the standard passing track, from here to Coffeyville,—if I remember right, is 3500 feet; I extended every track from Van Buren to Coffeyville and made them standard.

Q. Well, as I understand your criticism of that system there (in the working sheets) it is producing too much mileage made in switching?

A. Yes, sir; you see Cabin Creek, for instance, he is setting out three cars and he goes six trips for them.

Q. And how many should he make?

A. One.

Q. Then he has taken the passing track mileage there too?

A. Yes, sir. Oftentimes it is like this: the local train will go on a passing track, and the engine will go past the head block of the house track; instead of that engine running ahead a thousand feet
or such a matter to go in on the house track, they cut off two
4993 or three cars back here to clear and hold onto them, and back those cars in and do their work and all they do is simply go the distance from the length of the head block back to the cars.

Q. That would be much less than the length of the passing track?

A. Yes, sir.

Q. Without pursuing that in detail, you could take—by "you" I mean someone thoroughly familiar with the road—a freight conductor or a man that knows the line thoroughly, and the usual conditions on the line of a local freight, and he could make a fairly accurate estimate of the amount of switching *down* by the local couldn't he?

A. Yes, sir, pretty close; I could go on a local train from here to Van Buren, Poplar Bluff or Hoxie, and get it accurately within a very few feet, by being with the train.

Cross-examination.

By Mr. MOORE:

Q. The amount of switching on different trips, different runs of an engine, are not at all uniform?

A. No, sir.

Q. The conditions vary from day to day?

A. Yes, sir.

4994 Q. Depending upon the conditions of traffic each day?

A. Yes, sir.

Q. That is the traffic that is carried in the local train?

A. Yes sir, it is not alike every day.

Q. And the character of switching necessary to be done in order to take out cars or spot the cars, depends upon the necessities of the occasion, on each performance in that respect, doesn't it?

A. Yes, sir, the agent, whenever a man comes into the station, the agent has a list for him to do, set out cars or pick them up.

Q. You illustrated awhile ago, about spotting three cars; suppose he wanted to take one out; that would produce an entirely different movement?

A. Make that trip in there would be all.

Q. I understand what you mean by spotting a car is pulling it to a certain location?

A. Yes, sir.

Q. You have three cars——

A. Yes, sir.

Q. You want to spot two cars and take an empty out?

A. Yes, sir.

Q. Now, the location of that empty may be such that it will require a different movement and more movements than it would to spot two or three cars.

A. The way that is handled is this; in most cases, not all,
4995 they go in on the passing track,—you say the spur takes off the passing track, and they go in to put an empty in there and take out two loads?

Q. Yes.

A. They will set the empty out on the passing track, and they will reach in and get those two loads, and come out, and reach down here and get the empty——

Q. In order to make that movement, they put the empty on the passing track?

A. Yes, sir, that is, just below the clearance post.

Q. At any rate, they take it to the point where it is left on the passing track and leave it there?

A. Yes, sir.

Q. And then they go on the spur track and get the empty?

A. Yes, sir.

Q. In the movement you have just described, of putting an empty, leaving an empty on the passing track and taking out two loaded cars, you make a movement first—the first movement is to deposit the empty on the passing track; that is correct, isn't it?

A. Provided the train—if the train heads in on the passing track, as they do frequently, then they cut off at the empty car, leave the empty car and the caboose standing on the passing track, into the clear of the spur; they move up 128 feet or 30, whatever it might be,
and they move back down there and get that two loads that
4996 is in there on the spur; they are going to take them with them; they pull back on the passing track and reach down and get this empty with those two loads and pull up again, and sit them down where they are taking the two loads from.

Q. So that involves a stop in order to cut off the empty and caboose on the passing track?

A. Yes, sir.
Q. And then it involves the forward movement, for the purpose of clearing the switch, which would put them on the spur track?
A. Yes, sir.
Q. And then the back movement on the spur track to reach to the cars they want to get there?
A. Yes, sir.
Q. And then a forward movement on the spur track and passing track, to get beyond the switch connection?
A. Yes, sir.
Q. And then a backward movement on the passing track to go back to the empty and the caboose?
A. Yes, sir.
Q. How many movements is that?
A. 6.
Q. For two cars?
A. If they handled it that way.
Mr. HILL: Three cars you said.
4997 A. It wouldn't matter how many cars.

Mr. MOORE:

Q. That just simply illustrates how it varies, and suppose they would stop on the passing track instead of the main track, then they would cut off the caboose and empty; they would make the necessary movement to get the empty on the track they wanted to leave it on, say the passing track, what would they do to do that?
A. They would run up here on the main line, cut off where the empty is, take the empty with them; they might have five or six loads ahead of them; cut off the empty and run up on the passing track?
Q. For the purpose of clearing the switch stand?
A. Yes, sir.
Q. Go past that?
A. Back down and set that car in the clear on the passing track, reach in on the spur and get those two loads.
Q. What would that involve?
A. Back in.
Q. They have set the empty at the place they wanted to leave it?
A. Yes, sir.
Q. They did that in the backing movement?
A. Yes, sir.
Q. They couldn't back farther, they have to move forward then?
A. Yes, sir.
4998 Q. And clear the switch stand, and then what do they do?
A. Get those two loads.
Q. Then what do they do?
A. Pull forward to clear the switch stand.
Q. Then what?
A. Back up and get the empty.
Q. Then what?

A. Pull up to the switch stand and set it back where they took the two loads out.

Q. And then what?

A. Proceed up to the main line with their train, with the two loads.

Q. How many movements does that involve?

A. 7; now then, that is the actual movements they would have to do in that way; now, they are not going to set out any empty, just simply reach in there and get the loads and set them out.

Q. Where are they when they get up to the station—there on the main track?

A. Yes, sir.

Q. Where are you going to locate the loads they want to take out?

A. On the spur track the same as the other was.

Q. You come in on the main track?

A. Yes, sir, at the station.

4999 Q. Now, the two loads that you want to pick up are on the spur track?

A. Yes, sir.

Q. What is the first movement you make for the purpose of picking up the loads?

A. As a rule, the conductor and two brakemen go to unloading freight.

Q. Leave that part out.

A. Cut the engine off, and go up to the passing track switch.

Q. You do that now to clear the switch stand?

A. Yes, sir.

Q. That is a forward movement?

A. Yes, sir.

Q. Then you clear the switch stand, and back down to the passing track?

A. Back down to the two loads on the spur, and pick up those loads and come out.

Q. Then make the forward movement of clearing the switch stand again?

A. You don't have to make any stop; you clear the switch stand on the passing track.

Q. When you have connected with the two loads, you have to go forward and clear the switch stand and get back on the main track?

A. Yes, sir.

5000 Q. And then you back down to your train?

A. Yes, sir.

Q. Supposed you wanted to put those two cars on the rear end of the train, then what would you do—what would that movement involve?

A. Same thing.

Q. Would it involve a movement of all the cars on the train?

A. Yes, sir.

Q. The entire train would have to go through that movement?

A. Sometimes they do this—you mean behind the caboose?

Q. I mean at the rear end of the train?

A. If it is the rear end of the train, it would be behind the caboose.

Q. Suppose it was immediately in front of the caboose?

A. Then they would handle the whole train; let me explain that a little more fully; perhaps if they had charge of the train and were unloading freight, they would back down and pick up those two cars and bring them up to clear in the passing track, and then they would cut off the caboose and back in and get those two cars and pick up the caboose and go ahead.

Q. These illustrate the ways they could do it under other conditions?

A. Yes, sir.

Q. Suppose those two cars they want to pick up were on the spur track; tell the movements they would make to get them off
5001 the spur track.

A. I have just done that; that is off the spur track what I have been talking about; that spur track leads from the passing track, that is what we have been discussing.

Q. Is there any uniformity as to location of spurs at different stations along the line of road?

A. No, sir, there is not, not on these roads here.

Q. To illustrate the thing I have in my mind, you can tell me whether it is a case that might occur or not, suppose you were going into a station from the east, and you wanted to pick up two cars that are on a spur that makes off from the passing track in a westerly direction, and where the switch stand that connects the spur with the passing track, is at the east end of the spur; you want to pick up two cars on that spur; now your train is headed west; what movement would you make to do it?

A. Pole the car out—they frequently pole the car out, provided the switch is close enough to the passing track.

Mr. HILL:

Q. You had better explain what you mean by "poling"?

A. They pick up lots of them—lots of local engines carry poles with them on the rear end of the tank; I have seen many of them,—a pole three or four inches through and a band around each end, and
they put that against the pilot beam; they push those cars
5002 out onto the passing track; they can do that, or in other words, they can reach in and get the car and make a drop of them at the lower end of the passing track.

Q. Tell the movements that would be involved in that?

A. I am wrong about that, about the pilot beam; that wants to be the tank; they cut off their engine at the clearance here; leave room enough from the switch back to their train to receive that car; they move their engine down to where that car is; they put this pole on against that car, and shove that car right back to the train, throw the switch and couple up and go ahead.

Q. Now, in the case that I intended to put, you are resting on the main track with the engine, the head of the train pointing westward; now, we will say your passing track is on the south side;

now, if you use the engine alone, or suppose now you want to put those two cars on the spur track, between the caboose and the rear freight car, now you have got to move your train forward, haven't you, behind the switch stand, so as to get on the passing track?

A. Yes, sir.

Q. Now then, how do you get at the two cars that are on the spur that goes into the passing track from the west?

A. Then we would use the pole on the car, set it against the tank and handle it the same way.

5003 Q. Use the pole on the rear car of the train?

A. Yes, sir, push those cars out.

Q. Tell me how that is done; I don't know; I am asking you for information?

A. They can do it that way; they cut their train off their engine; or do you want some cars to the engine?

Q. I don't care which; the case I put was cars to the engine, because I want it put between the caboose and the rear car?

A. They cut off the cars they want, they go down to the switch and come back to this spur switch.

Q. That is two movements, a forward movement on the main track and backward movement on the passing track.

A. Well, a forward movement; you know the train is down there ready to go ahead.

Q. But you have to back, if your connection with the spur track happens to be——

A. They come up there and they push those cars out on the passing track, and throw the switch and couple up and proceed back to the train again; that would be four movements.

Q. To get those two cars?

A. Yes, sir.

Q. Now, in the case you put, where you pole them in, you will move west with your train until you get past the switch stand, then you will back onto the passing track?

5004 A. Yes, sir.

Q. If you can pole it in, you laid that on the rear car in the train and by that method, you will push those two cars on the spur in the passing track, and get them in the rear of those two cars?

A. Yes, sir.

Q. That involves a movement forward and movement backward, and also a movement of two cars on the spur track, to get them on the passing track?

A. That is involved in the backing up.

Q. It involves that movement?

A. Yes, sir.

Q. When you have got them on the passing track, you move forward until you clear the switch stand again on the passing track?

A. Yes, sir.

Q. And then you back your cars in order to get the caboose onto them?

A. Yes.
Q. How many movements does that involve?
A. Four.
Q. Suppose the condition or situation of those two cars was such you could not pole them in, they were too far away, then what would the movement be, until you got back on the passing track?
A. Go down here, come in on there, and back up those two
5005 cars. (Indicating.)
Q. Then you back past the switch stand that connects the spur with the passing track?
A. Yes, sir.
Q. Then you would go forward on that to reach the two cars?
A. Yes, sir.
Q. Then you would back again on the passing track?
A. Yes, sir.
Q. Then you would go forward to clear the switch stand to get on the main track?
A. Yes, sir.
Q. Then you would go back on the main track to get your caboose?
A. Yes, sir.
Q. How many movements would that involve?
A. Five.
Q. Wouldn't it be six?
A. Yes.
Q. Now, these instances that I have suggested, and the answers you have given, show how the conditions vary, don't they; they vary in nearly every movement; every movement is different from any other movement; I should not think it would be often that two movements would be precisely alike, occurring in a day?
A. It might, putting cars in the same side-track.
Q. If the conductor would have to keep an accurate track
5006 of the mileage that way, he would have to keep a rather extensive account; he would have to keep an account of each of those little movements.
A. Yes, sir, he would have to do that to get it accurate.
Q. Now, in order to spot the cars on more than one track, it may be necessary to make mileage on the passing track, and on the side-track as well, may it not, depending on the conditions and the locations of the cars and the place where you want to spot them?
A. It is frequently that an agent wants a car replaced; it requires just as much time to go in and replace that car as it does to put one in.
Q. In spotting cars, placing them and taking them out, you frequently have to use the spur track and passing track too?
A. Yes, sir, unless they head in on the passing track, as they come into town.
Q. I know there may be conditions when it doesn't exist, but there are conditions when you do even have to do that?
A. Yes, sir, have to use both tracks.
Q. Do you understand that the work sheet used by Mr. Wright,

and from which you have been testifying, shows the actual length of the passing tracks?

A. The length of the side-track may be al- right, but he has got too many movements to set out a car.

5007 Q. I am not speaking about the movements; what I want to know is whether you understand that he gives the actual length of the passing tracks there?

A. He evidently hasn't got the passing track on there; he has got the house tracks, I see; that would be about right for the house track.

Q. About right, you say?

A. I couldn't say it was just right, because I don't know the length of them.

Q. I want to give you another illustration; a train comes in from the east to a station where there is a passing track and a spur track; the passing track is on north side of the main track?

A. Yes, sir.

Q. The spur track connects with the passing track at its east end —at the east end of the spur?

A. Yes.

Q. A train comes in on the main track, from the east; there are four cars setting on the spur track; those cars are numbered consecutively from the switch stand where the spur connects with the passing track, one, two, three and four, and you want to get cars two and four out of that spur and put them in the middle of your train; now, tell me what movements would be involved in doing that.

A. The train will come up here to the east end of the passing track; they will cut off their engine, they will proceed up

5008 the passing track, and reach up here.

Q. Don't use the word "reach in," because that is confusing.

A. They will proceed up the passing track until they get to the switch stand of the spur; they will go in here and they get hold of all those cars.

Q. The four cars?

A. Yes, sir; they will proceed back to the main line; they will set car #4 up here on the main line; they will back up to the switch, put car #3 on the passing track, back up the main line and set car #2 on the main line, back up, get hold of car #3, push it back in onto the spur where the 4 is; the engine will back up and go down on the passing track, go ahead until she gets past car four, and pole car- 4 and 2 down to the train, back the engine out on the main line, couple up and go ahead.

Q. How many movements are involved in that—about 13 aren't there?

A. I didn't notice, but I can tell it to you; 12 I guess.

Q. I understand every movement of the engine is a movement?

A. Yes, sir—13 is right.

Q. Suppose those cars which you want to pick out in the order

which I mentioned awhile ago, were in the house track so you could not pole them out, what would be the movement?

5009 A. Turned on the track in the same direction?

Q. Yes?

A. The spur track goes from the main line?

Q. Yes?

A. They would stop at the head block of the spur; that first movement will be to go in to get those four cars.

Q. You have got to do something before you can do that?

A. No, sir, we stop here.

Q. At the east end?

A. Yes, sir; the engine goes in and gets hold of those cars, gets out on the main line, proceeds to the west end of the passing track; they jerk those cars, make a drop of them, jerk them in or drop them or make a running switch, drop them in the passing track, is four; the engine then proceeds down the main line, passes the head block, backs in on the passing track, gets hold of those cars; six; goes out on the main line, seven; backs down to the train, is 8.

Q. Have you provided in that for the movements that are necessary to get both cars; you remember that you have to get two cars out of there.

A. 12 movements.

Q. Suppose in the case I have cited, there should be a train going in the opposite direction, standing on that passing track at the time?

5010 A. Back them out of the road.

Q. How many movements would be required to back them out of the road?

A. One.

Q. Tell me where you would take it, just tell me what would be involved in that movement; you would have to move the whole train on the main track, wouldn't you? In the opposite direction from the train that we have been dealing with, that came there,—you would have to do that?

A. As I understand you, there is a freight train——

Q. Wait a moment; here is the passing track on the north, to which I call your attention, and when this train comes in from the east, of course that train going west is on the passing track; that train coming in from the east, part of that passing track occupied by a train that comes from the west, you have got to get that train out of the way, so as to get to the spur and reach these cars you wanted to take out; what movement is necessary to enable you to do that?

A. The freight train is meeting the local—let the local run up the main line and the train on the passing track proceed on east, and get out of the road.

Q. Then when you did that, and when the train on the passing track had gone, then what would you do with the local train?

5011 A. Drop it back to the switch.

Q. That would involve another movement of backing the entire train?

A. Yes, sir, provided there was a train in there, or in other words, we could cut the engine off and get up to this passing track and get in and get them.

Q. It would involve an extra movement, if the train is in there?

A. Yes, sir.

Q. In making those movements, they have to make running switches, do they not?

A. Yes.

Q. What is a running switch,—describe it, please.

A. If you want to set a car out here, for instance, and you would run down here three or four hundred feet, past the head block, a man standing on the footboard of the engine or on the pilot, or anywhere he can to uncouple it, and the train proceeds back, or the engine itself, with those two cars, goes back at the rate of six or eight miles an hour, or ten or twelve, whatever they think is necessary, and when they get to where they think the car will run in on the passing track, clear, the engine slacks just enough to let let him pull the pin, and he gives him a signal to back up; this engine backs up the main line; that turns the switch between the engine and cars, letting the cars go in on the passing track.

5012 Q. Doesn't a running switch involve pretty rough handling of the car.

A. Sometimes the man who does that uncoupling, stays with the cars; he gets right up on top to set a brake, if necessary.

Q. In order to get the velocity to create the momentum necessary to carry those cars to the point you want to take them, you have to give them pretty rough usage?

A. Not any more rough usage than there would be in regular work, unless they come back against some cars.

Q. But the great hope of the personal injury lawyer is to get a case where there is a running switch, and that is because of the rough handling of the cars that it is supposed to be dangerous.

A. The cars would not be handled any rougher there than anywhere else, unless they go back and strike other cars.

Q. As a matter of practical operation, there is frequently a great deal of danger?

A. Not any more than any other switching.

Q. Do you know the average cost of car repairs?

A. No, sir.

Q. Or engine repairs?

A. No, sir.

Q. That is a subject you have no familiarity with?

5013 A. No, sir, I am not versed on that.

Q. Or the cost of the maintenance of cars?

A. No, sir.

Q. Is a coal car of 100,000 capacity a very large car?

A. Yes.

Q. One of the largest that is made and operated?

A. No, sir.

Q. It is a very large car, extreme type of car?

A. Yes, sir, that is about the largest there is; I have seen 150,000 capacity cars—the Southern Railroad Co. has a 150,000.

Q. There is 8 driving wheels under an engine, I believe—I am speaking of driving wheels?

A. On some trains eight, and some four, and some six.

Q. Now, there is eight wheels under a car, isn't there?

A. Yes, sir.

Q. Now, Mr. Roberts testified yesterday that the wheel base of a car is 30 and a half feet; that the wheel base of an engine with eight wheels is 13 or 14 feet; I don't know but what he said 12 or 13.

A. 13½.

Q. What effect in the way of concentrating the weight of the load, does that difference in length of wheel base, have; doesn't it have the effect of concentrating the load,—the weight?

A. Of the car or engine—you are speaking of?

5014 Q. The weight, whatever it is, whatever it is, the weight of the engine or weight of the car, take the body of the car, in case it is the car, and the body of the engine, in case of the engine, isn't the weight very much more concentrated on the short wheel base of the engine?

A. The engine, we will say, has eight drivers and the trucks.

Q. You said four, six and eight; take six; what would be the wheel base if it had six drivers?

A. I don't believe I could tell you offhand.

Q. It would be less?

A. I am not an engineer you understand.

Q. Well, I understand it is 13-½.

A. The two front drivers are closer than the two back ones, and then there is a pair of trucks yet under that engine, or even a set of trucks; there is a pair of wheels in the front part of the engine; that engine, if I understand it just right, the weight is distributed the full length of that engine, on the six drivers and the truck.

Q. I think Mr. Roberts testified that the weight would be more concentrated on an engine than on a car; that is a fact, isn't it?

5015 On a car, the half of that carload is on the trucks, on one pair of wheels, on one truck; that would give more weight in one place than it would on the engine.

Q. And the wheels are under the trucks, are they not?

A. Yes, sir. Now, say the car is 50 feet long, one of those 100,000 capacity; there is lots of them 50 foot cars; 25 feet of that car weight is on the front trucks and 25 feet is on the back trucks, where on an engine, the engine is on the six drivers and the pair of trucks; in other words, it is on ten wheels and the car is on four.

Q. I think Mr. Roberts, who is perhaps more familiar with that subject than you, or I either, testified yesterday that an average car had eight drivers, and that there would be a greater concentration of weight on the wheels of the engine than there would be on the wheels of the car?

Mr. HILL: I didn't understand Mr. Roberts that way.

Mr. MOORE:

Q. Now the point I want to get at is this, is the weight on the 8 engine wheels greater than the weight on the eight car wheels?

Mr. HILL: Do you mean per wheel, or the whole amount?

Mr. MOORE:

Q. I am speaking of the driving wheels of the engine.

5016 A. If the engine is heavier than the car——

Q. Assuming that it is the same weight.

A. No; if the gentleman there will give me the length from the pony trucks, as they call them to the back drivers——

Q. I am just speaking of the driving wheels, the weight is on the drivers, as I understand; 113 feet is the wheel base.

A. It is from one wheel to another, but what is it from center of the back driver to the center of the front driver?

Q. Mr. Roberts testified yesterday it was 13 or 14 feet—the wheel base, any point between the two, from outside to outside; we will assume that it is about 13 feet.

Mr. HILL: I don't believe that is quite a fair examination; Mr. Simmons said he was not a mechanical man; I haven't asked him any questions about mechanics at all.

Mr. MOORE:

Q. I will put it a little different; I will assume, whether it is correct or incorrect, that there is a greater concentration of weight on the driving wheels of the engine than there is on the wheels of the car, both on account of the manner of loading, and on account of the fact that the engine is heavier than the car.

A. If the gentleman will tell me the distance between the wheels of the truck, from center to center of a car truck?

5017 Mr. ROSING: 5 foot six, same distance there is between the two drivers.

A. Then I think there is more strain on the car than there is on the engine; you have 13-½ feet, and you have 11 feet the other way.

Q. I don't understand what you mean; I thought there was 30-½ feet on the car—the wheel base is 30-½ feet on the car.

A. Yes, sir, but that gives a harder strain on the car than on the engine; I don't think I could just explain why, but I do believe that I know it is harder on the track; the car than the engine.

Q. Assuming that there is a greater weight on the driving wheels, on account of the difference in length of wheel base, and on account of the greater weight of the engine than the car, if that were true, would it not result that the engine would be likely to produce more damage to the track than the car?

A. I think not, on account of the wheels, which are larger on the engine than they are on a car.

Q. The gentleman testified yesterday that the engines were provided with more efficient springs, which protected the engine itself and operated them in certain ways with which you are perhaps

familiar, wouldn't that have a tendency to diminish the injury of the engine on the track?

5018 A. I think so. Now, let me make a little remark on that; there is many scales on the system that you cannot weigh a fifty foot car; they weigh that car, half at a time; what I mean by that is, they weight the front end and then they shove the other end on and weigh it, or take half the weight; we had those scales at Fort Smith, until they have just overhauled them.

Q. The car is longer than the scale?

A. Yes, sir.

Q. Mr. Roberts testified yesterday that they have to classify engines for the purpose of selecting those that can go over certain parts of the tracks, and keeping certain engines from going over weaker parts of the track, and also, they classify them for bridges, in order to keep particular engines for particular bridges, and that there is no classification made of that kind for the car; if the car inflicts greater damage on the track, why do they have to classify engines and do not have to classify the cars?

A. I can cite you to a road that won't let a hundred thousand capacity car go over her road, if she can possibly help it and that is the Arkansas Central.

Q. How is it on the Iron Mountain.

A. That is the Iron Mountain system,—the Arkansas Central.

Q. You say they won't let a hundred thousand car go over the system if they can help it?

5019 A. The conductor has orders not to take them; that is the Iron Mountain.

Mr. HILL: So reputed in our neighborhood?

A. Yes.

Mr. MOORE:

Q. Is the Arkansas Central part of the Iron Mountain Road; isn't that a little branch that runs down from Fort Smith to Paris, isn't that a different road from the Iron Mountain?

A. It belongs to the system; it is handled independent.

Q. The stock of that corporation may belong to the Missouri Pacific Railroad Co.——

Mr. HILL: I think Mr. Johnson testified that it did.

Mr. JOHNSON: No, sir, I testified I didn't know anything about that.

Mr. MOORE:

Q. Isn't the Arkansas Central a separate corporation, or do you know about that?

A. It is handled independent, but of course, I have no way of proving that it belongs to the Iron Mountain, but I am satisfied it does.

Q. You really don't know anything about that?

A. No, sir.

Q. And it is the Arkansas Central you refer to as refusing to take a hundred thousand pound car?

5020 A. Yes, sir; I loaded a car of sand, is why I know this, and the conductor refused to take it.

Q. You have never operated a train as an engineer or conductor?

A. No, sir.

Q. When did I understand you to say you severed your connection with the railroad service?

A. 1907, I believe—June 16, 1907.

Q. Where were you living at that time?

A. Ferriday, La.

Q. When did you move to Fort Smith?

A. Probably eight or nine days after that, about the 20th of June.

Q. What business did you go into there?

A. Sand business.

Q. What was your position on the Louisiana Road?

A. Division Engineer.

Q. You mean civil engineer.

A. No, sir, division engineer; that is, have charge of the bridge and building, track and everything on the right-of-way.

Q. Did you sever your connection with the railroad company on account of differences you had in connection with the officials of the road?

A. Yes, sir.

Q. I didn't mean to ask you what it was?

A. Yes, sir.

5021 Q. Were you discharged?

A. No, sir, here is my resignation; I sent in my resignation on the 7th of June and received relief on the 16th; I never was discharged in my life, but not only that, I am doing business with them now.

Redirect examination.

By Mr. HILL:

Q. Your relations with the Iron Mountain have always been pleasant?

A. Yes, sir, I have my clearance in my pocket.

Q. Mr. Moore has questioned you as to a great many switching movements here, which you have explained at length; I will ask you if those are the usual and ordinary movements in the operations of local trains?

A. No, sir, they are rare movements.

Q. Did you take into consideration those rare movements, as well as all other movements, when you made your estimates you have heretofore given?

A. Yes, sir.

Q. You took it by large and by small?

A. Yes, sir, because I am very familiar with that movement of trains; that is not done very often.

Q. It can be done and is done as illustrated there, I presume occasionally?

5022 A. Yes, sir.

Q. I believe he asked you, if in order to get an accurate statement of the mileage, the conductor would have to keep track of all these movements; I will ask you if to make a fairly accurate approximation of the mileage, you take the business that is done, if it is not very much along the same line, and you can make a fair approximation if you are familiar with the road and the way it is handled.

A. Yes, sir, a local conductor could, a good deal better than I could.

Q. Of course, he would have to take in consideration these unusual and abnormal movements that have been asked about, as well as all others?

A. Yes, sir, very often they do not stop at all.

Recross-examination.

By Mr. MOORE:

Q. When trains meet at stations, they frequently involve a more complicated movement where there is switching to do than it would ordinarily, wouldn't it?

A. The side-tracks are provided for that purpose, and there should not be but very little detail.

Q. But if the passing track is occupied and it has to be used in making a switch, it complicates the problem and increases the amount of switching to be done necessarily?

5023 A. The train would have to move up.

Q. Doesn't it occur, when through trains meet, that there is really more complicated movements than those I have illustrated awhile ago, in practice?

A. Yes, sir, the local has to take the siding to let the through freight pass by; it is not very often that a through freight takes a siding.

Q. Such movements as I illustrated, have to be made when there are cars to be picked up which are scattered along on the side-tracks.

A. The movement I illustrated has got to be done that way—there may be some other way it could be done.

Witness excused.

5024 HUBERT F. JERNIGAN, being first duly sworn and examined, in rebuttal, testified as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would state your name, age, residence and present occupation?

A. Hubert F. Jernigan, 34, present occupation working for Citizens' Investment & Security Company as clerk.

Q. Residence?

A. 2608 West 14th St., Little Rock.

Q. You had several years of railroad experience; I wish you would state in brief, just what experience you have had in railroad service?

A. My first experience was with the Iron Mountain on the Central Division, commencing somewhere in the Spring of 1903, and ending somewhere in the fall or Early Winter, about Christmas, 1903.

Q. In what capacity?

A. As Brakeman.

Q. Then what was next?

5025 A. I quit railroading for some two or three years, and went to the Rock Island in 1906, and stayed until the latter part of 1907.

Q. In what capacity?

A. Brakeman.

Q. What run did you have on the Rock Island?

A. Freight service only; I had a local sometime, through freight, and work train.

Q. What division did you work on?

A. Both divisions out of here, east and west.

Q. That is from here to Memphis and from here to Booneville?

A. Yes, sir, most of it was on the east end from here to Memphis.

Q. Are you familiar with the way local and through freight trains are handled?

A. Yes, sir.

Q. You have had no passenger experience?

A. No, sir.

Q. You quit railroading in 1907?

A. Yes, sir.

Q. What part of 1907?

A. It was in the last of 1907,—September, or October, or November, something like that.

Q. It has been testified in this case that it is impossible and impracticable to make any fairly accurate estimate of the amount of switching done by a local freight engine,—that is the switch-

5026 ing mileage don by it; I will ask you if in your experience, you think that a fairly accurate estimate can be made of the switching mileage of a local engine or an engine in local service and if so, how you would do it?

A. Well, I couldn't figure that anyway, only by figuring the time put in.

Q. How would you do that?

A. For instance, take a division—for illustration, a division of 100 miles, and a local on that run will put in at least 16 hours, and figuring the running time at 20 miles per hour——

Q. That is the running time between stations?

A. Yes, sir, that will leave you 11 hours for switching and unloading freight, and other work.

Q. Just take a run and illustrate that,—any run that you are familiar with?

A. I can follow it up from here to Brinkley, pretty well, because I am better acquainted with that—it is a 63 mile run.

Q. Just follow that run, if you are more acquainted with that?

A. Leaving out of here, say seven o'clock in the morning, my first stop would be Galloway, and there is usually some local for that place—merchandise, and possibly a switch or two to make, and the next stop will be Kerr, four miles from Galloway, usually
5027 spot a car or two there, and merchandise; the next stop will be the tank—there is a spur between there and the tank, usually stop there at the saw mill, and then at the tank, and the next stop will be Lonoke, 20 miles from here; I cannot get my stations in there between Lonoke and Carlisle now, cannot remember the names of them, but anyway there is about one stop in there, and then comes Carlisle, and there is two stations between Carlisle and Hazen, at which there is most always a stop, and then from Hazen there is Mesa; there is always a stop there from one to three hours at Mesa—hardly ever any merchandise to unload there; at DeValls Bluff, a mile from there, there is a good deal of switching on account of those mills, button factories and one thing and another.

At Biscoe, there is another stop there, and some merchandise to unload, and then there is a stop at Brasfield, and one at Eden, and that puts you at Brinkley, the next stop.

Q. At about what speed does your engine make the switching?

A. I should judge four or five miles an hour, put it at that—five miles anyway.

Q. When you get to a station on an ordinary run, how do
5028 you arrange your switching—how do you go about it, to handle the switching that is to be done?

A. We know what we have to set out, if any, and then we go to the agent and get a switch list of what switching he wants done, and then we go to the track and look up the number of cars we have to move, for instance, between the house track and so on, and what we had to pick up and then we go on with our work, as soon as we get everything looked up.

Q. While you are arranging that, what is your engine doing?

A. Usually standing still, or one man has the engine getting it in position.

Q. I suppose there is a great deal of variation in switching at stations, owing to the difference loads you have to pick up and set out, and the different modes of handling and all those matters?

A. Yes, sir.

Q. I will ask you if anyone thoroughly familiar with the road can make a fairly accurate estimate of the amount of switching that is usually done, that is, taking the extremes on one side, the most switching it does, and the least switching it does, and the ordinary run, if you can make a fairly accurate estimate of the average conditions?

A. That would be pretty hard to do, from my recollection of the run now.

5029 Q. I am not speaking of your recollection now, take anyone thoroughly familiar, take it at the time you were running

there and knew of the conditions, could you make a fairly accurate estimate of the mileage done in switching on that run?

A. I don't believe I could.

Q. I am not asking you to do it now?

A. You want to know if a man could.

Q. Yes?

A. I should think so.

Q. I understand you have been out of it for several years, and you don't recall all these things?

A. Yes, sir, I have been out three years.

Q. I am not asking you could now, but if you were familiar with that and making the run every day, you could make that estimate?

A. I should think a man ought to.

Q. Could he make it with reasonable accuracy?

A. Yes, sir.

Q. You would work it out on the time?

A. Yes, sir.

Q. On that Brinkley division, how much time did you say was allowed for your run?

A. I figured awhile ago on a hundred mile division.

Q. That is about the average division.

A. Yes, sir, what I illustrated there was only 63 miles.

5030 Q. Take your one hundred mile run, how many hours would be allowed for one hundred miles?

A. I don't know a local run of one hundred miles; the time on the local from here to Brinkley is considered ten hours, may be eleven, for sixty-three miles; that gives them time to include the switching and all, as well as I remember.

Q. About what time did you generally make?

A. Between stations or over the division?

Q. Over the division?

A. We usually put in about 12 to 14 hours, sometimes more.

Q. About what time would you make on that run between stations?

A. 20 to 25, or 30 miles an hour. We ran 25 miles right along.

Q. Then you would take that running time, what you usually made while running, deduct that from the time that you took over the division and count the difference as done in switching?

A. Yes, sir.

Q. That wouldn't represent all the time lost either, would it?

A. No, sir, there is time meeting trains we couldn't be switching.

Q. Taking water too?

5031 A. Yes, sir.

Q. Waiting at the station here, getting your list?

A. Yes, sir, and also there is the unloading of your merchandise, the engine is standing still then, while you are doing that.

Q. If you took your plan of making it, you would still have an excess of mileage allowed for switching, wouldn't you?

A. Not much.

Q. You say you would be counting your train as switching while

part of the time would be lost in doing these matters you have mentioned?

A. Yes, sir.

Q. It is in evidence in this case by the railroads, in an exhibit they have filed, that the local train stops about eight times to the through stopping once, I wish you would explain in ordinary railroad practice, what stops a through train necessarily makes in its run?

A. It is stopped for orders and for water and fuel, and meeting points and junctions.

Q. What about meeting other trains?

A. That is meeting points, meeting other trains; that does not say anything about setting out of bad orders, and picking up perishable stuff loaded since the local had passed.

5032 Q. That doesn't count the work that the through train does, picking up cars and setting them out?

A. I left that out.

Q. That sometimes occurs?

A. Yes, sir, very often they have to set out bad order cars, and most always, in a through freight run, you have one or two to set out at different stations along the road.

Q. Take the stops of a local, about how many are necessary stops for a local?

A. On an average,—it is a good deal owing to the population, the distance apart of the stations.

Q. Take one of their average runs, on the Rock Island, I presume that is the line you are familiar with?

A. They stop on an average of every five or six miles.

Q. If this through would be eight to one, that would be making the through stop about every forty or fifty miles?

A. Yes, sir, but they would cut that half in two; they stop about every three or four times—the local stops about every three or four times to the through.

Q. Explain just how that is, take an average run—by an average run, I mean *would* that would fairly illustrate usual conditions?

5033 A. You can take the Rock Island fast freight run from Memphis here, and without stopping to meet trains or stopping for orders, they have about eight stops?

Q. What is the distance?

A. 132 miles from Argenta.

Q. That is the best time they make?

A. That is without stopping for orders or meeting trains?

Q. We are taking an average run, taking in what it really stops for meeting trains and all that, about how many stops would that make?

A. On an average, meeting trains, it would stop at least ten or twelve times.

Q. They would be stopping——

A. They will stop every fifteen to twenty miles anyway.

Q. The best they can make?

A. Yes, sir, the best they can do.

Q. Are you familiar in general freight service, with the way they handle the red ball trains, or fast freight trains?
A. In what way?
Q. There is such a train as that?
A. Yes, sir, the Red Ball train is a fast train.
Q. How does the handling of that train differ from other through freight trains; does it stop as often or does it do any work?
5034 A. Not necessarily; they usually go over the road faster than other trains.
Q. It gets over the road faster than other through trains?
A. Yes, sir.
Q. When it gets into a terminal, what is the difference between it and other freight trains?
A. Not any; it is broken up like the rest of them.
Q. You don't find them shunting them right through, as a general rule?
A. No, sir, there may be some trains once in awhile that will go right through, but very seldom.
Q. When you find a train that goes through that way, is it one of these red ball trains?
A. Yes, sir, usually.
Q. Are other through trains broken up more than their red ball trains?
A. Not in a yard like this, except in rare cases.
Q. Don't they have a lot of through trains, classed as through trains, that pick up cotton and things like that?
A. They pick up cars of different stuff.
Q. They will be broken up in the terminals too?
A. Yes, sir.
Q. Your idea is that all these trains get broken up, whether they are throughs, red balls or locals?
5035 A. Yes, sir.
Q. It is just a question of degree, a red ball will get broken up the least of any?
A. Yes, sir.

Cross-examination.

By Mr. MOORE:

Q. I believe you began the railroad service in the spring of 1903, on the Central Division of the Iron Mountain?
A. Yes, sir.
Q. And continued until the following winter?
A. Sometime in the fall or early winter.
Q. Where was that service?
A. On the Central Division of the Iron Mountain.
Q. That is the Little Rock and Fort Smith line?
A. Yes, sir.
Q. Then you went out of the service?
A. Yes, sir.
Q. How long were you out of the service?

A. Until the Spring of 1906, I guess it was.
Q. How came you to quit the service at that time?
A. Of my own accord, to take a position in a store.
5036 Q. Then you went to work on the Rock Island in 1906?
A. Yes, sir.
Q. What time in 1906?
A. Early summer, latter part of the spring or early summer.
Q. You quit the railroad service again in 1907?
A. Yes, sir, November.
Q. That service was on the Rock Island?
A. Yes, sir.
Q. The character and amount of switching varies, I suppose, from station to station?
A. Yes, sir.
Q. Depending upon local conditions at the different stations?
A. Yes, sir.
Q. And also, I suppose it varies from day to day, depending on the condition of the traffic?
A. Well, not very much.
Q. You could not estimate that the switching at each station would be uniform from one day to another?
A. It would not be exactly the same, but practically the same amount would be performed on each day; the stations out on the east end would be almost the same each day?
Q. You had no experience on the main line of the Iron
5037 Mountain Railroad?
A. No, sir.
Q. I suppose you know very little about their red ball trains?
A. Nothing only the talk I heard from the brakemen on the Iron Mountain when I was switching with them.
Q. You know nothing of your own knowledge?
A. No, sir,—and my general observation.

Witness excused.

5038 D. HARSTON, being first duly sworn and examined, in rebuttal, testified as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, age, residence and present occupation?
A. My name is D. Harston, age 37, and I am engaged in the dry goods business.
Q. In what place?
A. In Argenta, reside there.
Q. What railroad experience have you had; I wish you would just give a little biography of the railroad service you have had, beginning at the first?
A. My first railroad experience was with the Mountain, working in a bridge gang, and later in the water service for the Mountain,

later with the old Little Rock and Memphis, as brakeman and conductor; then with the Mountain as switchman, and I worked two or three years for the Rock Island as conductor, brakeman and switchman, and assistant yardmaster; ran a train on parts of the Iron Mountain, and broke there; yardmaster on the Union Pacific, and conductor on the Valley Division of the Iron Mountain, and yardmaster at McGehee for awhile.

5039 Q. Your service all been in freight?

A. Yes.

Q. Haven't had any passenger service?

A. No.

Q. When did you leave the railroad service?

A. About two years ago.

Q. You have been conductor on both local and through trains?

A. Yes.

Q. Brakeman on both local and through trains?

A. Yes.

Q. What divisions have you had service on, on the Iron Mountain in Arkansas?

A. I have worked on what is known as the Central and Valley Divisions, and also on the White River.

Q. It has been testified to in this case by the Railroad witnesses in rebuttal, that it is impossible to make an accurate estimate of the amount of switching mileage made by a local locomotive—take a run, for illustration, of 100 miles of a local freight train, can you or anyone thoroughly familiar with that run, and with the service, make a fairly accurate estimate of the amount of switching mileage performed by the local locomotive?

5040 A. About the only way that I would know of, that it could be estimated, would be to take the length of time at each place that they were switching.

Q. Can anyone familiar with the road do that; I don't mean could you do it now for occurrences several years ago, but take a man in the current work?

A. I think he could; that is, he could estimate somewhere in the neighborhood of the number of miles.

Q. What I mean is the general average condition; of course, I understand these things would vary every day.

A. Yes, sir, some seasons of the year, the switching would be very much heavier, but I believe a person could estimate within a few miles.

Q. Take in detail, how would you estimate that, take a run of 100 miles, or any actual run that you are thoroughly familiar with, and make your estimate on that?

A. If I was going to figure up the number of miles I made in switching, I would take the time I was engaged in switching, the length of time at each station, and an engine in switching, seldom runs faster than ten miles an hour———

Q. It don't often get that speed?

A. Very seldom.

Q. What is about the average speed of an engine engaged in switching?

5041 It runs from nothing to about eight miles an hour; there is more time consumed in stopping, or as much, than there is in an engine running ten miles an hour; it would make an average of possibly five miles an hour or possibly not as much.

Q. Take that as a factor, say an average of five, then how would you get at your mileage; I interrupted you to get at that point.

A. If I figured thirty minutes switching time at each station, I would figure I would run two and a half or three miles; that is, I would keep the time of switching I had done, and add it up and make it into hours, and average it about five miles, or may be not so much.

Q. Can't you take a run you are familiar with, and figure it out, just the time you would spend in making the run and the amount of time you would spend in switching?

A. It is quite often done; I don't know whether any account is made of it, and charged up in that way, but in a man's delay report, that they had at the time I was with the Iron Mountain, we had a blank for delays; we would show the name of the station, what was the cause of the delay; if a man was at a station an hour unloading local, say for 40 minutes, and possibly switching 20.

5042 Q. By unloading local, do you mean less than carload commodities?

A. Yes, sir.

Q. We have been calling that, in this case, L. C. L. commodities?

A. Yes, sir.

Q. You are referring to the same thing in calling it local?

A. Yes, sir.

Q. Go ahead?

A. I believe I have about finished.

Q. Take the average local run in Arkansas, with which you are familiar, something like seventy or seventy-five or one hundred miles, something like that, what time was usually consumed in making that run from division to division?

A. From 10 to 14, and I have been on the road 24 hours, on a division of from 96 to 101 miles.

Q. Those would be extreme cases?

A. That is extreme cases.

Q. Take the average, making an allowance for extreme cases and quick runs?

A. I don't believe the time should average, considering good seasons, as much as 15 hours a day.

5043 Q. Of the 15 hours, as an average run, part of that would be in switching, and part of it would be lost in waiting for other trains, and waiting for orders, and things of that kind?

A. Taking water, orders, meeting trains, unloading merchandise.

Q. Then of that 15 hours, how much of it, in your judgment, would be used in actual running on the road, and how much in switching, and these other causes?

A. In a hundred mile division, seven hours to eight, I think, would

be a pretty fair estimate in running over the division, what we would consider running time.

Q. About half the time would be spent in making the run from station to station?

A. And meeting trains and other details—unloading.

Q. And not over half of it would be spent in switching?

A. Not, it couldn't be half.

Q. About how much, taking the average conditions, and average run, just make an estimate on average conditions of an average run, what amount of time would be spent in switching?

A. I don't think, in average conditions, the amount of time spent in switching should exceed three or four hours?

5044 Q. Then you would put that switching at three or four hours,—at what speed?

A. About five miles an hour, I don't think it would exceed that; I don't believe it would be that much.

Q. Would it be difficult for a man thoroughly familiar with each run, to make these estimates and give a fairly accurate mileage of the switching done by a local locomotive?

A. A man should, I think, that was working, as I said, his delay reports should show the time that was consumed in running between stations; that is, the dead time at stations, and what he was doing in those stations, and show the number of hours consumed in the switching.

Q. This is a proposition to which his attention is necessarily directed by these reports he has to make out?

A. It should be, yes.

Q. I believe you stated you had service on both through and local trains on the Iron Mountain in Arkansas. It is in evidence in this case, on both of the railroads, that the local stops eight times as often as the through train; I would ask you to state your opinion on that proposition?

5045 A. That a local made eight stops where a through train made one?

Q. Yes?

A. I don't think so.

Q. That doesn't square with your experience.

A. I don't believe it would.

Q. Explain the various stops made by each, will you?

A. As a usual thing, when business is good, a local will stop at almost every station.

Q. As a general thing, about how far are those stations apart?

A. I don't think they would be less than five or six miles apart; I don't know whether they would average that close or not; I never figured them down, but I would think five or six miles between stations; they would have to make water tank stops, and they would have to meet other trains.

Q. You are referring to the through or local?

A. Locals, in making each station stop; they would have to make the water tank, and then the crossing stops, while in through trains, they would make the water tank stops, the crossings, and meeting

points with other trains; with superior trains, trains that had been given the right over them.

Q. What about orders?

5046 A. Orders too; you take between here and Pine Bluff, 42 miles, I believe, and I don't know that I ever went out from here to Pine Bluff without making a stop to meet something, or to get orders; also, had to stop for the crossings, and there are very few trains that are full tonnage trains, that will run from Argenta to Pine Bluff with a tank of water.

Q. That would mean one water stop?

A. Yes, sir.

Q. Suppose they had a bad order car in the through train, what would you do with that?

A. That is according to the nature of the defect.

Q. Do they carry it along or set it out—I presume you mean according to the nature of the defect, they do one or the other?

A. Yes, sir.

Q. Is it frequent or infrequent, that a through train stops to set out a bad order car?

A. It is not infrequent that they stop to cool a hot box or brass one,—sometimes they set out cars.

Q. What freight trains does a through have to take siding for?

A. In most cases, I believe in all cases, for passenger trains, which would be first class on the time table. They are superior to

5047 second class, and it is according to what class the through freight is in, what trains would be superior to it; you take some trains, and they could be second or third class trains and still be a through train.

Q. And such second or third class trains would take more sidings than others?

A. Than their second class.

Q. What effect would the traffic on the road have?

A. It would cause stops oftener.

Q. The road with the heavier traffic, and single track, would have more frequent stops than one of light traffic?

A. Yes, sir.

Q. What would be your judgment about the comparative stops of the local and through train, taking an average run and an average condition on the Iron Mountain in Arkansas?

A. Well, on the parts that I am familiar with, I wouldn't think that a local would stop more than three or four times as often as a through freight would; that is, as a train running as a through freight.

Q. You have made out wheel reports, I suppose?

A. Yes, sir.

Q. And are familiar with the system on the Iron Mountain of making wheel reports?

5048 A. Yes, sir, was when I was working there.

Q. The wheel reports have the following on the back of them: "Cars must be reported in train order, commencing with the caboose, to show make-up of trains leaving district terminals."

Are you familiar with that.

A. I have made them out.

Q. You say you have made these?

A. Yes, sir.

Q. Explain the system of making them, in force on the Iron Mountain?

A. If I am not mistaken, the instructions read to make them beginning from the caboose, but I usually made the wheel reports from the engine back, and running on the Valley Division, they made the head end of the train up first; I naturally started back from the head end.

Q. That would make it in sequence, whether you began from one end or the other?

A. Yes, sir, in putting them down on the wheel report, I usually started at the top of the page and followed them on.

Q. Was this direction which I have read you, carried out in actual practice on the Iron Mountain?

5049 A. As far as I know it was, as much for their convenience as anything else.

Q. Was that a more convenient way of doing it than any other?

A. We stood less chance of overlooking any cars and getting them all on the wheel reports.

Q. Are you familiar with Red Ball #55 on the Iron Mountain?

A. I have worked in the yards, but I never rode 55.

Q. You know what the train is?

A. It is a high class merchandise train.

Q. How does that train compare with other through freights on the Iron Mountain, in the way it is handled?

A. It is handled in preference, as a usual thing, because they are higher class freight; the Red Ball is moved with more dispatch.

Q. How is it handled in the terminals as compared with other through trains?

A. It is now gotten in and out in as short time as possible.

Q. How much switching is done on that train in the terminals?

A. I don't know what is being done—I don't know what changes have been made since I left; at the time I was working there——

Q. What I want is the switching done in terminals on

5050 that #55, as compared with other through trains, whether it was more or less?

A. At that time, there was considerable switching done on #55, from the fact that they brought 57's stuff—that was the Valley fast train—down on 55 at that time, and it had to be thrown out; there was stuff for Little Rock proper, that had to be switched out, and I have worked on that train, when there was possibly 25 or 30 minutes hurry-up switching on it.

Q. Now, compare the switching that would be done on other through trains with that—the average conditions, I am speaking of.

A. With other through trains, there are other through trains that have come into the terminals in almost as good shape, while there are others that there has been almost one in and one out all

the way through—that is, switching for almost—possibly there would not be two cars for the same place, but what there had to be switches made on them—like lumber for Louisiana, possibly some would be going to the Central Division—possibly some south; possibly some to Thebes, and possibly some to St. Louis.

Q. Did you have experience on the railroad, either in
5051 braking or switching, in the days of the old equipment, link and pin couplers and hand brakes, and also in the days of the automatic couplers and air brakes.

A. I had some experience with the link and pin, that is before the automatic became generally used; when I first went to railroading, they were scattered, and there was a great deal of coupling with link and pin couplers.

Q. You observed the operation of trains, and had experience with the operation of trains in both kinds of equipment?

A. Yes, sir.

Q. In this case, there is an issue as to the amount of damage done to freight cars in stopping and starting of trains; an issue has been made up, as to whether more damage or less damage is done with the modern equipment or with the old equipment. I wish you would give your experience on that, just take the stopping and starting of freight trains under the old system and under the present.

A. In my judgment, there would be more damage from the link and pin, from the fact that there was more slack; in starting a train, the head end, the engine would have more start, jerk the hind end more, and in stopping, it would be the same way; especially in switching, what air they had would be out, and the head end
5052 would stop, and the slack would all run up in a bunch; if the cars were loaded with lumber, it would be more liable to knock out the ends, and possibly do more damage to the draw bars, that is as to the cars handled.

Q. I am referring to it, car for car?

A. Yes.

Q. Take the damage done to cars in switching; would there be more or less damage to the cars under the old system than under the present?

A. More with the link and pin, because there was more starts and more sudden stops and more slack to bunch up.

Cross-examination.

By Mr. MOORE:

Q. You say there were more starts and more sudden stops with the old system than with the present?

A. Yes, sir, that is in the switching; the jar was more severe.

Q. Have you ever worked in the repair shop?

A. Very little.

Q. Do you have any special knowledge in regard to repairs, cost of repairing?

A. No, sir, I have no knowledge as to the cost of repairs.

5053 Q. You have no knowledge of the distribution of the repair accounts?

A. No, sir.

Q. It is not in the line of the work you were engaged in?

A. No, sir.

Q. Are the switching facilities, such as passing tracks, side-tracks and spurs the same at all stations on the roads you have worked on?

A. Are they the same at all stations,—in which way?

Q. I mean the same lay out of the side-tracks and spurs, and the same length of tracks, and spurs?

A. Do you mean of the same length?

Q. I asked you if they were all alike, or are they different at different stations on the roads you have worked on?

A. I don't exactly understand the question—alike in what way—as to the location or as to the law of the ground?

Q. I am not speaking about the law of the ground; do they have the same switching arrangements, same arrangements of side-tracks and spurs at all stations?

A. They don't have the same at all stations, because there is more tracks at some stations than at others.

Q. There is a great variety and there is no two stations exactly alike in the arrangement of spurs and side-tracks?

5054 A. Yes, sir, there are lots of them a great deal alike, possibly just a few car lengths' difference in length.

Q. At some stations, I suppose, the passing track would be on the north side of the main line and the house track possibly on the opposite side—that is the case, isn't it?

A. Yes, sir.

Q. And sometimes the house track would be on the opposite side of the station house from the main track and sometimes on the same side?

A. There is a very few places where the house track is on the same side as the main line, because the main line at stations, is fixed convenient to the unloading of passengers.

Q. Doesn't the amount of side-tracks and spur tracks, depend upon the character of business at the station?

A. Yes, sir.

Q. And the number of industries and amount of switching that is necessary to be done at different stations?

A. Yes.

Q. Take a station for instance, like De Vall's Bluff, on the Memphis Road, there is a great deal more switching required there than at some other stations?

A. Yes, sir.

Q. And the same is true at Brinkley?

A. Yes, sir.

5055 Q. It may be so at Forrest City, how is that?

A. There is considerable yard room trackage at Forrest City.

Q. Another thing, I believe you stated a while ago, that the amount of switching at times depended upon the traffic?

A. The amount of switching depend upon the traffic?
Q. Didn't you state that a while ago?
A. It don't depend on the traffic; it depends on the stuff that is moving from the stations.
Q. That is the traffic, isn't it?
A. In one sense, but it could be through traffic——
Q. I mean the traffic at the stations?
A. Yes, sir.
Q. Does that vary at different times?
A. Yes.
Q. How did you find it in that respect—was the switching at stations along the road pretty much alike or different?
A. It was different.
Q. How was it with regard to the different periods at the same station?
A. The seasons had something to do with different stations.
Q. Were there variations in the amount of switching to be done at some stations from day to day and from time to time?
5056 A. There was some difference from day to day and also from time to time.
Q. I believe you stated they would be switching two or three hours at a station some days; that would depend upon the amount of business for that station?
A. That would be for the amount of business at the time; naturally if the business was heavy—the switching was heavy and would take more time.
Q. In the nature of things, I suppose there cannot be regularity in that respect?
A. I suppose not.
Q. How many spurs or side-tracks are there at De Vall's Bluff?
A. I don't know; there used to be, when I was on the road there, one that joined the main track a few yeards past the station, a little saw mill, that De Vall's Bluff did the billing for, and leaving back of the house, was a track that ran around to a button factory, and there was one next to that where they loaded ties, and a little spur dropped off from that, where they were loading some heading, and then there was a track that went straight towards the river, with four or five or six little tracks, called the run-around tracks.
Q. The amount of time and work you would have to put in switching at De Vall's Bluff would depend upon the location
5057 of the cars left there that you would have to spot?
A. Yes, sir, and location of the cars going out.
Q. And it would be just as variable as the locations there?
A. At different times, yes.
Q. I believe you said you ran as high as from the start to ten miles an hour, in switching?
A. I guess there was times when the engine would be running that fast.
Q. Would the brakeman ride the cars?
A. Sometimes, it is according to how many men was on the crew, and how lazy they were; often a man runs along and holds the lever

up, as often as he hangs on the corner; it depends on the man; sometimes a man will run along all day, and others will ride all day.

Q. Where was your last railroad service?

A. On the Rock Island.

Q. When was that?

A. I think it was last May, was a year ago, possibly.

Q. How long had you been in that service?

A. I don't just remember, but several months possibly; I believe I was there, if I am not mistaken, 15 or 16 or 18 months—something like that; I went to work in December—I think about 15 or 16 months.

Q. What were you doing before you went on the Rock
5058 Island?

A. I was with the Union Pacific, as yardmaster.

Q. How came you to quit the service of the Rock Island?

A. I got my hand mashed and bought out a grocery store.

Q. You have been in business in Argenta for some time?

A. I was in the grocery business until about eight or nine months ago, and then changed.

Q. When were you in the Iron Mountain service last?

A. In 1905, I think it was.

Q. Where did you go to when you quit that service?

A. To the Union Pacific.

Q. At what part of that line were you engaged?

A. For the Union Pacific?

Q. Yes?

A. At Rock Springs, Wyoming.

Q. How came you to quit the service of the Iron Mountain at that time?

A. Following a former official.

Redirect examination.

By Mr. HILL:

Q. You mean you went——

A. The trainmaster on the Valley went to the Union Pacific, and wrote for me to come out, and I followed him later, after he was there.

Witness excused.

5059 A. PAULETTE, being first duly sworn and examined, in rebuttal, testified as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would please state your name, age, residence and present occupation?

A. A. Paulette, age 38, residence 610 East 14th St., Little Rock, on the police force at the present time.

Q. How much experience have you had in railroad service, and in what capacities, just state generally without going into details?
A. Figure it out since 1885.
Q. What kind of work have you done in that time?
A. In that time, I have fired an engine, I have broke as brakeman, worked as conductor, and switchman.
Q. Have you run on local and through trains on the Iron Mountain in Arkansas?
A. Yes, sir.
Q. How many years of service have you had?
A. About six or seven years as conductor.
5060 Q. About what years.
A. I was promoted in 1901.
Q. To freight conductor?
A. Yes, sir.
Q. How long did you run as freight conductor on the Iron Mountain?
A. Between five and six years, as an average.
Q. Did you serve in Arkansas since then, on any other road?
A. Yes, I worked for the Rock Island, as switchman.
Q. I want to call your attention particularly to the Iron Mountain?
A. That is where I shine on the Central Division.
Q. That is what you are familiar with?
A. I am more familiar with that than anything else, as far as road service is concerned.
Q. By the Central Division, you mean from Little Rock to Van Buren?
A. From Argenta to Van Buren.
Q. The railroads have put in an exhibit here, claiming that the local train stops eight times to once for the through train——
A. Eight times to the through train's once?
Q. What do you think of that; what is your experience about that? Before you take it up in detail, just answer whether you think that is correct?
5061 A. It is pretty near that, but that ain't all the through freights.
Q. I am talking about the average condition?
A. No, sir, it won't do it.
Q. Take some division you are familiar with, and state why you say that? Here is a station list, take that and explain the stops?
A. Of a through freight or local?
Q. I want both; take whichever is most convenient first, I want you to explain this, I don't want an extreme case either way.
A. You want the average?
Q. I want the general average conditions.
A. Just like an every day occurrence?
Q. Yes, just take that and show from that station list, the stops made, take the through train first?
A. I will make it six stops is an average on the through between Amboy and Russellville—that is Argenta, you might say; that is

not including the meeting of trains; that is just each train as you go along; you are not meeting any trains; now you have got passenger trains to contend with——

Q. Put in the meeting of trains; what would be the average stops for meeting trains?

A. You have got passenger trains to meet; you have got to stop and head in for passenger trains, and then there is your
5062 through freight that has rights over them; you have got to get out of the way of them; an east bound train has rights over the west bound.

Q. It would depend on the way you were going?

A. We are starting out of Argenta, on a through freight.

Q. You take a run out of Argenta, and call out the various stops and tell what they would be?

A. Preston for water, Gold Creek between there—either at Gold Creek or Preston for water; then at Point Remove—we call it Germantown—it is between Germantown and Point Remove.

Q. It is a water tank?

A. Yes, sir, we stop, not including the train orders in that distance, in that 75 miles, you will meet on an average about 5 or 6 or 7 trains which you have to stop for all of them going west.

Q. That will make about nine stops to Russellville?

A. It will make ten stops on a through freight.

Q. Go on from Russellville to the end of the division, to Van Buren?

A. You will stop again for water——

Q. Where?

A. Mill Creek, and you will stop for water at Clarksville, you will take coal at Coal Hill, and you will stop for water at Mulberry, and you will figure nine times out of ten, stopping for water at
5063 Ozark; there is your junction point in there on these detours—that is, a detour from Hartman around to Ozark; them junction points is just the same as a road crossing; there is a telegraph office at each end of that; there is two detours, you have got to make, two stops there in spite of everything—that is at these junction points, because you have got to stop around in that detour, to come to Spadra; that is one stop you have got to make, and you stop at Denning, and stop at Hartman, for that detour to Ozark, and when you get to Ozark get to the junction point, you have got to stop again, for there is your registering station, where you have to register, so you can know which is going over the old main line and which over the new main line——

Q. What is a registering station?

A. We register at all these junctions.

Q. Who registers?

A. The conductor.

Q. Has to stop his train and get out——

A. Yes, sir, he is not going to do it on the fly—I never did—you have to sign your name and the number of your train and engine and everything in that register.

Q. You have gotten to Ozark?

A. You stop at Mulberry for water; you have got to take
5064 water, and you are sure to meet trains between Ozark and Van Buren, and if you do, you have got to stop and head in.

Have you figured up how many stops you would make in that distance, on your usual run?

A. No, I have just been talking, I haven't figured the amount of stops.

Q. I can figure it from what you say; now, take a local—before you come to that, take the run the other way?

A. Coming east, there used to be a run called 92, that was a manifest run.

Q. That is the Red Ball you mean?

A. Yes.

Q. I want you to take an average run—would a Red Ball be an average run?

A. No, because they get the benefit over the rest of them. You take an extra out of Van Buren——

Q. Would that be an average run?

A. Yes, sir, you start east, stop at Mulberry always, stop and take water going east, and then you will stop again at Coal Hill, if you go the old way, or if you go the new way, you will stop at Denning for coal always; if you go around the detour, you will stop at Denning to take coal.

5065 Q. Do you have to make the same stops at junction points going east, as you do going west?

A. Yes, sir, you have got to figure to register at these places; you stop at Denning, Mulberry, junction and Denning—that is not meeting trains at all.

Q. Go on down the road from there?

A. Then you leave Denning, you go along, and you have got to take water at Clarksville; then you take water at Hartman, there is a tank just a little beyond, Hartman, I forget what they call that place, it is just east of Hartman about half a mile; then you go to Clarksville, and take water; then you will go right along the line, and if you haven't any meeting points you will go to Mill Creek and take water, and then you will go on to Russellville, stop there,—register station—you have got to stop all trains there at Russellville, regardless of what they are; you leave Russellville,—you can figure on Morrillton being a stop—not all the time on a through freight—they might give you the white board, let you go; you are bound to get meeting points in between these places; you are coming on an extra, the man going west, of course, you have rights over him; you meet another extra freight, he is going to take the siding, you will stop—you will stop every time you meet a train—I don't
5066 know how many you will meet on the road, but it is on an average six or seven or eight trains a day, and you have to stop for very near every one of them.

Q. Going east?

A. Going east, you have a right over everything.

Q. What about passenger trains?

A. You have got to head in for them.

Q. You haven't rights over passenger trains?

A. No, sir, you have rights over extra freights going west; the time card trains, you haven't any rights over, unless they give you orders to hold the main line, and meet so and so—meet No. 77—but you have to stop to meet this one always.

Q. Go on down to Morrillton,—that was the last one.

A. Germantown, you have to take water again; that is Point Remove,—we call that Germantown,—water tank—then you go on down between Point Remove and Gleason,—you take water at Gleason, that is at the foot of the hill—you go on to Gold Hill (Creek) you take water again,—you are not meeting any trains—you may meet three or four trains between Russellville and Gold Creek—it is according to what is running on the road,—on an average, you will meet two or three trains,—regular train, passenger trains, and freight trains—you will figure on five trains anyway, counting your passenger trains coming down.

5067 Q. Where was the last point you did mention?

A. Gold Creek.

Q. From Gold Creek into Argenta,—go on?

A. There is no regular stop for a through freight, unless it is a meeting point; it is according to what time you are on the road, and whether there is any regular train coming or not; it is only three or four miles from Gold Creek to Argenta; if you have a through freight train—if you are an extra, the chances are you are going right along, unless you meet some through trains.

Q. You have mentioned meeting trains, and I suppose that is a variable quantity, varying at different times; I wish you would give what would be your experience of an average run, what would be the number of trains you would meet on a through freight, that you would have to take a siding for, between here and Van Buren?

A. Going West, you will have to take the siding for through trains, say ten trains you have to take the siding for,—all of them; going east, you don't have to, for through trains when you are coming out of Van Buren to Little Rock—Argenta..

Q. How many would you have to take sidings for?

A. Make it an average, you will meet eight or nine trains

5068 a day.

Q. By meeting, I mean trains you would have to stop for?

A. You have got to stop for them—it is either to take the siding, or you have got to stop for them.

Q. There is another question I don't know about—I suppose you do—can you meet these trains at your water stops,—can that answer for the same thing, or are they separate stops?

A. There is not a water tank between Van Buren and Little Rock that you can meet a train and take water at the same time; for instance, you take Mulberry, you are meeting a train at Mulberry; the siding is about a train length west of the water tank; you have an order to meet a train at Mulberry; you stop at Mulberry and meet your train and then pull down to the water tank, and take your water;

The Ozark tank is before you get to the siding, and the Clarks-

ville tank is beyond the siding about half a mile; and Mill Creek the water is beyond the siding; you stop at Mill Creek, you have a meeting point, you have no more rights to go beyond this east siding to go to get water,—you have got to get water—you have no rights unless you protect yours along this road, you have to protect the other train—you are making two stops to meet this train.

5069 Q. Have you allowed in that estimate of stops, you have referred to train orders; how many train orders would you usually have to stop to get, between here and Van Buren, on a through freight?

A. You will make eight or ten stops—ten stops, for orders, on an average.

Q. That is, you get orders at ten stops?

A. Yes, sir.

Q. Will you always stop for orders, or will the orders come at your stops?

A. These are special stops for orders; you can go to work—you are going west with a freight train—there is lots of places you can get your orders and still meet your train; you will pull in between the switch in the clear, and still walk back and get your orders.

Q. That would be one stop for the two of them?

A. One stop will answer two purposes; say you had a meeting point at Atkins,—you drive up in the clear; you have to meet the other train; the board is out, you can go and get the orders while you are waiting; you are making one stop answer both purposes.

Q. Take the local run—I believe that is split between here and Van Buren.

A. Split at Russellville.

5070 Q. Take the local run between here and Russellville, and say how many stops you will make?

A. You stop at every station.

Q. You have a station list before you, just count them?

A. You will make twenty regular stops.

Q. Will you have more than that twenty?

A. Yes, sir.

Q. What would they be for?

A. Meeting trains, sawing them by, heading in and unloading your merchandise,—you have got to stop, spot your merchandise cars—your merchandise is always next to your caboose—you pull up, spot your merchandise cars, and if there is any switching to be done, you cut your engine off and go to do your switching—say you are forty minutes at a station, unloading merchandise and doing the switching——

Q. That is getting onto the switching proposition; we will take that up in another connection; what I want to call your attention to, is the regular stops you would make on the local train between here and Russellville?

A. You would make more than that; there is a stop at Gold Creek, for water, besides your regular stop. Gleason spur will be

5071 another one; that is 22, and the water tank at Point Remove would be 23; you can make it on an average to Russellville on the local,—there will be 30 stops.

Q. Take from Russellville to Van Buren, on your local?

Mr. MOORE:

Q. 30 stops does not include the meeting of trains; there would be thirty regular stops for water and stations?

A. You include everything, coal and water and everything else. Say you leave Russellville on a local, you have got to wait at Branch Junction, switch at the coal mine; Mill Creek, Cabin Creek, Clarksville and Spadra; we will take this run from Russellville to Van Buren, 24 stops—Mill Creek water tank is 25.

Q. Not including water, that is just your regular stations?

A. Mill Creek for water, and Clarksville for water—that is two, and either Hartman or Ozark, you can make one stop for either one or the other, and Mulberry, 24 stops, including the stops for water.

Q. Did you count your coal stop in there?

A. No, sir, that would be another one.

Q. Where would that be?

5072 A. Denning or Coal Hill, if you came around the old main line, or go around the detour, you will stop at Denning; there is not a man going either way, through Denning or Coal Hill, but what takes coal.

Q. That makes how many—about thirty?

A. Yes, sir.

Q. What about stopping and meeting trains?

A. You haven't met any then.

Q. Are those taken care of in these stops or are they extra stops?

A. They are all extra stops, because you can do your local work and all on the siding, and you have to take siding to meet these trains.

Q. Put it at whatever number you think would be the average amount?

A. Say you meet eight or nine trains, counting the passenger trains and all.

Q. That would make something like thirty or forty stops on the local?

A. Yes, sir, from Russellville to Van Buren.

Q. Coming this way, without taking it up in detail, would it be more or less than that?

A. It would be about the same; the only difference is, you would hold the main line instead of taking the siding and meeting trains.

5073 Q. Were you in the railroad service when they used the link and pin coupler and hand brakes?

A. Yes, sir.

Q. Were you in the service when they used automatic couplers and air brakes?

A. Before they were in it.

Q. Were you in the service afterwards?

A. Yes, sir.

Q. You are familiar with the handling of trains with both classes of equipment?

A. Yes, sir, I have handled them with part air and all air and no air at all.

Q. There is a question in this case about the damage to freight cars from stopping and starting, it is recognized that starting and stopping trains, is a cause of injury to freight cars, and there is an effort to find out how much that was.

A. In what class, in the old link and pin or what?

Q. I will get to that; where would be more damage to the car,—in which class of equipment, the old class or in the present class, from starting and stopping?

A. The old class.

Q. Why?

A. On account of more friction to the cars; you haven's got the power like you have now to stop them; you haven't got no
5074 air; the brakeman will get out and set the brakes and hold that train down; he cannot regulate his speed like a man will with air; the engineer has to pull his train up to the tank, and you have got your brakes set, and the minute he starts that train, releases it, you have the hind end tied down, and he is pulling against a solid block.

Q. You mean that causes more injury?

A. Yes, sir, say there is twenty cars in the train; out of that, you will have eight or nine brakes set with the hand brakes; when this man starts to pull up, he sees he is going to stop too quick, with the pressure he has on them cars and the draw bars ahead of them—there is that much more strain than there would be with air; if it was air, he would release the whole train and go right along.

Q. What is the difference in effect on the cars, the injuries to the cars, in switching in terminals,—that is recognized as an element of injury to cars,—what I want to know, based on your experience,—was there more injury under the old link and pin days or more under the present equipment?

A. More under the old days.

Q. Why?

A. Because them days the cars wasn't as strong as they are today, wasn't built as strong, and there was automatic couplers that
5075 they have now-a-days, that don't require as much hammering as they did before, because when you make your coupling with the link and pin, you set your pin in your links, and at that time, you hit them pretty hard, you have to, and now you don't have to; all you have to do is keep the knuckles open and they will make themselves.

Q. I believe you say you have been a freight conductor?

A. Yes, sir.

Q. Are you familiar with the method of making out wheel reports on the Iron Mountain?

A. I guess so; I have made out several of them; a few anyway—never got any of them returned to me either.

Q. There is this rule on the back of the wheel reports, I want to read you: "Cars must be reported in train order, commencing

with the caboose, to show the make-up of trains, leaving district terminals."

A. Yes, sir, leaving the terminals.

Q. Do you remember that order?

A. Yes, sir.

Q. Was it obeyed?

A. Yes, sir, I did.

Q. What in your judgment, was the usual rule of freight conductors in making up their wheel reports, did they make them up this way or not?

5076 A. They make it off your train book, just as you take the train from the caboose to the head-end.

Cross-examination.

By Mr. MOORE:

Q. What are you engaged in now?

A. I am on the police force of Little Rock; I was in this railroading up to the 17th of last month.

Q. Are you in night or day service?

A. Night service, I just went home and had my breakfast and came right down here, because I promised Mr. Hill to be here.

Q. Are you in the habit of drinking?

A. No, sir.

Q. Haven't you been drinking this morning?

A. I took one drink this morning before breakfast; I don't make it a habit or anything like that, but if I want one, I will go and get it; I don't think this has anything to do with this railroad business; we are not on duty at the present time,—I know I am not.

Q. How many stops does the through train make on the run between Argenta and Russellville?

5077 A. You mean meeting trains and all?

Q. Yes—first, without meeting trains?

A. If you leave out meeting trains, they only make their stops for water.

Q. How many stops do they make for water?

A. There will be Gold Creek, Germantown,—make three stops.

Q. Independent of meeting any trains?

A. Yes, sir, independent of everything; you have got to make them.

Q. How many stops does the local make between Argenta and Russellville?

A. She makes all the stations.

Q. How many?

A. You can count them out.

Q. Just count them; that is the question.

A. 23 stops without meeting a train.

Q. Does that include taking water?

A. Yes, sir, that includes water, don't include any coal, there is no coal to be taken between Argenta and Russellville; this is an average; I don't say they will make that many stops every day,—

you haven't met a train in that, and there is lost of trains running between Russellville and Argenta,—passenger trains especially.

5078 Q. If I understand your statement correctly, you say that there was more damage with the old link and pin equipment in starting, because there would be eight or nine brakes set?

A. On the rear end of your train, figuring on making your stop,—than with the air coupler; it is a solid chunk that you have got to pull against.

Q. And they will create a greater friction?

A. Yes, sir, because here you are,—you say you will have seven brakes set—you have got that many set—there is your train pulling against it; you are pulling against that; the engine to stop this train—the engineer seeing he is going to be too soon in making this stop, he opens up that engine to pull that train down to the water tank—what is he pulling against? He has seven or eight cars in a solid block; these other cars haven't got brakes set in them ahead of them; when he pulls that open, there is where it is hard to work; if he has air, handling the air himself, he releases this air; you haven't anything on the hind end to hold you; the whole train is released.

Q. Are you through now?

A. Yes.

Q. He is pulling against all these set brakes?

A. Yes, sir.

5079 CARL R. GRAY, recalled, testified in behalf of the complainant as follows:

Redirect examination.

By Col. MOORE:

Q. You testified that if a division of expenses of operating local and through trains were properly apportioned, that would not account for the extra cost of handling state over interstate freight: what are the elements of difference you had in mind?

Judge HILL: That is objected to as not proper at this stage of the case.

Col. MOORE:

Q. You stated on cross-examination that you would not regard the last half of 1907 as representative of the business for a period of years:

Will you explain in what respect you do not consider it representative.

A. I was covering in that particular answer the question of physical conditions, and my answer was intended to cover the

5080 physical conditions only.

Q. What physical conditions do you refer to?

A. The conditions to which I had already referred, in respect

to the distortion of any one month or any short period of time, on account of the difference between the actual movement of tonnage and the actual time in which it is taken into account.

Q. How would it be in regard to the earnings on state business under the state commission rates which were in force at that time? I mean as a representative period?

A. I would regard it as fairly representative in that respect.

Q. You think, then, so far as the expense of state freight is concerned, and the earnings under the rates then in force, it would be a representative period?

A. Yes, sir, that is my thought.

Q. Mr. Gray, was the automatic coupler used in the old cars?

A. The automatic coupler was placed in all the old cars in service at the time the law took effect.

Q. It has been stated in testimony in this case that the cars had been strengthened so as to require a greater power of resistance: how has it been with regard to the draft rigging?

Judge HILL: That is objected to.

Col. MOORE:

Q. Will you state what the opportunities of operating
5081 officials, including division superintendents, and thence on up to the general manager of a railroad, are for familiarizing themselves with operating conditions such as switching and other conditions of that kind, and the effect of such conditions upon the expense of equipment?

Judge HILL: That is objected to, and we also object to Mr. Gray testifying at all on any matter other than his cross-examination. If it is competent to testify upon at all, he should be recalled after the defendants close their case.

A. An operating official, commencing with the rank of trainmaster, is in constant touch with the operation of trains on the road, and the supervision of switching at terminals. The duties and his responsibilities compel him to ride the local freight trains as well as the through freight trains, and constantly supervise the work, determine upon its necessities, pass upon its practicability and in the last analysis decide the general manner in which the work shall be conducted.

This is equally true of the terminals where a great deal of his time must necessarily be spent in the field, with all the different engines and crews; determining the manner in which they shall work; supervising the character of their service and by a proper method of statistical inquiry keep constantly posted as to the relative cost of the different terminals, comparing the same; investi-
gating and finally passing upon the expense; and in every
5082 way directing all items of physical operation.

As he progresses his responsibilities are not lessened but his methods and avenues of information are correspondingly broadened.

It is not only his privilege, but it is his duty to keep constantly

in touch with every element that creates or affects expense, and he is of necessity the final arbiter as to the character and extent of any kind of work.

He must have, in order to be able to judge intelligently, a knowledge of all the operation of his line, or such portion of his line as he is in charge of. And that keeps him in touch with any changes in conditions which serve to affect either favorably or adversely the elements of cost.

Cross-examination.

By Judge HILL:

Q. Mr. Gray, I wish you would restate you opinion about October being a representative month: I do not quite catch your distinction there?

A. The distinction I make is that October was not a representative month to be used in the physical sense.

Q. What do you mean by "physical sense"?

A. In the application of physical statistics which are the ton miles. Because of the fact that there is so much business, so many of the ton miles, that are not taken into account—as I explained in my testimony.

Q. On your "lap-over" proposition?

5083 A. Yes, sir.

Q. That does not have anything to do with the physical conditions, as I understand it, does it?

A. The physical statistics, yes.

Q. Did I understand you to make some distinction as to physical movement?

A. The physical conditions which were found, in the way the matter was explained to me, as your arriving at the October statistics.

Q. Your whole testimony on that goes back to a still further attack on that "lap-over" proposition: that is all you mean by this, is it?

A. I do not know that I understand what you mean by "attack"?

Q. Criticism, if you prefer that word.

A. No, sir, the question was, as to what I meant by my answer.

Q. I am going back to your original answer, just what that meant.

Col. MOORE: Let Mr. Gray explain.

Judge HILL: That is what I am asking him to do.

A. My answer to the question on cross-examination, as to the month and the period not being representative, applies directly to the question of physical statistics, and my fundamental objection was that you cannot get into that period the physical conditions by taking one month.

5084 Q. That is because there would be lap-overs that would not take care of themselves from one month into the other month: that is your point?

A. Yes, sir.

Q. As I understood your answer a while ago, which is what I did

not get clearly, it was that it would be representative to measure the state freight under the commission tariff: is that what you said?

A. Yes, sir.

Q. How is that. I do not understand that.

A. For two reasons: First, because the state freight all being short haul is taken into the current month's business.

The period involved represented the high water business; and for that reason it was representative of the maximum of what could be earned by a railroad of state freight, on any basis of rates.

Q. In other words, you do not think the lap-overs would be as much on state freight as on interstate: is that your point?

A. Yes, sir.

Q. That is all there is to it?

A. I don't know anything about "that is all there is to it."

Q. I am asking you that.

A. As I understand it, that was the question.

Q. I did not understand your distinction and that is
5085 what I am trying to get. I want to know now if that is all the distinction you are making?

A. That is the distinction between the two.

Q. That would mean that the physical conditions would not have a proper relation to the revenue?

A. I don't believe I exactly understand what is meant by that question.

(Previous question read.)

A. No, sir, I would not say that.

Q. Is not that what your position would lead to?

A. No, sir. I believe that the revenue is more nearly representative than the application of physical conditions would be.

Q. Just what do you mean by that?

A. It is difficult to explain what I mean by that.

I have testified that the period, the last half of 1907, was not representative in its physical sense, with respect to a number of things:

First, the fact that the freight was delayed in that period, and would serve more to throw into one month the expense of handling business that was accounted for in another month. That is the distinction I make in the physical sense.

Now, the distinction I make as to the state traffic is, that it is a short haul traffic and is more nearly accounted for in any given period, either a month or six months' period; and in arriv-
5086 ing at a conclusion as to the earnings upon any basis, as applied to that particular period, I would regard it as fair and if anything leaning in liberality toward showing a greater earning on the state business.

Q. That is the one month proposition you are discussing or is it the six months?

A. The one month or six months. I am discussing the question of applying physical statistics in the one case to other periods, and I have stated my objection to it.

Then in reply to the question whether I thought it was a fair criterion upon the state business I have said I did.

One is a question of arriving at comparative value of statistics. The other is a question of determining whether it is fair to use a certain period to determine earnings.

Q. And you think it is fair for earnings and not fair for expense?

A. I do not think the two bear any relation to each other.

Q. You do not think that earnings and expenses bear any relation to each other?

A. I did not say that.

I do not think my answer is inconsistent where in the one case I criticised the physical statistics and in the other where I accept as fair a period for determining known quantities.

Q. And you regard the cost as a known quantity?

A. No, sir.

5087 I am referring to the earnings on state business as a known quantity.

Q. I got the proposition backward.

The substance of your views, as I gather it, is that the physical conditions correspond to the revenue in the state business but not in the interstate?

A. No, sir, I am not testifying in that way.

Q. Is not that the result of your statement there?

A. No, sir, I do not see that that conclusion can be drawn.

The question I was asked was, whether I considered this period a fairly representative period for determining the earnings from state traffic; and my answer was that I did and if it leans in any direction it would be toward liberality in determining state earnings. And I gave as my reason for that the fact that the state earnings being short haul, and being mostly on one line, are almost invariably taken into the current month's earnings.

Q. It is a little bit of a digression here, but I will call your attention to the fact that a pretty large per cent, 12% or 15% or something like that, of the interstate business on the Iron Mountain road out of Fort Smith and Memphis has as short a haul as the interstate business.

Col. MOORE: You are mistaken about that. It is very much larger.

5088 Judge HILL: From Memphis it is somewhat larger than the other state business but not nearly so long a haul as the interstate. There is evidence here to show that that condition is true of Fort Smith. It happens that we have some furniture factories there and while the haul is not nearly so long as the interstate haul it is much longer than the average state haul.

A. I have not during any part of my testimony referred to specific conditions, because I am not familiar with them on the Iron Mountain road.

Judge HILL: You are not familiar with the Iron Mountain conditions, are you, Mr. Gray?

A. I have based my testimony on the figures which were given me as to the average haul of state and interstate business.

Q. The facts are undisputed as I have stated them to you, as I understand the proof. I cannot recall just the figure but I know I am stating them correctly, generally.

You are not familiar with conditions on the Iron Mountain road?

A. Only as I understand the conditions to be generally on that road in common with all southwestern roads.

Q. You have not performed any service on the Iron Mountain?

A. None whatever.

Q. You do not know the Iron Mauntain road any better than any other competing line in your territory?

A. No, sir.

Q. You never have studied the statistics of the Iron Mountain?

A. Only as presented me in this case.

5089 H. R. V. ROSING, recalled, testified as follows:

Redirect examination.

By Col. MOORE:

Q. Will you state the number of freight cars in service on the Iron Mountain Railroad, and the cost of equipping freight cars with air brakes, including the cost of the brake and putting it in place on the car?

A. The Iron Mountain Railroad has between 19,500 and 20,000 freight cars. The number of cars varies from day to day but it will not be less than 19,500 nor more than 20,000. The cost of equipping a car with air brakes is about eighty-five dollars, which includes the cost of the air brake equipment, complete, as purchased from the manufacturer, and its application, with the necessary connections to the car.

Recross-examination.

By Judge HILL:

Q. Mr. Rosing, did not you and Mr. Roberts agree that the cost of an air brake was $40.

A. That is the cost of the air brake parts as we got them from the manufacturer.

Q. You agreed on that?

A. Yes, sir, but that did not include its application to the car and the levers in connection with it.

Q. You are speaking now about the labor and other things?

5090 A. Yes, sir, and the appliances necessary to put the thing in the car in an operative condition.

5091 Mr. F. P. JOHNSON, recalled, testified as follows:

Cross-examination.

By Mr. HILL:

Q. Mr. Johnson, at page 884 of your testimony, speaking of maintenance of way expense you say it seems to you it is more of a general expense than any other item of the operating department: What do you mean by "operating department" in that connection?

A. By that I mean the entire operating expenses of the railroad. Perhaps, the words "operating department" are not just quite right; but, taking the five classes of operating expenses——

Q. What are those five classes?

A. Maintenance of way; maintenance of equipment; traffic; transportation; and general expenses.

By that I mean that the maintenance of way and structures is just as much an overhead expense as any other item of the expense in that class.

5092 Q. Under maintenance of way, maintenance of eqipment, traffic and general expenses?

A. Yes, sir.

Q. I just want to get your difinition of the term "operating expenses" in that connection.

I believe those five classifications are the ones that are used in these exhibits?

A. Yes, sir.

Q. Is that the term to which you apply the designation "primary accounts"?

A. Yes, sir, those are the primary accounts as designated by the Interstate Commerce Commission.

Q. The reason you give for tnat. as I understand it, is because, the expense that is incurred this month is not taken into the account this month or next month or possibly not this year, and the traffic or the car movement has no bearing upon the amount of money which is taken into maintenance of way expense in the month in which the car movement is made.

That is your reason for reaching that opinion, as I take it?

A. Yes, sir, those are among the reasons.

Q. The fact that all of that expense is not current is not peculiar to the maintenance of way expense?

A. Well, I think it is more so than it is in any other department of the railroad expenses.

Q. There might be a question of degree, but that same proposition runs into a great many other accounts?

5093 A. It does, yes, sir.

Q. Take maintenance of equipment and a very material part of that expense is not current, is it?

A. Yes, sir, I should say a large part of it is not current.

Q. I don't suppose you have any figures on it, but you know that a very material part of it is not current, do you not?

A. Not so much so as in maintenance of way.

Now, in saying that, I have this in mind: that there was a time in the handling of the accounts of the Missouri Pacific Railroad when we would separate the repairs of equipment between what we call "ordinary repairs" and "accident repairs." Those accident repairs as a rule were of very recent occurrence and it was a large part of the maintenance of equipment expense.

Q. But you do not do that now?

A. No, sir, we have not followed that plan since 1904.

Q. Under your present system there would be a very material part of the repair account which would not be current?

A. There would be the same proportion perhaps that occurred prior to 1904, when we had those figures separated.

Q. It would be more than that, I should take it; and in your maintenance of equipment you have to allow off a certain amount for depreciation, and all above that would be current?

A. I am afraid you do not understand what I mean by that:

5094 "Ordinary repairs" were repairs that were made in ordinary course of business; repairs to the cars and the locomotives, themselves.

And "accident repairs" were abnormal repairs, due to wrecks or accidents on the road. And those were of recent occurrence.

Q. I caught your distinction. But under the present accounting system you have to allow a certain percentage, under the Interstate Commerce Commission rule, for depreciation, don't you?

A. Yes, sir.

Q. How much do you allow?

A. It is 2½%, 3% and 4%; but I do not remember to what class of equipment these different percentages apply.

Q. I am not particular about the exact distribution but it is a small percentage?

A. Yes, sir, a small percentage.

Q. And a small amount?

A. Yes, sir, and a small amount.

Q. The wear and tear on equipment above that small percentage would not be current, would it? Cars wear out in the course of time, and all that sort of thing?

A. The ordinary wear and tear would perhaps be a large percentage.

Q. And that is not current any more than maintenance of way, is it?

A. No, sir.

5095 Q. Now take "traffic": is that current?

A. I should say a very large part of the traffic expense is a current expense, because it is practically all salaries.

Q. There is a part of that which would not be current, isn't there?

A. It may come under the head of stationery and printing and possibly advertising.

Q. Advertising is what I had in mind. What have you in that account—if you have it before you.

Col. MOORE: Let him finish his answer.

A. I was going to say that the advertising expense would not be more than 90 days old, because they would not let us run much longer than that.

Q. What is that?

A. It is newspaper advertising and printing bills.

Q. What I have in mind is, you have a large printing bill—I do not know how often but I do not suppose you would have that every month. You advertise the industries along the line, and all that sort of thing. Those would not be current expenses, but would run through the year?

A. No, sir, they are paid within sixty days and charged to operating expenses as paid.

Q. I understand that. But you would not have sixty days' worth of literature published at one time, would you?

A. The pamphlets, of course, we get out and we pay for them as they are printed. But we use them perhaps all that season.

5096 Q. All that year or more?

A. Yes, sir.

Q. That is the point I am making.

A. Yes, but even that is a comparatively small part of the trame expenses.

Q. I know that, but I wanted to call your attention to the fact that there would be an item there, of more or less moment, that would not represent the current expense?

A. Oh, yes. Of course, that runs through all of the operating expenses but not nearly so much as in maintenance of way and structures.

Q. Now, take "transportation": take your casualties; I believe that comes under transportation, does it not?

A. Yes, sir, casualties come under transportation.

Q. That is heavier?

A. It is a large item in itself.

Q. There is very little of that which is current?

A. Very little.

Q. I assume there are other transportation items that are not current. Do you recall any? Say "loss and damage": do you include that as casualty?

A. We understand that "casualty" includes loss and damage to stock, injuries to persons and to stock on right-of-way.

Q. I know you have sub-divisions.

A. I have just given you the sub-divisions. Damage to

5097 stock is, of course, a current expense.

Q. I do not agree with you about that.

A. Except such claims as are in litigation.

Q. I would have to disagree with you on that, Mr. Johnson. Unless you can qualify yourself as a claim agent.

A. I have handled those claims for perhaps fifteen years.

Q. You do not mean that stock killed in October are paid for in October?

A. I mean perhaps 90% of it is paid before the end of the November accounts.

Q. It would not be current if you take any one month or a certain period?

A. If you take six months, yes.

Q. There would be the question of "lap-overs"?

A. It would be a lap-over of July and December, yes, sir.

Q. But there is no such thing as current expenses in damage to stock. You may be prompt in your payments, and I hope you are.

A. We are compelled to be in Arkansas.

Q. In the ordinary course, when you are prompt, it would be thirty to sixty days before settlement was made?

A. I would call that a prompt settlement.

Q. I am not criticising the promptness of your settlement, but I am just getting at the course of business.

A. What I have in mind is, that there is a big difference between settling claims in sixty or ninety days, and paying an expense incurred six to seven years prior.

5098 Q. Why, certainly.

A. You must bear in mind that between fifty and sixty per cent of all the operating expenses on a railroad are for salaries, which are current items.

Q. What other items do you think of right now, without going too much into detail, that are not current, beside transportation?

A. You will find it in exhibit 3, if you have that before you.

Q. At page 889 (that is Mr. Wright's statement in regard to switching) you take two runs between Little Rock and Texarkana and between Little Rock and Hoxie, and show the actual time consumed by a local and by a through train:: you say you drew off the running time between Little Rock and Texarkana of a through train between those points, during the month of October, 1907, for each of the 31 days; and that the average running time of the through train was 16 hours and seven minutes and the average running time of the local train was 25 hours and 18 minutes:

How did you get at that, Mr. Johnson?

A. We had our man in charge of the wheel reports take the wheel reports themselves and take off the running time of those trains for each day in that month.

Q. And then average them?

A. Yes, sir, and then average them.

Q. Your local train there was composed of two trains, was it not?

A. Yes, sir.

5099 Q. Where were the respective runs of those two trains?

A. They break part of the time at Arkadelphia and part of the time at Malvern. We did that in order to cover the same territory that was covered by the through train.

Q. I understand that. That would make the average of each of those local runs about 12½ hours?

A. Well, that would depend upon the length of each of those runs.

Q. I said "average": Have you the actual figures of the separate runs? If so, I will put them in?

A. No, sir, I think Mr. Hamilton has that work sheet. I gave it to him the other day.

Q. I have not the work sheet but I knew from the physical situation that would necessarily be done.

A. What I mean is if the run from Little Rock to Arkadelphia was longer than the run from Arkadelphia to Texarkana, each of those runs would not average one-half of the total. You see what I mean?

Q. Yes, but I assume that break is made practically half way. That would be the usual practice.

A. The mere fact that they changed the run of those two locals would indicate there is some difference in the mileage. That change I think was made upon the 12th of that month.

Q. That would not be important to the question I want to get at. The average would be twelve hours whether one was a local and the other was a through train.

5100 A. The average between the two local runs would be.

Q. For the purpose of our inquiry it would not make any difference whether one was longer and the other shorter; the average would be that.

Take the distance between Arkadelphia and Little Rock: how much is it?

A. I have not that mileage.

Q. Haven't you a time-card there that would give it? Isn't it sixty-five miles from Little Rock to Arkadelphia?

A. Yes, sir.

Q. What would be the running time of that local train from Little Rock to Arkadelphia? How much of that 12½ hours would it consume? My recollection is that the testimony indicates that the speed is 20 miles an hour for average speed.

A. On the basis of 20 miles an hour it would be 3½ hours or 3¼ hours.

Q. What I am talking about is the run between stations?

A. Yes, sir, and the testimony in the case as to that running time.

Q. That would leave how much time of that 12½ hours?

A. It would leave 9¼ hours.

Q. Take your 9¼ hours and I think the evidence is that the switching is usually about five miles an hour. If you spend all that 9¼ hours switching how would that be?

A. Oh, I——

Q. You know, as a matter of fact, all of that time could

5101 not be spent in switching. You know that not only from your own observation but from what you have heard about the delays to the local train, waiting for orders, lay-outs, spotting cars, unloading merchandise and so on?

A. Yes, sir.

Q. You know that probably a large proportion of that 9¼ hours would not be spent in switching?

A. I would not say how much. Part of it would be spent in duties other than switching.

Q. And you know, without going into the figures, that it would be a large part?

A. Yes, sir.

Q. Now, take the next run there from Arkadelphia to Texarkana.

Col. MOORE: It would be variable, depending upon the conditions of traffic from day to day?

A. Yes, sir.

Judge HILL: Take the other run and make a similar calculation —the run from Arkadelphia down to Texarkana.

A. The distance is eighty miles and at twenty miles an hour the running time would be four hours; and that would leave eight and one-half hours. If all of that was employed in switching it would leave forty-two miles for switching.

Q. And you know a material part of that would have to be reduced for causes other than switching?

A. Yes, sir.

Q. Make your calculation on the basis you have made it,
5102 comparing your through with your local—sixteen hours against the twenty-five hours?

A. Those two local trains from Little Rock to Texarkana are making eighteen hours in switching service, according to this calculation.

Q. No, sir, according to your calculation here they are making nine hours. I am assuming that the local and through time on the road is the same. I think that is the testimony in the case?

A. You have a distance there of 145 miles for those two local trains at twenty miles an hour they consume seven hours in running time; that leaves eighteen hours for switching.

Q. Yes, that is breaking them up into two locals. But here is the point: The through train has made that run in sixteen hours. I understand from the testimony in this case—the testimony in behalf of the railroad at least, that the through train does not do any switching and that represents its running time. And I understand from the testimony in the case that aside from the stops of the local trains that it runs as fast or faster on the road than the through train. You so understand that?

A. Yes, sir.

Q. If it takes the through train sixteen hours to make its run from Little Rock to Texarkana, and takes the local train sixteen hours to make its run, exclusive of stops for switching and other purposes, that is nine hours excess, is it not?

A. Yes, sir.

5103 Q. That nine hours at five miles an hour would represent forty-five miles, if all that time was consumed in switching?

A. Yes, sir.

Q. And that forty-five miles would be what per cent of the 145 miles?

A. That would be about 30%.

All I intended to do was to explain that I did not give this illustration to show the amount of switching performed by a local train.

The testimony in this case that was presented by the state, by more than one witness, stated that the difference between the schedule time of trains was an indication of the amount of time that was put in by that local train in switching.

Now, I do not believe that the schedule time has anything to do with it. If the time of the trains is any indication of the amount of switching, it ought to be compared with the actual running time.

Q. I have accepted your basis and am making the comparison on your basis.

A. What I mean is, that I have not stated in my testimony that the timecard is any indication of the amount of time consumed in switching.

Q. If you recall the testimony put in by Mr. Wright, he simply stated it was the opinion of the men on the road that that
5104 would be the time consumed in switching, comparing the local and the through train?

A. I do not believe the time card has anything to do with it.

Q. I do not believe Mr. Wright said it had, but he said that the opinion of the men who got out the time-cards had something to do with it. But that is a matter of evidence. That other would run out practically the same way, wouldn't it?

A. Yes, sir.

Q. I will not take the time to make the calculation.

Turn to your testimony at page 892. You say that your traffic expenses are apportioned between states on the basis of the gross earnings and not the train mileage; and you quote from page four of the state's exhibit:

"The amount apportioned to the state of Arkansas is based on the revenue train mileage in that state as compared with the revenue train mileage on the whole road"

and you call attention to an apparent discrepancy there:

I wish you would turn to your exhibit and see if it is not a fact that the state has used your revenue figures:

I will state by way of explanation, that that is a typographical error in the state's exhibit, in copying it. Mr. Kimbell and you differed as to that basis of division. Your figures were made up according to your way and Mr. Kimbell's figures were made up according to his way. In copying the state's exhibit the typewriter copied the one figure when the other figure should have
5105 been used.

A. That is a typographical error in your exhibit.

Q. There is no error in the figures.

A. No, sir, there is an error in the reading matter in the exhibit.

Q. The reading matter in your exhibit is true as applied to the Cotton Belt?

A. Yes, sir.

Q. But the figures in the state's exhibit are correct?

A. The figures are correct.

Q. You are not questioning that?

A. No, sir, I am merely questioning the statement in the exhibit.

Q. Some of these copies have the figures and statements correct and some have not. It was simply an error in copying.

A. That is all I intended to call attention to—that the reading matter itself was wrong.

Q. But the figures are right?

A. Yes, sir.

Q. And use your basis as you claim it should be?

A. Yes, sir.

Q. At page 890-*a* here is Mr. Moore's question:

"Q. Mr. Hillman testified that the cost of yard service should be ascertained directly as between state and interstate on the basis of the tons instead of dividing that item between local and through trains."

Then he asked you what effect upon the result in the figures produced by the state here would such a division as that have, if divided in the manner suggested by that witness. And then you answered that in amounts.

5106 Did you understand Mr. Hillman's testimony that he said it should be ascertained directly between state and interstate, instead of dividing that item between local and through trains?

A. Yes, sir. My understanding of Mr. Hillman's testimony is that he would not divide that expense between local and through trains but divide it direct between state and interstate, either on a car basis or a ton basis.

Q. I will call your attention to the testimony of Mr. Hillman appearing at pages, 1566, 1567, 1576, 1577 and at pages 1609 to 1611 inclusive, which are as follows:

"Q. Now, Mr. Hillman, I wish you would take up this "Maintenance of equipment"; that seems to be the proposition that our friends on the other side are criticising very much. I would be very glad to have you go through that with some detail.

A. On this "Maintenance of equipment" I find that the accountants for the state have first taken the expenses and divided them between yard, local trains and through trains.

This method of handling it altogether, with their percentages which they have added to each of those, is, to be a little trite, a "new one on us."

I had made the division of those accounts recognizing the switching but dividing the switching in the freight on the basis of the handling, counting it on the tons.

I had divided the rest of the expenses which are the road expenses, on the basis of the ton miles. I was anxious to see how that would pan out here and with the information I have, I ran that up. I find they charge on this basis to intra, in the neighborhood of $76,000 for those "maintenance of equipment" items, included in locomotives and car repairs.

In my basis it amounts to a trifle over $73,000.

Q. A difference of how much?

A. A difference of $3,000, or approximately 5%, between the two methods.

Q. Our accountants were——

A. Your accountants' figures were higher than those that I would have placed had I been making the division.

I was very anxious to see how this would come out, as it struck me that they had allowed very liberally for the extra expense
5107 incurred by the damage done by yard locomotives to the equipment in the switching process. They have made a further allowance for extra switching done by locomotives on local trains, amounting to 75%. This is quite heavy, and in my opinion, it is a very liberal allowance to this factor.

Q. It is in evidence here that they attempted to take the maximum on all of these allowances that are shown in this head, and I will ask you if in your judgment that is true, that they were high enough to be the maximum for these various items?

A. Yes, sir, I should say they are. I would further say that I have considered in the matter of allowing the switching, in my own division, upon the ton basis, that I was giving an allowance to the contentions of the railway companies, and I have always felt in doing that that I wanted to place my figures beyond criticism and have therefore made that allowance on the ton basis. In doing so, of course, we ignore to a great extent the fact of switching of interstate tons at terminals, in making that division, but I think it is the best factor that we can get, unless we absolutely take the cars and their loading, which are switched at a terminal, and then apply that switching over the average length of haul, the ton mile basis, which would be almost an impossible work to pick out after you have gone over an account. It could be kept at the time."

And on pages 1576 and 1577:

"Q. The next item is yard and terminal expenses, divided between local and through business on the basis of the number of cars handled at terminals; are you familiar with that method and that factor of reaching that item of expense?

A. Yes, sir, I have not always gone into that detail. I am doing it now in one case that I have on hand, but I have not always gone into that detail where I have not had that factor; I have divided that, as I stated before, upon the ton basis.

Q. Which is the nearest factor, in your judgment?

A. The handling of cars at terminal stations, switching at stations, is undoubtedly the factor to be taken into consideration.

Q. When you cannot get that, you take the next best, as you have in some instances?

A. It really is not necessary to go into that much detail.

Q. The next item here is fuel and expenses; that matter was handled in this way, on the Iron Mountain; they took the fuel that was ascertained by a test made by the Cotton Belt Railroad, and the gentleman who had been general manager of both railroads, said that the fuel conditions should be practically the same upon those, and they have applied the factors obtained in the Cotton

Belt test to the Iron Mountain in the absence of any data
5108 from which they could get the actual fuel consumption. What is your opinion of the proper way to divide that expense, or the way it has been divided?

A. The way that it has been divided seems to us to be proper. Of course, it depends to a certain extent, upon whether the conditions between the two roads were on an equality; if there is testimony to that effect on file, it should receive its confirmation, as far as that test only goes to confirm it.

Q. If you were confronted with a statement made by a witness introduced by the carriers, who had been general manager of both of the railroads in controversy, that that was a fact, would you feel justified in using his figures?

Question objected to and not pressed.

A. I would say further, that in the absence of the testimony of the character of which I have spoken, I have taken that consumption of fuel on the straight engine mile basis, as between the local and the through trains; I mean by that, when I have not that percentage available I have taken it on the straight engine mile basis."

And on pages 1609, 1610, 1611:

"Q. I believe you stated this morning you used tons as a basis of dividing yard expenses between state and interstate; would it not be better to use that unit there, than to make the division between local and through trains on the car mile basis, and then divide between state and interstate on the ton mile basis, wouldn't it be a more direct way of arriving at the result?

A. I would not like to say that it would be the better way of doing it; it is a method I have pursued heretofore myself, in handling those expenses.

Q. I take it you pursued the method you thought the best?

A. I pursued it because my attention had not been called to this method of handling; I think I stated when I went over it, that it was a new one to me, that it received attention from me as to how it bears out, and it looks very fair on the face of it.

Q. Assuming if your plan is the proper plan, wouldn't it be better to divide the car expenses, I mean the expenses on the basis of the cars, between state and interstate, rather than to divide it between local and through trains, and then on the basis of ton miles between state and interstate, as far as it could be done?

A. I think that the absolute car basis of the handling of the cars would be the best, and if my recollection serves me, that is the way the accountants for the state have taken it up.

Q. If you will turn to page 4 of Exhibit K, you will find that the yard and terminal expense is divided between local and through business on the basis of the number of cars handled at terminals,
that assumes, as I understand it, a division between local
5109 and through trains, that is the way it is divided between local and through trains; after that is done, then this expense is divided between state and interstate business on the ton mile

basis. Now, what I want to ask you is, what is the use—is there any good reason for dividing that expense between state and interstate business upon a ton mile basis, where it is practicable, in so far as it is practical to divide it on the basis of the cars in which the freight is handled?

A. Offhand, without, as I have stated, going into this matter further, as I wish to do, I should say that I would prefer to accrue the switching cost upon the cars at the terminal, and after that amount of money had been determined, I would, then, of course, distribute it by the ton mile basis to state and interstate, as that would be the factor, or you might say, not the factor, but the term in which I would express costs. I would not base the costs on the ton mile, but after I had the cost of this ton and all other expenses, I would then express that in a cost per ton mile.

Q. You would make your division on the car basis?

A. Yes, sir, I think I would, as I see it now, without going further and comparing it further, I think I should fasten it on the car or ton.

Q. The state's accountants, in the exhibits in this case, have divided a large part of the train expenses of the expenses, I mean of trains—on the car mile basis, and in doing that, the car is a car without regard to its contents, whether it is empty or loaded; if it is loaded, without regard to the weight of the load. Now, what is your view as to the proper method of dividing that character of expense between freight and passenger cars?

A. That is, the expense of switching?

Q. Yes, the maintenance of way and structures and equipment, all that sort of thing, I am speaking now of these large divisions, maintenance of way and structures, maintenance of equipment, and that character of expense which is divided on a car mile basis as between local and through trains; what in your judgment would be the better way of dividing that between passenger and freight—I speak of the car itself?

A. The car mile or the car basis, and terminal car basis, as set up here, and dividing it by the ton mile would not enter into the division between freight and passenger."

Q. Mr. Johnson, is this the testimony you had in mind in using this basis and in making your Exhibit 56?

A. Yes, sir, so far as the division of yard and terminal expense is concerned, and particularly his testimony at pages 1609
5110 and 1610.

Q. You also used that on the basis of Mr. Hillman's testimony in making your division of repair to yard engines in your exhibit 56, in paragraph 1-*a*?

A. I did not make that division in the repairs to yard locomotives on account of any testimony that Mr. Hillman gave on that particular account. I think in my testimony I merely referred to what Mr. Hillman testified to as to what he would do in dividing his yard and terminal expenses. Now, then, the repairs to yard locomotives is an entirely different item.

Q. You made it on the same basis?

A. Yes, sir.

Q. My question was, were you doing it with Mr. Hillman as your support for so doing?

A. No, sir.

Q. At page 1566 of Mr. Hillman's testimony there is one paragraph where he stated:

"I had made the division of those accounts recognizing the switching but dividing the switching in the freight on the basis of the handling, counting it on the tons. I had divided the rest of the expenses which are the road expenses, on the basis of the ton miles."

Then he states further: that making his division that way and comparing it with the division made by the state on some items, there is only $3,000 difference between his division and that of the state.

If I understand your exhibit 56 you use Mr. Hillman's basis for the tons for switching but do not use his basis for the ton
5111 miles for the remainder of the expenses in making that division: isn't that true?

A. By "remainder of the expenses" you mean yard and terminal expenses?

Q. My question is, what Mr. Hillman was referring to.

A. Exhibit 56 was not made up on the basis of any testimony that Mr. Hillman gave, to the exclusion of the testimony of every other witness.

I merely called attention to what Mr. Hillman said in regard to this particular item. There were other witnesses who testified that the yard and terminal expenses should be divided on the basis of tons handled rather than between local and through trains on the basis of the number of cars.

Q. You referred in your testimony to which I am now directing your attention, to Mr. Hillman as your authority. And I am now calling your attention to the fact that you accept Mr. Hillman as authority on the tons in the yard and terminal service but do not accept Mr. Hillman as authority on the balance of that same account; and I ask you if that is not a fact?

A. I would not put it that way. I have not used Mr. Hillman as an authority for anything.

Q. Mr. Moore's question here, as I understand it, implies that (page 890). Your answer was that you thought that was correct.

A. I do not see any connection with that in stating that I thought Mr. Hillman was correct. Mr. Moore asked me what the
5112 effect of applying Mr. Hillman's basis to the figures would be and I told him.

Q. And that is the basis you used on the tons, but you did not follow Mr. Hillman when he used ton miles on the balance of the expenses in that account?

A. No, sir, I followed in the balance of the account quite a number of other witnesses.

Q. While we are on that point of handling cars in terminals and repairs of yard locomotives, on the tons instead of the car basis, you would necessarily assume there that the haul of intrastate freight

of 72 miles would occasion the same handling as the haul of 218 miles of through freight, wouldn't you?

A. Yes, sir. This basis assumes that a ton of state freight with an average haul of 70 miles receives the same service as a ton of interstate or trans-state freight with a haul of 218 miles.

Q. When you take those tons you derive your statistics from your exhibit 26, do you not?

A. Yes, sir, that would be from Exhibit 26, the month of October, 1907.

Q. Then your figures based on that would have this vice of the lap-overs in it, would it not?

A. Yes, sir, just the same as any other calculation made on the month of October would have it.

Q. And all the horrible results that would follow from that lap-over feature would run into your exhibit as well as in the state exhibits?

5113 A. Yes, sir, this exhibit is built on the same plan as the state's exhibit, changing the arbitraries and changing the factors for division.

Q. Is not the state exhibit also based on the wheel report, while your exhibit is based on the auditor's report?

A. Yes, sir.

Q. The state's exhibit would be freer from the lap-overs than yours, according to the testimony which has been given here, would it not?

A. So far as the car mile basis is concerned, of course there would be no lap-overs.

Q. But according to the basis you used there would be?

A. On the tons there would be lap-overs.

Q. And according to the state's plan there would not be any in this item?

A. No, sir, so far as the actual percentages are concerned, based on car mileage.

Q. On page 893 under the heading of "Other train expenses" you criticise the use of the train mile as a factor to divide those other train expenses: I will ask you if the state had used the car mile basis there, instead of the train mile, if it would not have been much more favorable to the state? And I will call your attention to Exhibit I on page 1 where you will find (leaving out the fractions) that if the car mile basis had been used there the result would have been fifteen, whereas by using the train miles it is twenty-six against the local train?

5114 A. Yes, sir, the percentage of train miles is larger than the percentage of car mile.

Q. The use by the state of the train mile in that instance operated to the advantage ultimately of the interstate expenses, did it not?

A. So far as those two bases are concerned, yes.

Q. At page 893 you state:

"And so far as the greater part of the damage to stock, wrecks, injuries to persons, are concerned, that expense could have been

located either to the local train or the through train with the same degree of exactness as the loss and damage to freight was."

How are you going to locate stock killed, to the local train?

A. The stock claims that are presented will show the point of damage, the train number and class, as well as the names of all the trainmen on that train. There are cases where stock is killed by an unknown train.

Q. A great part of the stock killed at night, they do not know by what train it was killed?

A. I would not say that, because the train crew itself makes report when it kills or damages stock.

Q. We know as a matter of common knowledge that a great deal of stock is killed at night, where the train crew does not know who killed or damaged the stock; is not that a fact?

A. It depends on what you call "a great amount."

Q. I know only what I learn about it in the law courts.

A. It is so definitely known that we used to divide it be-
5115 tween freight and passenger trains.

Q. You do not do that now?

A. No, sir.

Q. Suppose you had a head-end collision between a local train and a through train, how are you going to divide and locate that?

A. How am I going to do it?

Q. You said you could locate it between the local and the through train?

A. I said we could locate a large part of the expense of damage to stock and a large part of the injuries to persons.

Q. As a matter of fact is not that more of a train expense than a car expense?

A. What?

Q. Killing stock and injuring people: it is done by the train as an entity and not by the individual car: is not that the logic of it?

A. That is true. But I do not believe the train mileage is the proper basis to divide the expense between the two classes of expense, when you are trying to get the cost of state and interstate.

Q. Isn't it a fact that the mileage is better than any other factor, where a certain amount of injury takes place in the operation of a railroad?

A. I can answer that better by saying that neither the car mile nor the train mile would take care of loss and damage in transit.

5116 Q. But the train mile is evidently a more logical unit to use there than the car mile, is it not?

A. Yes, sir, than the car mile.

Q. Now, speaking of those injuries there: those are all questions of lap-overs, but we have discussed that.

At page 894 you say, in discussing the allocation of expense in the state's exhibit of wages paid to train crews and you say that was taken from your time books; and then occurs this statement:

"The only difference between that method and an exact amount would be the question of overtime on the last two or three days of each month that might not get into our time books."

Wouldn't it be pretty bad bookkeeping if you did not have all your wages both straight time and overtime, properly charged to each month?

A. That is a mistake there on the question of overtime.

What I should have said is, that the exact amount would be the question of the time for the last two or three days of each month.

Q. Even taking it that way, would not that be bad bookkeeping if you did not have the October time in your October accounts? It might be on account of an accident or sickness that a man's time was not sent in, but when it did come in would it not be properly charged to October?

A. No, sir.

Q. It would not?

5117 A. No, sir. And I should say there are a great number of runs on the Iron Mountain and the Missouri Pacific where the last day and possibly the last two days are carried over into the next month, because we do not get the time slips.

Q. You do not get those before you close your October accounts?

A. No, sir, we do not get those before we close our payrolls.

Q. I am speaking of October?

A. Yes, sir.

Q. Isn't it a fact that in this case—and did not you and Mr. Hamilton go through that and in a few instances, perhaps some half dozen instances, where you did not have an engineer's time or the fireman's time, you took the time of the other one and made the calculation so as to make that correctly. You took either the engineer's time or the conductor's time?

A. I do not know what Mr. Hamilton did to adjust that, but I do know that in going over those time books, we found a number of cases where the last two days of the train crew were not carried into the October account and that there were always one or two days in September carried forward into that October account.

Q. Don't you know those lap-overs to October were adjusted in that October exhibit for the state?

A. No, sir, I do not know that.

5118 Q. On page 894, Mr. Johnson, in discussing the principle of charging general expenses when the proportion of expense has been ascertained, you say:

"I do not believe the amount of money that is expended in the operation of a railroad say for expenses in the transportation department has anything to do with the cost of operating our general offices."

Have you not reversed the proposition there, Mr. Johnson? The question of spreading into transportation the expense of general offices, and not the other way?

A. No, sir, I don't believe I have. Your exhibit divides the total general expenses between local trains and through trains on the basis of the cost ascertained for each of those classes of trains in the other general accounts. I don't believe that is the proper way to do it.

Q. I understand that. But have you stated that proposition cor-

rectly there? You stated it, as I understand it, that the transportation expense would be put into the general expenses: you do not mean that?

A. No, sir, I do not. I say "the amount of money that is expended in the operation of a railroad, say for expenses in the transportation department has nothing to do with the cost of operating our general offices or has nothing to do with the general expenses."

Q. According to this method of dividing it, no part of the operating expenses go into the general expenses, do they? That is, no part of the transportation expenses?

A. No, sir.

5119 Q. Part of the general expenses go into the transportation?

A. I do not understand that either.

There are five classes of operating expenses; "general expenses" is one of those five classes; "transportation expenses" is another class. They are independent of each other.

Q. Certainly. But this answer (indicating record) would seem to leave the impression—or it did on my mind—that you are objecting to putting any operating expenses into general expenses: you did not mean that?

A. No, sir, but I am objecting to your plan of dividing general expenses in the exact proportion of the transportation expenses.

Q. You do not think any part of the president's salary should go into transportation expenses, or that any part of it applies to transportation?

A. It applies to transportation in a very general way, and I do not think you ought to divide the president's salary between local trains and through trains upon exactly the same percentages you found obtained in these transportation expenses because he has too many other duties to perform that do not depend upon the movement of trains.

Q. It just bears its proper proportion, does it not?

A. Its proper proportion to what?

Q. Its proper proportion to the other expenses?

A. I do not see just exactly what you mean by that.

What I mean is this: the trainmaster himself is employed

5120 in the operating of trains exclusively, as he is operating both local and through trains. Now, you have divided that. That together with other expenses in the transportation department, all added together, form a percentage and you have used that percentage upon which to divide the president's salary as betwen local and through trains.

Q. Don't you think the president has some duty with regard to running local and through trains?

A. Oh, yes. But I do not think his salary should be divided in the same proportion as the other actual operating officials' salaries and expenses are divided.

Q. Does not the Legal Department have duties reaching to every department of the railroad business?

A. Yes, sir.

Q. Maintenance of way, maintenance of equipment, transportation, traffic and everything else?

A. Yes, sir, and to the revenue as well.

Q. The Legal Department is very general, isn't it?

A. Yes, sir.

Q. Your Claims Department runs into every branch of business, does it not?

A. What do you mean by that?

Q. Don't you have claims that are handled by that department, growing out of Maintenance of way, maintenance of equipment, out of traffic and so on?

A. Yes, sir, but by no means in equal proportions.

5121 Q. Have you any way of finding out what proportion the claim department works, how much of it is in one department and how much in another?

A. Why, certainly. The claims themselves are charged to different accounts. For instance, there is a personal injury account in each one of these three primary accounts.

Q. The Claim Department has charge of all of it and runs it into each of the various branches and apportion- it according to where the claim arises—in which particular branch it arises?

A. To the department upon which the responsibility for incurring that expense rests. But not in equal proportions.

The claims in the maintenance of way, for instance, are very small as compared with other departments.

Q. There could not be any distribution of this that would really reflect the actual conditions, I take it. Suppose a passenger was injured on account of a defective rail: where would that claim go?

A. If a passenger on a train was injured on account of a defective rail, it would be charged to the transportation department.

Q. The maintenance of way department caused that injury yet it would be handled in the claims department through the transportation department?

A. I don't know whether maintenance of way caused that injury. We have had testimony here that shows that the

5122 Transportation Department injures the way and structures to a large extent.

Q. But it goes to a large proportion to defects in maintenance of way such as low joints, weakness of bridges and so on?

A. Yes, sir, and the expense of pounding on that track goes into another account.

Q. You criticise the state's plan of utilizing the October percentages by making them conform to the six months percentages in making up their exhibits: isn't it a fact that in these statistics the traffic expenses for six months are used instead of the month of October?

A. Yes, sir, the traffic expenses are divided between state and interstate on the basis of the gross earnings for six months.

Q. And station expenses the same way, aren't they?

A. Yes, sir, the station expenses are divided on six months' time.

Q. The only adjustment, as you referred to it in your testimony,

of the percentages of October to conform to the six months, is the ton mile, isn't it?

A. The ton miles that are used as the basis for dividing the local train and through train expenses.

Q. You referred generally to "Adjusting", as you call it, the percentages: did that refer only to ton miles?

A. It is just paragraph seven of your Exhibit K.

5123 Q. I think that is correct, but I think your testimony was a little broader than you intended to make it.

If they had not adjusted the ton miles to the six months period they would have had a constructive mileage in there instead of an actual mileage, would they not?

A. They would be no worse off than they are in either basis, they have used the six months' ton mileage on one month's percents.

Q. They have adjusted the ton miles to conform to the actual ton miles, instead of applying it on six months; instead of having a lot constructive mileage there that would not be actual?

A. They have done this: they have adjusted the six months' mileage to conform to the statistics of October, without taking into consideration any change that might have occurred and a change of one or two percent might have made a material change in that percentage.

Q. But if they had not done that they might have had a lot of constructive mileage in there. They would not have represented the actual conditions during the six months, would they?

A. I don't know, nor does anyone else.

Q. It would not be the same percentage?

A. No, sir, it would be 28.51% instead of 26%.

Q. And that difference of percentage would have represented a constructive mileage if they had not adjusted it to the

5124 actual ton miles, wouldn't it?

A. No, sir, it would not have represented a constructive mileage but it would have represented the proportions of state and interstate freight in October, 1907.

In November, 1907, that proportion may run thirty and seventy; or may run twenty-five and seventy-five. I do not see that the total ton miles for the six months would have anything to do with that October percentage.

Q. If they seek to make October representative of the entire six months' period they would necessarily have to take the six months' ton mileage to do so?

A. That is what they have done.

Q. I say if they assume October is representative of that entire six months' period, they would have to do that?

A. They have done that. They have assumed that the proportions ascertained in October, 1907, were exactly the same on local and through trains for the entire six months as they were for the month of October.

Q. And if October, 1907, fairly represents that six months' period, that was a fair way to do it?

A. I don't think so.

Q. You see from that, it is the theory upon which they proceeded?
A. I know that is their theory.
Q. You disagree with the theory, but what I want to get here is, that you are not disagreeing with the figures but with their theory?
A. It is the theory they adopt which I criticise.
5125 Q. Your testimony would rather leave the impression you disagree with their method of calculation. I want to make clear it is their theory of using the figures of October instead of for the six months that you are objecting to: is that correct?
A. Yes, sir.
5126 Q. On page 899, you criticise the division of "Miscellaneous" revenue, between state and interstate.
In your exhibit I understood you took the position that that could not be divided, so you just cut it out; cut out the property and the percentage representing that?
A. Yes, and the expense.
Q. What is that?
A. The expense as well as the property.
Q. The same proportion for the expense and for the property?
A. Yes, sir.
Q. You treated that like you did "mail and express"?
A. Yes, sir.
Q. Upon the State's plan of dividing the expense it was necessary for them to find some basis to divide that revenue, was it not?
A. Upon the State's method of ascertaining the cost of state and interstate freight you had to divide "Miscellaneous" earnings upon some arbitrary basis in order to take care of all of the operating expenses.
Q. By "arbitrary" you mean something other than actual, whether a proper factor or not; that would be a matter of discussion. They had to take some factor to divide that in order to get the expense that necessarily went into every account?
A. Yes, and an arbitrary factor, at that.
5127 Q. It was divided on the revenue basis, dividing revenue by revenue, and as I understand you, the revenue basis would be an arbitrary one?
A. For that purpose, yes.
Q. According to your basis, then, it would cost just as much to collect this $55,000 of Miscellaneous Rent as it would to earn a dollar in the first place, would it not?
You have an item of $55,000 "Miscellaneous Rents": according to your theory it would cost just as much to collect that $55,000, dollar for dollar, as it would to earn a dollar in the freight business?
A. No, sir.
Q. Why?
A. Because by adding to the percentage of extra cost of state freight, you have reduced the cost of your miscellaneous earnings.
Q. But your distribution is made before you add your arbitrary to the cost?
A. No, sir.
Q. It is not? You add your extra cost before you distribute?

A. Certainly.

Q. It would cost, then, as much to collect a dollar in through freight business, mail or express, as it would to collect these rents?

A. I think you have that mixed. Not as through freight and mail and express. They are entirely two different things.
5128 It would cost just as much to collect a dollar of these rents, as it would to earn a dollar of interstate freight; or, in the case of passenger, as it would to earn a dollar in interstate passenger.

Q. Or a dollar in mail?

A. Or a dollar in "mail" or "express".

Q. That is your method?

A. That is the result of our method. I would like to make that as plain as I can, too. That so far as the passenger business is concerned, these "miscellaneous" earnings are merged with our "mail" and "express" earnings, and we assume that it costs just as much to earn a dollar in "mail and express" as it does in the "miscellaneous" earnings, as compared with the State's method of making this profit as against "mail and express".

Q. On page 901 you say (referring to "mail and express" traffic):

"If the state is attempting to adopt bases that will come nearest to reflecting the actual expenses, then the revenue basis, which includes over 19% of mail and express earnings, is not the proper basis on which to divide this $53,000."

Are you not rather going back on the revenue basis, Mr. Johnson?

A. You are speaking now of "traffic expenses"?

Q. Yes.

A. My idea about that is this: that you are attempting, or the state is attempting to get at an actual basis that will reflect
5129 the cost of earning a dollar, in each class of service and as between local and through trains, state and interstate business. I do not believe that they have any right, when they are dividing the "traffic" expenses upon a revenue basis to include the "mail and express" earnings in that, and in saying that I do not believe we are discrediting our own exhibits in any way.

Q. I infer from that, that you do not think "traffic expenses" ought to be distributed over "mail and express"?

A. I don't think so if you are going to undertake to separate each item of expense. I do not believe, in the first place, that you can separate each item, but if you can obtain any basis that will do it, why, then, you have adopted the wrong basis in dividing your "traffic" expenses.

Q. I believe you have testified heretofore that you think the intrastate business ought to bear its revenue proportion of that "traffic" expense?

A. Yes, in connection with all other operating expenses, when you divide it on a revenue basis, because I believe that this is the only basis you can adopt for all of these accounts.

Q. I want to call your attention to the testimony of Mr. Ward, on page 685:

"Quite a number of witnesses (I cannot recall them all) have testified that it was proper on the theory that these agencies build up the country and induced the business into the country, and that

any agency which would tend to build up the country and build up the traffic on the road generally, would indirectly redound to the benefit of the intrastate traffic. I believe that this is about the theory upon which the state is charged with a proportion of that expense. If that theory is true should not the mail and ex-
5130 press also be charged with a proportion of it on the same theory?

A. It seems to me the point is a very small one. I would not personally think very much of the expense should be charged to the intrastate business.

Q. That is the position we took, but this gentleman converted us to the proposition of "laying up treasures in heaven"—or Arkansas—and we felt that on that theory they should be charged with their proper proportion.

A. That is true, in a general way; but I think it is a pretty fine point.

Q. I think so. But if you are going to accept that fine point, you should apply it to mail and express as well as to intrastate t[illegible] don't you think so?

A. Yes, sir, it seems to me so."

Do you agree with that view of Mr. Ward?

A. No, sir; I believe this, Judge: I don't think that Mr. Ward was thoroughly familiar with the items of expense that entered into this traffic account. I feel sure that there is not a part that is charged to "traffic" expenses, that was incurred by the railroad in the earning of its "mail and express" revenue.

Q. Mr. Johnson, don't you think that a general manager of a railroad is familiar with all of the details of operation, and of all parts of the railroad that is under his jurisdiction?

A. Yes, sir.

Q. Don't you think Mr. Ward is thoroughly familiar with all parts of a railroad?

A. No, I don't believe that Mr. Ward is familiar with the amount of money that is charged to each individual expense account. I think he has too many other duties to perform.

Q. You think you and our switchman and master me-
5131 chanic at Little Rock, are in accord?

A. That is not a fair view to take of it. The testimony in this case shows that in the first place, these accounts are not strictly Interstate Commerce accounts, and if Mr. Ward is operating the Burlington Railroad (as I know he is) on the basis of the Interstate Commerce classification, then he could not be familiar with them.

Q. You had some criticism of the train auditor's expense on passenger trains; you say that ought to be taken out of "general expense" and charged up to the passenger transportation, I believe: is not that the way you did it in your exhibit?

A. We have the train auditor's expense in our general expenses. Now, then, for the purpose of this exhibit, I think the state should have taken the train auditor's expense out of "general expenses" and divided that upon a different basis from the balance of the "general

expense," because in the first place, this is not a "general expense" item.

Q. That is what I want to talk about. You carried it in your books as a "general expense" item in 1907?

A. We used to, prior to July 1, 1907.

Q. And the Interstate Commerce Commission made a change?

A. Yes. The reason we did that was because our train auditors are entirely under the supervision of the General Auditor of the railroad company, and he felt that it ought to go in with the rest of his expenses.

Q. And you carried it that way: it was the judgment of
5132 your Company—up until the time the Interstate Commerce Commission required it to be otherwise—to put those items in "General Expense?"

A. Yes, sir.

Q. And your exhibits in this case carried them in "General Expense?"

A. Yes, sir.

Q. What are the duties of the passenger train auditors?

A. To collect the tickets and the cash fares on the train.

Q. He has no regular run, has he?

A. His runs are changed about every six weeks or two months.

Q. He is just sent from one part of the system to the other, is he not?

A. Just on part of it, every six weeks or two months.

Q. Then you haven't auditors for every run?

A. We had auditors for every run on the Iron Mountain in 1907, I think up to some time in December, when they were reduced. I may be mistaken about that, but we tried to cover every run.

Q. I do not know the dates, but I think I can state this, that you will probably agree with: when you first put on train auditors you put them on every run, did you not; when that system first went into vogue you attempted to put them on every run?

5133 A. Yes, on the Iron Mountain.

Q. And then you got to discontinuing runs and cutting down your force and transferring them from one run to another?

A. Our policy has always been to transfer them periodically, but we did not undertake to reduce any of them until the depression in December, 1907. As a matter of fact, our policy has been to constantly increase them, and on the Missouri Pacific——

Q. Is that expense pooled with the Missouri Pacific expense?

A. The train auditor's salary and expense is divided between states in exactly the same way that the conductor's salary is; it is divided on the mileage of his actual run.

Q. What I want to know is whether you treat the Iron Mountain and the Missouri Pacific as one, in your train auditors' expense?

A. No. We haven't a joint run, in the first place, but if we did have a run from a point in Kansas, on the Missouri Pacific, to a point in Oklahoma, on the Iron Mountain, we would divide that particular expense on the mileage of those two roads. But we haven't any joint run.

Q. Take an auditor running between Little Rock and Fort Smith; his run would be for six weeks. The next time he is liable to be transferred to run from Sedalia to Kansas City—on the Missouri Pacific?

A. Yes, sir.

Q. But you keep track of his mileage made in Arkansas?

5134 A. Yes, sir, we keep track of that.

Q. You interchange him from the Missouri Pacific to the Iron Mountain, as you please?

A. That is not a regular thing. What I mean is, we do not interchange them every day. It is not a daily occurrence.

Q. Every six weeks? You have some fixed period?

A. We will leave a man on a run say for six weeks or two months.

Q. And that other run is just as apt to be on the Missouri Pacific as it is on the Iron Mountain?

A. It is apt to be.

Q. More apt to be than not?

A. No.

Q. You want to take the fellow away from where he generally runs, don't you?

A. Our ordinary plan would be to run him in the other direction. For instance, if he was running from Little Rock to Texarkana, when the time came to change him, we would run him from Little Rock to Fort Smith or to Alexandria. His headquarters would be in Little Rock.

Q. Don't you use these men in your auditor's office for work there, when they are in town, or detail them for any work in the auditor's office?

A. When we detail them for work in the auditor's office they are no longer train auditors.

Q. You use them there, do you not?

A. As clerks.

5135 Q. I don't know what you call them, but they are on duty in the general auditor's office?

A. We have four or five men in the general auditor's office, whom we treat as extra men, and send them wherever we need them.

Q. And they do clerical work in the auditor's office when they are not on the run?

A. Yes, sir.

Q. If a man would come in from a run and you were shorthanded, you would put him to work in the auditor's office?

A. No, there are very few men who come in off their run. They never come up to St. Louis unless they are coming up for a rest of a week.

Q. Haven't you five or six men there now?

A. Yes, but they are extra men, these five or six.

They may be in Kansas for one week; they may be in Arkansas for the next week, and they may not go out again for three weeks.

Q. In the meantime they are in the auditor's office performing work there?

A. In connection with the train auditor's accounts, turning in the train audits.

Q. They are really collecting agents for the auditor?

A. They are what?

Q. They are really collecting agents for the auditor; collecting revenue and tickets for the auditor, and bring them directly into the auditor's office?

5136 A. You mean the train auditor in general?

Q. Yes.

A. To the same extent that a conductor used to collect tickets and cash before we had train auditors.

Q. That was when the conductor had the two services to perform?

A. Yes, sir.

Q. Now the conductor has no services to perform in regard to the collection of revenue, collection of tickets, when there is an auditor on the train?

A. No, sir.

Q. These auditors have no control over the train at all?

A. Not a bit.

Q. They cannot give orders to the conductor in any way, I understand, as to the management and control of his train?

A. Not so far as the train is concerned.

Q. Mr. Johnson, you put in a lot of figures here on the effect of the court tariff; the effect of railroad rates and commission rates, at page 911 or 912, I believe it is:

The object of that, as I understand you, is to show that an increase of revenue does not necessarily mean the same increase of rates?

A. That is the object of exhibit number 54. That is the exhibit, I believe, that refers to it.

Q. All the material part of this exhibit is in your testimony?

A. Yes, sir.

Col. MOORE:

Q. The testimony explains the purposes of the exhibit?

5137 A. Yes, sir.

Judge HILL:

Q. You did not make any calculations of the corresponding increase of revenue and rates on your interstate business during the periods that you were making the calculations for the intrastate, did you?

A. No, that was impossible for the reason already stated, that we could not apply the old rates to the interstate business on account of the volume of business involved.

Q. Then these figures showing the rate increase and showing the revenue increase, would have no bearing at all as to the relation between state and interstate, either in rates or revenue, would they?

A. These figures would not make any comparison between state and interstate business, either revenue, or rates or volume.

Q. If you were looking into these figures to throw light on the relation between state and interstate, and whether there was an in-

crease in rate or an increase in revenue, these figures would be valueless?

A. These figures are compiled for the purpose of showing that it is impossible to say that when the gross revenue, or rather, when the average revenue per ton per mile for two different periods would show a difference of 96 per cent, that that 96 per cent does not indicate a 96 per cent increase in the rate. That is all these figures were compiled for.

Q. One rate? I mean, one rate as against the interstate rate; or against the state rate?

5138 A. No, the 96 per cent we have had quoted to us was the increase in the average revenue per ton per mile, on state business in one period as against another.

Q. It was used in this connection, if you recall; an average of 96 per cent on state, as against an average increase of 9 per cent on interstate business, for the same period.

A. Yes, sir.

Q. You have no light, in these various statistics you have put in on these different tariffs, of the corresponding increase or decrease, as the case may be, in the interstate rate, while these changes were taking place?

A. We couldn't give you that. It is impossible to get it for the interstate business. We have it for the state because we worked it up currently during all of these months, at a large expense, because we were practically compelled to.

Q. But the problem that we were putting to you and to Mr. Kimbell, involving the 9 per cent increase in the interstate revenue and 96 per cent in the intrastate revenue, as indicative of the relation between state and interstate, hasn't any light thrown upon it in these figures that you have put in on this matter?

A. It has to this extent: that we know from compiling these figures that the 96 per cent is wrong.

Q. You know it is wrong as indicative that the rates were

5139 increased 96 per cent?

A. Yes, sir.

Q. You do not mean that Mr. Kimbell's figures are wrong.

A. No, I know his figures are right, but the 96 per cent is not the increase in the rate.

Q. I understand your position, but the great and primary object of that you haven't thrown any light on, that relation we have been trying so hard to find out?

A. We would like to know what that relation is just as well as you do, but we can't get it. We have this as a matter of record and gave you all that we have.

Q. Have you gone into it enough to know whether if there was 9 per cent increase on the Cotton Belt, what would likely be approximately correct on the Iron Mountain, for the same period?

A. We haven't done anything like that. It would mean our working up another exhibit 26 for January 1909, or one month's business.

Q. That is the only way we can get this relation between state

and interstate, by working up your interstate business and setting it up with state business, for the same period?

A. Yes, and applying to the interstate business the rates that were in force during the period in question, just as we did this state business.

Col. MOORE:

Q. I want to ask you, Mr. Johnson, in that connection, if the result of this exhibit in regard to state business (which I
5140 understand shows that the 96 per cent increase in the revenue per ton per mile does not represent the increase in rates) does not inferentially show that the 9 per cent you refer to in the interstate business would not reflect the increase in rates, or the change of rates—whatever it may have been—in that class of business; whether in that way it does not inferentially show that in neither case, the state or interstate, can you take the increase in revenue, per ton, per mile, as indicating the increase in rates?

A. I think this exhibit shows that that is not the proper way to get at the increase in rates, whether it be state or interstate.

Col. MOORE: That is what I want to know.

A. The principle itself is wrong.

Judge HILL:

Q. Just what principle is it that you say is wrong?

A. The plan that was adopted of taking the average revenue per ton per mile, in January, 1909, and comparing that with the average revenue per ton per mile for the six months ending December 31, 1907, and saying that the percentage of increase in 1909 over 1907 represented the percentage of increase in the rates that were in force in January, 1909.

Q. I don't know that anybody has advocated that theory.

A. That is my understanding of the exhibit that Mr. Kimbell was asked to put in on that basis.

5141 Q. We are digging after the relation between state and interstate and of course, incidentally, to know how much you had increased your rates, but I think you will see that questions put to Mr. Kimbell and all the other witnesses, recognize the fact that the revenue is a varying quantity and a very varying quantity, and we have been discussing that now from the viewpoint that that revenue represents the rates; that we are assuming it represents the rates.

A. You assumed that the rates had been increased 96 per cent on state business and 9 per cent on interstate business, by that exhibit?

Q. We assumed that the revenue had been increased and that a large part of that increase was on account of the increase in rates; that the relative increase in the two rates would be represented by a relative increase in the revenue.

A. I don't understand that it would.

Q. There is nothing in these calculations or statistics here to show it would not?

A. Not so far as the relation between state and interstate is concerned.

Q. That is the only matter we have been interested in particularly, and you haven't thrown any light on that interesting problem in these statistics?

A. Not so far as that particular question is concerned.

5142 NOTE.—It having been discovered that an error was made in the figures in Exhibit 56, growing out of a mistake of the accountant, those figures will have to be revised as soon as it can be ascertained, and correct figures substituted; and a certain part of F. P. Johnson's Exhibit 56, based on those figures, will also have to be corrected.

Recross-examination of F. P. JOHNSON continued as follows:

By Judge HILL:

Q. Mr. Johnson, as page 910 you speak of the car miles in Exhibit I including the hauling of company material. As I understand your statement you do not claim there are any company tonnage statistics included in Exhibit I, based on company material?

A. No, sir, in Exhibit I there are some averages shown at the bottom of the exhibit showing the average loading per car; and that is based upon the ton miles and the car miles as shown in this exhibit. The car miles included cars loaded with company material, the tonnage of which is not included in the ton mileage figures.

Q. Is not that the proper way to make up these statistics?

A. No, sir, I wouldn't say so.

Q. That is the usual way of doing it?

A. No, sir. The railroad undertakes to show the average loading per car mile. They would include their company material
5143 with their revenue freight.

Q. The company material does not enter into the revenue at all, does it?

A. Not at all, but it does enter into the average loading.

Q. Look at Exhibit I and you will see that they give statistics both ways.

A. (After examining exhibit.) That is all right. But the average number of tons of revenue freight considering loaded cars only, includes the cars that are loaded with company material. Now, then, the ton miles that form the other part of that calculation does not include the ton miles of company material.

Q. The only importance of this matter to which I am calling your attention is that the tonnage is not included in that, and the accountants have used car miles including the car miles made for the company material like the empty car?

A. Yes, and the only effect that has is upon that particular evidence.

In other words, the average loading per car on local trains considering local freight is not twelve tons.

Q. Fourteen tons?

A. Twelve in one case and fourteen in the other.

Q. You said "considering revenue freight": you mean company freight?

A. I mean revenue freight you have on this exhibit.

5144 That freight does not load on an average twelve tons or fourteen tons per car, because in that car mileage you have included only the revenue freight; and the car mileage includes the company material. And the same is true on the through train.

Q. That is a matter which runs into both of them?

A. Yes, sir.

Q. It is merely a question of whether you should include company material in making up the car mileage or not?

A. That is it.

Q. It seems the doctors of accountancy have disagreed again. You and Mr. Wharton have had a difference about Judge Farrington's opinion.

In your exhibit 55, which is your application of Judge Farrington's formula to the statistics in this case, I will ask you this: if the total freight transportation expenses were $1,755,255.76 and the average cost of all business is .0026721 per ton per mile, then by multiplying this cost by three you get the cost of state business, and by leaving the interstate business at .0026721, do you not increase the total transportation expenses beyond $1,755,255.76?

A. Yes, sir.

Q. Under this method, if the Interstate takes all transportation expense above the amount apportioned to the state, would not that result in charging the state with considerably more than three times as much per ton per mile?

5145 A. In making up this exhibit 55, I adopted the plan Judge Farrington adopted. I am not contending his plan is right any more than I am contending that Mr. Wharton's plan is right.

Q. What I am talking about now is the mathematics of it.

A. In the first case the figure .0026721 does not represent the average cost per ton per mile of all freight.

The ton mileage is 660,000,000 ton miles, and that brings about an average cost of .0026588.

Under Judge Farrington's method that extra cost should be increased by multiplying it by 100.5, or it should be increased .5 and that is your .0026721.

If I might explain, my idea about Exhibit 55 is that in applying Judge Farrington's formula, hire of equipment was not included in transportation expenses and that is what makes the difference.

Q. And you have put that hire of equipment in there?

A. Yes, sir. The Interstate Commerce Commission prior to July 1, 1907, included hire of equipment in transportation expenses.

Q. They did not in October, 1907?

A. No, sir.

And applying it to the statistics of this case, hire of equipment would not be included?

A. I don't know. I don't know what Judge Farrington would apply it to in October, 1907.

5146 Q. I am not talking about Judge Farrington but I am talking about the classification as it stands in this case.

A. The expense of the hire of equipment is still borne by the railroads, but it is not charged to the operating expenses.

Q. That is the point. The point of difference between you and Mr. Wharton is, as I take it, that you put the hire of equipment there and he took it as it stood?

A. He took our transportation account as it stood.

Q. In this case?

A. Yes, sir.

Q. And you changed it to conform to the later ruling of the Interstate Commerce Commission?

A. To the classification in force prior to July, 1907, when Judge Farrington's formula was applied to transportation expenses.

Q. Is not your mathematical calculation also made on a different basis?

A. A different basis from what? From Mr. Wharton's exhibit?

Q. Yes.

A. Yes, sir.

Q. Where does that difference come in?

A. In Exhibit G-1 which is worked out on the basis that the cost of state freight is three times as much as the cost of interstate.

Q. You worked it out yourself on the basis of 3½ times?

5147 A. No, sir, not three and one-half times. I worked it out on the basis that Judge Farrington laid down.

Q. I am not speaking about what Judge Farrington did, but I am speaking of the mathematical result.

A. The final result is 3½ times.

Q. That makes a difference of about $50,000, in rough numbers, charged to state freight, does it not?

A. Yes, sir. But I still want to make it plain that I was trying to follow Judge Farrington's formula.

Q. I started my question on the theory that the doctors of accountancy had disagreed about it and I was trying to get at the mathematics of the disagreement.

I believe you stated one of your objections to the method adopted by the state in making this calculation was that by the change of these percentages you could make radically different changes—that it was susceptible of great variation: is that your objection?

A. This general formula adopted by the state, yes.

Q. Your revenue basis, of 100%, is liable to some slight variation too, isn't it?

A. You mean the arbitrary application of either 50%, 100% or 150%?

Q. Yes, or 200% or 250% I believe some of the witnesses have run to.

A. Of course, the application of any two of those percentages would make a difference in the result.

5148 Q. A mighty wide range in working out results there, isn't it?

A. I don't think it has the same application to these statements as the state's basis does, because you can find perhaps a dozen different

bases for each individual item of expense, and an argument for each of them.

Q. It appears in this case, an argument against each of them.

A. Yes, sir, and an argument against each of them.

Q. Here is another point of variance, if you make estimates on the revenue basis, based on revenue or based on ton miles:

I notice some of the witnesses made their estimates based on ton miles and others made their estimates based on the revenue. And that results in considerable variance with men holding the same views, in so far as they use different factors, does it not?

A. There have been no different factors used by the railroad witnesses in this case.

Q. I am not speaking of the different factors but the different views.

A. There have been——

Q. Some of the witnesses say they estimate the extra cost at so much per ton mile and others state so much on the revenue theory. I think about five times on the ton mile and two and one-half times on the revenue has been a favorite way of expressing it. Rev-
5149 enue and ton miles are not in proportion to each other just one-half?

A. There is not very much difference on the Iron Mountain figures.

Q. They are close to that but they vary on the Cotton Belt?

A. Yes, sir, I think a little more than that on the Cotton Belt and a little less than that on the Iron Mountain.

Q. There is another varying factor, the factor used in forming an opinion?

A. I think so far as the Iron Mountain is concerned the opinion based on four times as much on the ton mile and two times as much on the revenue, would not bring about very much difference in the result.

Q. Not very much but applying these same figures to the Cotton Belt it would make some difference?

A. Some difference, yes.

Q. You stated (I do not recall the page of the record) that in the mileage in checking coach miles there was a discrepancy between you and the state accountants: they had 651,000 and you made it 685,000: you remember that item, do you not?

A. Yes, sir, 751,000 the state has and we have 785,000.

Q. You know how that difference came, don't you?

A. It is made up of the difference in actual miles in individual trains. It is made up of a number of different items. This
5150 makes a difference of two and one-half percent.

Q. My understanding of the difference is the difference in floor space of the mail and baggage cars?

A. That is a part of it and then there is some difference in the actual mileage of the different trains run and the cars in the train.

Q. Take a car used for mail and express both and I understand the state has taken it half and half?

A. Yes, sir.

Q. You have taken your government contracts as giving the floor space, haven't you?

A. No, sir, we took the memorandum the state got from the express company showing the actual amount of space in the car on each run.

Q. You got it from the express company?

A. The state got it from the express company and gave it to us.

Q. The floor space the express company is entitled to?

A. The statement says "the amount of floor space used."

Q. I thought that was all based on the contract?

A. Oh, no, sir.

Q. If it was mail, express and baggage all in one car the state would divide it one-third to each, and you attempted to take the actual amount of space used by each?

A. Yes, sir. And then there were some differences in the
5151 mileage of the individual run that made up the balance of it.

We had our car accountants check over the entire passenger car mileage for that month and I do not suppose any two men could check out work of that kind and come out exactly alike.

Q. I suppose not. I suppose there were errors both on your side and on theirs and possibly on both. That is about your idea?

A. Yes, sir, that is my idea of it.

Q. The main difference is using one-half or one-third, as the case may be, I presume?

A. Yes, sir.

Q. In your exhibit 56, in correcting what you said in your testimony you thought was an error of the state, is not allowing proper mileage for the passengers carried in Pullman coaches, you put in figures there in round numbers for the month of October of 12,000,000 passenger miles, of which 2,188,000 was in Pullmans.

It is a matter understood since we began this examination that an error has been discovered in that and I wish you would state just what you know about that.

A. The matter has just been called to our attention and we found in working up the number of passenger miles carried in Pullman cars that the clerks who made the report have duplicated a part of the passenger car mileage.

Q. You mean Pullman car mileage?

5152 A. Yes, Pullman car mileage; the passenger miles in Pullman cars. The conductor or train auditor in making his report, will report the entire mileage of the passengers in his Pullman cars. And frequently a train auditor will be changed on that run, and the new train auditor in making up his statement will also include the entire mileage of those passengers. That results in the duplication of some of the passenger miles.

We are arranging to take it now and correct it.

Q. We have not gone into it far enough yet to know the scope of the error?

A. No, sir, not yet.

NOTE.—It is agreed between counsel that the investigation which has been begun and is now under way to ascertain the extent of this error shall be continued by the state accountants and the company accountants and correct figures arrived at; and leave is granted to the complainants to revise that part of Exhibit 56 which is affected by this mistake. That the taking of testimony will not be affected by this but by this agreement the corrected statement will be filed later.

And, further, the railroad company has generously offered to bear the expense of this correction.

5153 Q. Mr. Johnson, I want to call attention to an exhibit filed by Mr. Roth (who I understand is sick and cannot answer any questions on cross-examination about it) and ask you if you are familiar with it?

A. No, sir, I am not.

Q. Have you examined it at all?

A. No, sir, only as it was filed here.

Q. I see a great many conclusions he has drawn here. For instance, he will say group 5 represents lower grade commodities carried in heavy loads with little, if any risk from loss and damage and consists of lumber and other forest products, salt, brick, lime and cement.

I have no way of finding out, unless some of you gentlemen can inform me, how that is made up and how he draws his conclusion.

A. Those groups are made up from a number of different commodities. I do not know what commodities were included in each group. As I have said, he made that up himself and I have no idea how he arrived at the different groups.

5154 T. A. HAMILTON, recalled, testified in sur-rebuttal as follows:

Redirect examination.

By Judge HILL:

Q. Mr. Hamilton, you put in evidence Exhibit C-1, which is a chart showing and illustrating certain rates, state and interstate, on the line of road south of Little Rock. Mr. Perkins, in discussing that at page 24 said, after explaining the rates set forth in your chart:

"In other words the state has picked out a comparatively small territory in Arkansas where this condition exists, to try to prove there is no relation between our state and interstate rates; while, as a matter of fact that comparatively small territory is an exception to the rule; although in that territory there is the relation between state and interstate rates as I have explained."

I will ask you if that is a correct statement that you have picked out a small territory there to prove this fact, and that that small territory is the exception to this rule.

Col. MOORE: The question is objected to because it necessitates the reopening of the line of testimony involved in the exhibit re-

ferred to and to that extent is original testimony and incompetent in surrebuttal, inasmuch as it may open up matter which would require further explanation on the part of the complainant.

A. First, on the question of the section of the line covered by Exhibit C-1 being the only portion of the line in Arkansas where the conditions illustrated in that chart were extant during
5155 the period of our inquiry I would say that I have taken the same tariff naming the interstate rates from St. Louis to points in Arkansas and have found that a similar condition exists on every section of the line which is covered by nine additional charts of similar character to Exhibit C-1, which I have prepared.

Q. Explain those charts, Mr. Hamilton, so it may be understood.

A. The charts are numbered for one to nine and to indicate the extent of the territory covered by them I have prepared as a recapitulation or summary of the charts an outline may of the Iron Mountain mileage in Arkansas, which appears first in the exhibit.

The portions of the Iron Mountain line colored in red are portions covered by the charts attached to the recapitulation.

The numbers shown opposite these red sections of the map are references to the charts which underlie it.

The mileage covered by the charts is 529 miles, including the territory covered by Exhibit C-1, which itself covered 7 miles.

Those 529 miles are 39% of the total Iron Mountain mileage in Arkansas.

The charts are similar in nature to Exhibit C-1, but cover different territory.

5156 Q. Explain the principle involved in this map and the charts.

A. Take one for example. Take chart five attached to the exhibit, the stations to which the rates apply, cover 79 miles on the White River division beginning at Fitzgerald just north of Newport and running to Cresswell. The red lines indicate the interstate rates from St. Louis to the various stations shown.

The graduated colored lines indicate the state distance tariff rates for the same mileage in Arkansas as would be covered on the haul from St. Louis on the through rate from St. Louis to these points.

It is not intended to compare the rates themselves in dollars and cents, but their relation one to the other.

To explain: First class rate from St. Louis to Fitzgerald was 80 cents. First class rate to Cresswell, 79 miles further distant (figuring the short line mileage via Diaz Junction) is also 80 cents. And the rate is 80 cents to all intermediate stations.

The first class state rate from the Missouri state line to Fitzgerald is 43 cents. The first class state rate to Cresswell, the most northerly station, is 56 cents, a variation of 19 cents, which is made gradually from station to station or in groups of five to ten miles.

The same is true of other state and other interstate rates.

5157 On this particular chart all of the interstate rates with the exception of class E are the same to the first and the last station on the chart.

Class E runs at the 15 cent level for 44 miles and at 16 cents the rest of the distance or 35 miles.

There is one chart to which I wish to call particular attention; that is number 2, covering eighty miles on the Helena branch; the first station being Jolly just south of Knobel, and the last station shown on the chart being Wynne, the junction of that line with the line from Bald Knob to Memphis, the distance between stations being eighty miles.

The first class interstate rates begin at 70 cents and is 70 cents to the first three stations shown on the chart.

The next station the rate is 71 cents.

To the next two it is 72 cents. And then to all except the last two stations on the chart or a distance of 48 miles, it is 73 cents level, raising one cent to each of the last two stations.

The second and third class interstate rates are absolutely level, being the same to the first station as to the last.

That is all true of the fourth class rate.

Class A from St. Louis recedes.

That is, the rate to the seventh station south or Paragould has dropped one cent, although the distance has increased.

5158 That is true of class B, the rate has dropped two cents when it reaches that station.

And of class C, which has dropped two cents. And class D has dropped two cents. And class E has dropped three cents.

That decrease in the rate remains effective for 19 miles, and then the rate resumes its former level and goes on on a parity with the first and second class rate.

On this same chart the state rates are graduated according to distance, the rates increasing in five or ten mile groups, according to the State Commission tariff.

Q. This was based on the rates in effect during the last half of the year 1907?

A. This chart was based on the interstate rates in effect during the last half of 1907 and also on standard tariff No. 3.

The map which is a recapitulation, bears a typewritten statement practically the same as what I have given here.

Q. The balance is made up practically in line with the explanation you have given?

A. Yes, sir.

Judge HILL: We offer in evidence this exhibit.

The exhibit referred to is marked "Defendant's Exhibit L-1.

Said exhibit is in the words and figures following to-wit:

For Exhibit L-1, see Vol. 9, page 5886.

5159 Judge HILL:

Q. Mr. Hamilton, you did not finish your answer I believe, as to the second part of the question?

A. I directed the answer so far given to covering the statement that Exhibit C-1 covered the only portion of the line where these conditions existed.

As I understand the latter part of your question, the quotation from Mr. Perkins' statement, was that a certain relation did exist.

Col. MOORE: I object to the witness going into the effect of it. That certainly would not be competent.

Judge HILL: I am inclined to think you are right about that.

Q. Mr. Hamilton, at page R7 Mr. Perkins in discussing the rates to Texas common points in answer to some testimony of Mr. Ludlam and exhibits filed uses this language:

"The rates to Texas common points are not made entirely from St. Louis. In many cases the rates are made from the territories east, and rates are then fixed from St. Louis on differentials under the rates so fixed from Eastern Territory.

This is due to the fact that the further east we go the more keenly do we feel the water competition of the Steamer Lines from New York to Galveston and Texas City. In adjusting our rates to Texas we attempt to arrive at a rate which will yield an average return. In other words, we do not figure on the rates to Paris, in the northern part of the state of Texas, nor on the rates to San Antonio, in the southern part of the state, but a rate which applied to the entire territory would yield an average return."

I wish you would state whether you have found that to be correct and if you think it is incorrect, if you have prepared a chart illustrating how those rates are made different from the way Mr. Perkins understood it?

5160 Col. MOORE: The question is objected to as not being proper surrebuttal evidence.

A. The rates are made in the way which Mr. Perkins says they are made. The tariffs show that.

But their division between the carriers hauling the freight results in greatly varying rates for the haul in Arkansas.

Q. You mean greatly varying revenue rather than rates, do you not?

A. Greatly varying revenue, assuming the business moves under the rates.

Q. What I am particularly calling attention to is the average of revenue. As I understand, that is made up by the rate and the division?

A. Yes, sir, that would be governed by the average movement of freight also.

Q. That is true. Now proceed with your explanation.

A. I have prepared a chart which covers the rates, or the Iron Mountain proportion of the rate in Arkansas on business from Chicago and Pittsburg and their surrounding territories, and St. Louis, to fifteen stations taken at random from the map of Texas:

The stations named are shown as taking Texas common point rates and I have selected the first class rates, for purposes of illustration.

Mr. PERKINS:

Q. Can you state what roads those stations are on, so we can follow that up?

5161 A. I have Victoria on the Texas and New Orleans.

Brownwood on the Fort Worth & Rio Grande.

Wharton, Texas, on the G. H. & S. A.

Abilene on the Texas and Pacific.

San Antonio on several roads, among them the I. & G. N. and I have figured I. & G. N. divisions on this chart.

Eastline, Texas ,on the Texas and Pacific.

Big Springs on the Texas and Pacific.

Austin on the I. & G. N. among other roads and I have used I. & G. N. divisions.

Corsicana on the Cotton Belt.

Waco on the Cotton Belt and I have used Cotton Belt divisions.

Palestine on the I. & G. N.

Fort Worth on the Texas and Pacific among other roads and I have used Texas & Pacific divisions.

New Boston on the Texas and Pacific.

Marshall on the Texas and Pacific.

Tyler on the I. & G. N. and Cotton Belt, and I have used Cotton Belt divisions.

The first class rate from Chicago to these points—that is, the proportion of it which Iron Mountain would earn in Arkansas is indicated by a red line.

The Iron Mountain Arkansas proportion of the Pittsburg rate is indicated by a blue line.

And its proportion of the St. Louis rates is indicated by

5162 a green line.

In arriving at the proportion accruing to the Iron Mountain in Arkansas, I have applied the regular divisions on Chicago and Pittsburg business north and east of East St. Louis, as shown in the company's division sheets current in 1907; and the divisions south of Texarkana as shown in their division sheets with the southern lines.

The remainder or the proportion of the rate between St. Louis and Texarkana I have divided between Missouri and Arkansas on a track mileage basis, which is the railroad's method in this suit, of locating revenue to Arkansas.

The chart speaks for itself.

The proportion of the rates in cents per hundred pounds is shown in figures across the top.

The lines extend to a figure which indicates the rate accruing to the Iron Mountain on its haul in Arkansas for the business for each station from each point indicated.

The rate accruing to the Iron Mountain in Arkansas on business from Chicago to Victoria, Texas was 31 cents.

From Chicago to Tyler, Texas, it was 59 cents.

Q. That would be exactly the same movement over the Iron Mountain tracks?

A. From the Missouri-Arkansas state line on the Iron Mountain rails to Texarkana.

Mr. PERKINS:

Q. You are using the first class rate?

A. Yes, that is the only rate shown on the chart. The rate used is the first class rate arrived at by adding the established dif-
5163 ferentials to the St. Louis rate on the Chicago and Pittsburg basis. And the divisions were obtained from the percentage sheets on file in the office of the auditor of freight receipts of the Missouri Pacific Railway.

The two extremes of the chart are 31 cents on the business from Chicago to Victoria, Texas, and 66 cents on business from St. Louis to Tyler, Texas.

The others speak for themselves.

Col. MOORE:

Q. They vary between those two extremes?

A. Yes, sir.

Judge HILL:

Q. I think it is in the record but I wish it restated here for the purpose of clarifying a situation:

The rate you have put down here is the proportion accruing to the state of Arkansas?

A. Yes, sir, on the basis I have explained, track mile division of the proportion of the rate from St. Louis to Texarkana.

Q. What I want to get at is, that track mileage basis is the one used by the railroads here?

A. In locating earnings to Arkansas, yes, sir.

Col. MOORE: I object to the statement and to the exhibit which counsel proposes to now file, on the ground of not being proper surrebuttal.

Judge HILL: We will offer in evidence this exhibit referred to by Mr. Hamilton. The exhbit referred to is marked "Defendant's Exhibit M-1" and is in the words and figures as fol-lows to-wit:

5164 For Exhibit M-1 see Vol. 9, page 5897.

Q. Mr. Hamilton, when you were on the stand before you were cross-examined as to various cars you traced up that were put before you in the October movement, Exhibit I, I believe it was. Redirect examination on that was deferred until you had time to look into the matter.

I will ask you if you have gone through that thoroughly and found out the extent of the errors upon which you were questioned in your cross-examination?

A. Yes, I have gone over our work sheets since that time. By "work sheets" I mean the sheets on which we worked up our figures which are condensed into Exhibit I; and have given particular attention to the cars referred to by Col. Moore in cross-examination

on the subject heretofore. I found there were thirty cars involved which were referred to as making sixty-eight different moves That is, as appearing sixty-eight times on our sheets. I do not mean that each of the cars appeared sixty-eight times but the thirty cars represented sixty-eight movements in the local trains.

I found that our weight as shown in tons in our classification as between state and interstate was correct on seven of these movements. I found that we had omitted to locate weights for forty-three cars in our statement, which cover some 20,835 cars.

I found that the sixty-one moves or sixty-one appearances of cars on our worksheets where we had made errors in ascertaining
5165 the weights or in classifying the weights when ascertained would when boiled down and applied to paragraph seven on page eight of Exhibit K result in taking $257.68 from the cost of intrastate business and adding that amount to the cost of interstate business.

That would be the net result of making the correction in our figures.

Q. Your error worked out against the state, then, to that extent?

A. Yes, sir.

Q. What percentage of error would that be? Have you ever figured that out?

A. If the changes I have indicated were made in Exhibit I, the percentage shown in that exhibit would read in this way:

Intrastate freight on local trains 39.02% instead of 39.10%.

Intrastate freight on through trains (I am speaking of ton mileage now) would read 60.98% instead of 60.90%.

Total revenue freight on local trains would read 11.17% instead of 11.18%.

Total revenue freight on through trains would read 88.83% instead of 88.82%.

Following that in Exhibit K it results in the change in dollars and cents to which I have already referred.

Col. MOORE: What cars does that result you have just now mentioned apply to?

5166 A. It applies to the car numbers——

Q. To which I called your attention?

A. Yes, sir.

Judge HILL:

Q. You remember at that time I told you I wanted to examine him further, after he had had a chance to look them up.

There is another matter in connection with that. You stated there were a few cars you missed; they were out of view in some way and you could not get the exact number: did you find that?

A. I think I stated it was 43 cars.

Q. Out of the total of 20,000?

A. Yes, sir.

Q. Which you never got trace of?

A. That we did not locate.

Q. I thought you passed that and had not looked it up?

A. I stated that in beginning my answer to your question.

Q. Mr. Johnson in his testimony criticised your October expenses in regard to labor and overtime, in which he stated as I recall it, that there would be an inaccuracy in it as to the labor and overtime that might appear in the last few days of the month; and this morning he corrected that as to the overtime and said there would be some lap-overs on the straight time.

A. Yes, sir.

5167 Q. From the last days of the month into the next month?

A. Yes, sir.

Q. I will ask you if you adjusted that and if so how you did it?

A. Our process for locating the labor cost for the local freight trains was to ascertain from the time books the amount of time, regular, overtime and constructive time, that was put in by each train crew; and apply to that the rate of pay indicated in the company's contract with the men in the different branches of this train service; and also indicated in the body of the time book opposite the trip, if the men were in diversified service, or at the head of the page if they were in one class of service throughout the month.

We found at some times one portion of the crew would not have gotten its time slips in to the timekeeper for the last day or the last two days of the month in time to get it into the timebook.

As I understand the process, the conductor reports time for himself and the brakeman under his supervision; and the engineer reports the time for himself and the fireman. Sometimes the engineer's timeslip would not have been reported. If that was the case we gave him the same time, regular, constructive and overtime, as the conductor got but at the engineer's rate of pay.

If the conductor's timeslip was missing we gave him the same time as was reported by the engineer, at the regular rate of

5168 pay for conductors; and the same thing in the case of the brakemen.

I recall no instance where timeslips for both ends of the train—if I may put it so, were missing.

But this is true as to lap-overs: I recall a few items of September time paid for in October. They were the omissions made in September. There were a few of those, but not many. But the time we have obtained for the local trains and the cost of that labor is, I think, accurate. I think our method is correct for the reason that I can conceive of no way a conductor could be engaged in road service without an engineer or an engineer without a conductor.

Q. That difference belongs to what we have designated as "negligible quantities"?

A. I think so.

Col. MOORE: I would like him to state what he did in cases where he failed to get the time of both the engineer and the conductor?

A. I do not recall any instance where we did not get one end of the train crew. But if that were the case my instructions were, and I did it for such portions of the statement as I made myself, to take the time shown by the dispatcher's sheet for that portion of the road. It might be that we might miss some few hours representing both ends of the train crew.

Judge HILL:

Q. Were those instances many or few?

5169 A. I do not recall many such instances. My memory does not recall them, if there were any.

Q. Mr. B. W. Moore, trainmaster, testified in rebuttal on the order of cars in trains leaving terminals and put in an exhibit for redball train No. 55 as an illustration of the fact that the trains were not broken up in terminals. There was also some question as to the order in which the trains were made up:

I will ask you to take his exhibit and apply the wheel reports to it and see what the result would be on that, Mr. Hamilton?

A. I have not in my possession the wheel reports which cover Mr. Moore's Exhibit. That covers train 55 for the entire month of October. But, as I understand the purport of the exhibit it was to show that train No. 55, or the trains of which train No. 55 was assumed to be a type were not broken up, or did not receive much switching at division or district terminals.

I made considerable examination of the wheel reports for October, 1907, during the time we were handling them for the purposes of our local train figures, and for the statements which I have put in evidence before, as to the delay of cars in through trains at district terminals, and predicated on the assumption that rule No. 2 on the back of the wheel report, which states that "cars must be reported in train order, commencing with the caboose, to show the makeup of trains, leaving division terminals," and predicated

5170 on the assumption that that instruction was followed and that the conductor listed his train in the exact order in which it was made up, I did compare practically all of the wheel reports into and out of these district or division terminals for October, 1907, and found that the order of the cars leaving the most central terminals, for instance Hoxie, was different from the order in the train of the same cars leaving Little Rock, in a great many instances. I take that as an illustration.

I assumed from that if both conductors followed the instructions and listed their cars from the caboose to the engine, or vice versa, as they stood in the train, that shifting must have taken place and on that I predicated my belief that trains were shifted at division terminals.

Mr. Moore said that the conductors disregarded that instruction, in order to group the cars, system and foreign for the benefit of the car accountant, to minimize the work in his office.

The actual inspection of the wheel reports does not develop that they group the cars in that way.

I have before me the original wheel reports furnished me by Mr. Johnson for the Arkansas Division, for the 10th of October, 1907. I selected this at random from several I had gotten from him for the purpose.

The first train shown here is an extra through train from Little Rock to Texarkana on October 10, 1907, being extra No. 58.

5171 I find out of a total of 55 cars exclusive of the caboose in the train, the first three are foreign cars, then two system

cars; another foreign car; another system car; then a group of eight or ten or twelve foreign cars; another system car; two more foreign cars; another system car; six foreign cars; three system cars—and so on down; indicating there was no regrouping of the cars by the conductor for the purpose of expediting the work of the car accountant. And he had to all appearances followed the instructions on the back of the report and listed his train as it stood.

That is true of every other train, in fact, all of the through trains, in which there were both system and foreign cars, in this entire day's wheel reports.

On that I based my idea that train No. 55, the redball crack train on the main line which got little or no terminal handling was not a type of all the through trains on the road.

Q. Mr. Amoucek put in some exhibits on that subject, did he not?

A. He covered practically the same ground as Mr. Moore, taking some thirty trains out of Hoxie as a type.

Q. How did he get the thirty trains?

A. He took them from some work sheets we had prepared, on which we counted the cars into and out of the terminals and on which we showed lapsed or delayed time in the terminals.

5172 We simply prepared that to use in a division of expenes.

The other sheets were made—those to which in my mind Mr. Amoucek's criticism would better be applied—were sheets in which we showed the breaking up of these trains at terminals and varying delays to the cars.

Q. He did not criticise those?

A. No, sir, his testimony was along the same line as Mr. Moore's as I understood it.

5173 Following the afternoon session, 12/17.

Q. Mr. Hamilton, have you examined Mr. Roth's exhibit and testimony in the form of statistics, copied into the record in his rebuttal testimony, commencing at page 867?

A. Yes, sir.

Q. Do you understand the purport of those or the method or manner in which they were made up?

A. I think I understand the method in which the table on page R. 869 was made up, but the purpose of the exhibit I cannot satisfy myself as to and do not quite understand.

Q. Do you know of any bearing it has in this case at all, as far as you are able to judge it?

A. I must confess that I have not been able to see its application.

Q. Take that table on page R. 869 and state what you understand it is.

A. I understand that is a table showing in six groups of commodities, the relative percentage in ton miles of each group to the total and the relative percentage of revenue under two heads, one covering the entire Missouri Pacific Iron Mountain system, and the other intrastate business in Arkansas.

The basis on which that was made up, or the method on which it was compiled, was stated by Mr. Roth on page R. 867, to the

effect that he has graded the various commodities into six groups, according to character, loading, risk of loss and damage, handling and incidental cost.

Q. Do you know how any such grading as that could be made?

A. I think it would require an intimate knowledge of

5174 transportation conditions and the results of transportation.

Q. Do you know of any system of grading that way, or is it apparently some opinion that is expressed in that way?

A. The groups are arrived at on a variety of assumptions which are set forth under the head of each group, and which, it seems to me, would require an intimate knowledge of transportation conditions and the results of transportation. The assumptions are that certain classes of freight are more liable or do receive actually, more loss and damage, more handling, etc., as set forth.

Q. That goes into the realm of opinion, purely, as to whether those assumptions are correct or not?

A. Exactly, unless we had statistics as to the effect of transportation on these various commodities.

Q. Do you know of any such system as that, anywhere?

A. No, sir.

Q. You have been investigating?

A. Special investigation given it may determine that, perhaps, to some extent, but——

Q. Without having some key to guide you, as a basis, does that mean anything to you as it stands?

A. Not without knowing Mr. Roth's reasons for grading the commodities as he has grouped them and what are in the group, in detail.

Q. And what influenced the putting of this commodity or that, into this group or into the other group?

5175 A. We would have to know the rates of the various commodities; the average haul of each commodity; the amount ordinarily transported; the proportions of each commodity to the other commodity in the group, before we could arrive at a definite conclusion.

Q. What is Mr. Roth's work; do you know the line of work he has followed?

A. From my observation in and about the General Auditor's office in the Missouri Pacific, he has been engaged in compiling statistics of various kinds and especially in the last year or so in getting up a statement of the effect of the application of the inhibited rates in Arkansas on the current traffic.

Q. He is a statistician?

A. I so understand.

Q. One of the witnesses for the Iron Mountain, in rebuttal, Mr. Cannon, I believe it was, testified that during October, owing to a congestion of the business, that there was a shifting of through business on to the local trains in Arkansas:—probably other witnesses expressed opinions along that line, but I remember that one in particular:

Have you investigated that question and prepared any statistics on that subject?

A. Yes, sir.

Q. I wish you would give us the benefit of it.

A. Exhibit "I" filed by the State, covering the month of October, 1907, shows the average number of cars per local train to have
5176 been 16.6.

As I recall what Mr. Cannon said, he stated that to relieve through trains during the month of October—which he said was a more or less congested period—they had burdened the local with more than it would ordinarily haul of freight which went from one end to the other end of its run. That is, it carried some of the burden of the through train during that period and that that would reflect itself in any ton mileage figures that might be made as to the local trains' performance.

As I recall it, he stated that that would result in putting more than a normal amount of interstate ton mileage on the local trains.

Q. That is the substance of it.

A. I have had in the last week or two weeks, the wheel reports for all of the local trains on the Iron Mountain in Arkansas, for the month of March, 1907, a spring month of the same year.

I find that the average cars per local train, for that month, were 16.7.

Q. What was it in October, 1907?

A. 16.6.

Col. MOORE: I do not think it is proper for you to go back——

Judge HILL: You are the one that brought that in in rebuttal. We took your testimony to begin with, that October was normal. We did not introduce testimony on that, and then in rebuttal you took this testimony of Cannon and others, to show it was not.

5177 Col. MOORE: This is objected to because it is a reopening of a matter that has been gone into before by the state.

A. The figures that I have just quoted were obtained from the wheel reports and the car mile calculations shown in the wheel reports by the statistician in the car accountant's office.

Those figures which we have abstracted for the local trains were an integral part of the total car mileage figures made by them for that month for the information of the operating officers of the Company and other statistical purposes.

The method followed was to abstract the car miles made by the local and the train miles made by the local and dividing the car miles by the train miles to get the average number of cars in the train each mile, which is exactly the process followed in compiling Exhibit "I" for October.

Q. You just matched March, 1907, with October, 1907?

A. Yes, sir.

Q. And found on the second decimal a difference of one point?

A. On the first decimal a difference of one-tenth of a car more in March than it was in October.

Q. Have you any other statistics on that point?

A. Do you mean as to the normality of October, from a transportation standpoint?

Q. Yes.

5178 A. Yes, sir. I have made a comparison of the October movement with the six months which covers the period of our inquiry in this case, the last six months of 1907.

I find that the freight train miles made in Arkansas on the Iron Mountain in October, 1907, were an exact one-sixth of the freight train miles made in the six months ending December 31, 1907—16.63%, an exact one-sixth.

I find that the freight car miles made in October, 1907, were also one-sixth of the freight car miles made in Arkansas during the latter one-half of 1907; they were 16.57%, virtually one-sixth.

Q. You mean per cent of what; of the total train miles made?

A. No. The October car miles were one-sixth of the freight car miles made in the six months' period.

Q. Ending December 31, 1907?

A. Yes, sir, the period of our inquiry here.

Q. Anything further?

A. No, sir.

Cross-examination.

By Col. MOORE:

Q. Mr. Hamilton, are the state rates upon which the graphic chart filed by you as Exhibit "L-1" is based, the rates prescribed in the Standard Distance Tariff, No. 3, put in force by the Arkansas State Commission?

A. Yes, sir. That is, they were taken from Standard Distance Tariff, No. 3.

5179 Q. Of the Arkansas Commission?

A. Yes, sir, the copy was furnished by the Commission.

Q. I will furnish you a copy of that and if it is not already in, will you file as an exhibit a copy of that tariff? If it has already been in evidence, and I think it has, it will not be necessary to do it.

A. Yes, sir.

For Exhibit N-1, see Vol. 9, page 5899.

5180 Mr. WRIGHT, recalled, testified as follows:

Redirect examination.

By Judge HILL:

Q. You testified in this case on an estimate of switching done by local trains and criticism has been made of your testimony in regard to two stations, that I feel call for an explanation.

Here is a statement given in Mr. Johnson's testimony at page 886:

In referring to your work-sheet he says:

"I notice in his worksheet he allows at Bald Knob ten cars, five set out and five picked up. But for some reason allows but ten engine trips.

At Kensett he allows four cars set out and four cars picked up, making eight in all; but allows only ten engine trips."

I wish you would explain why you made it in that way, if that is the way you made it?

A. When I made that statement I had in mind the peculiar condition that existed at Bald Knob, which is the junction station of the main line and the Memphis branch.

At Bald Knob proper the business is very light, but there is likely to be probably an average of three cars that would be picked up by the southbound Iron Mountain locals that would be destined to points on the Memphis branch. The Memphis branch local
5181 does switching for those cars, both those to be delivered to the main line and those to be received from the main line. Therefore, it would not be necessary for the main line local to perform any more than what is called a short "kick," kicking those probably three cars to the lead of the Memphis Branch.

The same would be true of cars that would be picked up at Bald Knob, that were set out there by the Memphis branch local at a point just south of Bald Knob.

Q. If I understand you, there are more cars there than are switched locally?

A. That is the idea.

Q. And you put down the number of cars and put down for switching trips the number that would be switched locally?

A. Yes, sir, and made a larger allowance for the locals than might be made for the Memphis branch, for instance.

Q. What about that Kensett situation?

A. The Kensett situation is somewhat similar to that at Bald Knob. The main business at Kensett is with the Doniphan Lumber Company. Kensett is a very small local station—that is, the business for Kensett proper is very small. The main business there would be for the Doniphan Lumber Company, which is a company situated about two miles out on a little branch line running from Kensett out to Red River, and the Doniphan Lumber Company operates its own engines and it has the privilege of coming in on the Iron Mountain track, and picking up cars destined to its
5182 mills, and also placing cars destined to points on the Iron Mountain road. So it is unnecessary for the Iron Mountain engine to do anything more than set those cars for the Doniphan Lumber Company out on the switch. It is unnecessary to make any switching movement for them, except a short kick.

Q. And you allowed for the switching locally to Kensett, and not for that performed by the Doniphan Lumber Company?

A. Yes, sir, I figured that the business at Kensett would average about one car a day. That would be a high average. That would be two cars a day each way; that is twenty cars—or whatever number of working days they have. It would be a high estimate, too high an estimate.

I see I allowed here four engine trips. That would allow one engine trip for the business of the Doniphan Lumber Company

and one for the business for Kensett. That is the way the conditions I had in mind were when I made this statement.

Cross-examination.

By Col. MOORE:

Q. Mr. Wright, you did not refer to these matters you have just now explained, in your former testimony, did you?

A. Those peculiar conditions? No, sir, I don't believe I did. I do not remember that I did.

Q. In your statement when you were on the stand, you allowed for four cars set out at Kensett and four picked up; and you
5183 allowed for ten engine trips. Does not it usually take two engine movements to set out a car and pick up? Would not that ordinarily allow for sixteen engine movements?

A. It might be possible it would take that many.

Q. Does it not usually do so?

A. No, sir, not in practical railroading.

Q. If you set out a car you have to move it to the track where it is going to be set out, do you not?

A. If there are four cars it might be that they are in such a position in the train that it would be necessary to make a switching movement for each car; but it would be hardly probable.

Q. In several other places I notice you have allowed two engine movements for each car: why did you not make the same allowance at Kensett?

A. For the reasons I have just stated—that the main business at Kensett was for the Doniphan Lumber Company and switching was not required.

Q. On what basis can you assume that eight cars would require just ten trips?

A. I don't know why I made the statement of eight cars. I did not have that many in mind.

Q. That is your statement given in evidence, is it not?

A. That was too high an estimate, if I made that estimate. I do not think the business will run that much.

Q. You assume your evidence was mistaken in that respect?

A. If I stated eight cars that is a mistake.

Q. Four cars set out and——

5184 A. As I stated, probably one would be for Kensett and the others would be for the Doniphan Lumber Company.

Q. You stated "probably"; you do not know?

A. It is all probability. I do not know any of these as true facts.

Q. It is all assumptions?

A. It is not based on any actual statement that has been made but merely my opinion formed from the business at those stations.

Q. In other words, it was simply your inference or assumption: you cannot say that is correct, can you?

A. I made up no statistics for those stations. Although I try to make a high average for them.

Q. At Bald Knob you show five cars set out and five picked up

and you allow ten engine movements; whereas, at other places you have doubled that: why did you make that difference at Bald Knob?

A. Just because, as I stated, the Memphis branch local does the switching for this business. It picks up and sets out at Bald Knob for the main line. That is an operating condition that prevailed there.

Q. You explained that in your examination in chief. What I want to ask you is this, you predicate that upon the assumption that all the Memphis branch line switching must be done by another engine and not by the Iron Mountain road?

A. Yes, sir, that was the operating condition that was in force at the time and is yet so far as I know.

5185 Redirect examination.

By Judge HILL:

Q. Were you familiar with the way the passenger traffic was handled through Little Rock in 1907?

A. Yes, sir.

Q. Here is a statement to which I direct your attention, made in Mr. Johnson's testimony at page 903. It reads as follows:

"If the passenger buys a through ticket to a point reaching beyond the state of Arkansas, I cannot conceive of any item of expense which should be included under station service, that would be charged to that passenger."

"Is it not the universal rule that a trans-state passenger, as well as all other passengers, buy a ticket from the origin to the end of their trip?

A. Yes sir."

I wish you would explain how the trans-state passengers are handled at Little Rock. Take the passengers from Texas that go east through Memphis; or take passengers from the south that go west through Fort Smith: Explain that situation there, Mr. Wright, if you please?

A. The trans-state passengers from the Iron Mountain between Little Rock and Texarkana destined to Memphis would use train No. 4 or No. 8 into Little Rock. They would use the two morning trains.

Q. You mean by that a train running from Texarkana to Little Rock?

A. Yes, sir. They would use the morning train from
5186 Texarkana to Little Rock and then change at Little Rock, taking train No. 204. They would change at Little Rock and take the train from Little Rock to Memphis.

Q. They make close connection there?

A. No, sir. Between train No. 4 there was, as I recollect it about 1 hour and 40 minutes and for train No. 8 there was pretty close connection, not more than 20 minutes.

Q. How about those passengers going south, through Memphis, using Memphis as the gateway from the east. All that travel going

through Memphis and coming back the other way, coming from the east and going into Texas: how is that handled?

A. They run two passenger trains from Memphis to Little Rock. One that arrives at Little Rock in the morning and the passengers would have to change cars at Little Rock and take the main line train. Those that used the other train, known as No. 223, would go straight through to Texarkana.

Q. There is one of those trains that goes straight through to Memphis?

A. One goes straight through. But the fastest train, No. 204, runs only to Little Rock and the trans-state passengers would have to change cars at Litle Rock for points south of there.

Q. Suppose a passenger from Louisiana on the line of the Iron Mountain road coming to St. Louis would buy a ticket at
5187 Alexandria or Monroe or any other of those points down there, how would that be handled?

A. They would have to change at Little Rock.

Q. They would have to spend the night there, would they not?

A. No, sir, if they used the Iron Mountain train No. 5 they would make quick connection there—that is, not more than one hour and twenty minutes. And the same is true of the night train. Unless the night train is late they would not have to stay there all night. And the same is true of the business for the Fort Smith branch. They would have to change at Little Rock.

Q. How about the White River branch? Say a passenger coming from Memphis, Louisiana or Texas or any other point beyond the state of Arkansas, coming into Little Rock and going out to Springfield, Missouri, or any point on the White River branch?

A. They would make a change, one at Bald Knob and one at Newport.

Q. They would change at Little Rock, too, wouldn't they?

A. Not a passenger from Memphis.

Q. Take a passenger from Louisiana or Texas.

A. Oh, yes, he would ch. there.

Q. He would make three changes, would he not?

A. Not necessarily, no, sir. It would not be necessary to change except at Newport. From Texas down to a point beyond the
5188 state line on the White River branch, would be a trans-state passenger or an interstate passenger and would change at Newport.

Q. For the purposes of this question, Fort Smith is a trans-state point.

I will ask you how the travel from Fort Smith going east by way of Little Rock to St. Louis, Memphis, New Orleans down to Texas would be handled?

A. You mean with regard to changing cars?

Q. Yes. Could they make any through trips?

A. No, sir, not the way the trains are operated. They would have to change at Little Rock.

Q. In any direction they wanted to go to get out of the State?

A. Yes, sir.

Q. I believe I am mistaken in saying that Fort Smith would be a trans-state point. It would be for half only. I believe that is right—is it not Mr. Johnson?

Mr. JOHNSON: To the extent of those two trains that cross the bridge.

Mr. WRIGHT: Two cross the bridge and four others do not

Q. There is a nearer connection between Fort Smith and St. Louis by the Frisco than by way of Little Rock, isn't there?

A. I believe there is.

Q. You don't doubt it much, do you?

A. I don't doubt it.

5189 CHARLES S. LUDLAM, recalled testified in sur-rebuttal as follows:

Direct examination.

By Judge HILL:

Q. Mr. Ludlam, in an exhibit filed by the Railroads, number 56, in "Maintenance of Equipment" subdivision (*b*), under the head of "stopping and starting" the Railroads have put this in:

"Car miles, same, with local car miles multiplied by eight."

In an exhibit filed by the State the same factor was used, except the multiple was four, representing (as explained in the testimony) four stops of the local as against one of the through: Now, I assume that this "eight times" is based upon the testimony of Mr. Gray and Mr. Ward, which I want to read to you:

Mr. Ward, at page 617, after quoting your exhibit "K" said:

"I assume that these average distances as stated are approximately correct. But that does not constitute a proper measure of the expense of handling local as against through service, because the through train in starting and stopping simply takes the siding, and after it has met the train, which has the right of the road, it then proceeds; or, in many cases, its stop is only for the purpose of taking coal and water and it does not have to stop even while the man turns the switch. On the other hand, the local train goes into the siding and after it is there it has its work to do by taking out the cars or placing in cars at the various industries or on the house track at that station; and it must pick up other cars and place them in the train. To an extent that constitutes, for all practical purposes, a terminal handling for all of the cars in that train at practically every station along the line of its run. So the multiple of four to one for the through service, on account of the assumed difference of five miles and twenty miles would not be correct.

5190 It would be more nearly eight times, although I don't know that eight miles is accurate. However, it is more nearly eight times than it is four."

And Mr. Gray, at page 712, makes practically the same statement, without using this figure 8 as a multiple:

I want to ask you if they are correct in using eight instead of four and for the reasons that they give?

A. No, sir. The multiple of four is used to apply to the question of starting and stopping only. The question of the increased cost of the terminal handling on the local train is covered by a separate allowance.

Q. Where is that? Point that out. I think these gentlemen just failed to understand that and I want you to point it out.

A. That is on the same exhibit, under subdivision (*b*) "Maintenance of equipment."

We make an allowance just below the allowance referred to for stopping and starting. We make an allowance for terminal handling by multiplying the mileage of the cars in the local trains by two and using the mileage of the cars in the through trains as they were.

Q. What does that represent, Mr. Ludlam?

A. That represents that on the average the cars in the local train will receive two terminal handlings to one terminal handling on a through train. That is in the case of the Iron Mountain, I am referring to.

In the case of the Cotton Belt we allow four terminal handlings on a local train to one terminal handling on the through

5191 train.

That is based on the premise that the local train will start out with a load of cars and that it will distribute all of those cars during the course of its run, and that during the same run it will pick up an equal number of cars, which it will carry into the last terminal.

That assumes that every car on the local train will be set out during the course of the run of the local train and another car picked up in its place. As a matter of fact there are some of the cars that start out of the terminal, on a local train, that go through to the end of the run of the local train without being set out.

Q. That operates as a maximum as against the local train on this terminal handling between division points?

A. Yes, sir.

Q. And it is the very item that Mr. Ward and Mr. Gray discuss, is it not?

A. Yes, sir.

Q. I presume those gentlemen had not studied the exhibit carefully enough to see that that is taken care of.

A. I should assume from their evidence that they did not understand the exhibit.

Q. To take the eight times, as done there, would practically amount to doubling all these cars set out, and every car set out and in, would it not, following your plan?

A. It would be an attempt to provide for the terminal

5192 handling under the specific allowance made for stopping and starting, although, as I have already stated, the terminal handling is taken care of in another place.

Q. It occurred to me at one time that probably they were confusing that stopping and starting also with the terminal handling in the division: is not that taken care of?

A. Yes, sir.

Q. And this is merely the terminal handling between the divisions?

A. Yes, what you might call "on the road".

In that connection I would like to say before we get away from that, that we consider an allowance of four stops of the local train to one stop of the through train, as being the maximum that could possibly accrue to the local train for the stopping and starting expense.

Q. I think Mr. Ludlam, subsequent developments have proved that it was the maximum.

A. The same remark would apply to the allowance which we made of two terminal handlings for the cars on the local trains. We thought that would be the maximum that could possibly be reached.

Q. Mr. Gray, at page 704 of his testimony, in criticising the use of the car mile as a factor for "Maintenance of Way" gives several reasons why in his opinion it is not a sound factor and then stated: "A further inclusion of caboose mileage only accentuates this difference."

5193 I wish you would state if the caboose mileage is included in your car mile statistics, and if so, where it is.

A. The caboose mileage is included, and the caboose mileage is included in order that the maximum expense of operating the local trains might be ascertained.

The average number of cars in the local train is 16.6, including the caboose; 15.6, without the caboose; whereas the average number of cars in a through train, including the caboose, is 33.2; without the caboose, 32.2.

Consequently, if you eliminated the caboose, the mileage would be in favor of the local train. That is, it would tend to reduce the cost of the local train. By adding one car to a train that otherwise would consist of 15.6 cars, you increase the proportion of the car mileage of that train to the total car mileage, more than you do the mileage of the train that carries 32 cars, by adding a car.

Q. So if there is any error in including the caboose mileage there, it is an error that would operate against the local train and consequently against the state traffic?

A. Yes, sir. I would not say it was an error, but the result of including the caboose mileage is that it operates to increase the cost shown by us of handling the state freight.

Q. Mr. Gray seemed to intimate it was an error: I wish you would give your views about that.

A. Well, the caboose is a necessary part of the train, and in attempting to distribute the cost between the two trains, the
5194 local and through, I think you should consider the elements of those trains.

Q. Mr. Gray, at page 719, and Mr. Ward, at page 621, criticise your use of train mile for "Other train expenses" and argue that on account of such items as "casualties"; "personal injuries occurring on trains"; "wrecks"; "stock killed"; "damages to persons and property"; "flood damage"; "road signal men"; "crossing watchmen";

2269

and "freight car lubrication", being included in that, the train mile is not a proper factor:

I wish you would state if you think the train mile is a proper factor, in view of what they have brought out in regard to what is included in that account?

A. I see nothing in the points raised by Mr. Gray or Mr. Ward that would change my view of our distribution being the correct distribution. Certainly there could be no question as to the majority of those items, and such question as there may be, if those items were divided on the car mileage basis, instead of the train mileage basis, it would tend to reduce the cost of the local train service, and therefore any criticism that is made of the method which we have adopted, would be to the effect that we had charged too much to the local trains, which would ultimately have the effect of increasing the cost as shown by us of doing the state business.

Q. Some of those items have been discussed by other witnesses, such as "stock killed"; "road signal men", and others:

5195 I wish you would state, in view of what they have brought out, in regard to these different items, why the train mile instead of car mile or any other factor, is proper.

A. In the case of "signal men", the signals are maintained for the operations of the train and not for the individual unit of the train.

In the case of "wrecks", if the train was wrecked, it would apply, I should think, rather to the train than to the unit of the train.

In the case of "lubrication", that would apply, probably, more specifically to the unit in the train than to the train itself, but inasmuch as the through train is a much longer train than the local train, the distribution of the lubrication on a car mileage and engine mileage basis would tend to reduce the cost of the local train as compared with the division used by us.

The "Highway crossing watchmen", which is also included in that expense, would apply to the train rather than to the unit of the train. The watchman is maintained to signal pedestrians and road vehicles against the train and not against the individual car of the train, without regard to the length of the train.

"Stock killed" might be allocated in many instances to the individual train, but some of the stock that is killed—and a considerable proportion of it—you could not locate the specific train that caused the accident.

Q. You could not very well allocate it to a car.

5196 A. No.

Q. I believe Mr. Johnson worked out some way of allocating it to trains, but I do not think he has as to the car.

A. For all those items I think, as I said before, that a train mileage basis is fair and equitable, and any way, in my judgment, in which it is not equitable, it is against the interest of the State in this controversy.

Col. MOORE:

Q. If you had divided that on a basis of train instead of train miles, what effect would it have had on the expense of local trains?

A. I don't know just what effect it would have had.

Q. Would it not have increased the cost of local trains?

A. I don't know just what effect it would have had, but the train mile basis, to my mind, is more equitable, for the reason that a train running 200 miles is much more apt to be the cause of any one of these charges, than a train running 50 miles. Therefore the train mile basis would seem to me more equitable than a train basis.

Q. If Exhibit "I" shows it was divided on the train basis of the number of trains, that would impose a larger cost on local trains, would it not?

A. I do not think Exhibit "I" shows that. Exhibit "I" does not show the local trains.

Q. How about "33% of the trains were local; 116 out of 3,874"—if I read these figures correctly: that would be about 33%. You can you look at that table and see what per cent you get.

5197 A. If it was distributed on the number of trains it would increase the charge to the local trains.

Q. Is it not a fact and is it not shown by all the evidence in this case, that the local trains cause more damage to stock, for instance, than through trains; more casualty damage in the way of killing stock, than through trains?

A. I have not heard any evidence to that effect and I should not assume it.

Q. Also "personal injuries": do you know about that?

A. Only in a general way, Mr. Moore.

Q. The testimony shows that local trains travel faster between stations than a through train, does it not?

A. There has been some testimony that in between stations the local trains travel faster than the through trains.

Q. If that is true, in view of that fact and also of the switching service done by local trains, is that not more likely to inflict more personal injuries and casualties?

A. I should say that it would be apt to cause more personal injuries, but I would not say casualties other than personal injuries.

Q. Running more rapidly through the country, between stations, would result in more largely killing stock, would it not?

A. No, sir, I don't think so. I think that the through train, as a rule being a longer train, a through train is not as apt to stop as quick if a cow gets on the track as the local train.

5198 Q. The velocity of the train has some effect?

A. Yes, but I think there is very little difference in velocity between the average speed of the through train and the maximum speed of the local train.

Judge HILL:

Q. I do not believe Col. Moore has quite correctly stated the testimony: there is some testimony that the local runs faster—and I believe some that it does not—but I believe that the great weight of the testimony is that it is about the same between stations, about twenty miles:

Is that a matter that you have any personal knowledge of, to speak of?

A. Only in a general way, but my answer was based on that and I think I so stated, that the average speed of the through train would be approximately the same as the maximum speed of the local train.

Q. Mr. Moore's questions have indicated that that account ought to be divided on the train basis: I wish you would express your opinion about that. It is a new factor to me.

A. I did that. I have already expressed my opinion that the train basis would be an erroneous basis, for the reason that you would then be charging against a train that ran 50 miles the same amount you would against a train that ran 200 miles.

Q. The proper way to reach it would be the train miles?

A. I think that is the most equitable way of reaching those
5199 items included in that specific account.

Q. Mr. Gray, at pages 730 and 734, and probably in other places, refers to the fact that in your exhibits you drop the locomotive mileage. I will read you from page 730:

"Q. Will you take up that exhibit before you and begin with the beginning of it and call attention to such parts of it as you desire and state your views about them?

"A. In the deductions throughout this theory, starting in with "Maintenance of way and structures" the car mile basis has been adopted entirely.

Why the locomotive mileage has been dropped, although used in freight statistics, it is hard to understand; especially as the proportion of locomotives to cars is very much greater in passenger than it is in freight."

And at page 734:

"I want to say that it is not an over-statement to say that in the shops 90% of the tools are provided for and are used in connection with locomotive repairs."

Then he goes further in the matter of repairs—the expense of repairs to locomotives, and I think in some other place, he criticises your exhibit for having used that for freight statistics and not in the passenger, if I recollect correctly:

I wish you would state why you have dropped that locomotive mileage, why you have done so.

A. In arriving at the passenger expenses, we distributed the expense direct to the passenger. We made no separation between the two classes of trains, local and through. Consequently, there was no object in distributing the expense to the locomotive because if we had done so, after distributing it to the locomotive we would have had to redistribute it to the passenger. So we distributed it direct to the passenger.

5200 Of course, all of the locomotive expense in the passenger service is incurred for the passenger business.

Q. You distribute that, as I understand it, on what is done behind the locomotive?

A. Yes, sir.

Q. In doing that, Mr. Ludlam, have you taken care of the locomotive expense and everything else? I want to understand whether that system would take care of all those items which Mr. Gray has referred to in his testimony?

A. Yes. We have distributed all the passenger expenses to the passenger business, whether incurred in direct connection with the locomotive or other parts of the passenger service?

Q. There is another place here where Mr. Gray seems to misunderstand your testimony, page 810 and 850: at page 810 he says:

"My judgment is that the car mile basis in a case of this kind, while it presents objections (os do all arbitrary sub-divisions) it does not present them in the same degree or to any such degree as the further attempt to divide the expenses attributable to any one state for car repairs between through and local on a car mileage basis, because there now enters into the equation a distinction as between short and the long haul."

Now at page 850, where he is referring to a car mile division between states:

"I think that a division of that kind between states is equitable and I don't think that a division of that between local and through trains is equitable, because it does not take into consideration the elements of difference brought about by the short and long haul."

5201 I will ask your opinion about that criticism of your exhibit and whether or not you have taken care of the short and long haul in that?

A. The criticism is not based on that because it is self-evident that any man who says that the car mile does not take into consideration the long haul or the short haul, either does not understand what the car mile means, or else does not understand what he is talking about.

Q. How does a car mile operate to take that in?

A. If a car moves one mile, that makes one mile; whereas if that car moves two miles, it makes two miles; if a hundred miles, that car makes one hundred car miles. Consequently, the element of distance is the most important element he does consider, and is the basis of the car mile.

Q. Mr. Ward, at page 613, criticises the method used by the state in apportioning the expense in terminals, of counting cars in and counting them out, and says that the proportion chargeable under this method, to through service, would be much greater than is actually the case, and adds this:

"The opinion of myself, or any other operating official, as to the excess cost of handling state over interstate business is on the basis of actual freight and not on the basis of the number of cars passing through the yards."

I presume from Mr. Johnson's testimony this morning, that is very likely the foundation for his distribution of that expense on the ton basis, in his exhibit No. 56.

I will ask you what is your opinion of that basis which is
5202 used here in this exhibit, on the testimony of Mr. Ward, which I have read to you?

A. You are asking what I think of the basis used in Exhibit 56?

Q. Yes, which I assume to be based on Mr. Ward's testimony, which I have read to you.

A. I think the basis is wrong, because it assumes that a ton of freight which moves 70 miles would have the same terminal service as a ton of freight that moves 224 miles.

Q. Those are the respective lengths of haul in this case on the Iron Mountain, I believe?

A. Of state and interstate.

I think I have already testified that, speaking generally, every ton of freight that passes through a terminal gets some handling at that terminal. I think also it is a matter of general railroad knowledge that the large and expensive terminals are required more and used more for the through business than for the local business.

Q. What effect would that length of haul have upon the proposition which you have referred to?

A. The effect, as that principle is used in exhibit 56, is that you charge as much for a terminal handling to the ton that moves 70 miles as you charge to the ton that moves 224 miles. You fail to take into consideration the most important element in distributing all expenses, and that is the use which is had from the expense incurred. The ton of freight that moves 70 miles, will, of
5203 course, not have the same use of the terminals as the ton of freight that moves 220 miles. Therefore, when you attempt to distribute your terminal expense on the tons handled, you arrive at a false conclusion and your figures are correspondingly unreliable.

Q. In that connection I might call your attention to what I believe to be evidence in this case, that the average local freight run in Arkansas is 70 miles and that of the through is 98: I think that is correct—it is approximately correct.

A. The average run of what?

Q. Of the local trains is 70 miles and the average run of the through would be 98 miles: what effect would that have upon this question, in terminal handling?

A. Well, there would be more terminal handling charged to the through trains than the local trains, because they run farther.

Q. The haul for interstate freight being 224 miles, would take in two terminals and probably three?

A. The average haul of interstate freight is shown on exhibit 26 to be 218 miles.

Q. That would take in at least two, if not three?

A. The average haul of the interstate freight being 218 miles, would use at least three terminals, and possibly four. That is, the terminal from which it started; a terminal, we will say, at the end of 100 miles; another at the end of 100 miles, and a terminal at its destination.

5204 Q. One of those four would be outside of the state, on the interstate?

A. Yes, except where the terminal happened to be located right at the borders of the state.

Q. That situation, I assume, makes manifest the incorrectness of that ton theory on that, without any further discussion?

A. It seems so to me.

Q. Now, in Exhibit 56, or Exhibit 26—I am calling your attention to Exhibit 26, you get the tons with the lap-overs included—ton miles I presume that is?

A. Yes, sir.

Q. —in the use of tons for this purpose, assuming the same yard engine expense for the haul of the state of 70 miles against the interstate of 218 miles: I wish you would state the effect of that.

This is the "yard engine" expense and they have used in Exhibit 56, the tons, and these tons, as I understand it have these horrible "lap-overs" in it: I want to know the effect of that upon this particular item of "yard engine" expense, when you consider that the state haul is 70 miles and the interstate is 218 miles.

A. Exhibit 56, in distributing the "Maintenance of Equipment" expense—that is, the proportion applicable to the "yard locomotive mileage" to yard engines, and in distributing the terminal
5205 and yard expense, uses the tons of freight as shown by Exhibit 26, which are determined from the auditor's figures, which would be subject to the criticism of the inaccuracies caused by the lap-overs from September into October, October into November, or even a longer period as those lap-overs extended over; whereas the distribution as made by us of both those items is based upon the reports, the actual yard engine mileage shown by the reports during the month.

In other words, the physical operations as compared with the auditor's figures.

If you ask my opinion as to what the effect would be, I would say I do not think those lap-overs would affect Exhibit 26 materially, if all worked out.

Q. If they are as horrible as they have been painted in this testimony—our friends on the other side are using them this time—is that a fact?

A. The tons as shown by Exhibit 26 are used in distributing these two items of expense to which we have referred in Exhibit 56.

Q. I do not suppose they are as horrible as some of their people might imagine, or I am satisfied Mr. Johnson would not have used them.

A. If you want my opinion, I would say that somewhat overworked word "negligible" would apply more specifically to the variation that would exist between the physical movement and the movement as shown by Exhibit 26, than to any other quan-
5206 tity to which it has been applied in this case.

Q. In section 3 "Transportation expenses," subdivision (*b*) in Exhibit 56, to which I wish to call your attention, is what I

understand to be the yard and terminal expenses divided upon the ton basis.

I believe you discussed that in connection with this other item: what do you say of its use there?

A. I think I have already covered that. I think it is wrong to distribute the same yard and terminal expense to a ton of freight that moves 70 miles, as you would distribute to a ton of freight that moves 222 miles.

Q. In other words, this applies to the matter you are discussing now, as well as to the one you discussed heretofore?

A. Yes, sir. It is also based on the tons as shown by Exhibit 26.

Q. What is the practical effect of that swelling of the division of expense there over against the state, in those two items when you consider this "Maintenance of Way" expense in Exhibit 56, which is switched from your basis on to the other head in the Railroad exhibit?

A. The effect of distributing the "Maintenance of Way" expense as an overhead expense against the direct expenses, and then charging your direct expenses so that you apportion as much expense for maintenance of yard locomotives and for terminal and yard expenses, to a ton of freight that moves 70 miles as you
5207 apportion to a ton of freight that moves 222 miles, is to improperly and excessively load the cost of the ton of freight that moves 70 miles.

I am speaking now of the effect of doing that, not as to the propriety of so distributing the "maintenance of way" expenses.

Q. While we are on that subject, I want you to discuss that question and I will ask your opinion of it now.

In Exhibit 56, made up by the Railroads—which I have somewhat facetiously called a "caricature" of the State's exhibit—they adopt many of the bases of the state, but in "Maintenance of Way" they have added that, as I understand it, to the general expenses, and distributed that item of expense all through the other:

I wish you would express your opinion on that.

A. I think it is wrong in principle; that there is no accounting practice or procedure that would justify it. It is a well known rule of accounting that you should distribute those expenses that are specific against the use which is had from the expenses incurred.

In the case of the "Maintenance of Way" expense, they should be distributed, in my judgment, both the proportion which is direct and the proportion which is indirect—which has been referred to as being from 75% to 90%—against the use which is made of the "Maintenance of Way," and the use which is made of "Maintenance of Way" is to run trains.

5208 If it is true that only 10 or 25% of the "Maintenance of Way" expenses apply specifically to the operation of the trains over the track, then that 10 or 25%, if it could be determined, should be apportioned specifically against those trains that cause the damage, and the remainder of the "Maintenance of Way" expense—which would be the indirect expense of "Maintenance of Way"—

should be apportioned over the direct expenses of "Maintenance of Way".

Q. And that was done?

A. The result of our distribution approximately does that.

Q. I believe you have heretofore testified that in your accounting experience you have had a great deal of experience in auditing railroads; did you ever come across a proposition like this that distributed things like "maintenance of way" through all these various accounts?

A. No, sir, the "maintenance of way" is a specific expense and that would be one of the elements used to distribute "general expenses".

There is a certain element of your "general expenses" that applies to your "maintenance of way" expenses. A certain proportion of your President's and Vice President's salaries, the clerks in the auditor's office, all apply to the "maintenance of way" expenses, and the "general expenses" would be distributed over all the elements of expense, which, as I stated, would include the "main-
5209 tenance of way" expenses, as well as the "maintenance of equipment"; "traffic" expenses; and "conducting transportation" expense, but there is absolutely, as I see it, no possible reason for adding your "maintenance of way" expenses to your "general expenses" and then attempting to distribute those over the balance.

In that way you do not apportion any of your "general expenses" to your "maintenance of way" expense.

Q. Why is that?

A. Because if you add your "maintenance of way" expense to your "general expense", then you apportion them all over "maintenance of equipment"; "traffic expenses"; and your "conducting transportation expenses", which are all that are left of your operating expenses.

I am sure no man who is familiar with railroad procedure, would claim that the officers of a company—and by "officers" I mean the general officers, higher executive officers—have nothing to do with the "maintenance of way".

I can imagine, for instance, in the case of the panic in October, 1907, the President of this Company wiring from New York to reduce the expenses, and probably the first men that were laid off were some of the section hands, who would be charged to "maintenance of way".

I am sure the records of the Company, if carefully searched, would show very explicit instructions from the higher executives during October, November and December of 1907, affecting the "main-
tenance of way" department.

5210 Q. Take the other items in "general expense" outside of the higher executive officers; take your legal department—claim department, auditor's department, and various items going to make up "general expenses": do not all of them have more or less relation or duties to perform in regard to the way and maintenance?

A. Yes, they all have something to do with the "maintenance of

way" expense and it is proper that those expenses should be distributed over the "maintenance of way".

Q. As I understand you, under this "grand, gloomy and peculiar method" that our friends have invented, the "maintenance of way" would escape all of that—all portions of that?

A. Under their method the "maintenance of way" would all be distributed against the other operating expenses.

Q. Now, coming to the practical end of that proposition on this matter: what is the effect when you come to carry out such an abnormal method—as we view it—to distribute it in connection with such abnormalities—as we view them—as is done in "terminal expenses": what is the practical effect of that?

A. On the basis followed by Exhibit 56?

Q. Yes.

A. The practical effect is to increase the cost of the state freight, as shown by Exhibit 56.

In the first place, you improperly apply certain of so-called direct expenses—specifically illustrated in the case of repairs of yard locomotives; in the case of handling and in the case of ex-
5211 pense of yard and terminal—by apportioning, as I have said before, as much of that expense to a ton of freight that moves only seventy miles, as you apportion to another ton of freight that moves two hundred and twenty-two miles.

If you take all of your "maintenance of way" expenses and distribute them over your direct expenses, the proportion that would apply to those specific items, you are also—in the case of your "maintenance of way"—charging as much to a ton that moves 70 miles as you are to a ton that moves 222 miles. That is, to the extent that the repairs of yard locomotives and the expense of yard terminals represent the total expense over which you distribute your "maintenance of way" expenses; you are claiming it costs as much to maintain your property to move a ton of freight 70 miles at it does to maintain your property to move a ton of freight 222 miles.

Q. Are there any other matters in that connection which I have not called your attention to? I want to go into it thoroughly and then pass on to something else.

A. I think that explains the inaccuracy of the principle.

Q. Take another illustration of that: in your exhibit you use 35% for stopping and starting——

A. Not 35%.

Q. 21½% for starting and stopping and 13½% for terminal. Under some testimony introduced by the railroads in rebuttal, the evidence tended to show that that ought to be very much
5212 increased, up to something like 58 or 60%: I believe Exhibit 56 is based on that——

A. Fifty-five per cent, Exhibit 56.

Q. The testimony in sur-rebuttal tends to show that the 21½% and 13½% used by you, is much too high:

I will ask you, assuming now that your 35%, for the two, is correct, as against 55%, what effect would that have on swelling

an item like that and then using the overhead method of apportioning the "maintenance of way expense"?

A. In our apportionment of the expense any variation between the percentage of 21½% allowed by us for starting and stopping, or any variation in the percentage of 13½% allowed by us for terminal handling, between those figures and the actual, would affect only the distribution of this item of expense to the extent that the per cent as used by us might be proven to be inaccurate, but under the method adopted in Exhibit 56, it would not only increase that specific item of expense, but it would correspondingly erroneously distribute the proportion of the "maintenance of way" expenses that are distributed over such items as are applied direct. That is to say, if they charged under their distribution twice as much to local trains on account of starting and stopping and terminal handling, then they would correspondingly, under their method, charge twice as much "maintenance of way expense" as they should charge.

Q. If you had any error in that your error would affect only "general expenses"?

5213 A. Our error would only affect the specific item and "general expenses".

Col. MOORE:

Q. How about supervision?

A. And supervision which was distributed over the direct charges—supervision of "maintenance of equipment" department.

Q. It would affect everything distributed over direct charges?

A. Yes. Consequently, it is apparent that if the total of your indirect which you distribute is $50,000, there is not a chance for as large a mistake to occur through such distribution as where the indirect that you distribute is half a million dollars, because the effect under our method, as you will see, of an error of one per cent. would result in a very small erroneous charge; whereas an error of one per cent, under your method, would result in a very much larger ultimate discrepancy—when I say "you" I mean the railroad.

Judge HILL:

Q. In that connection, there is another item of "maintenance of way" itself that there has been a diversity of testimony about:

In your exhibit you allowed 2½ for a locomotive as against a freight car:

The railroad put in testimony here tending to prove that that was too small and should have been five or six, if I remember their testimony correctly.

A. Three to five is the highest I saw in the testimony.

5214 Q. In the testimony of the state, in rebuttal, I think one of the witnesses testified it ought not to be more and others testified that 2 or 2½ would be sufficient. That is a subject that the "learned doctors" disagreed about.

What effect would an error like that have—suppose you had made an error in that, either way?

A. Inasmuch as we estimated that all engine miles are equal to

2½ car miles and applied that to both local and through trains, whatever element of difference there may be between 2½ times and the actual times, and the actual excess of the locomotive over the car, would affect our distribution only to the proportion that each of those items—the local and through—bore to the total.

For the purpose of running that out in the case of this "Maintenance of way and structures" I made a calculation estimating the one engine mile as being equal to five car miles, and I found that the ultimate return on the property as a result of doing that—in the case of intrastate freight— was reduced from the figure of 1093 per cent, as shown by Exhibit "O", to 1085 per cent.

Q. A difference of what?

A. 8/100 of one per cent.

Q. There is another item in the case that there has been much evidence upon and a wide diversity of opinion:

You use four stops for the local against the through and there has been a great deal of testimony that that is excessive; probably the weight of the testimony would indicate two times:

5215 Assuming for the sake of the illustration that that would be two times and also that the switching would be 25, 30 or 40 percent instead of 50 percent: that would cut quite a wide swath in those figures, would it not?

A. It would reduce the proportion of the expenses charged to the local trains.

Q. And consequently to the state, ultimately?

A. And ultimately it would tend to reduce the cost of doing the state business worked out to its final conclusion. I have not made any figures, however.

Q. Under your system if there has been any error in your statistics against the state there in using four to one, instead of two to one, and using 50% for switching instead of 25%, that error would be confined, as I understand it, to "Maintenance of equipment" and to a small percentage of "general expenses":

Now, what would be the effect of that, under this peculiar method that these gentlemen have devised, of adding the "maintenance of way" to the "general expenses"? I do not mean in dollars and cents.

A. Any inaccuracies between the assumed basis in determining expense of maintenance of equipment and the actual basis would carry not only the mistake in expense of "maintenance of equipment" resulting from such inaccuracies but also the corresponding proportion for "maintenance of way" expense.

5216 Q. What is the percentage of "general expenses" in this case? As I recall it, it is about 4%.

A. "General expenses" for the six months ending December 31, 1907, charged to the freight account, amount to $132,218.24 against——

Q. What percent is that of the whole? I just want the percent?

Mr. JOHNSON: About four and one-half percent.

A. —total expenses of $3,073,843.40. That would make the "general expenses" about four per cent of the total operating expenses.

Q. That is on the freight side?

A. That is on the freight only.

Q. Mr. Johnson has figured it out and says it is about four and one-half percent.

A. That would be about right.

Q. Now, to sum up that: if you made an error on this starting and stopping and switching, and what has been called the "arbitraries" that error would, to that extent, disturb the true relation of "maintenance of equipment" and to a certain extent of 4½% of "general expenes" and no more.

A. Other than the "Supervision and general" of the different specific departments.

Q. I understand that is included in your exhibit in that "Maintenance of equipment" account, is it not?

A. Yes, but that in turn is distributed over the direct expenses of that particular department.

5217 Q. But that is all confined in that department?

A. Yes, sir. The "Maintenance of way" expenses charged to freight for the six months ended December 31, amounts to $553,395.11 as compared to the total operating expenses charged to freight of $3,073,843.40. Approximately 18% of the total operating expenses applicable to the freight are for "Maintenance of way and structure."

Q. Now, turn to the passenger side of that: I believe they follow that same method in the passenger side of it, don't they?

A. Yes. The total "general expenses" for the six months ended December 31, 1907, charged to the passenger amounts to $160,767.19 and the total passenger operating expenses for the same period amounts to $1,678,039.98, making the "General expenses" approximately 10% of the total operating expenses.

Q. What is the "Maintenance of way"?

A. The "Maintenance of way" expense—the expense of "Maintenance of way and structures" charged to passenger service during the six months ended December 31, 1907, amounted to $501,281.40, as compared to total passenger operating expenses of $1,678,039.98, which would make the proportion of the "Maintenance of way and structures" expenses to the total operating expenses about 30%.

Q. About 18% of the freight and about 30% of the passenger for maintenance of way expense?

5218 A. Yes, sir, of the total operating expenses, applicable to the freight and passenger.

Q. And about 4½% on "General expenses" for freight and about 10% for passenger?

A. Yes, sir.

Q. What particular significance would that have upon this method of apportioning that "Maintenance of way"?

A. To my mind they illustrate very forcibly the inaccuracy of that method. I might say that they illustrate that under that method any mistakes that were made in the direct expenses would affect a much larger proportion of the total expenses than if the distribution of "Maintenance of way and structures" had been made in the man-

ner that I consider proper, that is, on the basis of the use made of the property.

Q. Then in this case, as we see it, there are a great many errors in this Exhibit 56 as to the various charges—conceding for the sake of the argument that we are right on that, how far reaching would this method of accentuating those errors go? I do not mean in dollars and cents, but just as a general proposition?

A. I think the Exhibit is altogether unreliable for obtaining any valuable information or reaching any conclusion that would be of value.

Q. You have illustrated these applications on the unreliability of it dependent on variable factors: now, suppose it was alright, that these various arbitraries were right: Is that a method that
5219 gets at the true result, aside from these matters that you have called attention to, when you come to a method of getting as near as the actual results as possible in distributing railroad costs?

A. I think the methods followed in Exhibit 56 are wrong.

Q. What are your reasons for that, leaving aside these illustrations that you have taken: are they so full of manifest errors as we take it——

A. I think the principle of attempting to distribute your "Maintenance of way" expense over these other expenses is entirely wrong wrong in principle and wrong in results, and the results, as I have already stated, are—the errors in the final results as I have already stated, are increased by any inaccuracies in the division that is made in the other items of expenses.

Q. Mr. Ward says on page 622:

"It seems to be the case that up to this point in this exhibit the endeavor of the state's accountants has been to determine what is a proper method of distributing train and car costs between local and through trains. And when they have done that according to the method adopted, they undertook by taking into account the tonnage of state freight handled on local and through trains respectively, to ascertain the ton mile cost of handling such freight; and have assumed that the cost of handling a ton mile of state freight on a local and on a through train is the same as that of handling a toin mile of interstate freight on the same train."

Is that a correct statement of your exhibit?

A. Yes, we assume that after we have gotten your train costs so far as the train costs themselves go, the cost of handling the
5220 ton mile of state freight is the same as the cost of handling a ton mile of interstate freight.

Q. At page 639 of Mr. Ward's testimony, in discussing the passenger side of your exhibit, he states this:

"The inclusion of those items of yard service, wages of train and engine men, fuel and other supplies, on a car mileage basis, is wrong. It is unfair, and charges too much to the through service, and not enough to the local service, and to the local trains on which are carried the state passengers."

In various other places in the testimony of Mr. Ward—I will

not take the time to give you the page—he criticises your passenger exhibit on the basis of the through and the local service.

I wish you would explain that.

A. We make no segregation of the passenger business between through and local trains. Our passenger expenses are divided between the coach, Pullman, mail and express service.

Q. Mr. Nay has made a statement here—you can get it more quickly than I can give it to you by looking it over, page 443—as if you had used a car mile there: I wish you would explain that. It seems to be a misapprehension as to the factor which you have used.

A. (After examining record.) Mr. Nay says: "They have divided the expenses of terminal handling of cars on a car mile basis." He thinks we should have used the same basis for dividing the repairs due to terminal handling that would be used in dividing repairs of yard locomotives.

5221 We attempted to divide it on the basis set forth in our exhibit very fully, that we thought was fairest and most equitable, and I will just say in answer to Mr. Nay's criticism that if we had used the basis he suggests that we would have charged local trains, in the case of that specific expense, with only 19.46%; whereas, under the method we had adopted—and we adopted it because we thought it more equitable—we did charge the local with 26.46. The method we adopted was more unfavorable to the state than the method that Mr. Nay says he should have thought we would have adopted.

5222 Judge HULL: Mr. Ludlam, we were discussing Mr. Nay's statement wherein he criticised your use of the car mile in the yard and terminal expense, was it not?

A. It was the charge we made to the local trains for terminal expense. He said instead of having made it on the car mile basis we should have made it on the car basis, the same as we did the yard and terminal expenses.

In that connection I might say the same result is accomplished by our method of multiplying the car mileage by two to get the number of terminal handlings that the cars in the local trains would have.

In other words, we use the car mile only as a factor to determine the actual terminal handling or the approximate terminal handling.

Q. He seems to misapprehend the way in which you have handled it?

A. Yes, sir, he apparently does not understand the use we have made of the car mile.

Mr. MOORE:

Q. You mean the same result in money would be obtained?

A. No, sir, I mean to say the same principle would be obtained. It is reduced to the basis of car handling, taking the car mileage and switching each car in the local train has two handlings to one handling of the cars in the through train.

5223 Q. You do not mean your method would be equivalent in respect of result of a division on the basis of the number of cars, do you? Or that it is the same in principle?

A. It is the same in principle but as your total expenses are different the rate per car would not be the same.

Q. Would the percentage be the same?

A. Not quite. There is a slight difference.

Q. Is it not more than a slight difference, Mr. Ludlam?

A. 26.43% of the total terminal handling is assigned to the local train under the method adopted by us. Whereas, in the case of the cars handled in the terminals the proportion assigned to the local trains is 19.46%. Of course, we are dealing with two different elements, you understand?

Q. I understand that.

Judge HILL (resuming):

Q. Which plan reaches most nearly, in your opinion, the actual facts: that suggested by Mr. Nay or the way you have followed in that exhibit?

A. The plan followed by us in our exhibit is the plan that Mr. Nay suggests would be the proper way to do it. The trouble is that Mr. Nay assumes that we have not done it on a car mileage basis and he says it should be done on a car mileage basis.

We have equalized our car mileage basis to a car basis; so we have done it on the plan Mr. Nay says would be the better plan but he does not give us credit for having done it that way.

5224 Col. MOORE:

Q. Would it not be a simpler method of arriving at that result to take the car miles, instead of doubling in order to equalize what the cars would produce?

A. You have no way of determining the method of handling the cars on local trains except as you determine it on a car mile basis.

Q. Don't you think this exhibit is plain enough, that a man of Mr. Nay's intelligence could understand the basis of your division?

A. Yes, sir, we think the basis is clear enough for any man of ordinary intelligence to understand it.

Q. So it is something else than want of understanding on Mr. Nay's part, do you think?

A. I think he simply got mixed on it. I think he could easily have been straightened out. Sometimes even the brightest men get twisted on the simplest and plainest things.

Judge HILL:

Q. On page 467 I wish to read an excerpt from Mr. Nay's testimony. It reads as follows:

"My judgment would be, based on a good many years' experience with Arkansas conditions, that the proportion of intrastate tonnage to interstate tonnage in October would be less than during the entire six months, or during an entire year, for the reason that there is an excess of interstate tonnage or shipments handled during that month."

I wish to call your attention to Exhibit 26 and Exhibit 5 and ask you to state whether Mr. Nay's statement there is correct, as shown by the exhibits of the railroad in this case.

5225 A. Exhibit 26 shows that on the ton mile basis the state freight in the month of October amounted to 8.15% of the total ton miles; whereas, Exhibit 5 shows that the state ton miles for the six months ended December 31st, amounted to 7.25% of the total ton miles.

When considered on a ton basis Exhibit 26 shows that October amounted to 21.15% on the state business and Exhibit 5 shows that for six months ending December 31st, the state per cent was 19.98%. Showing that both in the case of ton miles and in the case of tons, the state proportion of the total business was larger in the month of October than it was for six months.

In other words, just exactly the reverse of what Mr. Nay's many years' experience in the state of Arkansas led him to believe.

Q. That is the opinion against railroad statistics?

A. Yes, sir.

Q. On page 483 and also on page 490 of Mr. Nay's testimony, he makes certain statements about the passenger division of expenses between local and through trains: I wish you would explain that?

A. The remarks of Mr. Nay referred to on pages 483-484 are based on his proposition that it would have been more correct for us to have divided the passenger business between the local and the through trains as we did in the case of the freight business. I think Mr. Nay's comments, however, were answered fully when we
5226 referred him to the passenger train exhibit.

Q. Of Mr. McPherson?

A. Yes, sir, Mr. McPherson's exhibit 46.

Q. Now, what are you going to do with the Cotton Belt?

A. In the case of the Cotton Belt, the trains were all local. Not even a small proportion of them were through trains, as in the case of the Iron Mountain. So, of course, his remarks do not apply at all to the Cotton Belt?

Q. Mr. Johnson at page 884 says:

"Q. I notice in ascertaining the engine miles for the purpose of making the division under that heading, they have assumed 270,564 engine miles and on the next sheet speaking of maintenance of locomotives under "Maintenance of equipment" there is an enumeration of 130,150 engine miles for yard locomotives:

Is that omitted from the figures to which I first called your attention under the head of "Maintenance of way".

A. The item of 270,564 engine miles as shown in the state exhibit K under the heading of "maintenance of way and structures" is road engine miles. While under "Maintenance of equipment" yard locomotive mileage is shown to be 130,150.

This 130,150 miles has been omitted from the engine miles or wheels taken into account under "maintenance of way and structures."

The yard engines are incurring an expense in maintenance of way, maintenance of tracks, and the use of structures to at least the same extent as the road engine mileage is; and if the wheelage basis is to be considered a reasonable basis for dividing maintenance

of way and structures expense, I do not understand why the switch engine mileage should not be included in it."

I wish you would explain why it is your understanding it is not included in it?

A. Because the switch engine mileage was merely a feature
5227 of the transportation of the freight.

Consequently when we distributed all the expense of maintenance of way to the movement of the freight, there was no object in first apportioning it to the switch engine and then reapportioning it to the movement of the freight.

And, furthermore, there are no statistics and no way of determining the proportion of maintenance of way expenses that are attributable to the switching.

Q. Is there any significance to be attached to the omission of that engine mileage? Have you omitted any expense or items that should be included, by omitting to include that engine mileage in there?

A. No, sir.

Q. That is all taken care of on the other basis?

A. Yes, sir, and we think taken care of more correctly than if we had attempted to include a proportion of those expenses applicable to switching engines, and then in turn distributed that on the same basis as you attempt to distribute the other expenses.

Q. There is a simpler and better way to get at the same apportionment?

A. We think so.

Q. In Exhibit 56, passenger accounts, in a note on sub-division 8 there is this statement:

5228 "The company records also show that in October, 1907, there were 2,188,495 passenger miles carried in Pullman cars and on the state's assumption that 25% of the passenger miles is intrastate traffic the division of passenger miles for October, 1907, may be made as follows:"

And then follows a calculation based upon that theory.

Mr. Johnson in his testimony has explained that and claims that substantial injury has been done to the interstate business by the omission of those passenger mile statistics, and applying the same to the intrastate and interstate passengers carried in Pullman coaches.

I wish you would explain, first how your exhibit was made and what investigation you have made since to see whether his contention is correct?

A. When we made our exhibit in this case we did not have the proportion of passenger miles which were carried in the Pullman cars during the month of October, 1907, or for any other of the six months under review.

The company's records did not permit of the ascertainment of that information divided between intrastate and interstate passengers. The only way that information could be made up was from the tickets themselves, which we were advised had been destroyed and undoubtedly they had been.

Consequently, after giving the matter considerable thought we decided to apportion all of the baggage car expenses and the dining car expenses and a proportion of the observation part of the café car expenses, which would be accessible to the Pullman
5229 passengers as against coach passengers, and then divide the total coach expenses so ascertained against the total passenger mileage, between the state and interstate.

On that basis the coach expense in the case of the Iron Mountain was found to be $896,378.78.

This was represented by a total coach mileage proper on the basis stated of 751,229 miles.

In view of the figures produced by the company in this case, 2,188,495 passenger miles carried in Pullmans during the month of October (and I use this figure with the understanding it will be corrected) and a division made in Exhibit 56 between Pullman expense and the coach expense, but we have referred back to our figures and found that of 751,221 miles made by the coaches, there are 139,696 miles represented by baggage cars; 27,057 miles represented by diners; and there are 10,168 miles represented by café-observation cars; making a total of 176,921 car miles which would apply to the Pullman passengers as well as the coach passengers. The Pullman passenger, of course, using the baggage, dining cars and café cars equally with the coach passengers.

That leaves of the 751,221 coach miles shown by our exhibit, a total of only 574,308 coach miles which are applicable to the passengers carried in the coaches, plus their proportion of the baggage, diner and café-observation car.

5230 Apportioning those passengers on the basis of the state passengers and the interstate passengers carried in Pullman cars, I estimate that 18% of the total passengers carried in the Pullmans are state passengers and 82% are interstate passengers——

Q. If that does not interrupt your thought, I would like to ask you a question there.

A. All right, go ahead.

Q. You say your exhibit is 25% and 75%: why do you use 18%? Have you some basis for that?

A. We have made some figures from current operations of passenger trains in Arkansas, which would indicate that a percentage of 18% would be more nearly correct than the percentage of 25%.

In that connection I might say that in making our original exhibit we used 25% with the intention of not understating the state passengers carried in Pullman cars. We thought at the time that was a liberal estimate. But on examination we have made recently of the current operations it shows about 18% of state and 82% of interstate passengers——

Mr. MOORE:

Q. May I ask what period of time was covered by that recent investigation of which you speak?

By Mr. HAMILTON:

A. 94% of the trains for eight days for some twelve trains the reports had not come in.

Judge HILL:

Q. As I understand it, that is all that was possible. The custom of the company is to destroy the tickets as soon as they
5231 come in and they are properly listed.

A. Yes, sir. It is absolutely impossible to ascertain what proportion of passengers carried in Pullman cars during any part of the year 1907 were state and what proportion were interstate.

Q. One other matter in that connection: Do you recall Mr. Wright's testimony on that subject—and I think he is the only one who testified on that subject, for the state?

A. Yes, sir, Mr. Wright testified in his opinion the proportion of interstate passengers carried in Pullman cars would be somewhere between eighty and eighty-five per cent of the total. Of course, I mean passenger miles.

Q. You have taken 18%?

A. Yes, sir, in these figures we have taken 18%.

Taking both the average of Mr. Wright's estimate and the figures actually indicated by tests we have made of a few trains this month, as Mr. Hamilton stated 94% of all the trains for eight days.

Q. Proceed.

A. The result of this compilation would be to increase the charges applicable to the state passengers $16,968.83 over the figures shown by our exhibit in the case of the Iron Mountain.

And $3.597.00 in the case of the Cotton Belt.

That is for the six months.

5232 Q. There is one other thing you did not explain, but I interrupted you.

That is, what figures you have used for the total passengers carried in Pullmans for the month of October 2,188,495?

A. On the basis of our estimate made somewhat roughly that the figure given in Exhibit 56, 2,188,495 passenger miles carried in Pullmans during the month of October, is in error 33 1/3%. We have reduced that to 75% of that figure and based our estimate for the six months on that basis.

Q. Do you remember what percentage they actually showed on the Cotton Belt?

A. What percentage of what?

Q. Of the passenger miles in Pullman, in lieu of those 2,188,495? They have actual figures, as I understand it.

Q. The result of reducing the figures shown on Exhibit 56 in the case of the Iron Mountain from 2,188,495 miles one-third results in the figure I have just presented, being 12% of the passenger mileage carried in Pullman cars.

In the case of the Cotton Belt it is stated in Exhibit 60 that no record of the passenger miles made in Pullman cars during any of the months of July to December, 1907, is available; but for the month of June, 1910, which month is about an average of the six

months ending Dec. 31, 1907, the records of the company show passenger miles in coaches 2,574,781 or 90.26%. And passenger miles in Pullmans 277,764 or 9.74%.

5233 Q. You used 12% in the case of the Iron Mountain?

A. In the case of the Iron Mountain we used 12% and in the case of the Cotton Belt we used 9.74%.

Q. That is already in evidence in the statement and showing that these 2,188,495 is erroneous.

Just how great the error is, is to be determined by agreement later on and you have made a rough estimate from the data before you that it would be one-third, as I understand it.

A. Yes, sir, that the correct figures would reduce the figures shown here by one-third.

Q. And if that is more or less your calculations will change proportionately?

A. Yes, sir.

Q. The net result of that is that by this information you have obtained since your exhibit was made, there is an error here against interstate of $17,000 in round numbers, in the case of the Iron Mountain; and $3500 in round numbers, in the case of the Cotton Belt.

A. Yes, sir.

Q. That is favor of the interstate?

A. Yes, sir. Our exhibit was originally in favor of the intrastate.

Q. And now this error redounds in favor of the interstate to that extent?

A. Yes, sir.

5234–5236 Q. Have you figured out what effect that would have upon the returns on the property as made in your exhibits?

A. Yes, sir.

Q. What would that be?

A. In the case of the Iron Mountain it would reduce the intrastate return on the passenger valuation alone of .66%; and in the case of both freight and passenger it would reduce the intrastate return .4%.

Q. And now take the Cotton Belt?

A. On the Cotton Belt it would reduce the return from intrastate business on the passenger valuation alone .467%; and in the case of freight and passenger business both it would reduce the return from intrastate business alone .275%.

No cross-examination.

The defendants here rest.

And this was all the testimony offered in the case.

LEED THRU

## EXHIBIT TWO.

## EXHIBIT No. 2.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Statement of Track Mileage St. Louis, Iron Mountain & Southern Railway, December 31st, 1907.*

| Line. | St. L., I. M. & S. Ry. | | | State of Arkansas. | | |
|---|---|---|---|---|---|---|
| | Owned. | Leased. | Total. | Owned. | Leased. | Total. |
| Main Line | 490.19 | ..... | 490.19 | 305.29 | ..... | 305.29 |
| Main Line Connections | .58 | ..... | .58 | ..... | ..... | ..... |
| Potosi Branch | 3.72 | ..... | 3.72 | ..... | ..... | ..... |
| Belmont Branch | 120.30 | ..... | 120.30 | ..... | ..... | ..... |
| Jackson Branch | 16.31 | ..... | 16.31 | ..... | ..... | ..... |
| Cairo Branch | 70.77 | ..... | 70.77 | ..... | ..... | ..... |
| Doniphan Branch | 20.50 | ..... | 20.50 | ..... | ..... | ..... |
| Helena Branch | 140.14 | ..... | 140.14 | 140.14 | ..... | 140.14 |
| White River Division | 312.41 | ..... | 312.41 | 187.48 | ..... | 187.48 |
| Memphis Branch | 88.94 | 2.17 | 91.11 | 88.94 | *2.17 | 91.11 |
| Iron Mtn. R. R. of Memphis | ..... | 1.07 | 1.07 | ..... | *1.07 | 1.07 |
| Camden Branch | 33.65 | ..... | 33.65 | 33.65 | ..... | 33.65 |
| Camden and Alexandria Railway | 32.48 | ..... | 32.48 | 32.48 | ..... | 32.48 |
| K. & A. V. Ry | 170.64 | ..... | 170.64 | 6.61 | ..... | 6.61 |
| L. R. & Ft. S. Ry | 162.06 | ..... | 162.06 | 162.06 | ..... | 162.06 |
| L. R. Jct. Ry | ..... | .59 | .59 | ..... | .59 | .59 |
| L. R. M. R. & T. Ry | 113.61 | ..... | 113.61 | 113.61 | ..... | 113.61 |
| H. C. A. & N. Ry | 190.48 | .18 | 190.66 | 45.89 | ..... | 45.89 |
| Ft. Smith Branch | 17.63 | ..... | 17.63 | 17.63 | ..... | 17.63 |
| Van Buren Bridge Line | ..... | 1.39 | 1.39 | ..... | 1.39 | 1.39 |
| Coal Hill Branch | 3.87 | ..... | 3.87 | 3.87 | ..... | 3.87 |
| Ouita Branch | .42 | ..... | .42 | .42 | ..... | .42 |
| River Track | .82 | ..... | .82 | .82 | ..... | .82 |
| Ouachita Branch | 49.40 | ..... | 49.40 | 49.40 | ..... | 49.40 |
| M. H. & L. Line | 222.14 | 5.48 | 227.62 | 119.64 | ..... | 119.64 |

DARK PAGE E

| | | | | | | |
|---|---|---|---|---|---|---|
| Eudora—Gilbert Branch | 37.49 | ..... | 37.49 | 7.89 | ..... | 7.89 |
| Illinois Division | 166.17 | 9.32 | 175.49 | ..... | ..... | ..... |
| St. L. S. W. Ry. | ..... | 110.32 | 110.32 | ..... | 34.05 | 34.05 |
| So. Ill. & Mo. Bridge | ..... | 3.91 | 3.91 | ..... | ..... | ..... |
| Total | 2,464.72 | 134.43 | 2,599.15 | 1,315.82 | 39.27 | 1,355.09 |

*1.00 Mile
*1.07 " } Arkansas Division Terminals in Memphis, Tenn.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5239

## EXHIBIT THREE.

5240

## EXHIBIT No. 3.

### St. Louis, Iron Mountain & Southern Railway Company.

*Statement of the Earnings and Expenses of the St. Louis, Iron Mountain & Southern Railway Company in the State of Arkansas for Six Months Ending December 31st, 1907.*

A. The Gross Revenue of the St. Louis, Iron Mountain & Southern Railway in the State of Arkansas, for the period mentioned above, as shown in Statement No. 1 is as follows:

| | Amount. | Per cent of Freight revenue. | Per cent of All revenue. |
|---|---|---|---|
| Intra-State Freight | $640,248.17 | 13.08% | 9.59% |
| Inter-State Freight | 4,133,210.33 | 84.41 | 61.92 |
| Miscellaneous Freight | 122,814.41 | 2.51 | 1.84 |
| Total | $4,896,272.91 | 100.00 | 73.35 |
| | | Per cent of Passenger revenue. | |
| Intra-State Passenger | $836,542.20 | 47.03% | 12.53% |
| Inter-State Passenger | 568,476.21 | 31.96 | 8.52 |
| Misc'l. Passenger | 373,785.47 | 21.01 | 5.60 |
| Total | $1,778,803.88 | 100.00 | 26.65 |
| Grand Total | $6,675,076.79 | | 100.00 |

DARK PAGE BL

The methods used in apportioning revenue to the State of Arkansas are fully set forth in Statement No. 2. Miscellaneous revenue has not been divided between Intra-State and Inter-State for reasons given in Statement No. 2.

That the methods used in apportioning revenue to the State are fair and equitable is shown by a comparison of the revenue assigned to the State with the revenue of the entire line and a comparison of various statistics relating to revenue, all of which is shown in Statement No. 3.

5241 EXHIBIT No. —.

B. The total Operating Expenses and Fixed Charges of the St. Louis, Iron Mountain & Southern Railway Company in the State of Arkansas for the period mentioned, as shown in Statement No. 4, are as follows:

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Maint. of Way & Struct | $553,395.11 | $501,281.40 | $1,054,676.51 |
| Maint. of Equipment | 723,431.33 | 312,134.74 | 1,035,566.07 |
| Traffic Expenses | 88,734.42 | 53,276.08 | 142,010.50 |
| Transportation Expenses | 1,576,064.30 | 650,580.57 | 2,226,644.87 |
| General Expenses | 132,218.24 | 160,767.19 | 292,985.43 |
| Hire of Equipment—Bal | 179,191.46 | Cr. 1,033.99 | 178,157.47 |
| Dining Car Service—Bal | ..... | 1,183.90 | 1,183.90 |
| | $3,253,034.86 | $1,678,189.89 | $4,931,224.75 |
| Taxes | 162,945.69 | 59,202.49 | 222,148.18 |
| Rentals | 16,084.56 | 5,843.95 | 21,928.51 |
| Grand Total | $3,432,065.11 | $1,743,236.33 | $5,175,301.44 |

The basis used in apportioning expenses to the State of Arkansas and dividing same between the Freight and Passenger service *are* fully set forth in Statement No. 5.

Statement No. 4 shows the total Operating Expenses for the entire line and the percentage of the entire line expense charged to the State; and a comparison of these percentages with the percentage of traffic handled in the State, as shown in Statement No. 3, shows that the division of expense is fair and equitable when compared with the amount of business handled.

C. The assessment of the State Board of Equalization, for the purpose of taxation, is $20,156,022.00, and if multiplied by two and divided between the freight and passenger traffic in proportion to the gross earnings of each class of traffic, would be as follows:

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| One-half of total Assessed Valuation being for six months | $14,784,442.14 | $5,371,579.86 | $20,156,022.00 |
| Six per cent interest on above | 887,066.53 | 322,294.79 | 1,209,361.32 |
| Seven per cent interest | 1,034,910.95 | 376,010.59 | 1,410,921.54 |
| Eight per cent interest | 1,182,755.37 | 429,726.39 | 1,612,481.76 |

D. Recapitulation—Total Business, State of Arkansas.

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Gross Revenue | $4,896,272.91 | $1,778,803.88 | $6,675,076.79 |
| Operating Expenses | 3,253,034.86 | 1,678,189.89 | 4,931,224.75 |
| Net Operating Revenue | $1,643,238.05 | $100,613.99 | $1,743,852.04 |
| Less, Taxes and Rentals | 179,030.25 | 65,046.44 | 244,076.69 |
| Balance | $1,464,207.80 | $35,567.55 | $1,499,775.35 |
| Return on the assessed value of the property after deducting Taxes and Rentals | 9.90% | 0.66% | 7.44% |

DARK PAGE B

E. The Intra-State gross freight and passenger revenue, as shown in Statement No. 1, is:

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Gross Revenue | $640,248.17 | $836,542.20 | $1,476,790.37 |

The intra-state proportion of the total operating expenses, divided on per cents based upon the gross revenue of each class of traffic (Freight 13.08%, Passenger 47.03%), is,

| | | | |
|---|---|---|---|
| Operating Expenses | $425,496.96 | $789,252.70 | $1,214,749.66 |
| Leaving | $214,751.21 | $47,289.50 | $262,040.71 |

From these amounts there should be deducted a proportion of the taxes and rentals; divided on a revenue basis, (per cents shown above) the charge is as follows:

| | | | |
|---|---|---|---|
| Taxes and Rentals | $23,417.16 | $30,591.34 | $54,008.50 |
| Leaving | $191,334.05 | $16,698.16 | $208,032.21 |

F. From the sums thus left there should be deducted such sums as the Court may find to represent the extra cost of handling Intra-State traffic. This extra cost is shown under various percentages in statements No. 6 and 7, and the result of applying any of the percentages is as follows:

| | Freight. | | Passenger. |
|---|---|---|---|
| Amount left after deducting Taxes and Rentals | $191,334.05 | | $16,698.16 |
| Extra Cost @ 50% | 173,386.76 | Extra cost @ 15% | 58,568.83 |
| Surplus | $17,947.29 | Deficit | $41,870.67 |
| Extra cost @ 100% | $326,930.00 | Extra cost @ 25% | $93,475.18 |
| Deficit | $135,595.95 | Deficit | $76,777.02 |
| Extra cost @ 150% | $463,882.77 | Extra cost @ 35% | $125,696.42 |
| Deficit | $272,548.72 | Deficit | $108,998.26 |
| Extra cost @ 200% | $586,196.88 | Extra cost @ 50% | $169,161.54 |
| Deficit | $394,862.83 | Deficit | $152,463.38 |

G. Assuming that the property of the Company is worth at least the amount of the State's valuation for purposes of taxation, the value of the property to be assigned to each class of Intrastate traffic, is as follows:

| | | | |
|---|---|---|---|
| Freight | 13.08% of | $14,784,442.14 or | $1,933,805.03 |
| Passenger | 47.03% of | 5,371,579.86 or | 2,526,254.01 |
| Total | | $20,156,022.00 | $4,460,059.04 |

Making no allowance for the extra cost of handling Intrastate traffic, the per cent of return on the values shown above would be:

Freight ..... 9.89% Passenger..... 0.66% Total..... 4.66%

Allowing 50% for the extra cost of handling Intrastate freight and nothing for passengers, the per cent of return upon the values shown above, would be:

Freight ..... 0.93% Passenger..... 0.66% Total..... 0.78%

DARK PA

St. Louis, Iron Mountain & Southern Railway Company, State of Arkansas.

*Statement of Gross Revenue for Six Months Ending December 31st, 1907.*

| | Freight. | | | Passenger. | | | |
|---|---|---|---|---|---|---|---|
| | Interstate. | State. | Miscellaneous. | Interstate. | State. | Miscellaneous. | Grand total. |
| 1. Freight Revenue | $4,133,210.33 | $640,248.17 | ..... | ..... | ..... | ..... | $4,773,458.50 |
| 2. Passenger Revenue | ..... | ..... | ..... | $568,476.21 | $836,542.20 | ..... | 1,405,018.41 |
| 5. Mail Revenue | ..... | ..... | ..... | ..... | ..... | $202,637.71 | 202,637.71 |
| 6. Express Revenue | ..... | ..... | ..... | ..... | ..... | 133,910.82 | 133,910.82 |
| 3. Excess Baggage Revenue | ..... | ..... | ..... | ..... | ..... | 14,507.65 | 14,507.65 |
| 4. Parlor & Chair Car Revenue | ..... | ..... | ..... | ..... | ..... | 1,054.32 | 1,054.32 |
| 7. Milk Revenue | ..... | ..... | ..... | ..... | ..... | 15.26 | 15.26 |
| 8. Other Passgr. Train Revenue | ..... | ..... | ..... | ..... | ..... | 481.09 | 481.09 |
| 9. Switching Revenue | ..... | ..... | $27,344.85 | ..... | ..... | ..... | 27,344.85 |
| 10. Special Service Train Revenue | ..... | ..... | ..... | ..... | ..... | 141.46 | 141.46 |
| 11. Misc'l. Transp't'n Revenue | ..... | ..... | Dr. 428.16 | ..... | ..... | Dr. 126.02 | Dr. 554.18 |
| 12. Station & Train Privileges | ..... | ..... | 3,474.54 | ..... | ..... | 1,022.66 | 4,497.20 |
| 13. Parcel Room Receipts | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 14. Storage—Freight | ..... | ..... | 4,541.27 | ..... | ..... | ..... | 4,541.27 |
| 15. Storage—Baggage | ..... | ..... | ..... | ..... | ..... | 359.59 | 359.59 |
| 16. Car Service | ..... | ..... | 20,675.48 | ..... | ..... | ..... | 20,675.48 |
| 17. Telegraph Service | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 18. Rents of Buildings & Other Property | ..... | ..... | 55,578.87 | ..... | ..... | 16,358.58 | 71,937.45 |
| 19. Miscellaneous | ..... | ..... | 11,627.56 | ..... | ..... | 3,422.35 | 15,049.91 |
| Grand Total | $4,133,210.33 | $640,248.17 | $122,814.41 | $568,476.21 | $836,542.20 | $373,785.47 | $6,675,076.79 |

STATEMENT No. 2.



St. Louis, Iron Mountain & Southern Railway Company, State of Arkansas.

*Formulæ Used in Dividing Gross Revenue Between Freight and Passenger and Between Intrastate and Interstate.*



No. 1. Freight Revenue:

2. *Passenger Revenue:* The revenue from freight and passenger moving wholly within the State is credited to the State under *Intra-State revenue.* The revenue from freight moving partly in another State or States, is divided between the States through which the shipment moved upon a stright pro-rata per mile basis. The same rule applies to the division of revenue from Passengers traveling partly in Arkansas and partly in other States where the maximum rate is two cents per mile. When the maximum passenger rate in any State is more than two cents per mile, that State is allowed constructive mileage on interstate business, making the division of revenue on a pro-rata per *rate* basis.

All revenue accruing to Arkansas from business moving partly in Arkansas and partly in other States is credited to the State under *Interstate revenue.*

No. 3. *Excess Baggage Revenue:* The revenue from excess baggage is credited to the various States upon the basis of the actual mileage over which the baggage moves.

No. 4. *Parlor & Chair Car Revenue:* The revenue from Parlor and Chair Cars is credited to the various States upon the basis of the actual mileage of each train in each State.

No. 5. *Mail Revenue:* The transportation of mail is done under contract with the United States Government and the territory is divided into various "Mail Routes" for which compensation is allowed at certain rates per pound-mile handled. In cases where the entire mail route is located entirely in one State, all of the revenue is credited to that State.

When the mail route is through two or more States, the revenue is divided between States upon the basis of the actual mileage in each State.

No. 6. *Express Revenue:* The revenue from the handling of express is reported to us by the Express Company in total, the railroad company having no record of the details of business handled. The amount received from the Express Company is divided between States upon the basis of the gross freight earnings in each State.

No. 7. *Milk Revenue (on Passenger Trains)*: Basis similar to Account No. 4.

No. 8. *Other Passenger Train Revenue:* Basis similar to Account No. 4.

No. 9. *Switching Revenue:* The revenue earned from switching service is credited to the State in which the service is performed.

No. 10. *Special Service Train Revenue:* Basis similar to Account No. 4.

5245

No. 11. *Miscellaneous Transportation Revenue:* The revenue credited to this account is credited to the States in which the service is performed.

No. 12. *Station and Train Privileges:* Revenue from station privileges is credited to the State in which the station is located. Earnings from Train Privileges are divided between States upon the basis of the mileage of lines covered by the contracts. These earnings are derived from contracts made with News Companies for the privileges of selling papers, fruit, etc., at stations and on trains.

No. 13. *Parcel Room Receipts:* Revenue from parcel-room receipts is credited to the State in which the Station is located.

No. 14. *Storage—Freight:* Revenue from the storage of freight is credited to the State in which the service is performed.

No. 15. *Storage—Baggage:* Basis similar to Account No. 14.

No. 16. *Car Service:* Basis similar to Account No. 14.

No. 17. *Telegraph Service:* This Company has no revenue credited to this account.

No. 18. *Rents of Buildings and Other Property:* The revenue from rent of buildings and other property is credited to the State in which the property is located.

No. 19. *Miscellaneous:* The revenue credited to this account is as a rule derived from services of a local nature and credited to the State in which the service is performed.

NOTE.—Revenue Accounts No. 3, 4, 5, 6, 7, 8, 10, 13, and 15 are credited to the passenger service; accounts No. 9, 14, and 16 are credited to the freight service and accounts No. 11, 12, 18, and 19 are divided between the passenger and freight service upon the basis of the actual freight and passenger earnings; Freight 77.26%, Passenger 22.74%.

No attempt has been made to divide miscellaneous revenue between State and Interstate for the reason that rates on this class of business are not an issue in this litigation and for the further reason that in the case of Mail and Express revenue, which is 19% of all passenger revenue, there is no reasonable basis by which such an apportionment can be made.

STATEMENT No. 3.

St. Louis, Iron Mountain & Southern Railway Company.

*Statement of Gross Revenue for Six Months Ending December 31st, 1907.*

| Character. | Whole line. | State of Arkansas. | Percentage of total credited to Arkansas. |
|---|---|---|---|
| 1. Freight Revenue | $8,925,034.34 | $4,773,458.50 | 53 |
| 2. Passenger Revenue | 2,393,913.82 | 1,405,018.41 | 59 |
| 3. Excess Baggage Revenue | 23,993.66 | 14,507.65 | 60 |
| 4. Parlor & Chair Car Revenue | 1,413.25 | 1,054.32 | 75 |
| 5. Mail Revenue | 329,324.34 | 202,637.71 | 62 |
| 6. Express Revenue | 257,734.75 | 133,910.82 | 52 |
| 7. Milk Revenue (on Passenger Trains) | 6,532.72 | 15.26 | .. |
| 8. Other Passgr. Train Revenue | 838.28 | 481.09 | 57 |
| 9. Switching Revenue | 219,492.13 | 27,344.85 | 12 |
| 10. Special Service Train Revenue | 1,060.20 | 141.46 | 13 |
| 11. Misc'l. Transp't'n Revenue | 1,009.46 | Dr. 554.18 | .. |
| 12. Station & Train Privileges | 8,580.80 | 4,497.20 | 52 |
| 13. Parcel Room Receipts | ..... | ..... | .. |
| 14. Storage—Freight | 6,950.85 | 4,541.27 | 65 |
| 15. Storage—Baggage | 436.47 | 359.59 | 82 |
| 16. Car Service | 42,622.80 | 20,675.48 | 49 |
| 17. Telegraph Service | ..... | ..... | .. |
| 18. Rents of Buildings & Other Property | 141,052.01 | 71,937.45 | 51 |
| 19. Miscellaneous | 25,957.53 | 15,049.91 | 58 |
| Total | $12,385,947.41 | $6,675,076.79 | 54 |

*Statement of Various Mileage Statistics for Six Months Ending December 31st, 1907.*

| | | | |
|---|---|---|---|
| Track Mileage | 2,599.15 | 1,353.02 | 52 |
| Revenue Freight Train Mileage | 3,078,251 | 1,561,258 | 51 |
| Revenue Passenger Train Mileage | 2,470,022 | 1,461,474 | 59 |
| Mixed Train Mileage | 107,583 | 59,140 | 55 |
| Total Train Mileage | 5,655,856 | 3,081,872 | 54 |
| Loaded Freight Car Mileage | 65,958,062 | 36,439,562 | 55 |
| Empty Freight Car Mileage | 20,980,138 | 10,076,090 | 48 |
| Passenger Car Mileage | 13,033,063 | 7,686,781 | 59 |
| Total Engine Mileage | 7,625,796 | 4,052,786 | 53 |
| No. of Tons Hauled | 5,395,603 | 3,423,253 | 63 |
| No. of Tons Hauled one mile | 1,228,717,919 | 660,163,995 | 54 |
| No. of Passengers carried | 2,819,020 | 1,702,490 | 60 |
| No. of Passengers carried one mile | 120,919,916 | 73,842,620 | 61 |

STATEMENT No. 4.

## The St. Louis, Iron Mountain & Southern Railway Company.

*Statement of Operating Expenses, Six Months Ending December 31st, 1907.*

| Company classification of Accounts, Maintenance of way & structures. | Total. | Amounts chargeable to Arkansas. | Percentage of total expense chargeable to Arkansas. |
|---|---|---|---|
| 1. Track Maintenance | $445,966.14 | $249,022.63 | 56% |
| 2. Applying Track Material | 260,265.55 | 141,309.32 | 54 |
| 3. Roadway Policing | 83,368.41 | 43,421.31 | 52 |
| 4. Flood Damages | 13,749.28 | 11,148.08 | 81 |
| 5. General Cleaning | 57,636.78 | 30,578.90 | 53 |
| 6. Ballast | 31,913.18 | 22,434.42 | 70 |
| 7. Rails | 85,535.21 | 16,784.63 | 20 |
| 8. Ties | 333,252.05 | 210,209.70 | 63 |
| 9. Track Appliances | 68,820.08 | 30,960.34 | 45 |
| 10. Roadway Tools | 25,481.45 | 11,761.89 | 46 |
| 11. Other Roadway Maintenance | 12,709.50 | 5,408.95 | 43 |
| 12. Bridges and Culverts | 127,689.31 | 70,803.45 | 55 |
| 13. Buildings and Grounds | 71,267.53 | 38,435.57 | 54 |
| 16. Docks and Wharves | 8,969.65 | ..... | .. |
| 17. Interlocking Plants & Signals | 11,130.88 | 3,237.45 | 29 |
| 18. Fences, Road Crossings & Signs | 24,219.60 | 13,649.17 | 56 |
| 19. Telegraph and Telephone Lines | 12,774.44 | 7,836.29 | 61 |
| 20. Engineering & Superintendence | 107,117.16 | 55,008.84 | 51 |
| 21. Personal Injuries | 3,961.03 | 2,486.85 | 63 |
| 23. Stationery and Printing | 3,740.06 | 1,884.54 | 50 |

*Statement of Operating Expenses.*

| Company classificatoin of accounts conducting Transportation—Operation: | Total. | Amounts chargeable to Arkansas. | Percentage of total expense chargeable to Arkansas. |
|---|---|---|---|
| 24. Incidentals | 673.24 | 538.28 | 80 |
| 25. Maint. Jt. Trks., Bdgs., Yds. & Termls. | 2,076.02 | Cr. 1,474.72 | .. |
| Total Maint. of Way & Struct. | $1,792,316.55 | $965,445.89 | 54 |
| Maintenance of equipment: | | | |
| 31. Locomotives—Repairs of | $650,536.16 | $344,985.58 | 53 |
| 32. Passenger Cars—Repairs of | 132,100.40 | 77,775.19 | 59 |
| 35. Freight Cars—Repairs of | 748,317.08 | 398,992.36 | 53 |
| 36. Work Cars—Repairs of | 39,261.35 | 22,533.82 | 57 |
| 37. Floating Equipment—Repairs of | 4,730.58 | ..... | .. |
| 38. Superintendence | 67,402.53 | 36,932.29 | 55 |
| 39. Personal Injuries | 3,696.26 | 1,941.22 | 53 |
| 40. Tools & Machinery—Repairs of | 63,288.35 | 48,671.67 | 77 |
| 42. Shops—Heating and Lighting | 5,069.38 | 2,839.57 | 56 |
| 43. Watchmen | 3,647.75 | 2,085.69 | 57 |
| 44. Stationery and Printing | 2,742.47 | 1,392.45 | 51 |
| 45. Incidentals | 5,779.23 | 4,205.75 | 73 |
| 46. Equip. used in Jt.. Yds. and Termls.—Repairs of | Cr. 3,625.11 | Cr. 500.48 | .. |
| Locomotives—Depreciation | 18,175.32 | 9,660.69 | 53 |
| Passenger Cars—Depreciation | 9,751.03 | 5,752.03 | 59 |
| Freight Cars—Renewals | 27,046.75 | 14,663.04 | 54 |
| Freight Cars—Depreciation | 32,302.11 | 17,290.27 | 54 |
| Floating Equipment—Depreciation | Cr. 2,185.52 | ..... | .. |

DARK PAGE BLEED

| | | | |
|---|---|---|---|
| Equipment Borrowed—Dr. | 333,690.71 | 178,871.81 | 54 |
| Equipment Loaned—Cr. | 250,673.22 | 133,223.98 | 53 |
| Work Car—Renewals | 731.59 | 403.20 | 55 |
| Work Equipment—Depreciation | 536.46 | 293.90 | 55 |
| Total Maintenance of Equipment | $1,892,321.66 | $1,035,566.07 | 55 |

5248

| | | | |
|---|---|---|---|
| 51. Station Service—Passenger | $19,847.59 | $16,240.67 | 82% |
| 52. Station Service—Freight | 243,993.57 | 105,372.65 | 43 |
| 53. Station Service—Combined | 118,844.12 | 67,686.34 | 57 |
| 54. Station Supplies | 21,253.76 | 11,980.48 | 56 |
| 55. Stock Yards and Elevators—Operation of | Cr. 4.13 | 205.92 | .. |
| 56. Yard Supervision | 68,500.54 | 32,306.16 | 47 |
| 57. Yardmen | 234,104.88 | 119,710.41 | 51 |
| 58. Yard Enginemen and Firemen | 128,700.19 | 60,818.78 | 47 |
| 59. Yard Locomotives—Fuel for | 89,912.33 | 36,817.84 | 41 |
| 60. Road Enginemen & Firemen Passgr | 172,290.49 | 100,064.38 | 58 |
| 61. Trainmen—Passenger | 141,787.58 | 82,707.76 | 58 |
| 62. Road Locomotives—Fuel for—Passgr | 164,739.70 | 96,802.10 | 59 |
| 63. Passenger Cars—Care of | 85,620.54 | 50,600.32 | 59 |
| 64. Other Train Supplies—Passenger | 7,799.57 | 4,594.09 | 59 |
| 65. Road Enginemen & Firemen—Freight | 369,150.64 | 195,706.64 | 53 |
| 66. Trainmen—Freight | 500,594.06 | 271,918.53 | 54 |
| 67. Road Locos.—Fuel for—Freight | 353,188.23 | 168,359.39 | 48 |
| 68. Freight Cars—Lubrication of | 14,892.49 | 7,962.60 | 53 |
| 69. Other Train Supplies—Freight | 36,801.89 | 19,595.68 | 53 |
| 70. Enginehousemen | 252,115.20 | 133,165.31 | 53 |
| 71. Fuel Stations—Operation of | 90,105.39 | 45,526.25 | 51 |
| 72. Locomotives—Water Supply for | 52,749.64 | 27,227.07 | 52 |

*Statement of Operating Expenses.*

| Company classificatoin of accounts conducting Transportation—Operation: | Total. | Amounts chargeable to Arkansas. | Percentage of total expense chargeable to Arkansas. |
|---|---|---|---|
| 24. Incidentals | 673.24 | 538.28 | 80 |
| 25. Maint. Jt. Trks., Bdgs., Yds. & Termls. | 2,076.02 | Cr. 1,474.72 | .. |
| Total Maint. of Way & Struct. | $1,792,316.55 | $965,445.89 | 54 |
| Maintenance of equipment: | | | |
| 31. Locomotives—Repairs of | $650,536.16 | $344,985.58 | 53 |
| 32. Passenger Cars—Repairs of | 132,100.40 | 77,775.19 | 59 |
| 35. Freight Cars—Repairs of | 748,317.08 | 398,992.36 | 53 |
| 36. Work Cars—Repairs of | 39,261.35 | 22,533.82 | 57 |
| 37. Floating Equipment—Repairs of | 4,730.58 | ..... | .. |
| 38. Superintendence | 67,402.53 | 36,932.29 | 55 |
| 39. Personal Injuries | 3,696.26 | 1,941.22 | 53 |
| 40. Tools & Machinery—Repairs of | 63,288.35 | 48,671.67 | 77 |
| 42. Shops—Heating and Lighting | 5,069.38 | 2,839.57 | 56 |
| 43. Watchmen | 3,647.75 | 2,085.69 | 57 |
| 44. Stationery and Printing | 2,742.47 | 1,392.45 | 51 |
| 45. Incidentals | 5,779.23 | 4,205.75 | 73 |
| 46. Equip. used in Jt.. Yds. and Termls.—Repairs of | Cr. 3,625.11 | Cr. 500.48 | .. |
| Locomotives—Depreciation | 18,175.32 | 9,660.69 | 53 |
| Passenger Cars—Depreciation | 9,751.03 | 5,752.03 | 59 |
| Freight Cars—Renewals | 27,046.75 | 14,663.04 | 54 |
| Freight Cars—Depreciation | 32,302.11 | 17,290.27 | 54 |
| Floating Equipment—Depreciation | Cr. 2,185.52 | ..... | .. |

| | | | |
|---|---|---|---|
| Equipment Borrowed—Dr. | 333,690.71 | 178,871.81 | 54 |
| Equipment Loaned—Cr. | 250,673.22 | 133,223.98 | 53 |
| Work Car—Renewals | 731.59 | 403.20 | 55 |
| Work Equipment—Depreciation | 536.46 | 293.90 | 55 |
| Total Maintenance of Equipment | $1,892,321.66 | $1,035,566.07 | 55 |

5248

| | | | |
|---|---|---|---|
| 51. Station Service—Passenger | $19,847.59 | $16,240.67 | 82% |
| 52. Station Service—Freight | 243,993.57 | 105,372.65 | 43 |
| 53. Station Service—Combined | 118,844.12 | 67,686.34 | 57 |
| 54. Station Supplies | 21,253.76 | 11,980.48 | 56 |
| 55. Stock Yards and Elevators—Operation of | Cr. 4.13 | 205.92 | .. |
| 56. Yard Supervision | 68,500.54 | 32,306.16 | 47 |
| 57. Yardmen | 234,104.88 | 119,710.41 | 51 |
| 58. Yard Enginemen and Firemen | 128,700.19 | 60,818.78 | 47 |
| 59. Yard Locomotives—Fuel for | 89,912.33 | 36,817.84 | 41 |
| 60. Road Enginemen & Firemen Passgr | 172,290.49 | 100,064.38 | 58 |
| 61. Trainmen—Passenger | 141,787.58 | 82,707.76 | 58 |
| 62. Road Locomotives—Fuel for—Passgr | 164,739.70 | 96,802.10 | 59 |
| 63. Passenger Cars—Care of | 85,620.54 | 50,600.32 | 59 |
| 64. Other Train Supplies—Passenger | 7,799.57 | 4,594.09 | 59 |
| 65. Road Enginemen & Firemen—Freight | 369,150.64 | 195,706.64 | 53 |
| 66. Trainmen—Freight | 500,594.06 | 271,918.53 | 54 |
| 67. Road Locos.—Fuel for—Freight | 353,188.23 | 168,359.39 | 48 |
| 68. Freight Cars—Lubrication of | 14,892.49 | 7,962.60 | 53 |
| 69. Other Train Supplies—Freight | 36,801.89 | 19,595.68 | 53 |
| 70. Enginehousemen | 252,115.20 | 133,165.31 | 53 |
| 71. Fuel Stations—Operation of | 90,105.39 | 45,526.25 | 51 |
| 72. Locomotives—Water Supply for | 52,749.64 | 27,227.07 | 52 |

*Statement of Operating Expenses.*

| Company classification of accounts conducting transportation—traffic. | Total. | Amounts chargeable to Arkansas. | Percentage of total expenses chargeable to Arkansas. |
|---|---|---|---|
| 73. Locos.—Oil, Grease, Waste, etc., for | 23,088.46 | 15,289.23 | 66 |
| 74. Locomotives—Other Supplies for | 28,339.44 | 15,788.71 | 56 |
| 75. Signalmen | 30,610.91 | 13,126.65 | 43 |
| 76. Highway Crossing Watchmen | 9,505.64 | 4,737.09 | 50 |
| 77. Policemen | 13,105.78 | 5,867.77 | 45 |
| 78. Signal Supplies | 4,080.18 | 1,336.15 | 33 |
| 79. Highway Crossing Supplies | 99.91 | 45.33 | 45 |
| 80. Wrecks—Clearing | 76,610.76 | 39,062.21 | 51 |
| 81. Injuries to Persons | 134,370.95 | 84,737.14 | 63 |
| 82. Stock Killed & Damage to Property | 111,815.93 | 69,515.44 | 62 |
| 83. Loss & Damage to Baggage and Personal Property | 3,192.00 | 2,586.00 | 81 |
| 84. Loss & Damage to Freight in Transit | 140,123.79 | 81,360.60 | 58 |
| 89. Rents of Bldgs. & Other Property | 1,201.54 | 423.95 | 35 |
| 90. Superintendence—Transportation | 124,688.87 | 68,682.46 | 55 |
| 91. Telegraph & Telephone—Operation of | 170,009.00 | 86,812.03 | 51 |
| 92. Floating Equipment—Operation of | 23,271.07 | ..... | .. |
| 93. Elevation & Longshore Labor | 2,742.36 | ..... | .. |
| 104. Stationery & Printing—Transptn | 28,631.32 | 14,164.53 | 49 |
| 105. Incidentals | 6,197.81 | 3,608.04 | 58 |
| 106. Operation Jt. Trks., Bdgs., Yds. and Termls | 10,093.26 | Cr. 713.20 | .. |
| 107. Flood Damages | 3,210.20 | 2,962.60 | 92 |
| Total Condt. Transptn.—Operation | $4,111,977.45 | $2,164,762.10 | 53 |

| | | | |
|---|---|---|---|
| 110. Superintendence—Passenger | $19,309.59 | $10,445.55 | 54% |
| 111. Foreign Agencies—Passenger | 39,436.93 | 22,461.66 | 57 |
| 112. Advertising—Passenger | 24,364.91 | 13,369.89 | 55 |
| 113. Stationery & Printing—Passenger | 12,782.09 | 6,998.98 | 55 |
| 114. Superintendence—Freight | 32,752.46 | 16,967.68 | 52 |
| 115. Foreign Agencies—Freight | 104,399.57 | 54,128.20 | 52 |
| 117. Stationery & Printing—Freight | 33,466.59 | 17,638.54 | 53 |
| Total Condt. Transptn.—Traffic | $266,512.14 | $142,010.50 | 53 |
| General expenses: | | | |
| 121. General Officers | $64,790.98 | $33,895.99 | 52 |
| 122. Clerks | 234,817.02 | 125,856.46 | 54 |
| 123. Attendants | 11,956.42 | 6,194.22 | 52 |
| 124. Heat and Light | 2,950.35 | 1,540.06 | 52 |
| 125. Office Expenses and Supplies | 77,595.00 | 42,588.59 | 55 |
| 126. Insurance | 35,964.20 | 19,199.67 | 53 |
| 127. Law Expenses | 68,332.22 | 43,814.06 | 64 |
| 128. Stationery & Printing | 18,986.44 | 9,976.33 | 53 |
| 129. Incidentals | 17,213.27 | 9,335.70 | 54 |
| Gen'l Admr. Jt. Trks., Yds. and Termls | 23.08 | 584.35 | .. |
| Total General Expenses | $532,628.98 | $292,985.43 | 55 |
| Total Operating Expense | $8,595,756.78 | $4,600,769.99 | 54 |

| | | | |
|---|---|---|---|
| **Maint. Fund—Balance:** | | | |
| Rails | Cr. $9,257.57 | 5,437.72 | .. |
| Ties | 224,780.89 | 83,792.90 | .. |
| Total | $215,523.32 | $89,230.62 | .. |
| **Casualty credit fund—balance:** | | | |
| Injuries to Persons | Cr. $3,446.65 | $5,733.75 | .. |
| Stock Killed & Damage to Property | 12,797.74 | 10,932.93 | .. |
| Loss & Damage to Baggage | Cr. 1,102.13 | Cr. 932.69 | .. |
| Loss & Damage to Freight | 44,429.99 | 46,148.78 | .. |
| Total | $52,678.95 | $61,882.77 | .. |
| **Hire of equipment:** | | | |
| Freight Cars | $352,572.65 | $188,686.18 | 54 |
| Passenger Cars | 12,900.36 | 7,584.40 | 59 |
| Locomotives & Other Equipment | Cr. 35,561.04 | Cr. 18,113.11 | 51 |
| Total | $329,911.97 | $178,157.47 | 54 |
| Dining Car—Balance | $1,868.33 | $1,183.90 | 63 |
| Taxes | $317,931.70 | $222,148.18 | 70 |
| Rentals | $3,044.78 | $21.928.51 | .. |

| | Total. | Arkansas. | Per cent. |
|---|---|---|---|
| 7. Rails | $76,277.64 | $22,222.35 | 29% |
| 8. Ties | 558,032.94 | 294,002.60 | 53 |
| Total Maint. of Way & Struct. | $2,007,839.87 | $1,054,676.51 | 53 |
| 81. Injuries to Persons | $130,924.30 | $90,470.89 | 69 |
| 82. Stock Killed, etc | 124,613.67 | 80,448.37 | 65 |
| 83. Loss & Damage to Baggage | 2,089.87 | 1,653.31 | 79 |
| 84. Loss & Damage to Freight | 184,553.78 | 127,509.38 | 69 |
| Hire of Equipment | 329,911.97 | 178,157.47 | 54 |
| Dining Cars—Balance | 1,868.33 | 1,183.90 | 63 |
| Total Condt. Transptn.—Operation | $4,496,436.70 | $2,405,986.24 | 54 |
| Total Operating Expenses | $9,195,739.35 | $4,931,224.75 | 54 |

*Recapitulation.*

| | | | |
|---|---|---|---|
| Total Operating Expenses | $9,195,739.35 | $4,931,224.75 | 54 |
| Taxes | 317,931.70 | 222,148.18 | 70 |
| Rentals | 3,044.78 | 21,928.51 | 720 |
| Total | $9,516,715.83 | $5,175,301.44 | 54 |

STATEMENT No. 5.



St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Bases Used in Dividing Operating Expenses, Taxes and Other Fixed Charges Between States and Between the Freight and Passenger Business.*



*Maintenance of Way & Structures:* This account includes all cost of repairs to and maintenance of roadway and track, bridges, trestles, culverts, Fences, etc., also material and supplies used in repairing same, and supervision. This expense is practically all localized and is charged to the State in which the expense is incurred. The total charge to Maintenance of Way & Structures is divided between freight and passenger upon the basis of the number of train miles in each class of service.

*Maintenance of Equipment:* This account includes all cost of repairs, renewals and depreciation of cars and locomotives also shop machinery and tools. The cost of repairs, renewals and depreciation of equipment being of a general nature and not applicable to any particular State is divided between all States upon the basis of the mileage of each class of service in each state. The cost of repairs to shop machinery and tools, stationery and printing and supervision is divided between States upon the basis of the total engine mileage over the territory under the jurisdiction of each shop superintendent. The cost of repairs to freight and passenger cars are compiled separately and all expense of a common nature is divided between freight and passenger upon the basis of the number of train miles in each class of service.

*Traffic Expenses:* Traffic expenses include salaries and expense of officers and employés directly in charge of traffic; General Commercial, district and other agents engaged exclusively in soliciting traffic; Advertising; Immigration Bureal, etc. Salaries and expenses of General Officers and Agents and all traffic expenses of a general nature are divided between States upon the basis of the gross earnings in each State. The expense of officers and employés having charge of both freight and passenger business, is divided between the freight and passenger service in proportion to the amount of work done for each.

*Station Service:* Station Service includes, the wages of Station Employés, Station Supplies and Expenses and Telegraph and Telephone expense. This expense is practically all local and is charged to the State in which the expense is incurred. Wages of employés at and expenses of stations handling both freight and passenger business are divided 75% freight and 25% passenger which is approximately the proportion of revenue of each class of business.

*Yard Service:* Yard Service includes the wages of all yardmen, yard enginemen and oil and fuel for yard locomotives and like the station service is localized. The total charge to yard service is divided 95% freight and 5% passenger. This is the proportion of yard engine mileage in each class of service.

*Train Service:* Train Service includes the wages of Trainmen and Oil and Other Train Supplies. The wages of trainmen are divided between States upon the actual mileage of each run in each State. The cost of supplies is divided between States upon the basis of the car mileage in each State. The cost of each class of service is ascertained and compiled separately, the mixed train expense being divided 75% freight and 25% passenger.

5252

*Engine Service:* Engine Service includes the wages of enginemen, fuel, water and other supplies furnished locomotives and enginehouse expense. The wages of engine crews are divided between States upon the actual mileage of each run in each State. Enginehouse expense is charged to the State in which the enginehouse is located. The cost of each class of engine service is ascertained and compiled separately, the mixed train expense being divided 75% freight and 25% passenger. Water and other supplies and enginehouse expense is divided between freight and passenger upon the basis of the number of train miles in each class of service.

*Other Transportation Expense:* Other expenses include Superintendence, Miscellaneous Labor and Supplies, Wrecks, and Casualties. Salaries and expenses of division officers are divided between States upon the basis of the mileage of line under their supervision in each State. Miscellaneous labor and supplies which cannot be localized are divided between States upon the basis of the mileage of the lines benefited. Wrecks and casualties are charged to the State in which the loss occurs. Items included in Other Expenses which are of a common nature are divided between freight and passenger upon the basis of the number of train miles in each class of service.

*General Expenses:* General Expenses include the salaries and expenses of General Officers, their clerks and attendants, general office supplies and expenses, Law expenses, etc. This expense is divided between States upon the basis of the gross earnings in each State and between freight and passenger upon the basis of the number of train miles in each class of service.

*Hire of Equipment:* This account includes the amount of Rentals, Mileage or Per Diem paid for the use of equipment belonging to other companies, less the amount received from other companies for the use of our equipment. This item is divided between States upon the basis of the total mileage of each class of equipment in each State. The net rental paid for passenger equipment is charged to the passenger service. The net rental paid for freight equipment is charged to the freight service, and the net rental paid for hire of locomotives is divided between freight and passenger upon the basis of the number of train miles in each class of service.

*Taxes:* The total amount of taxes paid in each State is divided between freight and passenger upon the basis of the gross earnings of each class of service.

*Rentals:* This account represents the net amount paid for the use of main tracks, side tracks and spurs belonging to other companies. It is charged or credited to the State in which the track is located and divided between the freight and passenger upon the basis of the gross earnings of each class of service.

DARK PAGE

STATEMENT No. 6.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Extra Cost of State Freight Business, Revenue Basis.*

(A) At 50%.

| | | | | | |
|---|---|---|---|---|---|
| State | 13.08% x 1½ = | 19.62 = | 18.41, | Difference | 5.33+ |
| Interstate | 84.41 | 84.41 = | 79.23, | Difference | 5.18— |
| Miscellaneous | 2.51 | 2.51 = | 2.36, | Difference | .15— |
| Total | 100.00 | 106.54 | 100.00 | | |

The extra cost is 5.33% of $3,253,034.86 or $173,386.76.

(B) At 100%.

| | | | | | |
|---|---|---|---|---|---|
| State | 13.08% x 2 = | 26.16 = | 23.13, | Difference | 10.05+ |
| Interstate | 84.41 | 84.41 = | 74.65, | Difference | 9.76— |
| Miscellaneous | 2.51 | 2.51 = | 2.22, | Difference | .29— |
| Total | 100.00 | 113.08 | 100.00 | | |

The extra cost is 10.05% of $3,253,034.86 or $326,930.00.

(C) At 150%.

| | | | | |
|---|---|---|---|---|
| State | 13.08% x 2½ = | 32.70 = | 27.34, Difference | 14.26+ |
| Interstate | 84.41 | 84.41 = | 70.56, Difference | 13.85— |
| Miscellaneous | 2.51 | 2.51 = | 2.10, Difference | .41— |
| Total | 100.00 | 119.62 | 100.00 | |

The extra cost is 14.26% of $3,253,034.86 or $463,882.77.

(D) At 200%.

| | | | | |
|---|---|---|---|---|
| State | 13.08% x 3 = | 39.24 = | 31.10, Difference | 18.02+ |
| Interstate | 84.41 | 84.41 = | 66.91, Difference | 17.50— |
| Miscellaneous | 2.51 | 2.51 = | 1.99, Difference | .52— |
| Total | 100.00 | 126.16 | 100.00 | |

The extra cost is 18.02% of $3,253,034.86 or $586,196.88.

STATEMENT No. 7.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Extra Cost of State Passenger Business, Revenue Basis.*

(A) At 15%.

| | | | | | |
|---|---|---|---|---|---|
| State | 47.03% x 1.15 = | 54.08 = | 50.02, | Difference | 3.49+ |
| Interstate | 31.96 | 31.96 = | 29.85, | Difference | 2.11— |
| Miscellaneous | 21.01 | 21.01 = | 19.63, | Difference | 1.38— |
| Total | 100.00 | 107.05 | 100.00 | | |

The extra cost is 3.49% of $1,678,189.89 or $58,568.83.

(B) At 25%.

| | | | | | |
|---|---|---|---|---|---|
| State | 47.03% x 1.25 = | 58.79 = | 52.60, | Difference | 5.57+ |
| Interstate | 31.96 | 31.96 = | 28.60, | Difference | 3.36— |
| Miscellaneous | 21.01 | 21.01 = | 18.80, | Difference | 2.21— |
| Total | 100.00 | 111.76 | 100.00 | | |

The extra cost is 5.57% of $1,678,189.89 or $93,475.18.

(C) At 35%.

| | | | | | |
|---|---|---|---|---|---|
| State | 47.03% x 1.35 = | 63.49 = | 54.52, | Difference | 7.49+ |
| Interstate | 31.96 | 31.96 = | 27.44, | Difference | 4.52— |
| Miscellaneous | 21.01 | 21.01 = | 18.04, | Difference | 2.97— |
| Total | 100.00 | 116.46 | 100.00 | | |

The extra cost is 7.49% of $1,678,189.89 or $125,696.42.

(D) At 50%.

| | | | | | |
|---|---|---|---|---|---|
| State | 47.03% x 1½ = | 70.54 = | 57.11, | Difference | 10.08+ |
| Interstate | 31.96 | 31.96 = | 25.88, | Difference | 6.08— |
| Miscellaneous | 21.01 | 21.01 = | 17.01, | Difference | 4.00— |
| Total | 100.00 | 123.51 | 100.00 | | |

The extra cost is 10.08% of $1,678,189.89 or $169,161.54.

5255 Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

DARK PAGE BL

5256 EXHIBIT THREEa.

5257 EXHIBIT No. 3a.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Assessed Value of the Property Divided Between Freight and Passenger Traffic for Six Months Ending December 31st, 1907, and Interest at Various Rates.*

| | Assessment of 1907. | Assessment of 1908. | Assessment of 1909. |
|---|---|---|---|
| Proportion assignable to Freight Traffic for six months ending December 31st, 1907 (73.35%) | $14,665,072.35 | $15,002,485.28 | $17,657,415.67 |
| Six per cent on above | 879,904.34 | 900,149.12 | 1,059,444.94 |
| Seven per cent | 1,026,555.06 | 1,050,173.97 | 1,236,019.10 |
| Eight per cent | 1,173,205.79 | 1,200,198.82 | 1,412,593.25 |
| Proportion assignable to Passenger Traffic for six months ending December 31st, 1907 (26.65% of) | $5,328,209.65 | $5,450,800.72 | $6,415,407.33 |
| Six per cent on above | 319,692.58 | 327,048.04 | 384,924.44 |
| Seven per cent | 372,974.68 | 381,556.05 | 449,078.51 |
| Eight per cent | 426,256.77 | 436,064.06 | 513,232.59 |
| Proportion assignable to Total Traffic for six months ending December 31st, 1907 | $19,993,282.00 | $20,453,286.00 | $24,072,823.00 |
| Six per cent on above | 1,199,596.92 | 1,227,197.16 | 1,444,369.38 |
| Seven per cent | 1,399,529.74 | 1,431,730.02 | 1,685,097.61 |
| Eight per cent | 1,599,462.56 | 1,636,262.88 | 1,925,825.84 |

| | | | |
|---|---|---|---|
| Per cent of return on the assessed value of the Property as shown by the net earnings on all traffic for six months ending December 31st, 1907 (Exhibit 3, Par. D): | | | |
| Freight | 9.98% | 9.76% | 8.29% |
| Passenger | .67% | .65% | .55% |
| Total | 7.50% | 7.33% | 6.23% |
| Proportion assignable to Intrastate Freight Traffic for six months ending December 31st, 1907 (13.08%) | $1,918,191.46 | $1,962,325.07 | $2,309,589.97 |

5258 Page 2.

*Assessed Value of the Property Divided Between Freight and Passenger Traffic for Six Months Ending December 31st, 1907, and Interest at Various Rates.*

| | Assessment of 1907. | Assessment of 1908. | Assessment of 1909. |
|---|---|---|---|
| Per cent of return on the assessed value, as shown by the net earnings from Intrastate freight traffic for six months ending December 31st, 1907 (Exhibit No. 3, Par. E. & F.): | | | |
| No extra cost | 9.97% | 9.75% | 8.28% |
| 50% extra cost | .94% | .91% | .78% |
| Proportion assignable to Intrastate Passenger Traffic for six months ending December 31st, 1907 (47.03%) | $2,505,857.00 | $2,563,511.58 | $3,017,166.07 |

| | | | |
|---|---|---|---|
| Per cent of return on the assessed value, as shown by the net earnings from Intrastate passenger traffic for six months ending December 31st, 1907 (Exhibit 3, Par. E): | | | |
| No. Extra cost | 0.67% | 0.65% | 0.55% |
| Proportion assignable to all Intrastate traffic as shown above | $4,424,048.46 | $4,525,836.65 | $5,326,756.04 |
| Per cent of return upon the assessed value, as shown by the net earnings from all Intrastate traffic (Exhibit 3, Par. E. & F.): | | | |
| No Extra cost | 4.70% | 4.60% | 3.91% |
| 50% extra cost for freight only | 0.78% | 0.77% | 0.65% |

NOTE.—This is a revision of Exhibit No. 3, paragraph- C, D, and G, based on additional Assessments. The value of the property used in this statement is double the assessment as shown in Exhibit 7*a*.

5259 Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

Another basis for ascertaining the cost of handling Intrastate business, and for determining whether the same is profitable or not was laid down by Judge Willis Van Davanter of the United States Circuit Court, and upon the results shown by the adoption of that basis, a temporary injunction was granted. In granting the restraining order, Judge Van Davanter said:

"Here the additional cost is shown to be at least 100% in freight traffic and at least 15% in passenger traffic, and this is not more than what has been shown in other cases. Undoubtedly these differences furnish a standard by which to apportion the total cost between the traffic which is intrastate and that which is interstate. Other standards are suggested, but the proofs indicate that none of them is as satisfactory or accurate as is the difference in cost in its relation to the revenue."

This basis is shown in detail in Statement No. 1 and the result of applying this basis to the figures of the St. Louis, Iron Mountain & Southern Railway Company is as follows:

| | Freight. | Passenger. |
|---|---|---|
| Intrastate Revenue | $640,248.17 | $836,542.20 |
| Operating Expenses | 791,310.15 | 865,571.12 |
| Deficit | $151,061.98 | $29,028.92 |
| Return at six per cent upon the assessed value of the property | $184,911.34 | $202,326.15 |
| Deficit | $335,973.32 | $231,355.07 |

At an extra cost on Intrastate traffic of 50% instead of 100% as shown in paragraph F of Statement attached, the result is:

DARK PAGE

| | Freight. | Passenger. |
|---|---|---|
| Intrastate Revenue | $640,248.17 | $836,542.20 |
| Operating Expenses | 630,705.97 | 865,571.12 |
| Surplus | $9,542.20 | |
| Deficit | | $29,028.92 |
| Return at rate of 6% on the Assessed valuation | $147,421.14 | $202,326.15 |
| Deficit | $137,878.94 | $231,355.07 |

5262

STATEMENT No. 1.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Basis for Ascertaining the Cost of State Business, Adopted by Judge Willis Van Davanter in the Arkansas R. Rates Case,* 163 *Fed. Rep.,* 142.

After setting aside a proportion of the total operating expense to cover the cost of miscellaneous business, (this proportion based upon the percentage of miscellaneous earnings to the total earnings) "Increase the intrastate earnings by the ascertained percentage representing the difference in cost, thereby ascertaining what would have been earned by the same actual expenditure in conducting the intrastate traffic, had it been attended with the same relative cost as the interstate traffic. Then add the intrastate earnings, as so increased, to the interstate earnings, thereby ascertaining what would have been earned by the actual expenditure in conducting both the intrastate and the interstate traffic, had the former been attended with the same relative cost as the latter. Then ascertain what proportion of this total represents the intrastate earnings, as so increased, and what proportion

represents the interstate earnings, and then ascertain the corresponding proportion of the total cost of the intrastate and the interstate traffic."

The assessed valuation of the Company's property should be multiplied by two, and the amount thus ascertained should be divided between the various classes of business on the basis of the cost to operate each class of business.

Applying this basis to the revenue and expenses for the State of Arkansas, there is this result:

(A) Revenue.

| | Freight. Amount. | Freight. Per cent. | Passenger. Amount. | Passenger. Per cent. |
|---|---|---|---|---|
| Intrastate | $640,248.17 | 13.08 | $836,542.20 | 47.03 |
| Interstate | 4,133,210.33 | 84.41 | 568,476.21 | 31.96 |
| Miscellaneous | 122,814.41 | 2.51 | 373,785.47 | 21.01 |
| Total | $4,896,272.91 | 100.00 | $1,778,803.88 | 100.00 |
| (B) Expenses including | | | | |
| Taxes and Rentals | $3,432,065.11 | | $1,743,236.33 | |
| Expenses of Miscellaneous Traffic: | | | | |
| Freight 2.51% | 86,144.83 | | | |
| Passenger 21.01% | | | 366,253.96 | |
| Balance | $3,345,920.28 | | $1,376,982.37 | |

| | | Freight. | Per cent. | Passenger. | Per cent. |
|---|---|---|---|---|---|
| (C) Intrastate Revenue | | $640,248.17 | ..... | $836,542.20 | ..... |
| Increase representing extra cost: | | | | | |
| Freight | 100% | 640,248.17 | ..... | ..... | ..... |
| Passenger | 15% | ..... | ..... | 125,481.33 | ..... |
| Total | | $1,280,496.34 | 23.65 | $962,023.53 | 62.86 |
| Interstate Revenue | | 4,133,210.33 | 76.35 | 568,476.21 | 37.14 |
| Grand Total | | $5,413,706.67 | 100.00 | $1,530,499.74 | 100.00 |

(D) The total expense shown in paragraph B, divided on percentages shown above are as follows:

| Freight. | Amount. | Per cent. | |
|---|---|---|---|
| Intrastate | $791,310.15 | 15.29 | |
| Interstate | 2,554,610.13 | 49.36 | |
| Total | $3,345,920.28 | | |
| Miscellaneous | 86,144.83 | 1.66 | |
| Total Freight | $3,432,065.11 | | 66.31 |

| | | | |
|---|---|---|---|
| Passenger. | | | |
| Intrastate | $865,571.12 | 16.73 | |
| Interstate | 511,411.25 | 9.88 | |
| Total | $1,376,982.37 | | |
| Miscellaneous | 366,253.96 | 7.08 | |
| Total Passenger | $1,743,236.33 | | 33.69 |
| Grand Total | $5,175,301.44 | | 100.00 |

(E) The assessment of the State Board of Equalization is $20,156,022.00; twice this amount is $40,312,044.00 and 6% on this amount for six months is $1,209,361.32. Dividing these amounts between each class of traffic on per cents shown above, the result is as follows:

| | Assessed valuation. | Assessed valuation for six months. | Six per cent on valuation for six months. |
|---|---|---|---|
| Freight. | | | |
| Intrastate | $6,163,711.53 | $3,081,855.77 | $184,911.34 |
| Interstate | 19,898,024.92 | 9,949,012.46 | 596,940.75 |
| Miscellaneous | 669,179.93 | 334,589.96 | 20,075.40 |
| Passenger. | | | |
| Intrastate | 6,744,204.96 | 3,372,102.48 | 202,326.15 |
| Interstate | 3,982,829.95 | 1,991,414.97 | 119,484.90 |
| Miscellaneous | 2,854,092.71 | 1,427,046.36 | 85,622.78 |
| Grand Total | $40,312,044.00 | $20,156,022.00 | $1,209,361.32 |

DARK PAGE B

(F) If the extra cost of handling Intrastate freight is found to be 50% instead of 100%, then the result would be as follows:

| | | Freight. | Per cent. | Passenger. | Per cent. |
|---|---|---|---|---|---|
| Intrastate Revenue | | $640,248.17 | ..... | $836,542.20 | ..... |
| Increase representing extra cost: | | | | | |
| Freight | 50% | 320,124.08 | ..... | ..... | ..... |
| Passenger | 15% | ..... | ..... | 125,481.33 | ..... |
| Total | | $960,372.25 | 18.85 | $962,023.53 | 62.86 |
| Interstate Revenue | | 4,133,210.33 | 81.15 | 568,476.21 | 37.14 |
| Grand Total | | $5,093,582.58 | 100.00 | $1,530,499.74 | 100.00 |

The total expense shown in paragraph B, divided on percentages shown above is as follows:

| Freight. | Amount. | Per cent. | |
|---|---|---|---|
| Intrastate | $630,705.97 | 12.19 | |
| Interstate | 2,715,214.31 | 52.46 | |
| Total | $3,345,920.28 | | |
| Miscellaneous | 86,144.83 | 1.66 | |
| Total Freight | $3,432,065.11 | | 66.31 |

| | | | |
|---|---|---|---|
| Passenger. | | | |
| Intrastate | $865,571.12 | 16.73 | |
| Interstate | 511,411.25 | 9.88 | |
| Total | $1,376,982.37 | | |
| Miscellaneous | 366,253.96 | 7.08 | |
| Total Passenger | $1,743,236.33 | | 33.69 |
| Grand Total | $5,175,301.44 | | 100.00 |

Dividing the State's valuation of $40,312,044.00 between each class of traffic on the per cents shown above, the result is as follows:

| Freight. | Assessed valuation. | One-half valuation. | Six per cent for six months on valuation. |
|---|---|---|---|
| Intrastate | $4,914,038.17 | $2,457,019.09 | $147,421.14 |
| Interstate | 21,147,698.28 | 10,573,849.14 | 634,430.95 |
| Miscellaneous | 669,179.93 | 334,589.96 | 20,075.40 |
| Passenger. | | | |
| Intrastate | $6,744,204.96 | $3,372,102.48 | $202,326.15 |
| Interstate | 3,982,829.95 | 1,991,414.97 | 119,484.90 |
| Miscellaneous | 2,854,092.71 | 1,427,046.36 | 85,622.78 |
| Grand Total | $40,312,044.00 | $20,156,022.00 | $1,209,361.32 |

5265 Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

St. Louis, Iron Mountain & Southern Railway Company.

STATEMENT No. 5.

*Miscellaneous Statistics, Relative to the Business Handled During Six Months Ending December 31st, 1907.*

Track Mileage, State of Arkansas..... 1,353.02 Miles

| | Intrastate. | Interstate. | Total |
|---|---|---|---|
| Number of tons moved | 684,122 | 2,739,131 | 3,423,253 |
| Number of tons moved one mile | 47,860,299 | 612,303,696 | 660,163,995 |
| Percentage of total tons | 19.98% | 80.02% | 100% |
| Percentage of total ton miles | 7.25% | 92.73% | 100% |
| Average length of haul-miles | 70 | 224 | 193 |
| Revenue from freight | $640,248.17 | $4,133,210.33 | $4,773,458.50 |
| Revenue per ton—Dollars | 0.9359 | 1.5089 | 1.3944 |
| Revenue per ton per mile—mills | 13.377 | 6.750 | 7.231 |
| Percentage of total freight revenue | 13.41% | 86.59% | 100% |
| Number of passengers carried | 1,444,540 | 257,950 | 1,702,490 |
| No. of passgrs. carried one mile | 43,355,996 | 30,486,624 | 73,842,620 |
| Percentage of total passengers | 84.85% | 15.15% | 100% |
| Percentage of total passgr. miles | 58.71% | 41.29% | 100% |
| Average length of journey—miles | 30 | 118 | 43 |

| | Uniten Stated. | Group No. 8. | St. L., I. M. & S. Ry., six months ending December 31st, 1907. | State of Arkansas, six months ending December 31st, 1907. |
|---|---|---|---|---|
| Other Freight Revenue | $6,113,648 | $200,870 | $221,562 | $26,932 |
| % of total revenue | 0.24 | 0.08 | 1.79 | 0.40 |
| Other Earnings from Operation | $74,346,795 | $8,403,817 | $225,600 | $117,061 |
| % of total revenue | 2.87 | 3.41 | 1.82 | 1.76 |
| Total Earnings from Operation | $2,589,105,578 | $246,716,865 | $12,385,947 | $6,675,077 |
| | 100.00 | 100.00 | 100.00 | 100.00 |
| Operating Expenses: | | | | |
| Maint. of Way & Struct | $343,544,907 | $33,933,442 | $2,007,840 | $1,054,677 |
| % of total expense | 19.65 | 21.38 | 21.83 | 21.39 |
| Maint. of Equipment | $368,061,728 | $30,318,677 | $1,892,321 | $1,035,566 |
| % of total expense | 21.05 | 19.10 | 20.58 | 21.00 |
| Conducting Transportation | $970,952,924 | $86,326,515 | $4,762,949 | $2,547,997 |
| % of total expense | 55.53 | 54.39 | 51.80 | 51.67 |
| General Expense | $65,404,655 | $8,039,954 | $532,629 | $292,985 |
| % of total expense | 3.74 | 5.06 | 5.79 | 5.94 |
| Operating Expenses: | | | | |
| Unclassified | $551,600 | $108,623 | ..... | ..... |
| % of total expense | 0.03 | 0.07 | ..... | ..... |
| Total Operating Expense | $1,748,515,814 | $158,727,211 | $9,195,739 | $4,931,225 |
| | 100.00 | 100.00 | 100.00 | 100.00 |

DARK PAGE BL

| | | | | |
|---|---|---|---|---|
| Percentage of earnings: | | | | |
| Passenger | 21.81 | 21.63 | 19.33 | 21.05 |
| Freight | 70.44 | 69.73 | 72.06 | 71.51 |
| Other | 7.75 | 8.64 | 8.61 | 7.44 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 |
| Percentage of expenses to Earnings | 67.53 | 64.34 | 74.24 | 73.88 |
| Passenger Statistics: | | | | |
| Passenger Train Miles | 509,328,042 | 49,988,078 | 2,470,022 | 1,461,474 |
| No. of Passengers carried | 873,905,133 | 39,469,631 | 2,819,020 | 1,702,490 |
| No. of Passgrs. carried one mile | 27,718,554,030 | 2,295,286,905 | 120,919,916 | 73,842,620 |
| Average No. of Passgrs. per train mile | 51 | 42 | 47 | 49 |
| Average length of journey | 31.72 | 58.15 | 42.89 | 43.37 |
| Av. Rev. per passgr. per mile (cents) | 2.014 | 2.291 | 1.980 | 1.903 |
| Av. Rev. from each passgr. (Dollars) | .64600 | 1.33293 | .84920 | .82527 |
| Density of Passenger Traffic | 123,259 | 72,939 | 46,523 | 54,576 |
| Freight Statistics: | | | | |
| Freight Train Mileage | 629,995,723 | 61,399,583 | 3,078,251 | 1,561,258 |
| Number of tons carried | 1,796,336,659 | 99,658,448 | 5,395,603 | 3,423,253 |
| No. of tons carried one mile | 236,601,390,103 | 17,406,430,971 | 1,228,717,919 | 660,163,995 |
| Av. No. of tons per train mile | 357.35 | 265.35 | 385.68 | 407.41 |
| Av. length of haul | 131.71 | 174.66 | 227.73 | 192.85 |
| Av. Rev. per ton per mile (cents) | .759 | .966 | .726 | .723 |
| Av. Rev. from each ton carried (dollars) | 1.05428 | 1.91291 | 1.65413 | 1.39442 |
| Density of Freight Traffic | 1,052,119 | 553,139 | 472,738 | 487,919 |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5275 EXHIBIT EIGHT.

5276 EXHIBIT No. 8.

St. Louis, Iron Mountain & Southern Railway Company.

*Statement of the Earnings and Expenses of the St. Louis, Iron Mountain & Southern Railway Company in the State of Arkansas for Six Months Ending June 30th, 1907.*

A. The Gross Revenue of the St. Louis, Iron Mountain & Southern Railway Company in the State of Arkansas, for the period mentioned above, is as follows:

| | Amount. | Per cent of Freight revenue. | Per cent of All revenue. |
|---|---|---|---|
| Intrastate Freight | $544,929.60 | 11.52% | 8.46% |
| Interstate Freight | 4,143,101.79 | 87.60 | 64.30 |
| Miscellaneous Freight | 41,381.25 | 0.88 | 0.64 |
| Total | $4,729,412.64 | 100.00 | 73.40 |
| | | Per cent of passgr. earnings. | |
| Intrastate Passenger | $726,679.60 | 42.40% | 11.28% |
| Interstate Passenger | 623,402.50 | 36.37 | 9.67 |
| Misc'l. Passenger | 363,927.18 | 21.23 | 5.65 |
| Total | $1,714,009.28 | 100.00 | 26.60 |
| Grand Total | $6,443,421.92 | ..... | 100.00 |

B. The total Operating Expenses and Fixed Charges of the St. Louis, Iron Mountain & Southern Raailway Company in the State of Arkansas, for the period mentioned, are as follows:

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Maint. of Way & Struct. | $384,112.07 | $314,398.01 | $698,510.08 |
| Maint. of Equipment | 741,481.50 | 314,933.05 | 1,056,414.55 |
| Traffic Expenses | 79,901.77 | 53,731.08 | 133,632.85 |
| Transportation Expenses | 1,424,342.53 | 624,662.70 | 2,049,005.23 |
| General Expenses | 165,636.50 | 119,746.82 | 285,383.32 |
| Total | $2,795,474.37 | $1,427,471.66 | $4,222,946.03 |
| Taxes | $147,891.55 | $53,212.00 | $201,103.55 |
| Rentals | 18,657.33 | 6,712.99 | 25,370.32 |
| Grand Total | $2,962,023.25 | $1,487,396.65 | $4,449,419.90 |

C. The assessment of the State Board of Equalization, for the purpose of taxation was $20,156,022.00, and, if multiplied by two and divided between the freight and passenger traffic in proportion to the gross earnings of each class of traffic, would be as follows:

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Total Assessed Valuation for six months | $14,822,738.58 | $5,333,283.42 | $20,156,022.00 |
| Six Per cent Interest on above | 889,364.31 | 319,997.01 | 1,209,361.32 |
| Seven Per cent Interest | 1,037,591.70 | 373,329.84 | 1,410,921.54 |
| Eight Per cent Interest | 1,185,819.09 | 426,662.67 | 1,612,481.76 |

5277

D. Recapitulation—Total Business—State of Arkansas.

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Gross Revenue | $4,729,412.64 | $1,714,009.28 | $6,443,421.92 |
| Operating Expenses | 2,795,474.37 | 1,427,471.66 | 4,222,946.03 |
| Net Operating Revenue | $1,933,938.27 | $286,537.62 | $2,220,475.89 |
| Less Taxes and Rentals | 166,548.88 | 59,924.99 | 226,473.87 |
| Balance | $1,767,389.39 | $226,612.63 | $1,994,002.02 |
| Per cent of return on the assessed value of the property after deducting Taxes and Rentals | 11.92% | 4.25% | 9.89% |

E. Results for the year ending December 31st, 1907—Total Business.

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Surplus six months ending June 30th, 1907 | $1,767,389.39 | $226,612.63 | $1,994,002.02 |
| Surplus six months ending December 31st, 1907 | $1,464,207.80 | $35,567.55 | $1,499,775.35 |
| Total | $3,231,597.19 | $262,180.18 | $3,493,777.37 |
| Return on the assessed value of the property | 10.91% | 2.45% | 8.67% |

F. The Intrastate gross freight and passenger revenue for the period shown above is as follows:

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Gross Revenue | $544,929.60 | $726,679.60 | $1,271,609.20 |
| Operating Expenses including Taxes and Rentals | 341,225.08 | 630,656.18 | 971,881.26 |
| Leaving | $203,704.52 | $96,023.42 | $299,727.94 |

From the sums thus left there should be deducted such amounts as the Court may find to represent the extra cost of handling Intrastate traffic. This extra cost is shown under various percentages in statements attached, and the result of deducting the extra cost is as follows:

| | Freight. | | Passenger. |
|---|---|---|---|
| Balance, after deducting taxes and rentals | $203,704.52 | | $96,023.42 |
| Extra cost @ 50% | 134,741.86 | Extra cost @ 15% | 49,105.03 |
| Surplus | $68,962.66 | Surplus | $46,918.39 |
| Extra cost @ 100% | $255,506.36 | Extra cost @ 25% | $78,796.44 |
| Deficit | $51,801.84 | Surplus | $17,226.98 |
| Extra cost @ 150% | $364,529.86 | Extra cost @ 35% | $106,203.89 |
| Deficit | $160,825.34 | Deficit | $10,180.47 |
| Extra cost @ 200% | $463,210.10 | Extra cost @ 50% | $143,746.40 |
| Deficit | $259,505.58 | Deficit | $47,722.98 |

5278 G. Assuming that the property is worth at least the amount of the State's valuation for purposes of taxation, and dividing that valuation on the basis of revenue, the amount to be assigned to each class of traffic is as follows:

| | |
|---|---|
| Freight | 11.52% of $14,822,738.58 or $1,707,579.48. |
| Passenger | 42.40% of $5,333,283.42 or $2,261,312.17. |

Allowing 50% for the extra cost of handling State freight and 15% for handling State passengers, the return upon the value of the property would be as follows:

Freight.....4.04% Passenger..... 2.07% Total..... 2.92%

H. Results for the year ending December 31st, 1907, Intrastate Traffic.

| | | Freight. | Passenger. | Total. |
|---|---|---|---|---|
| Surplus six months ending June 30th, 1907 | | $203,704.52 | $96,023.42 | $299,727.94 |
| Surplus six months ending December 31st, 1907 | | 191,334.05 | 16,698.16 | 208,032.21 |
| Total | | $395,038.57 | $112,721.58 | $507,760.15 |
| Extra cost: | | | | |
| Freight | 50% | $308,128.62 | $107,673.86 | $415,802.48 |
| Passenger | 15% | ..... | ..... | ..... |
| Balance | | $86,909.95 | $5,047.72 | $91,957.67 |

Making no allowance for extra cost, the return upon the State's valuation is:

Freight..... 10.84% Passenger..... 2.35% Total..... 6.02%

Allowing 50% for the extra cost of Intrastate freight and 15% for passenger, the return upon the State's valuation is:

Freight..... 2.39% Passenger..... 0.11% Total..... **1.09%**

5279 St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Extra Cost of State Freight, Revenue Basis.*

(A) At 50%.

| | | | | | |
|---|---|---|---|---|---|
| **State** | 11.52% x 1½ = | 17.28 = | 16.34, | Difference | 4.82+ |
| Interstate | 87.60 | 87.60 | 82.83, | | 4.77— |
| **Miscellaneous** | 0.88 | 0.88 | 0.83, | | .05— |
| Total | 100.00 | 105.76 | 100.00 | | |

The extra cost is 4.82% of $2,795,474.37 or $134,741.86.

(B) At 100%.

| | | | | | |
|---|---|---|---|---|---|
| State | 11.52% x 2 = | 23.04 = | 20.66, | Difference | 9.14+ |
| Interstate | 87.60 | 87.60 | 78.55, | | 9.05— |
| Miscellaneous | 0.88 | 0.88 | 0.79 | | .09— |
| Total | 100.00 | 111.52 | 100.00 | | |

**The extra cost is 9.14% of $2,795,474.37 or $255,506.36.**

(C) At 150%.

| | | | | | |
|---|---|---|---|---|---|
| State | 11.52% x 2½ = | 28.80 = | 24.56, | Difference | 13.04+ |
| Interstate | 87.60 | 87.60 | 74.69, | | 12.91— |
| Miscellaneous | 0.88 | 0.88 | 0.75, | | .13— |
| Total | 100.00 | 117.28 | 100.00 | | |

The extra cost is 13.04% of $2,795,474.37 or $364,529.86.

(D) At 200%.

| | | | | | |
|---|---|---|---|---|---|
| State | 11.52% x 3 = | 34.56 = | 28.09, | Difference | 16.57+ |
| Interstate | 87.60 | 87.60 | 71.20, | | 16.40— |
| Miscellaneous | 0.88 | 0.88 | 0.71, | | .17— |
| Total | 100.00 | 123.04 | 100.00 | | |

The extra cost is 16.57% of $2,795,474.37 or $463,210.10.

5280 St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Extra Cost of State Passenger Business, Revenue Basis.*

(A) At 15%.

| | | | | | |
|---|---|---|---|---|---|
| State | 42.40% x 1.15 = | 48.76 = | 45.84 | Difference | 3.44+ |
| Interstate | 36.37 | 36.37 | 34.20 | | 2.17— |
| Miscellaneous | 21.23 | 21.23 | 19.96 | | 1.27— |
| Total | 100.00 | 106.36 | 100.00 | | |

The extra cost is 3.44% of $1,427,471.66 or $49,105.03.

DARK PAGE

(B) At 25%.

| | | | | | |
|---|---|---|---|---|---|
| State | 42.40% x 1.25 = | 53.00 = | 47.92 | Difference | 5.52+ |
| Interstate | 36.37 | 36.37 | 32.88 | | 3.49— |
| Miscellaneous | 21.23 | 21.23 | 19.20 | | 2.03— |
| Total | 100.00 | 110.60 | 100.00 | | |

The extra cost is 5.52% of $1,427,471.66 or $78,796.44.

(C) At 35%.

| | | | | | |
|---|---|---|---|---|---|
| State | 42.40 x 1.35 = | 57.24 = | 49.84 | Difference | 7.44+ |
| Interstate | 36.37 | 36.37 | 31.67 | | 4.70— |
| Miscellaneous | 21.23 | 21.23 | 18.49 | | 2.74— |
| Total | 100.00 | 114.84 | 100.00 | | |

The extra cost is 7.44% of $1,427,471.66 or $106,203.89.

(D) At 50%.

| | | | | | |
|---|---|---|---|---|---|
| State | 42.40 x 1½ = | 63.60 = | 52.47 | Difference | 10.07+ |
| Interstate | 36.37 | 36.37 | 30.01 | | 6.36— |
| Miscellaneous | 21.23 | 21.23 | 17.52 | | 3.71— |
| Total | 100.00 | 121.20 | 100.00 | | |

The extra cost is 10.07% of $1,427,471.66 or $143,746.40.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

148—813

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Assessed Value of the Property Divided Between Freight and Passenger Traffic for Six Months Ending June 30th, 1907, and Interest Thereon at Various Rates.*

| | Assessment of 1907. | Assessment of 1908. | Assessment. of 1909. |
|---|---|---|---|
| Proportion assignable to Freight Traffic for six months ending June 30th, 1907 (73.40%) | $14,675,068.99 | $15,012,711.92 | $17,669,452.08 |
| Six per cent on above | 880,504.14 | 900,762.72 | 1,060,167.12 |
| Seven per cent | 1,027,254.83 | 1,050,889.83 | 1,236,861.65 |
| Eight per cent | 1,174,005.52 | 1,201,016.95 | 1,413,556.17 |
| Proportion assignable to Passenger Traffic for six months ending June 30th, 1907 (26.60%) | $5,318,213.01 | $5,440,574.08 | $6,403,370.92 |
| Six per cent on above | 319,092.78 | 326,434.44 | 384,202.26 |
| Seven per cent | 372,274.91 | 380,840.19 | 448,235.96 |
| Eight per cent | 425,457.04 | 435,245.93 | 512,269.67 |
| Proportion assignable to the Total Traffic for six months ending June 30th, 1907 | $19,993,282.00 | $20,453,286.00 | $24,072,823.00 |
| Six per cent on above | 1,199,596.92 | 1,227,197.16 | 1,444,369.38 |
| Seven per cent | 1,399,529.74 | 1,431,730.02 | 1,685,097.61 |
| Eight per cent | 1,599,462.56 | 1,636,262.88 | 1,925,825.84 |

DARK PAGE B

| | | | |
|---|---|---|---|
| Per cent of return on the assessed value of the Property as shown by the net earnings of all traffic for six months ending June 30, 1907 (Exhibit 8, Paragraph D): | | | |
| Freight | 12.04% | 11.77% | 10.00% |
| Passenger | 4.26% | 4.17% | 3.54% |
| Total | 9.97% | 9.75% | 8.28% |
| Proportion assignable to Intrastate Freight Traffic for six months ending June 30, 1907 (11.52%) | $1,690,567.95 | $1,729,464.41 | $2,035,520.88 |

5283 PAGE 2.

*Assessed Value of the Property Divided Between Freight and Passenger Traffic for Six Months Ending June 30th, 1907, and Interest Thereon at Various Rates.*

| | Assessment of 1907. | Assessment of 1908. | Assessment. of 1909. |
|---|---|---|---|
| Per cent of return on the assessed value of the property, as shown by the net earnings from Interstate Freight Traffic for six months ending June 30, 1907 (Exhibit No. 8, Par. F): | | | |
| No extra cost | 12.05% | 11.78% | 10.01% |
| 50% extra cost | 4.08% | 3.99% | 3.39% |
| Proportion assignable to Intrastate Passenger Traffic for six months ending June 30, 1907 (42.40%) | $2,254,922.32 | $2,306,803.41 | $2,715,029.27 |

| | | | |
|---|---|---|---|
| Per cent return on the assessed value of the property as shown by the net earnings from Intrastate passenger traffic for six months ending June 30th, 1907 (Exhibit 8, Par. F): | | | |
| No Extra cost | 4.26% | 4.16% | 3.54% |
| Proportion assignable to all Intrastate Traffic as shown above | $3,945,490.27 | $4,036,267.82 | $4,750,550.15 |
| Per cent of return upon the assessed value as shown by the net earnings from all Intrastate Traffic (Exhibit 8, Par. F): | | | |
| No extra cost | 7.60% | 7.43% | 6.31% |
| 50% extra cost for freight only | 4.18% | 4.09% | 3.47% |

NOTE.—This is a revision of Exhibit No. 8, paragraph- C, D, F, and G, based on additional Assessments. The value of the property used in this statement is double the assessment as down in Exhibit 7*a*.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

DARK PAGE

5284 EXHIBIT EIGHT*b*.

5285 EXHIBIT No. 8*b*.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Assessed Value of the Property Divided Between Freight and Passenger Traffic for the Year Ending December 31st, 1907, and Interest Thereon at Various Rates.*

| | Assessment of 1907. | Assessment of 1908. | Assessment. of 1909. |
|---|---|---|---|
| Proportion assignable to Freight Traffic | $29,340,141.34 | $30,015,197.20 | $35,326,867.75 |
| Six per cent on above | 1,760,408.48 | 1,800,911.83 | 2,119,612.06 |
| Seven per cent | 2,053,809.89 | 2,101,063.80 | 2,472,880.74 |
| Eight per cent | 2,347,211.31 | 2,401,215.78 | 2,826,149.42 |
| Proportion assignable to Passenger Traffic | $10,646,422.66 | $10,891,374.80 | $12,818,778.25 |
| Six per cent on above | 638,785.36 | 653,482.49 | 769,126.69 |
| Seven per cent | 745,249.59 | 762,396.24 | 897,314.48 |
| Eight per cent | 851,713.81 | 871,309.98 | 1,025,502.26 |
| Total Valuation | $39,986,564.00 | $40,906,572.00 | $48,145,646.00 |
| Six per cent on above | 2,399,193.84 | 2,454,394.32 | 2,888,738.75 |
| Seven per cent | 2,799,059.48 | 2,863,460.04 | 3,370,195.22 |
| Eight per cent | 3,198,925.12 | 3,272,525.76 | 3,851,651.68 |

| | | | |
|---|---|---|---|
| Per cent of return on the value of the Property as shown by the net earnings on all traffic for the year (Exhibit No. 8, Par. E.): | | | |
| Freight | 11.01% | 10.77% | 9.15% |
| Passenger | 2.46% | 2.41% | 2.05% |
| Total | 8.74% | 8.54% | 7.26% |
| Proportion assignable to Intrastate Freight Traffic | $3,608,759.41 | $3,691,789.48 | $4,345,110.85 |
| Per cent of return on the value as shown by the net earnings from Intrastate freight traffic (Exhibit 8, Par. H): | | | |
| No. extra cost | 10.95% | 10.70% | 9.09% |
| 50% extra cost | 2.41% | 2.35% | 2.00% |
| Proportion assignable to Intrastate Passenger Traffic | $4,760,779.32 | $4,870,314.99 | $5,732,195.34 |
| Per cent of return on the value as shown by the net earnings from Intrastate Passenger traffic (Exhibit 8, Par. H): | | | |
| No extra cost | 2.37% | 2.31% | 1.97% |

*Assessed Value of the Property Divided Between Freight and Passenger Traffic for the Year Ending December 31st, 1907, and Interest Thereon at Various Rates.*

| | Assessment of 1907. | Assessment of 1908. | Assessment. of 1909. |
|---|---|---|---|
| Proportion assignable to all Intrastate Traffic..... | $8,369,538.73 | $8,562,104.47 | $10,077,306.19 |
| Per cent of return on the value as shown by the net earnings from all Intrastate traffic (Exhibit 8, Par. H): | | | |
| No extra cost..... | 6.07% | 5.93% | 5.04% |
| 50% extra cost for freight only..... | 2.39% | 2.33% | 1.98% |

NOTE.—This is a revision of Exhibit No. 8, paragraph- E and H, based on additional Assessments. The value of the property used in this statement is double the assessment as shown in Exhibit 7.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT TEN.

EXHIBIT 10.

St. Louis Southwestern Railway Company.

*Number of Miles Operated.*

| Main Line: | Miles Owned. | Miles Leased. | Total Miles. | Miles in Arkansas. |
|---|---|---|---|---|
| St. Louis to Illmo | .... | 138.2 | 138.2 | .... |
| Illmo, Mo., to Texarkana, Tex | 412.3 | 13.5 | 425.8 | 348.9 |
| Gray's Point Branch: | | | | |
| Illmo, Mo., to Gray's Pt., Mo | .... | 3.1 | 3.1 | .... |
| Cairo Branch: | | | | |
| Bird's Pt., Mo., to Malden, Mo | 57.7 | .... | 57.7 | .... |
| New Madrid Branch: | | | | |
| Lilbourn, Mo., to New Madrid, Mo | 6.1 | .... | 6.1 | .... |
| Stuttgart Branch: | | | | |
| Stuttgart, Ark., to Gillett, Ark | 35.1 | .... | 35.1 | 35.1 |
| Little Rock Branch: | | | | |
| Altheimer, Ark., to Little Rock, Ark | 44.4 | .... | 44.4 | 44.4 |



DARK PAGE B

| | | | | |
|---|---|---|---|---|
| Shreveport Branch: | | | | |
| Lewisville, Ark., to Shreveport, La..... | 62.6 | .... | 62.6 | 23.8 |
| | 618.2 | 154.8 | 773.0 | 452.2 |

NOTE.—The Paragould Southeastern Railway Company and Pine Bluff Arkansas River Railway are operated by officers of the St. Louis Southwestern Railway Company, but are separate and distinct corporations and their accounts are kept separate and independent of the accounts of the St. Louis Southwestern Railway Company.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5294 EXHIBIT TWELVE.

5295 EXHIBIT 12.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement of Operating Revenues, Operating Expenses, Taxes, and Rentals, Showing Results from Handling State Freight and Passenger Traffic (After Excluding Revenues, Expenses, Taxes, and Rentals for Interstate Freight and Passenger Traffic and All of Mail, Express, and Miscellaneous for Year Ending June 30th, 1908.*

Expenses, Taxes, and Rentals, as well as the State's valuation of Property, Divided Between the Different Classes of Traffic and Between State and Interstate on a Revenue Basis.

*Freight.*

| Item. | Operating revenues. | Per cent. | Operating expenses, taxes, and rentals. | Valuation (total based on State Board's assessment). |
|---|---|---|---|---|
| Freight—State | $315,908.00 | 9.79 | $171,851.68 | $1,359,996.05 |
| Freight—Interstate | 2,867,701.62 | 88.87 | 1,560,006.05 | 12,345,541.25 |
| Miscellaneous | 43,099.94 | 1.34 | 23,522.09 | 186,148.59 |
| Total Freight | $3,226,709.56 | 100.00 | $1,755,379.82 | $13,891,685.89 |

*Passenger.*

| | | | | |
|---|---|---|---|---|
| Passenger—State | $440,452.64 | 48.76 | $440,563.37 | $1,896,049.23 |
| Passenger—Interstate | 305,434.56 | 33.81 | 305,484.98 | 1,314,713.38 |
| Mail, Express & Misc. | 157,414.69 | 17.43 | 157,486.04 | 677,771.50 |
| Total Passenger | $903,301.89 | 100.00 | $903,534.39 | $3,888,534.11 |
| Grand Total | $4,130,011.45 | ..... | $2,658,914.21 | $17,780,220.00 |

*Summary, State Traffic Only.*

| | Freight. | Equal to return of | Passenger. | Equal to return of | Total. | Equal to return of |
|---|---|---|---|---|---|---|
| State Revenue | $315,908.00 | .... | $440,452.64 | .... | $756,360.64 | .... |
| State Expenses, Taxes and Rentals on a Revenue basis with no allowance for Extra Cost | 171,851.68 | .... | 440,563.37 | .... | 612,415.05 | .... |
| Balance | $144,056.32 | 10.60% | 110.73‡ | None | $143,945.59 | 4.42% |
| Extra Cost: | | | | | | |
| *Frt. 50%—Pass. 25% | 74,548.74 | .... | 48,291.45 | .... | 122,840.19 | .... |
| Balance | $69,507.58 | 5.11% | $48,402.18‡ | None | $21,105.40 | 0.65% |
| †Frt. 100%—Pass. 15% | 142,545.69 | .... | 30,258.02 | .... | 172,803.71 | .... |
| Balance | $1,510.63 | 0.11% | $30,368.75‡ | None | $28,858.12‡ | None |

Return on State Valuation at following rates would be:

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| At 6% | $81,599.76 | $113,762.95 | $195,362.71 |
| At 7% | 95,199.72 | 132,723.44 | 227,923.16 |
| At 8% | 108,799.68 | 151,683.93 | 260,483.61 |

*Minimum ratios of Extra Cost found in the Missouri Case.
†Minimum ratios of Extra Cost found by Judge Vandeventer in granting temporary injunction.
[‡In red ink in copy.]

EXHIBIT 12.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement of Operating Revenues, Operating Expenses, Taxes, Rentals, and Outside Operations (Def.), Showing Results from Handling State Freight and Passenger Traffic (After Excluding Revenues, Expenses, Taxes, and Rentals for Interstate Freight and Passenger Traffic and All of Mail, Express, and Miscellaneous, for Year Ending June 30th, 1908.*

Expenses, Taxes, Rentals, and Outside Operations (Deficit), Divided Between the Different Classes of Traffic and Between State and Interstate on Revenue Basis.

*Freight.*

| Item. | Operating revenues. | Per cent. | Operating expenses, taxes, rentals, and outside operations (deficit). |
|---|---|---|---|
| Freight—State | $315,908.00 | 9.79 | $174,778.43 |
| Freight—Interstate | 2,867,701.62 | 88.87 | 1,586,573.94 |
| Miscellaneous | 43,099.94 | 1.34 | 23,922.68 |
| Total Freight | $3,226,709.56 | 100.00 | $1,785,275.05 |
| *Passenger.* | | | |
| Passenger—State | $440,452.64 | 48.76 | $441,771.64 |
| Passenger—Interstate | 305,434.56 | 33.81 | 306,322.79 |
| Mail, Express & Misc. | 157,414.69 | 17.43 | 157,917.96 |
| Total Passenger | $903,301.89 | 100.00 | $906,012.39 |
| Grand Total | $4,130,011.45 | ..... | $2,691,287.44 |

*Summary, State Traffic Only.*

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| State Revenue | $315,908.00 | $440,452.64 | $756,360.64 |
| State Expenses, Taxes, Rentals and Outside Operations (Def.), on a revenue basis with no allowance for extra cost | 174,778.43 | 441,771.64 | 616,550.07 |
| Balance | $141,129.57 | $1,319.00‡ | $139,810.57 |
| Extra Cost: | | | |
| *Frt. 50%—Pass. 25% | 74,548.74 | 48,291.45 | 122,840.19 |
| Balance | $66,570.83 | $49,610.45‡ | $16,970.38 |
| †Frt. 100%—Pass. 15% | 142,545.69 | 30,258.02 | 172,803.71 |
| Balance | $1,416.12‡ | $31,577.02‡ | $32,993.14‡ |

*Minimum ratio of Extra Cost found in the Missouri Case.
†Minimum ratio of Extra Cost found by Judge Vandeventer in granting temporary injunction.
[‡In red ink in copy.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

DARK PA

5297 EXHIBIT TWELVEa.

5298 EXHIBIT 12a.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement of Operating Revenues, Operating Expenses, Taxes, Rentals and Outside Operations (Def.), Showing Results from Handling State Freight and Passenger Traffic (After Excluding Revenue, Expenses, Taxes and Rentals for Interstate Freight and Passenger Traffic and All of Mail, Express and Miscellaneous, for Year Ending June 30th, 1908.*

Expenses, Taxes, Rentals and Outside Operations (Deficit), Divided Between the Different Classes of Traffic and Between State and Interstate on a Revenue Basis.

*Freight.*

| Item. | Operating revenues. | Per cent. | Operating expenses, taxes, rentals, and outside operations (deficit). |
|---|---|---|---|
| Freight—State | $315,908.00 | 9.79 | $174,778.43 |
| Freight—Interstate | 2,867,701.62 | 88.87 | 1,586,573.94 |
| Miscellaneous | 43,099.94 | 1.34 | 23,922.68 |
| Total Freight | $3,226,709.56 | 100.00 | $1,785,275.05 |
| *Passenger.* | | | |
| Passenger—State | $440,452.64 | 48.76 | $441,771.64 |
| Passenger—Interstate | 305,434.56 | 33.81 | 306,322.79 |
| Mail, Express & Misc | 157,414.69 | 17.43 | 157,917.96 |
| Total Passenger | $903,301.89 | 100.00 | $906,012.39 |
| Grand Total | $4,130,011.45 | ..... | $2,691,287.44 |

*Summary, State Traffic Only.*

| | Freight. | Passenger. | Total |
|---|---|---|---|
| State Revenue | $315,908.00 | $440,452.64 | $756,360.64 |
| State Expenses, Taxes, Rentals and Outside Operations (Def.), on a revenue basis with no allowance for extra cost | 174,778.43 | 441,771.64 | 616,550.07 |
| Balance | $141,129.57 | $1,319.00‡ | $139,810.57 |
| Extra cost: | | | |
| *Frt. 50%—Pass. 25% | 74,423.30 | 37,726.63 | 112,149.93 |
| Balance | $66,706.27 | $39,045.63‡ | $27,660.64 |
| †Frt. 100%—Pass. 15% | 142,033.20 | 23,838.65 | 165,871.85 |
| Balance | 903.63‡ | $25,157.65‡ | $26,061.28‡ |

* Minimum ratio of Extra Cost found in the Missouri Case.
† Minimum ratio of Extra Cost found by Judge Vandeventer in granting temporary injunction.
[‡ In red ink in copy.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

DARK PAGE BLEED

5299 EXHIBIT THIRTEEN.

5300 EXHIBIT 13.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement Showing How the Extra Cost of Handling State Traffic, in Proportion to Revenue, is Arrived at for Year Ending June 30th, 1908. (Extra Cost Applied to Operating Expenses Only; Not to Taxes or Rentals.)*

| | Freight. | Passenger. |
|---|---|---|
| Total Operating Expenses, Taxes and Rentals..... | $1,755,379.82 | $903,534.39 |
| Less Taxes and Rentals..... | 15,374.11‡ | 36,542.46 |
| Total Operating Exps. Only..... | $1,770,753.93 | $866,991.93 |

* Freight @ 50%.

| | | | | | |
|---|---|---|---|---|---|
| State Revenue ..... | 9.79 x 1½ = | 14.69 = | 14.00 | Difference | 4.21%+ |
| Interstate & Misc. Rev..... | 90.21 | 90.21 | 86.00 | | 4.21%— |
| | 100.00 | 104.90 | 100.00 | | |

The Extra Cost is 4.21% of $1,770,753.93 or $74,548.74.

† Freight @ 100%.

| | | | | | |
|---|---|---|---|---|---|
| State Revenue ..... | 9.79 x 2 = | 19.58 = | 17.84 | Difference | 8.05%+ |
| Interstate & Misc. Rev..... | 90.21 | 90.21 | 82.16 | | 8.05%— |
| | 100.00 | 109.79 | 100.00 | | |

The Extra Cost is 8.05% of $1,770,753.93 or $142,545.69.

* Passenger @ 25%.

| | | | | | |
|---|---|---|---|---|---|
| State Revenue ..... | 48.76%x1.25 = | 60.95 = | 54.33 | Difference | 5.57%+ |
| Interstate and Mail, Express and Misc. Revenue | 51.24 | 51.24 | 45.67 | | 5.57%— |
| | 100.00 | 112.19 | 100.00 | | |

The Extra Cost is 5.57% of $866,991.93 or $48,291.45.

† Passenger @ 15%.

| | | | | | |
|---|---|---|---|---|---|
| State Revenue ..... | 48.76 x1.15 = | 56.07 = | 52.25 | Difference | 3.49%+ |
| Interstate and Mail, Express and Misc. Revenue | 51.24 | 51.24 | 47.75 | | 3.49%— |
| | 100.00 | 107.31 | 100.00 | | |

The Extra Cost is 3.49% of $866,991.93 or $30,258.02.

---

* Minimum ratio of Extra Cost found in the Missouri Case.
† Minimum ratio of Extra Cost found by Judge Vandeventer in granting temporary injunction.
[‡ In red ink in copy.]

EXHIBIT 13.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement Showing How the Extra Cost of Handling State Traffic, in Proportion to Revenue, is Arrived at for Year Ending June 30th, 1908. (Extra Cost Applied to Operating Expenses Only; Not to Taxes or Rentals.)*

| | Freight. | Passenger. |
|---|---|---|
| Total Operating Expenses, Taxes, Rentals and Outside Operations (Def.) | $1,785,275.05 | $906,012.39 |
| Less Taxes and Rentals | 14,521.12 | 39,020.46 |
| Total Operating Expenses only | $1,770,753.93 | $866,991.93 |

* Freight at 50%.

| | | | | | |
|---|---|---|---|---|---|
| State Revenue | 9.79 x 1½ = | 14.69 = | 14.00 | Difference | 4.21%+ |
| Interstate & Misc. Rev. | 90.21 | 90.21 | 86.00 | | 4.21%— |
| | 100.00 | 104.90 | 100.00 | | |

The Extra Cost is 4.21% of $1,770,753.93 or $74,548.74.

† Freight @ 100%.

| | | | | | |
|---|---|---|---|---|---|
| State Revenue | 9.79 x 2 = | 19.58 = | 17.84 | Difference | 8.05%+ |
| Interstate & Misc. Rev. | 90.21 | 90.21 | 82.16 | | 8.05%— |
| | 100.00 | 109.79 | 100.00 | | |

The Extra Cost is 8.05% of $1,770,753.93 or $142,545.69.

* Passenger @ 25%.

| | | | | | |
|---|---|---|---|---|---|
| State Revenue ..... | 48.76% x1.25 = | 60.95 = | 54.33 | Difference | 5.57%+ |
| Interstate and Mail, Express and Misc. Revenue | 51.24 | 51.24 | 45.67 | | 5.57%— |
| | 100.00 | 112.19 | 100.00 | | |

The Extra Cost is 5.57% of $866,991.93 or $48,291.45.

† Passenger @ 15%.

| | | | | | |
|---|---|---|---|---|---|
| State Revenue ..... | 48.76 x1.15 = | 56.07 = | 52.25 | Difference | 3.49%+ |
| Interstate and Mail, Express and Misc. Revenue | 51.24 | 51.24 | 47.75 | | 3.49%— |
| | 100.00 | 107.31 | 100.00 | | |

The Extra Cost is 3.49% of $866,991.93 or $30,258.02.

* Minimum ratio of Extra Cost found in the Missouri Case.
† Minimum ratio of Extra Cost found by Judge Vandeventer in granting temporary injunction.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT THIRTEEN*a*.



EXHIBIT 13*a*.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement Showing How the Extra Cost of Handling State Traffic, in Proportion to Revenue, is Arrived at for Year Ending June 30th, 1908. (Extra Cost Applied to Operating Expenses Only; Not to Taxes, Rentals, etc.)*

| | Freight. | Passenger. |
|---|---|---|
| Total Operating Expenses (excluding Taxes, Rentals and Outside Operations) (Def.) | $1,770,753.93 | $866,991.93 |
| Less Mail, Express & Miscellaneous, Prop'n Frt. 1.34%—Pass. 17.43% | 23,728.10 | 151,116.69 |
| Total Operating Expenses only, chargeable to Frt. & Pass. Traffic | $1,747,025.83 | $715,875.24 |

* Freight @ 50%.

| | | | | | Diff. |
|---|---|---|---|---|---|
| State Frt. Revenue | $315,908.00 — | 9.92% x 1½ = | 14.88 = | 14.18 | 4.26%+ |
| Interstate Frt. Rev | 2,867,701.62 — | 90.08% | 90.08 | 85.82 | 4.26%— |
| | $3,183,609.62 | 100.00% | 104.96 | 100.00 | |

The Extra Cost is 4.26% of $1,747,025.83 or $74,423.30.

† Freight @ 100%.

| | | | | | |
|---|---|---|---|---|---|
| State Frt. Revenue..... | $315,908.00 — | 9.92% x | = 19.84 = | 18.05 | 8.13%+ |
| Interstate Frt. Rev..... | 2,867,701.62 — | 90.08% | 90.08 | 81.95 | 8.13%— |
| | $3,183,609.62 — | 100.00% | 109.02 | 100.00 | |

The Extra Cost is 8.13% of $1,747,025.83 or $142,033.20.

* Passenger @ 25%.

| | | | | | |
|---|---|---|---|---|---|
| State Pass. Rev..... | $440,452.64 — | 59.05% x 1¼ = | 73.81 = | 64.32 | 5.27%+ |
| Interstate Pass. Rev..... | 305,434.56 — | 40.95% | 40.95 | 35.68 | 5.27%— |
| | $745,887.20 — | 100.00% | 114.76 | 100.00 | |

The Extra Cost is 5.27% of $715,875.24 or $37,726.63.

† Passenger @ 15%.

| | | | | | |
|---|---|---|---|---|---|
| State Pass. Rev..... | $440,452.64 — | 59.05% x 1.15 = | 67.91 = | 62.38 | 3.33%+ |
| Interstate Pass. Rev..... | 305,434.56 — | 40.95% | 40.95 | 37.62 | 3.33%— |
| | $745,887.20 — | 100.00% | 108.86 | 100.00 | |

The Extra Cost is 3.33% of $715,875.24 or $23,838.65.

---

* Minimum ratio of Extra Cost found in the Missouri Case.
† Minimum ratio of Extra Cost found by Judge Van Devanter in granting temporary injunction.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

DARK PAGE BL

5304

EXHIBIT FOURTEEN.

5305

## EXHIBIT 14.

St. Louis Southwestern Railway Company, State of Arkansas.

*Miscellaneous Traffic Statistics for Year Ending June 30th,* 1908.

Miles operated in Arkansas..... 452.2 Miles.

| Freight. | State. | Interstate. | Total. |
|---|---|---|---|
| Tons carried | 339,749 | 1,431,855 | 1,771,604 |
| Tons carried one mile | 15,082,098 | 330,935,620 | 346,017,718 |
| Tons carried one mile per mile of road | 33,353 | 731,834 | 765,187 |
| Avg. distance haul per ton—in miles | 44 | 231 | 195 |
| Percentage of total tons | 19.2 | 80.8 | 100.0 |
| Percentage of tons one mile | 4.4 | 95.6 | 100.0 |
| Percentage of freight revenue | 9.9 | 90.1 | 100.0 |
| **Passenger.** | | | |
| Passengers carried | 928,313 | 145,351 | 1,073,664 |
| Passengers carried one mile | 21,981,242 | 17,696,245 | 39,677,487 |
| Pass. carried one mile per mile of road | 48,609 | 39,134 | 87,743 |
| Avg. distance haul per pass.—in miles | 23 | 121 | 36 |
| Percentage of total passengers | 86.5 | 13.5 | 100.0 |
| Percentage of passengers one mile | 55.4 | 44.6 | 100.0 |
| Percentage of passenger revenue | 59.1 | 40.9 | 100.0 |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5307 EXHIBIT 15.

St. Louis Southwestern Railway Company.

*Statement of Assessed Valuation of Property in the State of Arkansas for the Year* 1908, *and Proportion Assignable to State Freight and Passenger Traffic on Basis of the Revenue for the Year Ending June* 30, 1908.

| | |
|---|---|
| The value of the property of the Company in Arkansas, used in operating, is assessed by the State for the year 1908, at | $7,014,817.00 |
| Said assessment is on the basis of 50% of the value, making the State's valuation of the property in Arkansas | 14,029,634.00 |

| | Freight. | Passenger. |
|---|---|---|
| Said valuation divided between Total Freight and Passenger business, on a Revenue basis, is | $10,961,353.04 | $3,068,280.96 |
| Deduct: Miscellaneous proportion, Frt. 1.34%—Pass. 17.43% (Ex. 12-A) | 146,882.13 | 534,801.37 |
| Total valuation assignable to Frt. and Pass. Traffic only | $10,814,470.91 | $2,533,479.59 |

*Valuation Assignable to State Freight and Passenger Traffic Only, and Amount of Returns Thereon, Figured at Rates Shown.*

*Freight.

| Basis (per cents taken from Ex. 13-A). | Valuation. | Return @ 6%. | Return @ 7%. | Return @ 8%. |
|---|---|---|---|---|
| Straight Revenue Basis— 9.92% | $1,072,795.51 | $64,367.73 | $75,095.69 | $85,823.64 |
| 50% Extra Cost Basis—14.18% | 1,533,491.98 | 92,009.52 | 107,344.44 | 122,679.36 |
| 100% Extra Cost Basis—18.05% | 1,952,012.00 | 117,120.72 | 136,640.84 | 156,160.96 |

ROBERT F. ALLEN ET AL. vs.

DARK PAGE B

*Passenger.

| | | | | |
|---|---|---|---|---|
| Straight Revenue Basis—59.05%..... | $1,496,019.70 | $89,761.18 | $104,721.38 | $119,681.58 |
| 25% Extra Cost Basis—64.32%..... | 1,629,534.07 | 97,772.04 | 114,067.38 | 130,362.73 |
| 15% Extra Cost Basis—62.38%..... | 1,580,384.57 | 94,823.07 | 110,626.92 | 126,430.77 |

*Total.

| | | | | |
|---|---|---|---|---|
| Straight Revenue Basis..... | $2,568,815.21 | $154,128.91 | $179,817.07 | $205,505.22 |
| Ex. Cost Basis—Frt. 50%—Pass. 25%..... | 3,163,026.05 | 189,781.56 | 221,411.82 | 253,042.09 |
| Ex. Cost Basis—Frt. 100%—Pass. 15%..... | 3,532,396.57 | 211,943.79 | 247,267.76 | 282,591.73 |

NOTE.—The valuation used in this Exhibit differs from the valuation used in the affidavit at the hearing of the application for an injunction, on account of Special Taxes having been erroneously and unintentionally used in arriving at that valuation. Special Taxes are excluded from this statement.

*See Exhibit 12-A for Returns actually earned (Deficits in some instances) on the several bases shown hereon.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Field, D. C.

5308 EXHIBIT SIXTEEN.

5309 EXHIBIT 16.

St. Louis Southwestern Railway Company.

*Statement of Assessed Valuation of Property in the State of Arkansas for the Year 1909, and Proportion Assignable to State Freight and Passenger Traffic on Basis of the Revenue for the Year Ending June 30th, 1908.*

| | |
|---|---|
| The value of the property of the Company in Arkansas, used in operating, is assessed by the Arkansas Tax Commission, for the year 1909, at | $8,890,110.00 |
| Said assessment is on the basis of 50% of the value, making the State's valuation of the property in Arkansas | 17,780,220.00 |

| | Freight. | Passenger. |
|---|---|---|
| Said valuation divided between Total Freight and Passenger business, for the year ending June 30, 1908, on a Revenue basis, is | $13,891,685.89 | $3,888,534.11 |
| Deduct: Miscellaneous proportion, Frt. 1.34%—Pass. 17.43% (Ex. 12-A) | 186,148.59 | 677,771.50 |
| Total valuation assignable to Freight and Passenger Traffic only | $13,705,537.30 | $3,210,762.61 |

*Valuation Assignable to State Freight and Passenger Traffic Only, and Amount of Return Thereon, Figured at Rates Shown.*

*Freight.

| Basis (per cent taken from Ex. 13-A). | Valuation. | Return @ 6%. | Return @ 7%. | Return @ 8%. |
|---|---|---|---|---|
| Straight Revenue Basis— 9.92% | $1,359,589.30 | $81,575.36 | $95,171.25 | $108,767.14 |
| 50% Extra Cost Basis—14.18% | 1,943,445.19 | 116,606.71 | 136,041.16 | 155,475.62 |
| 100% Extra Cost Basis—18.05% | 2,473,849.48 | 148,430.97 | 173,169.46 | 197,907.96 |

DARK PAGE BL

*Passenger.

| | | | | |
|---|---|---|---|---|
| Straight Revenue Basis—59.05%..... | $1,895,955.32 | $113,757.32 | $132,716.87 | $151,676.43 |
| 25% Extra Cost Basis—64.32%..... | 2,065,162.51 | 123,909.75 | 144,561.38 | 165,213.00 |
| 15% Extra Cost Basis—62.38%..... | 2,002,873.72 | 120,172.42 | 140,201.16 | 160,229.90 |

*Total.

| | | | | |
|---|---|---|---|---|
| Straight Revenue Basis..... | $3,255,544.62 | $195,332.68 | $227,888.12 | $260,443.57 |
| Ex. Cost Basis—Frt. 50%—Pass. 25%..... | 4,008,607.70 | 240,516.46 | 280,602.54 | 320,688.62 |
| Ex. Cost Basis—Frt. 100%—Pass. 15%..... | 4,476,723.20 | 268,603.39 | 313,370.62 | 358,137.86 |

*See Exhibit 12-A for returns actually earned (deficits in some instances) on the several bases shown hereon.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

## Exhibit Seventeen.

## Exhibit 17.

### St. Louis Southwestern Railway Company.

*Bases Used in Dividing Operating Revenues Between "Freight" and "Passenger" and Between States.*

Operating Revenues.

| Item. | When common to Freight and passenger. | When common to two or more States. |
|---|---|---|
| Freight Revenue | Direct to Freight | Actual mileage pro-rate. |
| Passenger Revenue | Direct to Passenger | " " " |
| Excess Baggage Revenue | " " " | " " " |
| Parlor & Chair Car Rev. | " " " | " " " |
| Mail Revenue | " " " | Trk. Mi. prorate for ea. mail route. |
| Express Revenue | " " " | Rev. Passenger Train-miles. |
| Other Pass. Tr. Revenue | " " " | " " " |
| Switching Revenue | Direct to Freight | Localize to each state. |
| Special Service Tr. Rev. | Revenue Train-Miles | Actual mileage pro-rate. |
| Misc. Transp. Rev. | " " | Revenue Train-miles. |
| Station and Train Privileges | " " | " " |
| Storage—Freight | Direct to Freight | Localize to each state. |
| Storage—Baggage | Direct to Passenger | " " " " |
| Car Service | Direct to Freight | " " " " |
| Rents of Bldgs. & Property | Revenue Train-miles | " " " " |
| Miscellaneous | " " | Revenue Train-miles. |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

5312

EXHIBIT EIGHTEEN.

5313

EXHIBIT 18.

St. Louis Southwestern Railway Company.

Accounting Department.

Supplement "A" to Circular No. 360.

(Cancels Supplement No. 1, Dated July 1, 1907.)

(Issued for Use of Accounting Department Only.)

*Bases for Dividing Operating Expenses "Common to Entire Line" Between State Accounting Divisions and "Common" Between "Freight" and "Passenger."*

ST. LOUIS, Mo., *July* 1, 1908.

1. All items of expense charged "Common to Entire Line" must be divided between State Accounting Divisions on the bases as indicated by initials opposite each account, which bases are as follows:

A.—Total revenue train-miles.
B.—Track-miles maintained (excluding Illinois).
C.—Total revenue locomotive-miles.
D.—Total revenue passenger car-miles.
E.—Total revenue freight car-miles.
F.—Total revenue freight train-miles.
G.—Total revenue passenger train-miles.

2. All items of expense charged "Common" must be divided as between "Freight" and "Passenger," on basis of Total Revenue Train-Miles.

| Accounts. | Between State accounting divisions. |
|---|---|
| Maintenance of way and structures: | |
| 1. Superintendence | B |
| 14. Telegraph and Telephone Lines | B |
| 19. Injuries to Persons | B |
| 20. Stationery and Printing | B |
| 21. Other Expenses | B |
| Maintenance of equipment: | |
| 24. Superintendence | A |
| 25. Steam Locomotives—Repairs | C |
| 26. Steam Locomotives—Renewals | C |
| 27. Steam Locomotives—Depreciation | C |
| 31. Passenger-Train Cars—Repairs | D |
| 32. Passenger-Train Cars—Renewals | D |
| 33. Passenger-Train Cars—Depreciation | D |
| 34. Freight-Train Cars—Repairs | E |
| 35. Freight-Train Cars—Renewals | E |

| Accounts. | Between State accounting divisions. |
|---|---|
| Maintenance of equipment (Continued): | |
| 36. Freight-Train Cars—Depreciation | E |
| 43. Work Equipment—Repairs | B |
| 44. Work Equipment—Renewals | B |
| 45. Work Equipment—Depreciation | B |
| 46. Shop Machinery and Tools | A |
| 48. Injuries to Persons | A |
| 49. Stationery and Printing | A |
| 50. Other Expenses | A |
| Traffic expenses: | |
| 53. Superintendence | F or G |
| 54. Outside Agencies | F or G |
| 55. Advertising | F or G |
| 56. Traffic Associations | F or G |
| 57. Fast Freight Lines | F or G |
| 58. Industrial and Immigration Bureaus | F or G |
| 59. Stationery and Printing | F or G |
| 60. Other Expenses | F or G |
| Transportation expenses: | |
| 61. Superintendence | A |
| 64. Weighing and Car Service Associations | F |
| 81. Enginehouse Expenses—Road | C |
| 82. Fuel for Road Locomotives | C |

| | | |
|---|---|---|
| 83. | Water for Road Locomotives | C |
| 84. | Lubricants for Road Locomotives | C |
| 85. | Other Supplies for Road Locomotives | C |
| 88. | Road Trainmen | F, G or A |
| 89. | Train Supplies and Expenses | F, G or A |
| 94. | Telegraph and Telephone—Operation | A |
| 97. | Stationery and Printing | A |
| 98. | Other Expenses | A |
| 101. | Damages to Property | A |
| 102. | Damages to Stock on Right of Way | A |
| 103. | Injuries to Persons | A |
| | General expenses: | |
| 106. | Salaries and Expenses of General Officers | A |
| 107. | Salaries and Expenses of Clerks and Attendants | A |
| 108. | General Office Supplies and Expenses | A |
| 109. | Law Expenses | A |
| 110. | Insurance | A or B |
| 113. | Stationery and Printing | A |
| 114. | Other Expenses | A |

S. C. JOHNSON,
*Gen'l Auditor.*

File 2948.

# ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.

**ACCOUNTING DEPARTMENT.**

# CIRCULAR No. 360

(Cancels Circular No. 344)

## Rules for Assigning Operating Expenses to State Accounting Divisions and Dividing the Same Between "Freight" and "Passenger."

St. Louis, Mo., July 1, 1907.

### STATE ACCOUNTING DIVISIONS.

1. Effective with the month of July, 1907, the accounts of the company will be kept by four accounting divisions, viz.: Illinois, Missouri, Arkansas and Louisiana. The assignment of operating expenses to state accounting divisions must be made strictly in accordance with the rules herein prescribed, except when otherwise specially instructed.

2. Operating expenses that are common to the entire line must be designated "Common to entire Line," and such items will be divided between state accounting divisions by the Accounting Department.

3. Operating expenses that can be localized to one or more state accounting divisions, and are not common to the entire line, must be assigned to the proper state accounting divisions direct, on the bases herein given.

### DIVISION BETWEEN FREIGHT AND PASSENGER.

4. All operating expenses must be divided between "Freight" and "Passenger," after the assignment to state accounting divisions has been made. Items of operating expenses pertaining exclusively to freight business, or to passenger business, must be assigned direct to "Freight" or "Passenger," as the case may be; items which cannot be classed as exclusively "Freight" or "Passenger" must be designated "Common" and such items will be divided by the Accounting Department.

5. It is important that the division of operating expenses between "Freight" and "Passenger" be made very carefully. All concerned must bear in mind that while the figures obtained under these rules give approximate results only, they are to be used for the purpose of developing operating efficiency.

6. In the right-hand column of this circular, opposite each account, is indicated the assignment of the same with reference to "Freight" or "Passenger." Where the word "Direct" is shown, items must be directly assigned to "Freight" or "Passenger," as the case may be; all other items must be designated "Common," as indicated.

| Accounts | Between State Accounting Divisions | Between Freight and Passenger |
|---|---|---|
| **MAINTENANCE OF WAY AND STRUCTURES—** | | |
| 1. Superintendence | Divide on basis of track miles over which the employes whose wages are charged to this account have jurisdiction (excluding Illinois Division). When jurisdiction covers the entire line, designate "Common to Entire Line" | Common. |
| 2. Ballast | Localize | Common. |
| 3. Ties | Localize | Common. |
| 4. Rails | Localize | Common. |
| 5. Other Track Material | Localize | Common. |
| 6. Roadway and Track | Localize | Common. |
| 7. Removal of Snow, Sand, and Ice | Localize | Common. |
| 8. Tunnels | Localize | Common. |
| 9. Bridges, Trestles, and Culverts | Localize | Common. |
| 10. Over and Under Grade Crossings | Localize | Common. |
| 11. Grade Crossings, Fences, Cattle Guards, and Signs | Localize | Common. |
| 12. Snow and Sand Fences and Snow Sheds | Localize | Common. |
| 13. Signals and Interlocking Plants | Localize | Common. |

SECURITY PRINTING CO. OF ST. LOUIS.

2371

| Accounts | Between State Accounting Divisions | Between Freight and Passenger |
|---|---|---|
| 14. Telegraph and Telephone Lines | Localize, except as to salaries and expenses of Sup't Telegraph and his clerks, which should be designated "Common to Entire Line" | Common. |
| 15. Electric Power Transmission | For use of Electric Lines only | For use of Electric Lines only. |
| 16. Buildings, Fixtures, and Grounds | Localize | Direct or Common. |
| 17. Docks and Wharves | Localize | Number of Freight and Passenger cars handled over the same. |
| 18. Roadway Tools and Supplies | Localize | Common. |
| 19. Work Equipment—Repairs | Localize when possible; otherwise designate "Common to Entire Line" | Common. |
| 20. Work Equipment—Renewals | Common to Entire Line | Common. |
| 21. Work Equipment—Depreciation | Common to Entire Line | Common. |
| 22. Injuries to Persons | Localize, except as to salaries and expenses of Claim Agents and their clerks, which should be designated "Common to Entire Line" | Direct or Common. |
| 23. Stationery and Printing | Localize when possible; otherwise designate "Common to Entire Line" | Common. |
| 24 Insurance | Localize, except insurance on work equipment, which should be designated "Common to Entire Line" | Direct or Common. |
| 25. Other Expenses | Localize when possible; otherwise designate "Common to Entire Line" | Direct or Common. |
| 26. Maintaining Joint Tracks, Yards, and Other Facilities—Dr. | Localize | Direct or Common. |
| 27. Maintaining Joint Tracks, Yards, and Other Facilities—Cr. | Localize | Common. |
| **MAINTENANCE OF EQUIPMENT—** | | |
| 28. Superintendence | Common to Entire Line | Direct or Common. |
| 29. Steam Locomotives—Repairs | Common to Entire Line<br>The cost of repairing damages caused by accidents should be localized to the extent of the damage done | Common.<br>Direct. |
| 30. Steam Locomotives—Renewals | Common to Entire Line | Common. |
| 31. Steam Locomotives—Depreciation | Common to Entire Line | Common. |
| 32. Electric Locomotives—Repairs | For use of Electric Lines only | For use of Electric Lines only. |
| 33. Electric Locomotives—Renewals | For use of Electric Lines only | For use of Electric Lines only. |
| 34. Electric Locomotives—Depreciation | For use of Electric Lines only | For use of Electric Lines only. |
| 35. Passenger-Train Cars—Repairs | Common to Entire Line | Direct. |
| 36. Passenger-Train Cars—Renewals | Common to Entire Line | Direct. |
| 37. Passenger-Train Cars—Depreciation | Common to Entire Line | Direct. |
| 38. Freight-Train Cars—Repairs | Common to Entire Line | Direct. |
| 39. Freight-Train Cars—Renewals | Common to Entire Line | Direct. |
| 40. Freight-Train Cars—Depreciation | Common to Entire Line | Direct. |
| 41. Electric Equipment of Cars—Repairs | For use of Electric Lines only | For use of Electric Lines only. |
| 42. Electric Equipment of Cars—Renewals | For use of Electric Lines only | For use of Electric Lines only. |
| 43. Electric Equipment of Cars—Depreciation | For use of Electric Lines only | For use of Electric Lines only. |
| 44. Floating Equipment—Repairs | For use of lines operating floating equipment | For use of lines operating floating equipment. |
| 45. Floating Equipment—Renewals | For use of lines operating floating equipment | For use of lines operating floating equipment. |
| 46. Floating Equipment—Depreciation | For use of lines operating floating equipment | For use of lines operating floating equipment. |
| 47. Shop Machinery and Tools | Common to Entire Line | Direct or Common. |
| 48. Power Plant Equipment | For use of Electric Lines only | For use of Electric Lines only. |
| 49. Injuries to Persons | Common to Entire Line | Direct or Common. |
| 50. Stationery and Printing | Common to Entire Line | Common. |
| 51. Insurance | Common to Entire Line | Direct or Common. |
| 52. Other Expenses | Localize when possible; otherwise designate "Common to Entire Line" | Direct or Common. |
| 53. Maintaining Joint Equipment at Terminals—Dr. | Localize | Direct. |





2572

| Accounts | Between State Accounting Divisions | Between Freight and Passenger |
|---|---|---|
| 54. Equipment Borrowed—Dr. | Charges to this account for cars must be divided on basis of the total car miles of foreign line cars, Freight and Passenger, separately; for locomotives, on basis of the total revenue locomotive miles. | Direct. |
| 55. Maintaining Joint Equipment at Terminals—Cr. | Localize. | Direct, as per current Accounting Dept. Authority. |
| 56. Equipment Loaned—Cr. | Credits to this account for cars must be divided on basis of total revenue car miles of home cars, Freight and Passenger separately; for locomotives, on basis of total revenue locomotive miles. | Direct. |
| **TRAFFIC EXPENSES—** | | |
| 57. Superintendence | Common to Entire Line. | Direct. |
| 58. Outside Agencies | Localize in the case of City Ticket Offices along the line; otherwise designate "Common to Entire Line". | Direct. |
| 59. Advertising | Common to Entire Line. | Direct. |
| 60. Traffic Associations | Common to Entire Line. | Direct. |
| 61. Fast Freight Lines | Common to Entire Line. | Direct. |
| 62. Industrial and Immigration Bureaus | Common to Entire Line. | Direct. |
| 63. Stationery and Printing | Common to Entire Line. | Direct. |
| 64. Insurance | Common to Entire Line. | Direct. |
| 65. Other Expenses | Common to Entire Line. | Direct. |
| **TRANSPORTATION EXPENSES—** | | |
| 66. Superintendence | "Common to Entire Line"; except trainmasters or other employes, whose jurisdiction covers more than one state but not the entire line; such items must be divided on basis of track miles in each state under the jurisdiction of such employes. | Direct or Common. |
| 67. Dispatching Trains | Localize, except when a train dispatcher's office has jurisdiction over two or more states; such items should be divided on basis of track miles in each state under the jurisdiction of such office. | Common. |
| 68. Station Employes | Localize. | Direct or Common. |
| 69. Weighing and Car-Service Associations | Expenses of weighing associations and inspection bureaus should be designated "Common to Entire Line." Expenses of car service associations should be localized when possible; unlocalized expenses should be divided on basis of the total track miles on June 30th, preceding, over which each car service association has jurisdiction. | Direct. |
| 70. Stock Yards and Grain Elevators | Localize. | Direct. |
| 71. Coal and Ore Docks | Localize. | Direct. |
| 72. Station Supplies and Expenses | Localize. | Direct or Common. |
| 73. Yard Masters and their Clerks | Localize. | Direct, as per current Accounting Dept. Authority. |
| 74. Yard Conductors and Brakemen | Localize. | Direct, as per current Accounting Dept. Authority. |
| 75. Yard Switch and Signal Tenders | Localize. | Direct, as per current Accounting Dept. Authority. |
| 76. Yard Supplies and Expenses | Localize. | Direct, as per current Accounting Dept. Authority. |
| 77. Yard Enginemen | Localize. | Direct, as per current Accounting Dept. Authority. |
| 78. Enginehouse Expenses—Yard | Localize. | Direct, as per current Accounting Dept. Authority. |
| 79. Fuel for Yard Locomotives | Localize. | Direct, as per current Accounting Dept. Authority. |
| 80. Water for Yard Locomotives | Localize. | Direct, as per current Accounting Dept. Authority. |
| 81. Lubricants for Yard Locomotives | Localize. | Direct, as per current Accounting Dept. Authority. |
| 82. Other Supplies for Yard Locomotives | Localize. | Direct, as per current Accounting Dept. Authority. |
| 83. Operating Joint Yards and Terminals—Dr. | Localize. | Direct. |
| 84. Operating Joint Yards and Terminals—Cr. | Localize. | Common. |
| 85. Motormen | For use of Electric Lines only. | For use of Electric Lines only. |
| 86. Road Enginemen | Localize as to engine runs; when one run is in two or more states expense of the run should be divided on basis of the actual locomotive miles of run in each state. | Direct. |
| 87. Enginehouse Expenses—Road | Common to Entire Line. | Common. |
| 88. Fuel for Road Locomotives | Common to Entire Line. | Direct. |
| 89. Water for Road Locomotives | Common to Entire Line. | Common. |



2323

5317

| Accounts | Between State Accounting Divisions | Between Freight and Passenger |
|---|---|---|
| 90. Lubricants for Road Locomotives | Common to Entire Line | Common. |
| 91. Other Supplies for Road Locomotives | Common to Entire Line | Common. |
| 92. Operating Power Plants | For use of Electric Lines only | For use of Electric Lines only. |
| 93. Purchased Power | For use of Electric Lines only | For use of Electric Lines only. |
| 94. Road Trainmen | Localize as to train runs; when one train runs in two or more states, divide on basis of the actual train-miles of that run in each state; salary and expenses of Chief Train Auditor should be designated "Common to Entire Line" | Direct. |
| 95. Train Supplies and Expenses | Common to Entire Line; except cost of detouring trains, which should be charged to the state accounting division which caused the detour | Direct or Common. |
| 96. Interlockers, Block and Other Signals—Operation | Localize | Common. |
| 97. Crossing Flagmen and Gatemen | Localize | Common. |
| 98. Drawbridge Operation | Localize; when operated between state lines, divide equally between the states served | Common. |
| 99. Clearing Wrecks | Localize | Direct. |
| 100. Telegraph and Telephone—Operation | Localize when possible; otherwise designate "Common to Entire Line" | Direct or Common. |
| 101. Operating Floating Equipment | For use of lines operating floating equipment | For use of lines operating floating equipment. |
| 102. Express Service | Localize when possible; otherwise divide on basis of revenue passenger train-miles | Direct. |
| 103. Stationery and Printing | Localize when possible; stationery furnished employes who have jurisdiction over two or more states, and not entire line must be divided on basis of track miles in each state under the jurisdiction of such employes; otherwise designate "Common to Entire Line" | Direct or Common. |
| 104. Insurance | Localize when possible; otherwise designate "Common to Entire Line" | Direct or Common. |
| 105. Other Expenses | Localize when possible; otherwise designate "Common to Entire Line" | Direct or Common. |
| 106. Loss and Damage—Freight | Localize when possible; otherwise divide on basis of track miles over which the particular shipment of freight was consigned | Direct. |
| 107. Loss and Damage—Baggage | Localize when possible; otherwise divide on basis of track miles over which the particular shipment of baggage was consigned | Direct. |
| 108. Damage to Property | Localize when possible; otherwise designate "Common to Entire Line" | Direct or Common. |
| 109. Damage to Stock on Right of Way | Localize when possible; otherwise designate "Common to Entire Line" | Direct or Common. |
| 110. Injuries to Persons | Localize when possible; otherwise designate "Common to Entire Line" | Direct or Common |
| 111. Operating Joint Tracks—Dr. | Localize | Common. |
| 112. Operating Joint Tracks—Cr. | Localize | Common. |
| **GENERAL EXPENSES—** | | |
| 113. Salaries and Expenses of General Officers | Common to Entire Line | Direct or Common. |
| 114. Salaries and Expenses of Clerks and Attendants | Common to Entire Line; salaries and expenses of traveling auditors should be divided on basis of the track miles under the jurisdiction of each | Direct or Common. |
| 115. General Office Supplies and Expenses | Common to Entire Line | Direct or Common. |
| 116. Law Expenses | Localize when possible; otherwise designate "Common to Entire Line" | Direct or Common. |
| 117. Insurance | Common to Entire Line | Direct or Common. |
| 118. Relief Department Expenses | Not used on this Line | Not used on this Line. |
| 119. Pensions | Not used on this Line | Not used on this Line. |
| 120. Stationery and Printing | Common to Entire Line | Direct or Common. |
| 121. Other Expenses | Localize when possible; otherwise designate "Common to Entire Line" | Direct or Common. |
| 122. General Administration Joint Tracks, Yards, and Terminals—Dr. | Localize | Direct or Common. |
| 123. General Administration Joint Tracks, Yards, and Terminals—Cr. | Localize | Common. |

S. C. JOHNSON,
General Auditor.

(File 2948)



2374

5318

5319 Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

5320 EXHIBIT NINETEEN.

5321 EXHIBIT 19.

St. Louis Southwestern Railway Company.

*Statement of Ton-miles of Commercial Freight Handled on All Through and Local Trains in the State of Arkansas, Revenue Therefrom, Train Cost (Wages and Fuel), Divided Between "State" and "Inter-State," During Month of October,* 1908.

Through Trains.

| | State. | Interstate. | Total. |
|---|---|---|---|
| Commercial Ton Miles | 296,723 | 26,850,904 | 27,147,627 |
| Revenue | $6,794.96 | $257,768.68 | $264,563.64 |
| *Wages and Fuel | 610.96 | 22,887.65 | 23,498.61 |
| Avg. Cost (Wages and Fuel) per ton, per mile | 0.002059 | 0.000852 | 0.000865 |

Local Trains.

| | State. | Interstate. | Total. |
|---|---|---|---|
| Commercial Ton Miles | 1,084,580 | 2,236,361 | 3,320,941 |
| Revenue | $24,836.88 | $21,468.06 | $46,304.94 |
| *Wages and Fuel | 6,963.01 | 5,931.46 | 12,894.47 |
| Avg. Cost (Wages and Fuel) per ton, per mile | 0.006420 | 0.002652 | 0.003883 |

All Trains.

| | State. | Interstate. | Total. |
|---|---|---|---|
| Commercial Ton Miles | 1,381,303 | 29,087,265 | 30,468,568 |
| Wages and Fuel | $7,573.97 | $28,819.11 | $36,393.08 |
| Avg. Cost (wages and fuel) per ton mile | 0.005483 | 0.000991 | 0.001194 |

Cost per State ton-mile greater than Interstate ..... 5.5 Times.

*Divided between State and Interstate on basis of straight Revenue earned by each class of trains with no allowance for Extra Cost of handling State Freight.

NOTE.—Wages and Fuel sub-divided are as follows:

| | Through trains. | Local trains. |
|---|---|---|
| Wages of Enginemen | $5,182.29 | $2,665.60 |
| Wages of Trainmen | 7,744.39 | 4,616.81 |
| Overtime | 698.53 | 1,743.34 |
| **Fuel** | 9,873.40 | 3,868.72 |
| | $23,498.61 | $12,894.47 |
| Per Cent of overtime to total wages | 5% | 19% |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT TWENTY.

EXHIBIT 20.

St. Louis Southwestern Railway Company.

*Miscellaneous Train Statistics, State of Arkansas, Month of October,* 1908.

| | Through trains. | Local trains. |
|---|---|---|
| Train Miles | 68,118—73% | 25,797—27% |
| Wages and Fuel | $23,498.61—65% | $12,894.47—35% |
| Cost (Wages and Fuel) per Tr. Mi. | $0.34 | $0.50 |
| Com'l Ton-Miles—LCL | 2,069,794—80% | 521,038—20% |
| " " —CL. | 25,077,833—90% | 2,799,903—10% |
| " " —Total | 27,147,627—89% | 3,320,941—11% |
| Cost per Com'l Ton-Mile | $0.000865 | $0.003883 |
| Ton-Miles of Dead Wt. (Inc. Eng., Cab. Co. Frt. and all cars)—LCL. | 9,505,516—66% | 4,920,301—34% |
| Ton-Miles of Dead Wt. (Inc. Eng., Cab. Co. Frt. and all cars)—CL. | 40,523,513—88% | 5,330,326—12% |
| Ton-Miles of Dead Wt. (Inc. Eng., Cab. Co. Frt. and all cars)—Total | 50,029,029—83% | 10,250,627—17% |
| Company Freight (Inc. in Dead Wt.) | 3,375,428—86% | 535,910—14% |

| | | |
|---|---|---|
| Avg. tons Com'l Frt. per Tr. Mi. | 399 | 129 |
| Avg. tons Dead-Wt. " " " | 734 | 397 |
| Avg. tons Com'l & D. Wt. " " | 1133 | 526 |
| Avg. ton-miles D. Wt. to each ton-mile Com'l Frt—LCL.. | 4.59 | 9.44 |
| " " " " " " —CL.... | 1.62 | 1.90 |
| " " " " " " —Total.. | 1.84 | 4.09 |
| Per Cent. Dead-Wt. to Gross Wt. of Tr. | 65% | 76% |
| Loaded Car Miles—Com'l Frt.—LCL. | 293,797—70% | 127,980—30% |
| " " " " " —CL. | 1,276,194—90% | 139,223—10% |
| " " " " " —Total. | 1,569,991—85% | 267,203—15% |
| Empty Car Miles (Inc. Co. Frt.) | 631,450—82% | 139,329—18% |
| Avg. Cars per Tr. Mi.—Loaded | 23 | 11 |
| " " " " " —Empty & Co. Frt. | 9 | 5 |
| " " " " " —Total | 32 | 16 |
| Ton Miles LCL Com'l Frt.—State | 21,136—17% | 101,666—83% |
| " " " " " —Inter-state | 2,048,658—83% | 419,372—17% |
| " " " " " —Total | 2,069,794—80% | 521,038—20% |

| | | |
|---|---|---|
| Ton Miles CL Com'l Frt.—State..... | 275,587—22% | 982,914—78% |
| " " " " " —Inter-state ..... | 24,802,246—93% | 1,816,989— 7% |
| " " " " " —Total ..... | 25,077,833—90% | 2,799,903—10% |
| Ton Miles all Com'l Frt.—State..... | 296,723—22% | 1,084,580—78% |
| " " " " " —Inter-state ..... | 26,850,904—92% | 2,236,361— 8% |
| " " " " " —Total ..... | 27,147,627—89% | 3,320,941—11% |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

St. Louis Southwestern Railway Company.

*Statement of Gross Revenue for Year Ending June 30th, 1908, Showing Proportion Accruing to Arkansas and Percentage Thereof to the Total; Also Miscellaneous Statistics.*

| Account. | Whole line. | State of Arkansas. | Per cent Arkansas. |
|---|---|---|---|
| 1. Freight Revenue | $4,923,148.85 | $3,183,609.62 | 65 |
| 2. Passenger Revenue | 1,062,500.29 | 745,887.20 | 70 |
| 3. Excess Baggage Revenue | 11,869.78 | 9,011.33 | 76 |
| 4. Parlor & Chair Car Rev. | 3,976.30 | 3,976.30 | 100 |
| 5. Mail Revenue | 93,713.14 | 66,610.37 | 71 |
| 6. Express Revenue | 101,409.00 | 67,026.82 | 66 |
| 7. Milk Revenue | ..... | ..... | ... |
| 8. Other Pass. Tr.. Revenue | 491.40 | 491.40 | 100 |
| 9. Switching Revenue | 27,856.00 | 20,140.00 | 72 |
| 10. Spec. Serv. Train Revenue | 4,443.61 | 3,135.34 | 71 |
| 11. Misc. Transportation Rev. | 3,403.53 | 1,058.75 | 31 |
| 12. Station & Tr. Privileges | 4,272.00 | 2,833.76 | 66 |
| 13. Parcel Room Receipts | ..... | ..... | ... |
| 14. Storage—Freight | 3,980.41 | 2,951.06 | 74 |
| 15. Storage—Baggage | 234.68 | 164.59 | 70 |
| 16. Car Service | 14,336.69 | 8,598.83 | 60 |
| 17. Telegraph Service | ..... | ..... | ... |
| 18. Rents of Bldgs. & Other Property | 3,671.85 | 2,713.15 | 74 |
| 19. Miscellaneous | 14,344.18 | 11,802.93 | 82 |
| Total | $6,273,651.71 | $4,130,011.45 | 66 |

ROBERT P. ALLEN ET AL. VS.

*Miscellaneous Statistics.*

| | | | |
|---|---|---|---|
| Track Mileage | 773 | 452 | 58 |
| Track Mileage (excluding Ill. Div.) | 635 | 452 | 71 |
| Revenue Freight Tr. Mileage | 1,472,990 | 1,033,954 | 70 |
| Revenue Pass. Train Mileage | 1,150,733 | 765,859 | 67 |
| Revenue Mixed Tr. Mileage | 31,847 | 21,683 | 68 |
| Total Train Mileage | 2,655,570 | 1,821,496 | 69 |
| Loaded Freight Car Mileage | 31,867,123 | 20,992,264 | 66 |
| Empty Freight Car Mileage | 11,718,098 | 7,185,854 | 61 |
| Total Freight Car Mileage | 43,585,221 | 28,178,118 | 65 |
| Passenger Car Mileage | 5,977,263 | 4,221,834 | 71 |
| Locomotive Mileage—Revenue | 3,071,442 | 2,036,498 | 66 |
| Number of Tons Hauled | 2,023,635 | 1,771,604 | 88 |
| Number Tons Hauled one mile | 525,928,117 | 346,017,718 | 66 |
| Number Passengers Carried | 1,455,633 | 1,073,664 | 74 |
| No. Passengers Carried one mile | 54,970,387 | 39,677,487 | 72 |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

## EXHIBIT TWENTY-TWO.

5327

## EXHIBIT 22.

St. Louis Southwestern Railway Company.

*Statement of Operating Expenses, Taxes, Rentals and Outside Operations (Def.), for Year Ending June 30th, 1908.*

| Accounts. | Total. | Amount chargeable to Arkansas. | Per cent Arkansas. |
|---|---|---|---|
| Maintenance of way & structures: | | | |
| 1. Superintendence | $36,449.36 | $26,194.84 | 72 |
| 2. Ballast | 2,799.37 | 1,476.92 | 53 |
| 3. Ties | 161,959.04 | 125,318.05 | 77 |
| 4. Rails | 10,969.91 | 4,606.72 | 42 |
| 5. Other Track Material | 31,587.78 | 14,552.70 | 46 |
| 6. Roadway & Track | 290,831.16 | 194,505.32 | 67 |
| 7. Removal of Snow, Sand & Ice | 25.48 | 5.73 | 22 |
| 8. Tunnels | ..... | ..... | ... |
| 9. Bridges, Trestles & Culverts | 171,633.09 | 157,180.58 | 92 |
| 10. Over and Under Grade Crossings | 685.85 | 106.46 | 16 |
| 11. Grade Crossings, Fences, Cattle Guards and Signs | 22,187.89 | 13,358.73 | 60 |
| 12. Snow and Sand Fences & Snowsheds | ..... | ..... | ... |
| 13. Signals & Interlocking Plants | 843.42 | 95.15 | 11 |
| 14. Telegraph & Telephone Lines | 6,030.44 | 3,829.95 | 64 |
| 15. Electric Power Transmission | ..... | ..... | ... |
| 16. Bldgs., Fixtures & Grounds | 56,654.53 | 44,095.23 | 78 |
| 17. Docks & Wharves | 2,856.30 | ..... | ... |
| 18. Roadway Tools & Supplies | 10,986.54 | 7,457.07 | 68 |
| 19. Work Equipment—Repairs | 4,722.10 | 3,152.26 | 67 |

| | | | |
|---|---|---|---|
| 20. Work Equipment—Renewals | ..... | ..... | ... |
| 21. Work Equipment—Depreciation | 5,908.04 | 4,135.64 | 70 |
| 22. Injuries to Persons | 1,166.63 | 782.31 | 67 |
| 23. Stationery & Printing | 1,386.63 | 1,003.76 | 72 |
| 24. Insurance | 4,596.85 | 3,182.07 | 69 |
| 25. Other Expenses | 193.33 | 193.33 | 100 |
| 26. Maintaining Jt. Tracks, Yds. and Other Facilities—Dr. | 80,093.44 | 12,858.93 | 16 |
| 27. Maintaining Jt. Tracks, Yds. and Other Facilities—Cr. | 85,548.65 | 8,108.32 | 10 |
| Total | $819,018.53 | $609,983.43 | 74 |
| Maintenance of equipment: | | | |
| 28. Superintendence | $35,187.50 | $23,971.80 | 68 |
| 29. A. Steam Locomotives—Repairs—Ord | 231,060.74 | 153,142.13 | 66 |
| 29. B. Steam Locomotives—Repairs—Acc | 3,459.71 | 2,958.16 | 86 |
| 30. Steam Locomotives—Renewals | ..... | ..... | ... |
| 31. Steam Locomotives—Depreciation | 38,201.04 | 25,349.43 | 66 |
| 32 to 34. Electric Locomotives | ..... | ..... | ... |
| 35. A. Pass. Tr. Cars—Repairs—Ordinary | 69,769.33 | 49,046.20 | 70 |
| 35. B. Pass. Tr. Cars—Repairs—Accident | 383.88 | 363.17 | 95 |
| 36. Passenger Tr. Cars—Renewals | Cr. 322.59 | Cr. 229.04 | 71 |
| 37. Passenger Tr. Cars—Depreciation | 16,264.57 | 11,419.28 | 70 |
| 38. A. Frt. Tr. Cars—Repairs—Ordinary | 391,408.49 | 253,847.08 | 65 |
| 38. B. Frt. Tr. Cars—Repairs—Accident | 16,194.58 | 12,453.88 | 77 |
| 39. Frt Tr. Cars—Renewals | Cr. 3,629.19 | Cr. 2,493.44 | 69 |
| 40. Frt. Tr. Cars—Depreciation | 138,808.76 | 90,241.38 | 65 |
| 41 to 46. Electric & Floating Equip | ..... | ..... | ... |
| 47. Shop Machinery & Tools | 22,407.51 | 15,365.59 | 69 |

| | | | |
|---|---|---|---|
| 48. Power Plant Equipment | ..... | ..... | ... |
| 49. Injuries to Persons | 2,706.69 | 1,282.19 | 47 |
| 50. Stationery & Printing | 1,852.36 | 1,271.65 | 69 |
| 51. Insurance | 11,427.25 | 7,757.19 | 68 |
| 52. Other Expenses | 456.94 | 319.53 | 70 |
| 53. Maint'g Jt. Equip. at Terms.—Dr. | 10,740.15 | 5,187.35 | 48 |
| 54. Equipment Borrowed—Dr. | 96,315.84 | 64,171.91 | 67 |
| 55. Maint'g Jt. Equip. at Terms.—Cr. | 14,470.31 | ..... | ... |
| 56. Equipment Loaned—Cr. | 143,972.12 | Cr. 90,450.67 | 63 |
| Total | $924,251.13 | $624,974.77 | 68 |

5328

EXHIBIT —.

Sheet No. 2.

| Accounts. Traffic expenses: | Total. | Amount chargeable to Arkansas. | Per cent Arkansas. |
|---|---|---|---|
| 57. Superintendence | $57,648.99 | $39,672.54 | 69 |
| 58. Outside Agencies | 134,654.34 | 95,078.45 | 71 |
| 59. Advertising | 23,909.27 | 16,134.31 | 67 |
| 60. Traffic Associations | 3,309.49 | 2,292.97 | 69 |
| 61. Fast Freight Lines | ..... | ..... | ... |
| 62. Industrial & Immigration Bureaus | 2,838.72 | 1,970.83 | 69 |
| 63. Stationery & Printing | 21,396.41 | 14,801.12 | 69 |
| 64. Insurance | 17.43 | 11.92 | 68 |
| 65. Other Expenses | ..... | ..... | ... |
| Total | $243,774.65 | $169,962.14 | 70 |

| | | | |
|---|---|---|---|
| Transportation expenses: | | | |
| 66. Superintendence | $46,264.41 | $31,886.51 | 69 |
| 67. Dispatching Trains | 16,894.59 | 9,938.68 | 59 |
| 68. Station Employés | 228,012.90 | 117,059.97 | 51 |
| 69. Weighing & Car Serv. Ass'ns | 8,130.60 | 5,227.90 | 64 |
| 70. Stock Yds. & Gr. Elevators | ..... | ..... | ... |
| 71. Coal and Ore Docks | ..... | ..... | ... |
| 72. Station Supplies & Expenses | 16,129.54 | 9,638.56 | 60 |
| 73. Yardmasters & their clerks | 29,015.93 | 11,050.20 | 38 |
| 74. Yard Conductors & Brakemen | 61,289.68 | 29,238.23 | 48 |
| 75. Yard Switch & Signal Tenders | 1,459.72 | 927.52 | 64 |
| 76. Yard Supplies and Expenses | 2,023.59 | 871.28 | 43 |
| 77. Yard Enginemen | 36,242.57 | 17,177.91 | 47 |
| 78. Enginehouse Expenses—Yard | 14,734.57 | 7,560.33 | 51 |
| 79. Fuel for Yard Locomotives | 26,457.49 | 11,605.73 | 44 |
| 80. Water for Yd. Locomotives | 2,772.28 | 673.46 | 24 |
| 81. Lubricants for Yd. Locomotives | 977.02 | 408.53 | 42 |
| 82. Other Supplies for Yd. Locomotives | 1,175.91 | 447.54 | 38 |
| 83. Oper'g Jt. Yds. & Terms.—Dr | 115,431.88 | 51,637.59 | 45 |
| 84. Oper'g Jt. Yds. & Terms.—Cr | 78,311.45 | 4,828.54 | 06 |
| 85. Motormen | ..... | ..... | ... |
| 86. Road Enginemen | 216,881.34 | 150,135.40 | 70 |
| 87. Enginehouse Expenses—Road | 52,801.85 | 34,799.49 | 65 |
| 88. Fuel for Road Locomotives | 304,606.77 | 200,894.22 | 66 |
| 89. Water for Road Locomotives | 14,254.48 | 10,380.41 | 73 |
| 90. Lubricants for Road Locomotives | 6,635.57 | 4,347.62 | 66 |
| 91. Other Supplies for Road Locomotives | 3,263.13 | 2,167.03 | 66 |
| 92. Operating Power Plants | ..... | ..... | ... |
| 93. Purchased Power | ..... | ..... | ... |

| | | | |
|---|---|---|---|
| 94. Road Trainmen | 272,915.51 | 191,246.89 | 70 |
| 95. Train Supplies & Expenses | 76,333.01 | 52,751.80 | 69 |
| 96. Interlockers & Block & Other Signals—Operation | 3,596.60 | 1,257.38 | 35 |
| 97. Crossing Flagmen and Gatemen | 799.92 | 799.92 | 100 |
| 98. Drawbridge Operation | 5,218.29 | 4,948.29 | 95 |
| 99. Clearing Wrecks | 8,451.17 | 6,063.02 | 72 |
| 100. Telegraph & Telephone—Operation | 12,745.12 | 6,610.54 | 52 |
| 101. Operating Floating Equipment | ..... | ..... | ... |
| 102. Express Service | ..... | ..... | ... |
| 103. Stationery & Printing | 16,384.87 | 9,576.54 | 58 |
| 104. Insurance | 9,000.71 | 6,491.45 | 72 |
| 105. Other Expenses | 16,242.92 | 4,031.84 | 25 |
| 106. Loss and Damage—Freight | 61,078.86 | 45,404.86 | 74 |
| 107. Loss and Damage—Baggage | 893.21 | 932.19 | ... |
| 108. Damage to Property | 6,595.70 | 3,729.96 | 57 |
| 109. Damage to Stock on Right-of-way | 34,680.42 | 26,444.86 | 76 |
| 110. Injuries to Persons | 41,919.37 | 27,075.78 | 65 |
| 111. Operating Joint Tracks—Dr | 16,647.66 | 176.70 | 01 |
| 112. Operating Joint Tracks—Cr | 11,896.69 | 1,790.93 | 15 |
| Total | $1,698,751.02 | $1,088,996.64 | 64 |

| Account. General expenses: | Total. | Amount chargeable to Arkansas. | Per cent Arkansas. |
|---|---|---|---|
| 113. Salaries and Expenses of Gen'l Officers | $43,244.21 | $29,593.21 | 68 |
| 114. Sals. & Exps. Clerks & Attendants | 80,128.41 | 54,673.41 | 68 |
| 115. Gen'l Office Supplies & Expenses | 32,777.37 | 22,411.88 | 68 |
| 116. Law Expenses | 46,576.50 | 28,922.06 | 62 |
| 117. Insurance | 83.33 | 55.62 | 67 |
| 118. Relief Department Expenses | ..... | ..... | ... |
| 119. Pensions | ..... | ..... | ... |
| 120. Stationery & Printing | 9,357.27 | 6,439.22 | 69 |
| 121. Other Expenses | 3,262.25 | 2,266.24 | 69 |
| 122. Gen'l Administration Jt. Tracks, Yards and Terminals—Dr. | 9,088.67 | 1,129.51 | 12 |
| 123. Gen'l Administration Jt. Tracks, Yards and Terminals—Cr. | 2,185.56 | 1,662.27 | 76 |
| Total | $222,332.45 | $143,828.88 | 65 |

*Recapitulation.*

| | | | |
|---|---|---|---|
| Maintenance of Way & Structures | $819,018.53 | $609,983.43 | 74 |
| Maintenance of Equipment | 924,251.13 | 624,974.77 | 68 |
| Traffic Expenses | 243,774.65 | 169,962.14 | 70 |
| Transportation Expenses | 1,698,751.02 | 1,088,996.64 | 64 |
| General Expenses | 322,332.45 | 143,828.88 | 65 |
| Total Operating Expenses | $3,908,127.78 | $2,637,745.86 | 67 |

| | | | |
|---|---|---|---|
| Taxes | 183,643.22 | 143,770.92 | 78 |
| *Rentals | 21,237.93† | 92,707.34† | ... |
| Outside Operations (Def.) | 2,478.00 | 2,478.00 | 100 |
| Grand Total | $4,073,011.07 | $2,691,287.44 | 66 |

* Analysis of Rental Credit Balance is as follows:

| | Total. | Arkansas proportion. |
|---|---|---|
| Hire of Equipment—Cr. Balance | $174,711.05 | $102,205.96 |
| Joint Facilities—Dr. Balance | 153,473.12 | 9,498.62 |
| | $21,237.93 | $92,707.34 |

[† In red ink in copy.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

5331 EXHIBIT 23.

Question by Judge HILL:

I will ask you to work out the following example for me, using the Revenue Basis, as you have used it in your exhibit:

Assume that the entire revenue from Freight in the State was $100,00-.00; entire expenses in the State $70,-000.00; interstate freight revenue, $85,000.00; state revenue $15,000.00;

Then calculate the amount of expense charg-able to State business and the amount of expenses charg-able to Interstate business;

Then, assume that intrastate rates are increased 33⅓%;

Then make the same calculation showing what amount is charg-able to State business and what to interstate, assuming that the $70,000.00 expense account would remain stationary and that the other rates would remain stationary, except the changes I have indicated.

Also, under Judge Van Devanter's Rule, assuming 100% more cost for State Freight operations.

5332-5349 Ex. 23.

*Answer to Judge Hill's Example.*

| Item. | Per cent. | Amount on straight rev. basis. | Amount under Judge Van De Vanter's theory of 100% extra cost for State business. |
|---|---|---|---|
| State Freight Revenue | 15 | $15,000.00 | ..... |
| Interstate Freight Rev | 85 | 85,000.00 | ..... |
| | 100 | $100,000.00 | ..... |
| State Freight Expenses | 15 | $10,500.00 | 18,200.00— 26% |
| Interstate Freight Exps | 85 | 59,500.00 | 51,800.00— 74% |
| | 100 | $70,000.00 | $70,000.00—100% |

*State Freight Revenue Increased 33⅓% with no Corresponding Increase in Interstate Revenue.*

| | | | |
|---|---|---|---|
| State Freight Revenue..... | 19 | $20,000.00 | ..... |
| Interstate Freight Rev..... | 81 | 85,000.00 | ..... |
| | 100 | $105,000.00 | ..... |
| State Freight Expenses..... | 19 | $13,300.00 | $22,400.00— 32% |
| Interstate Freight Exps..... | 81 | 56,700.00 | 47,600.00— 68% |
| | 100 | $70,000.00 | $70,000.00—100% |

*Formula for Adding 100% Extra Cost.*

| | | | | |
|---|---|---|---|---|
| 15% x 2 = | 30 = | 26 | difference..... | 11%+ |
| 85% | 85 = | 74 | " ..... | 11%— |
| 100% | 115 | 100 | | |
| 19% x 2 = | 38 = | 32% | difference..... | 13%+ |
| 81% | 81 = | 68% | " ..... | 13%— |
| 100% | 119 | 100% | | |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT TWENTY-SIX

EXHIBIT No. 26.

St. Louis, Iron Mountain & Southern Railway Company

*Statement of Trans-State, Interstate and State Freight Handled During the Month of October, 1907.*

| Character of freight. | (1) Number of tons. | (2) Percentage of total tons. | (3) Revenue. | (4) Percentage of total revenue. | (5) Average amount received per ton. | (6) Number of tons one mile. | (7) Percentage of total ton miles. | (8) Average amount received per ton per mile (miles). | (9) Average length of haul (miles). |
|---|---|---|---|---|---|---|---|---|---|
| Trans-State: | | | | | | | | | |
| 1. Carload | 207,767 | 32.29 | $300,220.53 | 33.74 | $1.4450 | 59,194,477 | 49.12 | 5.072 | 284.91 |
| 2. Less-than-carload | 8,482 | 1.32 | 57,311.06 | 6.44 | 6.7568 | 2,460,496 | 2.04 | 23.292 | 290.08 |
| 3. Total Trans-State | 216,249 | 33.61 | $357,531.59 | 40.18 | $1.6533 | 61,654,973 | 51.16 | 5.799 | 285.11 |
| Interstate: | | | | | | | | | |
| 4. Carload | 270,537 | 42.04 | $331,477.91 | 37.25 | $1.2253 | 46,789,104 | 38.82 | 7.085 | 172.95 |
| 5. Less-than-carload | 20,573 | 3.20 | 74,879.19 | 8.41 | 3.6397 | 2,253,381 | 1.87 | 33.230 | 109.53 |
| 6. Total Interstate | 291,110 | 45.24 | $406,357.10 | 45.66 | $1.3959 | 49,042,485 | 40.69 | 8.286 | 168.47 |
| Intra-State: | | | | | | | | | |
| 7. Carload | 128,014 | 19.90 | $95,107.34 | 10.69 | $0.7429 | 9,364,798 | 7.77 | 10.156 | 73.15 |
| 8. Less-than-carload | 8,031 | 1.25 | 30,893.15 | 3.47 | 3.8467 | 459,204 | 0.38 | 67.275 | 57.18 |
| 9. Total Intra-State | 136,045 | 21.15 | $126,000.49 | 14.16 | $0.9262 | 9,824,002 | 8.15 | 12.826 | 72.21 |
| 10. Grand total | 643,404 | 100.00 | $889,889.18 | 100.00 | $1.3831 | 120,521,460 | 100.00 | 7.384 | 187.31 |
| Total Intrastate (lines 1 to 6): | | | | | | | | | |
| 11. Carload | 478,304 | 74.33 | $631,698.44 | 70.99 | $1.3207 | 105,983,581 | 87.94 | 5.960 | 221.58 |
| 12. Less-than-carload | 29,055 | 4.52 | 132,190.25 | 14.85 | 4.5497 | 4,713,877 | 3.91 | 28.043 | 162.24 |
| 13. Total | 507,359 | 78.85 | $763,888.69 | 85.84 | $1.5056 | 110,697,458 | 91.85 | 6.901 | 218.18 |
| 14. All Carload—Total | 606,318 | 94.23 | $726,805.78 | 81.68 | $1.1987 | 115,348,379 | 95.71 | 6.301 | 190.24 |
| 15. All Less-than-carload—Total | 37,086 | 5.77 | $163,083.40 | 18.32 | $4.3974 | 5,173,081 | 4.29 | 31.527 | 139.48 |

**Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.**

EXHIBIT TWENTY-SEVEN.

5353 EXHIBIT No. 27.

The Missouri Pacific Railway.

*Average Daily Rates of Pay for Classes of Service Given for Years Shown.*

Average Rate of Pay per 100 Miles in Freight Service, and per Day Passenger and Switching Service, as per Schedules.

(Includes Passenger, Through and Local Freight, and Switch Service.)



| | 1897. | 1902. | 1903. | 1905. | 1906. | 1907. | 1909. | Per cent of increase. |
|---|---|---|---|---|---|---|---|---|
| Engineers | 3.43 | 3.95 | 4.16 | 4.20 | 4.20 | 4.55 | 4.55 | 32.6 |
| Firemen | 2.22 | 2.40 | 2.64 | 2.64 | 2.70 | 2.92 | 2.92 | 31.5 |
| Conductors | 3.27 | 3.53 | 3.96 | 3.96 | 3.96 | 4.31 | 4.31 | 31.8 |
| Brakemen | 1.96 | 2.04 | 2.27 | 2.27 | 2.27 | 2.50 | 2.50 | 27.5 |
| Switchmen | 2.10 | 3.00 | 3.00 | 3.00 | 3.00 | 3.40 | 3.40 | 61.9 |
| Telegraphers | .... | .... | .... | .... | 1.93 | 2.13 | 2.18 | 13.0 |

| | Average rates. | | | | | Per cent of increase. |
|---|---|---|---|---|---|---|
| | 1900. | 1902. | 1903. | 1907. | 1909. | |
| *Blacksmiths | 2.73 | 2.85 | 3.10 | 3.38 | 3.38 | 23.9 |
| *Boilermakers | 2.93 | 3.20 | 3.40 | 3.70 | 3.70 | 26.3 |
| *Machinists | 2.93 | 3.20 | 3.40 | 3.70 | 3.70 | 26.3 |
| *Tinners and Pipe Fitters | 2.59 | 2.70 | 2.90 | 3.19 | 3.19 | 23.2 |
| *Car Men | 2.27 | 2.30 | 2.30 | 2.57 | 2.57 | 13.2 |

*Figures for 1896 not available.

Endorsed.

*Increase Granted Train Porters and Rates of Pay Since* 1892.

| | 1892. | Rate April 1st, 1907. | Per cent of increase. |
|---|---|---|---|
| Train Porters | $40.00 | $45.00 | 12.5 |
| Chair Car Porters | 35.00 | 40.00 | 14.0 |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5354 EXHIBIT TWENTY-EIGHT.

5355 EXHIBIT No. 28.

St. Louis, Iron Mountain & Southern Railway Company.

*Average Price Paid for Various Commodities in Year* 1909, *Compared with Year* 1898, *and Per Cent of Increase.*

| Item. | 1898. | 1909. | Increase per cent. |
|---|---|---|---|
| Angle Bars | $1.02½ cwt. | $1.75 cwt. | 71.5 |
| Track Bolts | 1.60 " | 2.50 " | 56.2 |
| Track Spikes | 1.60 " | 2.05 " | 28.1 |
| Lime | .40 Bbl. | .75 Bbl. | 87.5 |
| Cast Iron Pipe | 14.60 per ton. | 28.50 per ton. | 95.2 |
| Nails—Cut | 1.33 cwt. | 2.20 cwt. | 65.4 |
| Barb wire | 1.80 " | 2.05 " | 13.9 |
| Bridge Stringers | 20.00 per M. | 28.00 M. | 40.0 |
| Piling | .10 " ft. | .15½ ft. | 55.0 |
| Bridge timbers (Miscellaneous) | 16.00 " M. | 19.50 M. | 22.0 |
| Dimension lumber | 12.50 " " | 17.00 " | 36.0 |

| | | | | | |
|---|---|---|---|---|---|
| Bar Iron | 1.10 | cwt. | 2.00 | cwt. | 81.8 |
| Malleable Journal Boxes | 1.60 | each. | 2.86 | each. | 78.7 |
| White Lead | 5.14 | cwt. | 7.00 | cwt. | 36.1 |
| Freight car decking | 13.00 | per M. | 14.00 | M. | 7.7 |
| Tank Steel | 1.00 | cwt. | 1.96 | cwt. | 96.0 |
| Car axles | 1.65 | " | 2.05 | " | 24.2 |
| Malleable Iron | 2.40 | " | 3.50 | " | 45.8 |
| Waste | 3.50 | " | 5.50 | " | 57.0 |
| Chain | 1.90 | " | 4.50 | " | 136.8 |
| Forgings | 1.95 | " | 3.25 | " | 66.6 |
| Gray iron castings | 1.375 | " | 1.80 | " | 30.9 |
| Brass tubing | .16 | ft. | .21¾ | ft. | 35.9 |
| Brass sheets | .135 | lb. | .265 | lb. | 96.3 |
| Journal bearings | .11 | " | .16 | " | 45.4 |
| Brass castings | .125 | " | .18 | " | 44.4 |
| Track switches | 29.40 | each. | 39.50 | each. | 34.3 |
| Track frogs | 30.25 | each. | 37.75 | each. | 24.8 |
| Boiler Tubes | .065 | ft. | .16 | ft. | 147.7 |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

St. Louis, Iron Mountain & Southern Railway Company.

*Average Yearly Actual and Relative Prices of Commodities—Report Bureau of Commerce and Labor, Bulletin* 75, *March,* 1908.

| | 1907. | 1897. | Increase per cent 1907 compared with 1897. |
|---|---|---|---|
| Coke, Ton | $2.8250 | $1.6167 | 74.7 |
| Oil Crude, Barrel | 1.7342 | .9118 | 90.2 |
| " Refined, Gallon | .0824 | .0597 | 38.0 |
| Augers, ¾" each | .3600 | .1425 | 152.6 |
| Axes | .6800 | .3938 | 72.7 |
| Bar Iron (Mill) Pound | .0175 | .0110 | 59.1 |
| Barb Wire (Galvanized) pound | 2.6342 | 1.8000 | 46.3 |
| Chisels, 1" each | .4438 | .1710 | 159.5 |
| Copper, Ingot, pound | .2125 | .1132 | 87.7 |
| " Sheet " | .2792 | .1400 | 99.4 |
| " Wire " | .2402 | .1375 | 74.7 |
| Door Knobs Bronze, pair | .4500 | .1660 | 171.1 |
| Lead Pipe, 100 pounds | 6.7050 | 4.3167 | 32.2 |
| Locks, common, mortise, each | .2000 | .0833 | 140.1 |
| Nails, 8 penny, per 100 lbs | 2.1625 | 1.3329 | 62.2 |
| " wire 8 penny, per 100 lbs | 2.1167 | 1.4854 | 42.5 |
| Pig iron, Bessemer, per ton | 22.8417 | 10.1258 | 125.6 |
| " " Gray forge " " | 20.9875 | 8.8021 | 138.4 |

| | | | |
|---|---|---|---|
| Steel Billets, ton | 29.2530 | 15.0800 | 94.0 |
| Steel Sheets, black pound | .0250 | .0195 | 28.2 |
| Tin Plate, per 100 lbs | 4.0900 | 3.1823 | 28.5 |
| Vises, solid box, each | 5.7500 | 3.5000 | 64.3 |
| Wood Screws, gross 1″ | .1219 | .0850 | 43.4 |
| Zinc Sheet, per 100 lbs | 7.4858 | 4.9400 | 51.5 |
| Lime, barrel | .9492 | .7188 | 32.1 |
| Linseed oil, gallon | .4342 | .3275 | 32.6 |
| Plate Glass, 3′-5′ sq. foot | .2300 | .2000 | 15.0 |
| Resin, ..... Barrel | 4.3771 | 1.6125 | 171.4 |
| Tar | 2.3292 | 1.0542 | 120.9 |
| Rope, Manilla 3/8, pound | .1290 | .0631 | 104.4 |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

(Here follows paster, marked pp. 5360 and 5361.)

EXHIBIT THIRTY-ONE.

EXHIBIT No. 31.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Comparison of Averages Based upon Statistics Published by the Interstate Commerce Commissi*
*Revenue and Expenses of Steam Roads in the United States for Six Months Ending Decembe*
*Based upon the Operation of the St. Louis, Iron Mountain & Southern Railway for the Sam*

| | United States. | Alabama Great Southern. | Atchison, Topeka and Santa Fe. | Atlantic Coast Line. | Central of Georgia. | Illinois Central. | Rock Island-Frisco. |
|---|---|---|---|---|---|---|---|
| Miles Operated (average) | 226,458.12 | 1,177.99 | 9,558.58 | 11,061.11 | 2,118.58 | 5,843.59 | 14,378. |
| Operating Revenues: | | | | | | | |
| Freight | $945,671,423.37 | $6,836,367.28 | $33,765,453.41 | $32,625,142.42 | $4,342,415.90 | $23,335,800.93 | $40,183,653. |
| % of Total Revenue | 69.09 | 70.30 | 68.76 | 69.85 | 65.97 | 67.82 | 67. |
| Passenger | 319,936,828.32 | 2,296,320.96 | 11,539,740.23 | 11,266,283.23 | 1,713,581.34 | 7,244,039.38 | 15,809,662. |
| % of Total Revenue | 23.37 | 23.61 | 23.50 | 24.12 | 26.03 | 21.05 | 26. |
| Other Transportation | 90,005,252.06 | 493,572.88 | 3,407,606.43 | 2,437,225.31 | 371,223.10 | 3,551,548.03 | 3,415,240. |
| % of Total Revenue | 6.58 | 5.08 | 6.94 | 5.22 | 5.64 | 10.32 | 5. |
| Non Transportation | 13,131,368.30 | 98,193.15 | 390,395.03 | 377,124.05 | 155,165.04 | 277,892.23 | 365,352. |
| % of Total Revenue | 0.96 | 1.01 | 0.80 | 0.81 | 2.36 | 0.81 | . |
| Unclassified | 66,311.10 | ..... | ..... | ..... | ..... | ..... | ..... |
| % of Total Revenue | ..... | ..... | ..... | ..... | ..... | ..... | ... |
| Total | 1,368,811,183.15 | 9,724,454.27 | 49,103,195.10 | 46,705,775.01 | 6,582,385.38 | 34,409,280.57 | 59,773,909. |
| | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100. |
| Operating Expenses: | | | | | | | |
| Maintenance of Way & Structures | 186,610,831.90 | 1,192,637.95 | 8,463,762.81 | 6,742,363.52 | 884,875.24 | 5,098,638.47 | 8,505,857. |
| % of Total Expenses | 0.05 | 15.79 | 24.55 | 19.14 | 18.35 | 19.92 | 19. |
| Maintenance of Equipment | 215,792,707.71 | 2,370,040.02 | 8,572,572.85 | 8,930,358.35 | 1,194,467.70 | 6,851,902.72 | 8,674,771. |
| % of Total Expenses | 23.19 | 31.37 | 24.86 | 25.35 | 24.77 | 26.77 | 20. |
| Traffic | 25,163,637.58 | 225,775.88 | 902,002.85 | 1,044,151.00 | 157,677.40 | 706,647.54 | 1,360,776. |
| % of Total Expenses | 2.70 | 2.99 | 2.61 | 2.96 | 3.27 | 2.76 | 3. |
| Transportation | 471,536,215.87 | 3,501,352.31 | 15,505,063.27 | 17,324,695.08 | 2,333,560.02 | 12,173,674.99 | 22,385,492. |
| % of Total Expenses | 50.67 | 46.34 | 44.97 | 49.17 | 48.39 | 47.56 | 52. |
| General Expenses | 31,337,125.03 | 265,557.70 | 1,036,846.34 | 1,190,830.23 | 251,685.92 | 765,517.49 | 1 693,668. |
| % of Total Expenses | 3.37 | 3.51 | 3.01 | 3.38 | 5.22 | 2.99 | 3. |
| Unclassified | 139,142.94 | ..... | ..... | ..... | ..... | ..... | ..... |
| % of Total Expenses | 0.02 | ..... | ..... | ..... | ..... | ..... | ..... |
| Total | 950,579,661.03 | 7,555,363.86 | 34,480,248.12 | 35,232,398.18 | 4,822,266.26 | 25,596,381.21 | 42,620,565. |
| | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100. |
| Taxes | 41,380,438.36 | 263,169.06 | 1,468,437.53 | 1,403,415.36 | 221,919.63 | 1,383,859.29 | 1,522,725. |
| % of Taxes to Gross Revenue | 3.02 | 2.71 | 2.99 | 3.00 | 3.37 | 4.02 | 2. |
| Percentage of Earnings: | | | | | | | |
| Freight | 69.09 | 70.30 | 68.76 | 69.85 | 65.97 | 67.82 | 67. |
| Passenger | 23.37 | 23.61 | 23.50 | 24.12 | 26.03 | 21.05 | 26. |
| Other | 7.54 | 6.09 | 7.74 | 6.03 | 8.00 | 11.13 | 6. |
| Total | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100. |
| Percentage of Expenses to Earnings | 67.98 | 77.69 | 70.22 | 75.43 | 73.26 | 74.39 | 71. |
| Gross Revenue per Mile of Line | 6,044.00 | 8,255.00 | 5,137.08 | 4,222.52 | 3,106.98 | 5,888.38 | 4,157. |
| Gross Expenses " " " " | 4,109.00 | 6,414.00 | 3,607.26 | 3,185.25 | 2,276.18 | 4,380.25 | 2,964. |

NOTE.—Other Transportation includes Revenue Accounts 3 to 11; Non Transportation includes Revenue Accounts 12 to 19; Operating Expenses do not inclu

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

Company.

*ce Commission's Bulletin No. 1, Showing ding December 31, 1907, with Similar Averages for the Same Period.*

| Rock Island–Frisco. | St. Louis Southwestern. | Seaboard Air Line. | Southern. | Kansas City Southern. | Mo. Pac. System, all lines. | St. L., I. M. & S. Ry. in Arkansas. |
|---|---|---|---|---|---|---|
| 14,378.24 | 1,569.21 | 2,986.51 | 9,351.44 | 859.37 | 7,129.45 | 1,353.02 |
| $40,183,653.68 | $4,134,679.61 | $5,762,959.60 | $24,422,429.80 | $3,845,354.37 | $18,568,759.08 | $4,773,458.50 |
| 67.23 | 74.58 | 66.70 | 65.75 | 76.91 | 71.21 | 71.51 |
| 15,809,662.22 | 1,122,624.46 | 2,181,960.89 | 9,566,000.60 | 752,281.12 | 5,190,087.70 | 1,405,018.41 |
| 26.45 | 20.25 | 25.25 | 25.76 | 15.05 | 19.90 | 21.05 |
| 3,415,240.67 | 241,116.14 | 470,531.08 | 2,928,127.78 | 341,846.54 | 1,839,254.03 | 379,538.98 |
| 5.71 | 4.35 | 5.45 | 7.88 | 6.84 | 7.02 | 5.69 |
| 365,352.78 | 45,623.45 | 224,329.31 | 226,281.24 | 59,911.12 | 487,190.49 | 117,060.90 |
| .61 | .82 | 2.60 | .61 | 1.20 | 1.87 | 1.75 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 59,773,909.35 | 5,544,043.66 | 8,639,780.88 | 37,142,839.42 | 4,999,393.15 | 26,076,291.30 | 6,675,076.79 |
| 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 8,505,857.33 | 931,969.92 | 1,241,225.05 | 5,260,380.11 | 525,953.46 | 4,194,363.35 | 1,054,676.51 |
| 19.96 | 23.24 | 18.64 | 18.96 | 16.15 | 21.74 | 22.19 |
| 8,674,771.33 | 924,823.14 | 1,272,396.23 | 6,719,616.17 | 763,306.62 | 4,163,050.48 | 1,035,566.07 |
| 20.35 | 23.06 | 19.10 | 24.23 | 23.44 | 21.58 | 21.79 |
| 1,360,776.31 | 177,862.86 | 272,324.29 | 877,475.48 | 139,397.10 | 606,816.05 | 142,010.50 |
| 3.19 | 4.44 | 4.09 | 3.16 | 4.28 | 3.14 | 2.99 |
| 22,385,492.35 | 1,760,896.84 | 3,566,792.17 | 13,617,515.92 | 1,677,358.91 | 9,521,320.16 | 2,226,644.87 |
| 52.52 | 43.92 | 53.56 | 49.09 | 51.52 | 49.35 | 46.86 |
| 1,693,668.21 | 214,020.75 | 306,854.27 | 1,263,366.68 | 149,919.24 | 807,948.80 | 202,985.43 |
| 3.98 | 5.34 | 4.61 | 4.56 | 4.61 | 4.19 | 6.17 |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 42,620,565.53 | 4,009,573.51 | 6,659,592.01 | 27,738,354.36 | 3,255,935.33 | 19,293,498.84 | 4,751,883.38 |
| 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 1,522,725.49 | 146,322.03 | 322,600.00 | 1,244,327.53 | 108,452.70 | 836,192.94 | 222,148.18 |
| 2.55 | 2.64 | 3.73 | 3.35 | 2.17 | 3.21 | 3.33 |
| 67.23 | 74.58 | 66.70 | 65.75 | 76.91 | 71.21 | 71.51 |
| 26.45 | 20.25 | 25.25 | 25.76 | 15.05 | 19.90 | 21.05 |
| 6.32 | 5.17 | 8.05 | 8.49 | 8.04 | 8.89 | 7.44 |
| 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| 71.39 | 72.32 | 77.08 | 74.68 | 65.13 | 73.99 | 71.19 |
| 4,157.25 | 3,533.02 | 2,892.94 | 3,971.88 | 5,817.50 | 3,657.55 | 4,933.46 |
| 2,964.24 | 2,555.15 | 2,229.89 | 2,966.21 | 3,788.74 | 2,706.17 | 3,512.06 |

do not include Hire of Equipment nor outside operation.

5363 EXHIBIT 32.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement of Operating Revenues, Operating Expenses, Taxes and Outside Operations (Def.) for Six Months Ending December* 31, 1907.

Operating Revenues.

| Item. | Freight. | Passenger. | Total. | Per cent. |
|---|---|---|---|---|
| Freight Revenue—State | $173,064.45 | $..... | $173,064.45 | 7.56 |
| Freight Revenue—Interstate | 1,597,230.02 | ..... | 1,597,230.02 | 69.80 |
| Pass. Revenue—State | ..... | 246,101.33 | 246,101.33 | 10.76 |
| Pass. Revenue—Interstate | ..... | 170,735.14 | 170,735.14 | 7.46 |
| Miscellaneous: | | | | |
| Excess Baggage Revenue | ..... | 4,206.42 | ..... | ..... |
| Parlor and Chair Car Revenue | ..... | 2,096.05 | ..... | ..... |
| Mail Revenue | ..... | 33,218.77 | ..... | ..... |
| Express Revenue | ..... | 34,155.57 | ..... | ..... |
| Other Pass. Tr. Revenue | ..... | 290.56 | ..... | ..... |
| Switching Revenue | 11,743.00 | ..... | ..... | ..... |
| Spec. Serv. Tr. Revenue | 3,066.73 | ..... | ..... | ..... |
| Misc. Transp. Revenue | 1,375.90 | ..... | ..... | ..... |
| Station & Train Privileges | ..... | 1,431.12 | ..... | ..... |

| | | | | |
|---|---|---|---|---|
| Storage—Freight | 1,495.05 | ..... | ..... | ..... |
| Storage—Baggage | ..... | 89.30 | ..... | ..... |
| Car Service | 5,275.83 | ..... | ..... | ..... |
| Rents of Bldgs. & Other Propty. | 515.85 | 121.00 | ..... | ..... |
| Miscellaneous | 1,538.66 | 372.65 | 101,042.46 | 4.42 |
| Total | $1,795,355.49 | $492,817.91 | $2,288,173.40 | 100.00 |

Operating Expenses, Taxes, Rentals, and Outside Operations (Def.).

| Item. | Freight. | Passenger. | Total. | Per cent. |
|---|---|---|---|---|
| Maint. of Way & Structures | $174,232.35 | $126,992.95 | $301,225.30 | 22.01 |
| Maintenance of Equipment | 260,243.81 | 90,097.04 | 350,340.85 | 25.59 |
| Traffic Expenses | 59,812.88 | 25,999.54 | 85,812.42 | 6.27 |
| Transportation Expenses | 387,821.21 | 176,500.45 | 564,321.66 | 41.23 |
| General Expenses | 44,017.99 | 23,119.48 | 67,137.47 | 4.90 |
| | $926,128.24 | $442,709.46 | $1,368,837.70 | 100.00 |
| Taxes | 56,188.77 | 15,848.11 | 72,036.88 | |
| Rentals | *56,722.81 | 2,549.88 | *54,172.93 | |
| Outside Operations | ..... | 1,374.29 | 1,374.29 | |
| Total | $925,594.20 | $462,481.74 | $1,388,075.94 | |

* Red ink figures denote credit.

NOTE.—The State Freight and Passenger rates inhibited by the injunction granted at St. Paul, in September, 1908, were in effect during this entire year.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT THIRTY-THREE.

EXHIBIT 33.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement of Operating Revenues, Operating Expenses, Taxes, Rentals and Outside Operations (Def.), Showing Results from Handling State Freight and Passenger Traffic (After Excluding Revenue, Expenses, Taxes, Rentals and Outside Operations (Def.) for Interstate Freight and Passenger Traffic and All of Mail, Express and Miscellaneous), for Six Months Ending December 31, 1907.*

Expenses, Taxes, Rentals and Outside Operations (Def.) Divided Between the Different Classes of Traffic and Between State and Interstate on a Revenue Basis.

*Freight.*

| Item. | Operating revenues. | Per cent. | Operating expenses, taxes, rentals & outside operations (def.). |
|---|---|---|---|
| Freight—State | $173,064.45 | 9.64 | $89,227.28 |
| Freight—Interstate | 1,597,230.02 | 88.96 | 823,408.60 |
| Miscellaneous | 25,061.02 | 1.40 | 12,958.32 |
| Total Freight | $1,795,355.49 | 100.00 | $925,594.20 |
| *Passenger.* | | | |
| Passenger—State | $246,101.33 | 49.94 | $230,963.38 |
| Passenger—Interstate | 170,735.14 | 34.64 | 160,203.68 |
| Mail, Express & Misc. | 75,981.44 | 15.42 | 71,314.68 |
| Total Passenger | $492,817.91 | 100.00 | $462,481.74 |
| Grand Total | $2,288,173.40 | ..... | $1,388,075.94 |

*Summary, State Traffic Only.*

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| State Revenue | $173,064.45 | $246,101.33 | $419,165.78 |
| State Expenses, Taxes, Rentals and Outside Operations (Def.) on a revenue basis, with no allowance for extra cost | 89,227.28 | 230,963.38 | 320,190.66 |
| Balance | $83,837.17 | $15,137.95 | $98,975.12 |
| Extra cost: | | | |
| * Frt. 50%—Pass. 25% | 38,444.14 | 19,733.18 | 58,177.32 |
| Balance | $45,393.03 | $4,595.23‡ | $40,797.80 |
| † Frt. 100%—Pass. 15% | 73,418.26 | 12,468.97 | 85,887.23 |
| Balance | $10,418.91 | $2,668.98 | $13,087.89 |

* Minimum ratio of Extra Cost found in the Missouri Case.
† Minimum ratio of Extra Cost found by Judge Vandeventer in granting temporary injunction.
[‡ In red ink in copy.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild. D. C.

5367 EXHIBIT 34.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement Showing How Extra Cost of Handling State Traffic, in Proportion to Revenue, is Arrived at for Six Months Ending December 31, 1907. (Extra Cost Applied to Operating Expenses Only; Not to Taxes, Rentals, etc.)*

| | Freight. | Passenger. |
|---|---|---|
| Total Operating Expenses (excluding Taxes, Rentals and Outside Operations (Def.) | $926,128.24 | $442,709.46 |
| Less Mail, Express and Miscellaneous prop'n Frt. 1.40%—Pass. 15.42% | 12,965.79 | 68,265.80 |
| Total Operating expenses only, chargeable to Freight and Passenger Traffic | $913,162.45 | $374,443.66 |

* Freight at 50%.

| | | | | | Difference. |
|---|---|---|---|---|---|
| State Freight Rev. | $173,064.45 — | 9.78 x 1½ = | 14.67 = | 13.99 | 4.21+ |
| Interstate Frt. Rev. | 1,597,230.02 — | 90.22 | 90.22 | 86.01 | 4.21— |
| | $1,770,294.47 — | 100.00 | 104.89 | 100.00 | |

The Extra Cost is 4.21% of $913,162.45 or $38,444.14.

† Freight @ 100%.

| | | | | | |
|---|---|---|---|---|---|
| State Freight Rev..... | $173,064.45 — | 9.78 x 2 | = 19.56 = | 17.82 | 8.04+ |
| Interstate Frt. Rev..... | 1,597,230.02 — | 90.22 | 90.22 | 82.18 | 8.04— |
| | $1,770,294.47 — | 100.00 | 109.78 | 100.00 | |

The Extra Cost is 8.04% of $913,162.45 or $73,418.26.

* Passenger @ 25%.

| | | | | | |
|---|---|---|---|---|---|
| State Pass. Rev. ..... | $246,101.33 — | 59.04x1.25 = | 73.80 = | 64.31 | 5.27+ |
| Interstate Pass. Rev..... | 170,735.14 — | 40.96 | 40.96 | 35.69 | 5.27— |
| | $416,836.47 — | 100.00 | 114.76 | 100.00 | |

The Extra Cost is 5.27% of $374,443.66 or $19,733.18.

† Passenger @ 15%.

| | | | | | |
|---|---|---|---|---|---|
| State Pass. Rev. ..... | $246,101.33 — | 59.04x1.15 = | 67.90 = | 62.37 | 3.33+ |
| Interstate Pass. Rev..... | 170,735.14 — | 40.96 | 40.96 | 37.63 | 3.33— |
| | **$416,836.47** — | 100.00 | 108.86 | 100.00 | |

The Extra Cost is 3.33% of $374,443.66 or $12,468.97.

* Minimum ratio of Extra Cost found in the Missouri Case.
† Minimum ratio of Extra Cost found by Judge Vandeventer in granting temporary injunction.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

5369 EXHIBIT 35.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Miscellaneous Traffic Statistics for Six Months Ending December* 31, 1907.

Miles Operated in Arkansas..... 452.2 Miles.

| Freight: | State. | Interstate. | Total. |
|---|---|---|---|
| Tons carried | 197,600 | 797,865 | 995,465 |
| Tons carried one mile | 8,512,807 | 184,831,455 | 193,344,262 |
| Tons carried one mile per mile of road | 18,825 | 408,738 | 427,563 |
| Avg. distance haul per ton—in miles | 43 | 232 | 194 |
| Percentage of total tons | 19.9 | 80.1 | 100.0 |
| Percentage of total tons one mile | 4.4 | 95.6 | 100.0 |
| Percentage of freight revenue | 9.8 | 90.2 | 100.0 |
| Passenger: | | | |
| Passengers carried | 504,392 | 82,064 | 586,456 |
| Passengers carried one mile | 12,345,719 | 9,930,034 | 22,275,753 |
| Passengers carried one mile per mile of road | 27,301 | 21,959 | 49,260 |
| Avg. distance haul per pass. in miles | 24 | 121 | 38 |
| Percentage of total passengers | 86.0 | 14.0 | 100.0 |
| Percentage of passengers one mile | 55.4 | 44.6 | 100.0 |
| Percentage of passenger revenue | 59.0 | 41.0 | 100.0 |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5370 EXHIBIT THIRTY-SIX.

5371 *Document No.* 750.

Pacific Express Company and The Missouri Pacific Railway Company.

*Contract Providing Facilities for the Transportation of Express Matter Over Lines of the Railway Company.*

Dated May 1st, 1886; Expires May 1st, 1896.

General Auditor's Contract No. 503.

This Agreement, Entered into this first day of May, A. D. eighteen hundred and eighty-six, between The Missouri Pacific Railway Company, a corporation organized under the laws of the State of Missouri, for themselves and for all lines owned, operated or controlled by them, party of the first part, and the Pacific Express Company, a corporation organized under the laws of the State of Nebraska, party of the second part; witnesseth:

5372 That Whereas, the party of the first part now owns and is engaged in operating lines of railroad extending from St. Louis, Mo., to Texarkana and to Omaha, Nebraska, and diverging lines;

And Whereas, the party of the second part is an Express Company having a large and established business between the principal commercial cities of the east and various places upon the lines of said railroad, and points beyond such lines of railroad;

And Whereas, the party of the second part is desirous of securing for the benefit of itself and the persons employing it, permanent and reliable facilities for the transportation of its express matter, and the party of the first part is desirous of securing the business and patronage of the party of the second part;

It is agreed as follows:

First. The party of the first part agrees to provide, on each of its daily passenger trains, sufficient facilities of the kind customarily furnished to express companies by railroad companies for the transportation of all freight and express matters which may be tendered to them by the party of the second part for transportation upon any of their daily passenger trains, at any station at which such trains may stop, and to receive and transport such freight and express matter upon the said passenger trains leaving such station next after said tender, and carry and deliver the same without delay. But the carriage of more than one carload of express matter by any one passenger train, shall for convenience, be at the option of the party of the first part.

Second. The party of the second part shall be entitled to send free both ways, all its messengers' safes and empty packing trunks,

5373 and shall also have the privilege to send free of charge one person, with each car, as messenger, to take charge of its

property, and the property confided to it for carriage, and when necessary an additional messenger, armed as guard, for protection against highway robbers. Such messengers shall ride in the car provided by the party of the first part for the carriage of the goods in their charge. The agents of the party of the second part shall be carried free of charge on the passenger trains of the party of the first part, whenever such agents are traveling on the business of the party of the second part.

In case the cars for the transportation of express matter are furnished by the party of the second part, the said second party shall be entitled to receive from the party of the first part, such compensation for said cars, as is the customary mileage paid by said first party to connecting railways for similar cars.

Third. The party of the first part agrees to employ the party of the second part, exclusively, to receive, take charge of and deliver all money, remittances, packages and parcels which they may require to have sent or delivered on the line of its railway, by express, such service to be compensated as hereinafter provided.

Fourth. Settlements shall be made monthly, and the party of the first part shall be entitled to receive fifty (50) per cent of the total gross earnings of the party of the second part on the lines of the said first party's railroad.

Fifth. The party of the second part shall at all times be entitled to have its necessary equipment material transported free on freight trains, as compensation for receiving, caring for, and delivering the money, remittances, packages and parcels of the party of the first part, and shall not make any other charge for such services.

5374 Sixth. The party of the second part shall have the right to employ the agents and servants of the party of the first part as its own agents when such employment will, in the opinion of the parties of the first part not be to the interruption or detriment of their business. It is understood that in the case of such employment, the party is the exclusive employé of the party of the first part, as to any shipment to be made on account of said first party, until it is delivered to an exclusive employé of the party of the second part.

Seventh. This contract is to supersede and cancel and is a settlement in full for all existing contracts between the parties hereto, and shall be binding for ten (10) years from the first day of May, 1886, and shall apply to all lines of railroad now owned, operated or controlled by the party of the first part and also to such as may be owned, operated or controlled by them during the period of this contract.

The said second party in consideration of this contract, and the rights and privileges accorded by it, agrees to give to the said party of the first part $2,400,000.00 of its capital stock (and it is agreed that the capital stock of the second party shall not be increased above $6,000,000.00 without the consent of the first party).

Eighth. The party of the first part also agrees not to engage during the last named period in the Express business, nor to employ any other Express Company or individual in the carriage of its money,

remittances, packages, parcels or goods by express, and that they will not permit any of their employes, to receive, carry or deliver express matter except as hereinbefore provided. They also agree that they will not during such period give to any other person, firm, company or corporation any better or more advantageous terms, rates or facilities than they give to the party of the second part, and
5375 they will so far as they lawfully may, during all such period, protect and forward the interest and business of the party of the second part.

Ninth. The party of the first part in consideration of the payments received and hereafter to be received, and the benefits to be derived from this agreement, hereby appoints and constitutes the said party of the second part its sole agent to manage and carry on the express business of its lines of railway, and should any portion of said Railway be occupied by any other express company or firm, then such payments as may be received from such other express company or firm shall be considered gross earnings of said party of the second part, and treated as such.

THE MISSOURI PACIFIC RAILWAY COMPANY,
[SEAL.] By JAY GOULD, *President.*

Attest:

GUY PHILLIPS,
*Second Assistant Secretary.*

THE PACIFIC EXPRESS COMPANY,
[SEAL.] By E. M. MORSMAN, *President.*

Attest:

WM. F. BECHEL, *Secretary.*

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

(Here follows paster, marked pp. 5376 and 5377.)

EXHIBIT THIRTY-SEVEN.

*Intrastate Mileage Rates in Effect in 1907 in States Mentioned on Commodities as Lis*

| | Mileage. Arkansas | | | | Mileage. Kansas. | | | | Mileage. Louisiana. | | | | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 25 | 50 | 75 | 100 | 25 | 50 | 75 | 100 | 25 | 50 | 75 | 100 | 25 |
| Bricks—Common | 2 | 2 | 3 | 3.50 | 3.75 | 5 | 5.75 | 6.25 | 4 | 5 | 5 | 6 | 3.25 |
| Coal: | | | | | | | | | | | | | |
| Lump | 2.50 | 2.50 | 3.75 | 4.75 | 3. | 4.25 | 5.25 | 6.00 | 4.50 | 5 | 5.75 | 6.50 | *2.50 |
| Slack | 2.25 | 2.25 | 3.00 | 3.50 | 3. | 4.25 | 4.2 | 4.8 | 4.50 | 5 | 5.75 | 6.50 | 2.50 |
| Cement | 6.00 | 7.00 | 8.00 | 9.00 | 6.00 | 7.00 | 8.00 | 10.00 | †11.50 | 16.5 | 19.50 | 22.50 | 4.50 |
| Cordwood | 2.00 | 2.00 | 2.50 | 3.00 | †4.50 | 5.50 | 7.00 | 7.50 | 4.00 | 5.0 | 5.00 | 6.00 | 3.00 |
| Emigrant Outfit | 6.00 | 8.00 | 10.00 | 12.00 | †9.00 | 11.00 | 14.00 | 16.00 | $20.00 | $25. | $30. | $30. | 11.00 |
| Grain: | | | | | | | | | | | | | |
| Corn | 4.00 | 5.00 | 7.00 | 8.00 | 4.50 | 5.50 | 6.50 | 7.00 | .... | .... | .... | .... | 5.00 |
| Oats | 4.00 | 5.00 | 7.00 | 8.00 | 4.50 | 5.50 | 6.50 | 7.00 | .... | .... | .... | .... | 5.00 |
| Rye | 4.00 | 5.00 | 7.00 | 8.00 | 4.50 | 5.50 | 6.50 | 7.00 | .... | .... | .... | .... | 5.00 |
| Barley | 4.00 | 5.00 | 7.00 | 8.00 | 4.50 | 5.50 | 6.50 | 7.00 | .... | .... | .... | .... | 5.00 |
| Wheat | 6.00 | 8.00 | 10.00 | 11.00 | 5.00 | 7.00 | 7.00 | 9.00 | .... | .... | .... | .... | 6.00 |
| Hay | 4.00 | 5.00 | 6.00 | 7.00 | 6.00 | 7.00 | 8.00 | 10.00 | 5.50 | 8.00 | 9.50 | 10.50 | †8.50 |
| Ice | 4.00 | 4.50 | 5.00 | 5.50 | 4.00 | 5.50 | 6.50 | 7.00 | 4.50 | 5.00 | 6.00 | 6.50 | †5.00 |
| Lime | 4.00 | 5.00 | 6.00 | 6.50 | 6.00 | 7.00 | 8.00 | 10.00 | †11.50 | 16.50 | 19.50 | 22.50 | 4.50 |
| Lumber | 3.00 | 4.00 | 4.50 | 5.00 | 6.50 | 8.00 | 11.00 | 13.00 | 6.00 | 7.00 | 7.00 | 8.00 | 4.00 |
| Plaster | 6.00 | 7.00 | 8.00 | 9.00 | 6.50 | 7.00 | 8.00 | 10.00 | †11.50 | 16.50 | 19.50 | 22.50 | 4.50 |
| Salt | 5.00 | 6.00 | 7.00 | 7.50 | 7⅓ | 11.00 | 13.00 | 15⅓ | .... | .... | .... | .... | 4.50 |
| Sand | 2.00 | 2.00 | 2.50 | 3.00 | 3.50 | 4.50 | 5.25 | 5.75 | 4.00 | 5.00 | 5.00 | 6.00 | 3.25 |
| Stone | 2.00 | 2.00 | 2.50 | 3.00 | 3.50 | 4.50 | 5.25 | 5.75 | 4.00 | 5.00 | 5.00 | 6.00 | 3.25 |
| Gravel | 2.00 | 2.00 | 2.50 | 3.00 | †4.50 | 5.50 | 7.00 | 7.50 | 4.00 | 5.00 | 5.00 | 6.00 | 3.25 |
| Fertilizer | 4.00 | 5.00 | 6.00 | 6.50 | †4.50 | 5.50 | 7.00 | 7.50 | †9.00 | 12.00 | 14.00 | 16.75 | †5.00 |

*Interstate Rates Between—*

| | Arkansas and Louisiana. | | | | Arkansas and Missouri. | | | | Ark |
|---|---|---|---|---|---|---|---|---|---|
| Coal: | | | | | | | | | |
| Brick—Common | 4.00 | 5.00 | 5.00 | 6.00 | †9.00 | 11.00 | 14.00 | 16.00 | 3.75 |
| Lump | .... | .... | .... | .... | .... | .... | .... | .... | 6.50 |
| Slack | .... | .... | .... | .... | .... | .... | .... | .... | 6.50 |
| Cement | †11.50 | 16.50 | 19.50 | 22.50 | †10.50 | 15.50 | 19.00 | 22.00 | †8.50 |
| Cordwood | 4.00 | 5.00 | 5.00 | 6.00 | †9.00 | 11.00 | 14.00 | 16.00 | †6.50 |
| Emigrant Outfit | †11.50 | 16.50 | 19.50 | 22.50 | †10.50 | 15.50 | 19.00 | 22.00 | †11.00 |
| Grain: | | | | | | | | | |
| Corn | .... | .... | .... | .... | .... | .... | .... | .... | 7.00 |
| Oats | .... | .... | .... | .... | .... | .... | .... | .... | 7.00 |
| Rye | .... | .... | .... | .... | .... | .... | .... | .... | 7.00 |
| Barley | .... | .... | .... | .... | .... | .... | .... | .... | 7.00 |
| Wheat | .... | .... | .... | .... | .... | .... | .... | .... | 8.00 |
| Hay | .... | .... | .... | .... | .... | .... | .... | .... | 6.50 |
| Ice | 5.00 | 5.00 | 6.50 | 8.00 | †9.00 | 11.00 | 14.00 | 16.00 | 4.00 |
| Lime | †11.50 | 16.50 | 19.50 | 22.50 | †10.50 | 15.50 | 19.00 | 22.00 | 8.50 |
| Lumber | 6.00 | 7.00 | 7.00 | 8.00 | 5.00 | 6.50 | 7.50 | 8.50 | 7.00 |
| Plaster | †11.50 | 16.50 | 19.50 | 22.50 | †10.50 | 15.50 | 19.00 | 22.00 | 8.50 |
| Salt | †11.50 | 16.50 | 19.50 | 22.50 | †10.50 | 15.50 | 19.00 | 22.00 | 8.50 |
| Sand | 4.00 | 5.00 | 5.00 | 6.00 | †9.00 | 11.00 | 14.00 | 16.00 | 3.75 |
| Stone | 4.00 | 5.00 | 5.00 | 6.00 | †9.00 | 11.00 | 14.00 | 16.00 | 3.75 |
| Gravel | 4.00 | 5.00 | 5.00 | 6.00 | †9.00 | 11.00 | 14.00 | 16.00 | 3.75 |
| Fertilizer | †9.00 | 12.00 | 14.00 | 16.75 | †9.00 | 11.00 | 14.00 | 16.00 | †6.50 |

* Soft Coal.
† Class Rates.
Rates shown on Cordwood Intrastate in Oklahoma and Texas are dollars per cord; in all other instances cents per 100 pounds, except Emigrant Outfit Intrastate rate

Endorsed: Filed Jun. 8. 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

*tioned on Commodities as Listed.*

| ge. | Louisiana. | | Mileage. Missouri. | | | | Mileage. Oklahoma. | | | | Mileage. Texas. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 75 | 100 | 25 | 50 | 75 | 100 | 25 | 50 | 75 | 100 | 25 | 50 | 75 | 100 |
| | 5 | 6 | 3.25 | 3.75 | 4.50 | 5 | 3.75 | 5 | 5.50 | 6.25 | 2.25 | 3 | 3.50 | 4 |
| | 5.75 | 6.50 | *2.50 | 3.50 | 4.25 | 5 | *4.25 | 5.75 | 7.00 | 7.50 | 2.75 | 3.25 | 4.00 | 4.50 |
| | 5.75 | 6.50 | 2.50 | 3.50 | 4.25 | 5 | 4.25 | 5.75 | 7.00 | 7.50 | 2.00 | 2.50 | 3.75 | 3.75 |
| .5 | 19.50 | 22.50 | 4.50 | 6.00 | 7.50 | 8.50 | 6.00 | 7.00 | 8.00 | 10.00 | 6.50 | 7.50 | 9.50 | 11.00 |
| .0 | 5.00 | 6.00 | 3.00 | 3.75 | 4.50 | 5.00 | $1.25 | $1.40 | $1.40 | $1.65 | $ .70 | $ .80 | $1.10 | $1.25 |
| . | $30. | $30. | 11.00 | 13.00 | 16.00 | 18.00 | †9.00 | 11.00 | 14.00 | 16.00 | †7.00 | 8.00 | 11.00 | 13.00 |
| ... | .... | .... | 5.00 | 6.50 | 8.00 | 8.50 | 5.00 | 6.50 | 7.50 | 8.50 | 5.00 | 6.00 | 7.50 | 8.50 |
| ... | .... | .... | 5.00 | 6.50 | 8.00 | 8.50 | 5.00 | 6.50 | 7.50 | 8.50 | 5.00 | 6.00 | 7.50 | 8.50 |
| ... | .... | .... | 5.00 | 6.50 | 8.00 | 8.50 | 5.00 | 6.50 | 7.50 | 8.50 | 6.50 | 9.00 | 11.50 | 12.50 |
| ... | .... | .... | 5.00 | 6.50 | 8.00 | 8.50 | 5.00 | 6.50 | 7.50 | 8.50 | 6.50 | 9.00 | 11.50 | 12.50 |
| ... | .... | .... | 6.00 | 7.50 | 9.00 | 10.00 | 6.00 | 8.00 | 8.50 | 10.50 | 6.50 | 9.00 | 11.50 | 12.50 |
| .00 | 9.50 | 10.50 | †8.50 | 10.50 | 12.00 | 14.00 | 6.00 | 7.00 | 8.00 | 10.00 | 5.50 | 8.00 | 9.50 | 10.50 |
| .00 | 6.00 | 6.50 | †5.00 | 6.00 | 7.00 | 8.00 | 4.00 | 5.50 | 6.50 | 7.00 | 4.50 | 5.00 | 6.00 | 7.00 |
| .50 | 19.50 | 22.50 | 4.50 | 6.00 | 7.50 | 8.50 | 6.00 | 7.00 | 8.00 | 10.00 | 6.50 | 7.50 | 9.00 | 10.00 |
| .00 | 7.00 | 8.00 | 4.00 | 5.50 | 7.00 | 8.00 | 6.50 | 8.00 | 11.00 | 13.00 | .... | .... | .... | .... |
| .50 | 19.50 | 22.50 | 4.50 | 6.00 | 7.50 | 8.50 | 6.00 | 7.00 | 8.00 | 10.00 | .... | .... | .... | .... |
| ... | .... | .... | 4.50 | 6.00 | 7.50 | 8.50 | 7⅞ | 11.00 | 13.00 | 15½ | 6.00 | 8.00 | 10.00 | 11.00 |
| .00 | 5.00 | 6.00 | 3.25 | 3.75 | 4.50 | 5.00 | 3.50 | 4.50 | 5.00 | 5.75 | 1.75 | 2.25 | 2.75 | 3.25 |
| .00 | 5.00 | 6.00 | 3.25 | 3.75 | 4.50 | 5.00 | 3.75 | 5.00 | 5.50 | 6.25 | 1.75 | 2.25 | 2.75 | 3.25 |
| .00 | 5.00 | 6.00 | 3.25 | 3.75 | 4.50 | 5.00 | 3.75 | 5.00 | 5.50 | 6.25 | 1.75 | 2.25 | 2.75 | 3.25 |
| .00 | 14.00 | 16.75 | †5.00 | 6.00 | 7.00 | 8.00 | †4.50 | 5.50 | 7.00 | 7.50 | 3.75 | 5.00 | 6.00 | 7.00 |

—

| as and Missouri. | | | Arkansas and Oklahoma. | | | |
|---|---|---|---|---|---|---|
| .00 | 14.00 | 16.00 | 3.75 | 5.00 | 5.75 | 6.25 |
| ... | .... | .... | 6.50 | 9.00 | 11.50 | 13.50 |
| ... | .... | .... | 6.50 | 9.00 | 11.50 | 13.50 |
| .50 | 19.00 | 22.00 | †8.50 | 11.00 | 14.00 | 16.50 |
| .00 | 14.00 | 16.00 | †6.50 | 9.00 | 11.50 | 13.50 |
| .50 | 19.00 | 22.00 | †11.00 | 16.00 | 21.00 | 24.00 |
| ... | .... | .... | 7.00 | 9.50 | 11.50 | 13.50 |
| ... | .... | .... | 7.00 | 9.50 | 11.50 | 13.50 |
| ... | .... | .... | 7.00 | 9.50 | 11.50 | 13.50 |
| ... | .... | .... | 7.00 | 9.50 | 11.50 | 13.50 |
| ... | .... | .... | 8.00 | 10.50 | 13.00 | 15.50 |
| ... | .... | .... | 6.50 | 9.00 | 11.50 | 13.50 |
| .00 | 14.00 | 16.00 | 4.00 | 5.50 | 6.50 | 7.00 |
| .50 | 19.00 | 22.00 | 8.50 | 11.00 | 14.00 | 16.50 |
| .50 | 7.50 | 8.50 | 7.00 | 9.50 | 11.00 | 13.00 |
| .50 | 19.00 | 22.00 | 8.50 | 11.00 | 14.00 | 16.50 |
| .50 | 19.00 | 22.00 | 8.50 | 11.00 | 14.00 | 16.50 |
| .00 | 14.00 | 16.00 | 3.75 | 5.00 | 5.75 | 6.25 |
| .00 | 14.00 | 16.00 | 3.75 | 5.00 | 5.75 | 6.25 |
| .00 | 14.00 | 16.00 | 3.75 | 5.00 | 5.75 | 6.25 |
| .00 | 14.00 | 16.00 | †6.50 | 9.00 | 11.50 | 13.50 |

migrant Outfit Intrastate rates in Louisiana, which are dollars per car.

| Commodities. | Arkansas. Miles. 200 | Arkansas. Miles. 300 | Kansas. Miles. 200 | Kansas. Miles. 300 | Louisiana. Miles. 200 | Louisiana. Miles. 300 | Missouri. Miles. 200 | Missouri. Miles. 300 | Texas. Miles. 200 | Texas. Miles. 300 |
|---|---|---|---|---|---|---|---|---|---|---|
| Brick—Common ..... | 5.0 | 7.0 | 8.75 | 11.25 | 7.0 | ..... | 7.5 | 10.00 | 6.00 | 8.00 |
| Coal: | | | | | | | | | | |
| Lump ..... | 7.0 | 9.5 | 9.00 | 12.75 | 9.5 | 10.25 | %7.5 | %9.25 | %7.0 | %9.50 |
| Slack ..... | 6.0 | 8.5 | 7.2 | 10.2 | 9.5 | 10.25 | %7.5 | %9.25 | 6.25 | 8.75 |
| Cement ..... | 10.0 | 13.0 | #16 | #21 | #33.5 | #42.5 | 12.0 | 14.00 | 18.0 | 23.00 |
| Cordwood ..... | 5.0 | 8.0 | #12 | #16 | 7.0 | ..... | 9.0 | 10.75 | 1.80 | $2.50 |
| Emgr. Outfit ..... | 18.0 | 23.0 | #26 | #34 | $40 | $50 | #27.0 | #34.00 | #22 | #23 |
| Grain: | | | | | | | | | | |
| Corn ..... | 10.0 | 12.0 | 11.5 | 12.5 | ..... | ..... | 12.5 | 14.50 | 12.5 | 12.5 |
| Oats ..... | " | " | " | " | ..... | ..... | " | " | " | " |
| Rye ..... | " | " | " | " | ..... | ..... | " | " | 15.0 | 15.0 |
| Barley ..... | " | " | " | " | ..... | ..... | " | " | " | " |
| Wheat ..... | 12.0 | 15.0 | 13.0 | 14.0 | ..... | ..... | 14.5 | 16.00 | " | " |
| Hay ..... | 8.5 | 13.0 | #16.0 | #21 | 15.0 | 15.0 | #21 | #26 | 15.0 | 15.0 |
| Ice ..... | 7.0 | 8.0 | 10.5 | 14.0 | 10.0 | 10.0 | #12 | #15 | 9.5 | 11.0 |
| Lime ..... | 7.5 | 9.0 | #16 | #21 | #33.5 | #42.5 | 12.0 | 14.00 | 14.0 | 16.0 |
| Lumber ..... | 7.0 | 12.0 | 19.0 | 22.0 | 12.0 | ..... | 11.0 | 13.50 | ..... | ..... |
| Plaster ..... | 10.0 | 13.0 | #16.0 | #21 | #33.5 | #42.5 | 12.0 | 14.00 | ..... | ..... |
| Salt ..... | 8.0 | 12.0 | 23.0 | 27.0 | ..... | ..... | 12.0 | 14.00 | ..... | ..... |
| Sand ..... | 5.0 | 8.0 | 7.75 | 10.0 | 7.0 | ..... | 7.5 | 10.00 | 5.25 | 5.25 |
| Stone ..... | 5.0 | 8.0 | 8.75 | 11.25 | " | ..... | " | " | " | " |
| Gravel ..... | 5.0 | 8.0 | #12.0 | #16.0 | " | ..... | " | " | " | " |
| Fertilizer ..... | 7.5 | 9.0 | #12.0 | #16.0 | #25.0 | 31.75 | #12 | #15 | 11.0 | 15.0 |

| Commodities. | Interstate Rates Between— Arkansas & Louisiana. Miles. 200 | 300 | Arkansas & Missouri. Miles. 200 | 300 | Arkansas & Oklahoma. Miles. 200 | 300 |
|---|---|---|---|---|---|---|
| Brick—Common | 7.0 | ..... | #25.00 | #34.00 | 8.75 | 11.25 |
| Coal: | | | | | | |
| Lump | ..... | ..... | ..... | ..... | #20.00 | #24.00 |
| Slack | ..... | ..... | ..... | ..... | #20.00 | #24.00 |
| Cement | #33.5 | #42.50 | #32.00 | #42.00 | #25.00 | #30.00 |
| Cordwood | 7.0 | ..... | #25.00 | #34.00 | #20.00 | #24.00 |
| Emgr. Outfit | #33.5 | #42.50 | #32.00 | #42.00 | #38.00 | #48.00 |
| Grain: | | | | | | |
| Corn | ..... | ..... | ..... | ..... | 18.00 | 20.00 |
| Oats | ..... | ..... | ..... | ..... | 18.00 | 20.00 |
| Rye | ..... | ..... | ..... | ..... | 18.00 | 20.00 |
| Barley | ..... | ..... | ..... | ..... | 18.00 | 20.00 |
| Wheat | ..... | ..... | ..... | ..... | 23.00 | 25.00 |
| Hay | ..... | ..... | ..... | ..... | #20.00 | #24.00 |
| Ice | 10.0 | ..... | #25.00 | #34.00 | 10.50 | 15.00 |
| Lime | 7.0 | ..... | #32.00 | #42.00 | #25.00 | #30.00 |
| Lumber | 12.0 | ..... | 12.00 | ..... | 19.00 | 22.00 |
| Plaster | 7.0 | ..... | #32.00 | #42.00 | #25.00 | #30.00 |
| Salt | " | ..... | " | " | " | " |

| | | | | | | |
|---|---|---|---|---|---|---|
| Sand | 7.0 | ..... | #25.00 | #34.00 | 8.75 | 11.25 |
| Stone | 7.0 | ..... | #25.00 | #34.00 | 8.75 | 11.25 |
| Gravel | 7.0 | ..... | #25.00 | #34.00 | 8.75 | 11.25 |
| Fertilizer | #25.0 | #31.75 | #25.00 | #34.00 | #20.00 | #24.00 |

NOTE.—No rates in Oklahoma for 200 & 300 miles, maximum distance 170 Mi. Rates shown on Cordwood Intrastate in Oklahoma and Texas, are dollars per cord; in all other instances, cents per 100 lbs., except Emigrant Outfit Intrastate rates in Louisiana, which are dollars per car.

---

# Class Rates.
% Soft Coal.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT FORTY-FOUR.

EXHIBIT No. 44.

*State of Arkansas Matter.*

St. Louis, Iron Mountain & Southern Railway Company.

*Analysis—Mail Earnings in Arkansas—Six Months Ended December* 31, 1907.

| Post Office Department—Route. | | | | | Arkansas' Proportion on a Track-mile Basis. | | | |
|---|---|---|---|---|---|---|---|---|
| Number. | Between— | And— | Operating Division. | Percent of route in Arkansas.* | Compensation fixed by contract. | Additional allowances. | Deductions and adjustments. | Net compensation received. |
| 145,081 | Bergman, Ark..... | Carthage, Mo..... | White River | 18.65% | $450.36 | $208.31 | $.19 | $658.48 |
| 147,041 | St. Louis, Mo..... | Texarkana, Ark.... | Mo. & Ark. (Main Line.) | 63.16% | 151,980.06† | 2,788.71† | 7,960.34 | 146,808.43 |
| 147,044 | McGehee, Ark..... | Clayton Jct., La.... | Valley | 31.61% | 1,336.62 | 27.11 | 1.89 | 1,361.84 |
| 149,001 | " " ..... | Alexandria, La..... | " | 24.03% | 3,010.68 | 23.28 | 180.23 | 2,853.73 |
| 147,003 | Little Rock, Ark.... | Ft. Smith, Ark..... | Central | 100% | 10,254.66 | 115.47 | 140.71 | 10,229.42 |
| 147,004 | Halley, Ark..... | Warren, Ark..... | Valley | 100% | 1,552.56 | .01 | 7.92 | 1,544.65 |
| 147,007 | Little Rock, Ark.... | McGehee, Ark..... | Arkansas | 100% | 9,017.43 | 17.00 | 96.64 | 8,937.79 |
| 147,008 | Newport, Ark..... | Bergman, Ark..... | White River | 100% | 8,534.10 | 9.00 | 6.00 | 8,537.10 |
| 147,010 | Gurdon, Ark..... | El Dorado, Ark..... | Arkansas | 100% | 3,096.18 | .... | 24.38 | 3,071.80 |
| 147,012 | Knobel, Ark..... | Helena, Ark..... | Memphis | 100% | 8,724.36 | 15.00 | 54.56 | 8,684.80 |
| 147,014 | Cashman, Ark..... | White River Jct.... | White River | 100% | 205.62 | .... | 3.00 | 202.62 |
| 147,023 | Memphis, Tenn..... | Bald Knob, Ark.... | Memphis‡ | 100% | 7,768.56 | 51.08 | 223.31 | 7,596.33 |
| 147,025 | Ft. Smith, Ark..... | Greenwood, Ark.... | Central | 100% | 441.72 | 4.00 | 6.74 | 438.98 |
| 147,060 | Arkansas City, Ark.. | Trippe, Ark..... | Valley | 100% | 156.24 | .... | .... | 156.24 |
| 147,069 | Barton Jct., Ark.... | McGehee, Ark..... | Memphis | 100% | 1,685.40 | .... | 129.90 | 1,555.50 |
| 153,005 | Ft. Smith, Ark..... | Coffeyville, Kan.... | Central§ | .... | .... | .... | .... | .... |
| | Total..... | | | | $208,214.55 | $3,258.97 | $8,837.81 | $202,637.71 |

* Percents represent Arkansas proportion of track mileage covered by routes.
† Compensation changed in July, 1907, and readjusted in October, 1907.
‡ All credited to Arkansas although 1.7 miles of route in Tennessee.
§ Only 2/10 of one mile in Arkansas. No revenue credited to that state.

5395 EXHIBIT No. 45.

*Exhibit No. 45.*

St. Louis, Iron Mountain & Southern Railway Company.

*Statement of Gross Earnings per Mile of Road.*

| For six months ending. | Track mileage. | Gross earnings. | Gross earnings per mile. |
|---|---|---|---|
| June 30th, 1900 | 1,773.77 | $6,726,202.11 | $3,792.00 |
| " 30th, 1901 | 1,773.77 | 7,917,845.18 | 4,464.00 |
| " 30th, 1902 | 1,773.77 | 8,350,632.66 | 4,708.00 |
| " 30th, 1903 | 1,815.44 | 9,448,382.27 | 5,204.00 |
| " 30th, 1904 | 2,224.19 | 9,454,231.73 | 4,251.00 |
| " 30th, 1905 | 2,355.93 | 9,371,408.33 | 3,978.00 |
| " 30th, 1906 | 2,434.37 | 10,814,122.50 | 4,442.00 |
| " 30th, 1907 | 2,531.47 | 12,153,773.86 | 4,801.00 |
| " 30th, 1908 | 2,599.15 | 9,407,346.38 | 3,619.00 |
| Dec. 31st, 1900 | 1,773.77 | $7,854,834.35 | $4,428.00 |
| " 31st, 1901 | 1,773.77 | 9,043,175.79 | 5,098.00 |
| " 31st, 1902 | 1,773.77 | 9,289,945.78 | 5,237.00 |
| " 31st, 1903 | 2,113.28 | 10,128,966.95 | 4,792.00 |
| * " 31st, 1904 | 2,291.84 | 10,334,596.81 | 4,509.00 |
| " 31st, 1905 | 2,355.93 | 10,395,654.67 | 4,413.00 |
| " 31st, 1906 | 2,459.15 | 11,833,245.96 | 4,812.00 |
| " 31st, 1907 | 2,599.15 | 12,385,947.41 | 4,765.00 |

* World's Fair Year.

5396 EXHIBIT FORTY-SIX.

5397 EXHIBIT No. 46.

*Statement of Relative Stops of Passenger Trains in Arkansas.*

Time Table of May 12th, 1907.

In Effect in October, 1907.

*Through Trains.*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| No. 1. | State Line | to | Texarkana | ..... | 305 | miles | 13 | stops. | |
| No. 3. | " " | " | " | ..... | 305 | " | 10 | " | |
| No. 5. | " " | " | " | ..... | 305 | " | 12 | " | |
| No. 7. | " " | " | " | ..... | 305 | " | 3 | " | |
| No. 17. | " " | " | Benton | ..... | 184 | " | 4 | " | |
| No. 4. | Texarkana | " | State Line | ..... | 305 | " | 6 | " | |
| No. 6. | " | " | " | ..... | 305 | " | 10 | " | |
| No. 18. | Benton | " | " | ..... | 184 | " | 3 | " | |
| | | | | | 2198 | " | 61 | " | Average 36 miles. |

**Train No. 1.**

Corning.
Walnut Ridge.
Hoxie.
Newport.
Higginson.
Little Rock.
Benton.
Malvern.
Arkadelphia.
Gurdon.
Prescott.
Hope.
Fulton.
13 stops.
305 miles.

**Train No. 3.**

Knobel.
Hoxie.
Newport.
Bald Knob.
Little Rock.
Benton.
Malvern.
Arkadelphia.
Prescott.
Hope.
10 stops.
305 miles.

**Train No. 5.**

Knobel.
Hoxie.
Newport.
Argenta.
Little Rock.
Benton.
Malvern.
Arkadelphia.
Gurdon.
Prescott.
Hope.
Fulton.
12 stops.
305 Miles.

**Train No. 7.**

Hoxie.
Little Rock.
Texarkana.
3 stops.
305 miles.

**Train No. 17.**

Hoxie.
Newport.
Little Rock.
Benton.
4 stops.
184 miles.

**Train No. 4.**

Hope.
Benton.
Little Rock.
Newport.
Hoxie.
Knobel.
6 stops.
305 miles.

**Train No. 6.**

Fulton.
Hope.
Prescott.
Gurdon.
Arkadelphia.
Malvern.
Benton.
Little Rock.
Newport.
Hoxie.
10 stops.
305 miles.

**Train No. 18.**

Little Rock.
Newport.
Hoxie.
3 stops.
184 miles.

Time Table of May 12th, 1907.

In Effect in October, 1907.

*Local Trains.*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| No. 8. | Texarkana | to | State Line | 305 | miles, | 35 | stops. |
| No. 202. | " | " | Bald Knob | 202 | " | 18 | " |
| No. 24. | " | " | State Line | 305 | " | 68 | " |
| No. 806. | El Dorado | " | Little Rock | 147 | " | 36 | " |
| No. 22. | Little Rock | " | State Line | 161 | " | 34 | " |
| No. 26. | " " | " | " " | 161 | " | 33 | " |
| No. 204. | " " | " | Bald Knob | 57 | " | 12 | " |
| No. 23. | State Line | " | Little Rock | 161 | " | 35 | " |
| No. 25. | " " | " | " " | 161 | " | 34 | " |
| No. 223. | Bald Knob | " | Texarkana | 202 | " | 45 | " |
| No. 205. | " " | " | Little Rock | 57 | " | 12 | " |
| No. 805. | Little Rock | " | El Dorado | 147 | " | 36 | " |
| No. 103 | " " | " | McGehee | 102 | " | 16 | " |
| No. 105. | " " | " | " | 102 | " | 24 | " |
| No. 137. | " " | " | Pine Bluff | 43 | " | 15 | " |
| No. 104. | McGehee | " | Little Rock | 102 | " | 14 | " |
| No. 106. | " | " | " " | 102 | " | 23 | " |
| No. 138. | Pine Bluff | " | " " | 43 | " | 15 | " |
| No. 9-210. | State Line | " | Bridge Jct. via Knobel & Wynne | 139 | " | 21 | " |
| No. 307. | Knobel | " | Helena | 140 | " | 35 | " |
| No. 309. | Wynne | " | " | 58 | " | 17 | " |
| No. 10-209. | BridgeJct. | " | State Line via Wynne & Knobel | 139 | " | 14 | " |
| No. 304. | Helena | " | Knobel | 140 | " | 35 | " |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No. 310. | " | " | Wynne | 58 | " | 17 | " |
| No. 223. | Bridge Jct. | " | Bald Knob | 89 | " | 25 | " |
| No. 205. | " " | " | " " | 89 | " | 21 | " |
| No. 203. | " " | " | " " | 89 | " | 3 | " |
| No. 202. | Bald Knob | " | Bridge Jct. | 89 | " | 5 | " |
| No. 204. | " " | " | " " | 89 | " | 25 | " |
| No. 208. | " " | " | " " | 89 | " | 18 | " |
| No. 103. | McGehee | " | La. State Line | 46 | " | 8 | " |
| No. 105. | " | " | " " " | 46 | " | 11 | " |
| No. 104. | La.StateLine | " | McGehee | 46 | " | 7 | " |
| No. 106. | " " " | " | " | 46 | " | 11 | " |
| No. 325. | McGehee | " | La. State Line via M. H. & L. Line | 47 | " | 11 | " |
| No. 326. | La.StateLine | " | McGehee via M. H. & L. Line | 47 | " | 11 | " |
| No. 825. | Warren | " | McGehee via Arkansas City | 57 | " | 15 | " |
| No. 826. | McGehee | " | Warren via Ark. City | 57 | " | 15 | " |
| No. 209. | Ark.StateLine | to | Newport, White River Line | 180 | " | 36 | " |

5400 Bro't Forward ..... 4340 miles, 866 stops.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| No. 210. | Newport | to | Ark. State Line, White River Line | 180 | miles, | 36 | stops. |
| No. 103. | Ark.Stateline | " | Little Rock, Central Division | 161 | " | 32 | " |
| No. 105. | do. | " | do. | 164 | " | 14 | " |
| No. 131. | Russellville | " | Little Rock | 74 | " | 13 | " |
| No. 133. | Ft. Smith | " | Russellville | 87 | " | 17 | " |
| No. 104. | Argenta | " | Ark. State Line via Cent. Div. | 162 | " | 32 | " |
| No. 106. | " | " | do. | 164 | " | 14 | " |
| No. 132. | " | " | Russellville | 74 | " | 13 | " |
| No. 134. | Russellville | " | Ft. Smith | 87 | " | 17 | " |
| Total | | | | 5493 | " | 1054 | " |

Average 5.2 miles.

| Train No. 8. | Train No. 202. | Train No. 24. | |
|---|---|---|---|
| Little Rock. | Mandeville. | Mandeville. | Garner. |
| Argenta. | Homan. | Homan. | Higginson. |
| McAlmont. | Fulton. | Fulton. | Kensett. |
| Jacksonville. | Sheppard. | Sprudell. | Judsonia. |
| Holland. | Gurnsey. | Sheppard. | Bald Knob. |
| Cabot. | Hope. | Gurnsey. | Russell. |
| Austin. | Emmett. | Hope. | Bradford. |
| Ward. | Prescott. | Emmett. | Grand Glaise. |
| Bebee. | Boughton. | Prescott. | Olyphant. |
| McRae. | Bierne. | Boughton. | Newport. |
| Garner. | Gurdon. | Bierne. | Diaz. |
| Higginson. | Smithton. | Gurdon. | Campbell. |
| Kensett. | Arkadelphia. | Smithton. | Tuckerman. |
| Judsonia. | Malvern. | Curtis. | Swifton. |
| Bald Knob. | Benton. | Gum Springs. | Alica. |
| Russell. | Little Rock. | Arkadelphia. | Minturn. |
| Bradford. | Higginson. | Daleville. | Hoxie. |
| Grand Glaise. | Bald Knob. | Witherspoon. | Walnut Ridge. |
| Olyphant. | | Oak Leaf. | Murta. |
| Newport. | 18 stops. | Donaldson. | O'Kean. |
| Diaz. | 202 miles. | Saginaw Jct. | Delaplaine. |
| Campbell. | | Elmore. | Peach Orchard. |
| Tuckerman. | | Walco. | Knobel. |
| Swifton. | | Malvern. | Corning. |
| Alica. | | Perla. | Moark. |
| Minturn. | | Gifford. | |
| Hoxie. | | Traskwood. | 68 Stops. |

Walnut Ridge.
Murta.
O'Kean.
Delaplaine.
Peach Orchard.
Knobel.
Corning.
Moark.

35 stops.
305 miles.

Haskells.
Benton.
Bryant.
Alexander.
Mabelvale.
Ensign.
Little Rock.
Argenta.
McAlmont.
Wooleys.
Jacksonville.
Cabot.
Austin.
Ward.
Beebe.
McRae.

305 Miles.

5402

| Train No. 806. | Train No. 22. | Train No. 26. | Train No. 204. |
|---|---|---|---|
| McMurrain. | Argenta. | Argenta. | Argenta. |
| Norphlet. | McAlmont. | McAlmont. | McAlmont. |
| Smackover. | Jacksonville. | Jacksonville. | Jacksonville |
| Griffin. | Wooleys. | Wooleys. | Cabot. |
| Louann. | Cabot. | Cabot. | Austin. |
| Kirkland. | Austin. | Austin. | Ward. |
| Elliott. | Ward. | Ward. | Beebe. |
| Tate. | Beebe. | Beebe. | Garner. |
| Camden. | McRae. | McRae. | Higginson. |
| Lester. | Garner. | Garner. | Kensett. |
| Chidester. | Higginson. | Higginson. | Judsonia. |

Sayre.
Reader.
Whelen.
Gurdon.
Smithton.
Curtis.
Gum Springs.
Arkadelphia.
Daleville.
Witherspoon.
Oak Leaf.
Donaldson.
Elmore.
Saginaw Junct.
Walco.
Malvern.
Gifford.
Traskwood.
Haskells.
Benton.
Bryant.
Alexander.
Mabelvale.
Ensign.
Little Rock.

36 stops.
147 miles.

Kensett.
Judsonia.
Bald Knob.
Russell.
Bradford.
Grand Glaise.
Olyphant.
Newport.
Diaz.
Campbell.
Tuckerman.
Swifton.
Alica.
Minturn.
Hoxie.
Walnut Ridge.
O'Kean.
Delaplaine.
Peach Orchard.
Knobel.
Schrenk.
Corning.
Moark.

34 stops.
161 miles.

Kensett.
Judsonia.
Bald Knob.
Russell.
Bradford.
Grand Glaise.
Olyphant.
Newport.
Diaz.
Campbell.
Tuckerman.
Swifton.
Alica.
Minturn.
Hoxie.
Walnut Ridge.
O'Kean.
Delaplaine.
Peach Orchard.
Knobel.
Corning.
Moark.

33 stops.
161 miles.

Bald Knob.

12 stops
57 miles.

| Train No. 23. | Train No. 25. | Train No. 223. | Train No. 205. |
|---|---|---|---|
| Moark. | Moark. | Bald Knob. | Bald Knob. |
| Corning. | Corning. | Judsonia. | Judsonia. |
| Schrenk. | Knobel. | Kensett. | Kensett. |
| Knobel. | Peach Orchard. | Higginson. | Higginson. |
| Peach Orchard. | Delaplaine. | Garner. | Garner. |
| Delaplaine. | O'Kean. | Beebe. | Beebe. |
| O'Kean. | Walnut Ridge. | Ward. | Ward. |
| Murta. | Hoxie. | Austin. | Austin. |
| Walnut Ridge. | Minturn. | Cabot. | Cabot. |
| Hoxie. | Alica. | Jacksonville. | Jacksonville. |
| Minturn. | Swifton. | McAlmont. | McAlmont. |
| Alica. | Tuckerman. | Argenta. | Argenta. |
| Swifton. | Campbell. | Little Rock. | |
| Tuckerman. | Diaz. | Ensign. | 12 stops. |
| Campbell. | Newport. | Mabelvale. | 57 miles. |
| Diaz. | Olyphant. | Alexander. | |
| Newport. | Grand Glaise. | Bryant. | |
| Olyphant. | Bradford. | Benton. | |
| Grand Glaise. | Russell. | Haskells. | |
| Bradford. | Bald Knob. | Traskwood. | |
| Russell. | Judsonia. | Gifford. | |
| Bald Knob. | Kensett. | Perla. | |
| Judsonia. | Higginson. | Malvern. | |
| Kensett. | Garner. | Walco. | |
| Higginson. | McRae. | Saginaw Jct. | |
| Garner. | Beebe. | Elmore. | |
| McRea. | Ward. | Donaldson. | |

Beebe.
Ward.
Austin.
Cabot.
Wooleys.
Jacksonville.
McAlmont.
Argenta.

35 stops.
161 miles.

Austin.
Cabot.
Holland.
Wooleys.
Jacksonville.
McAlmont.
Argenta.

34 stops.
161 miles.

Oak Leaf.
Witherspoon.
Daleville.
Arkadelphia.
Gum Springs.
Curtis.
Smithton.
Gurdon.
Bierne.
Boughton.
Prescott.
Emmett.
Hope.
Sheppard.
Sprudell.
Fulton.
Homan.
Mandeville.

45 stops.
202 miles.

5404

| Train No. 805. | Train No. 103. | Train No. 105. | Train No. 137. |
|---|---|---|---|
| Ensign. | East Little Rock. | East Little Rock. | East Little Rock. |
| Mabelvale. | Rottaken. | East Little Rk. Yd. | College Station. |
| Alexander. | Woodson. | Wrightsville. | Sweet Home. |
| Bryant. | Farrells. | Rottaken. | Rottaken. |
| Benton. | Redfield. | Woodson. | Higgins. |
| Haskells. | Kearney. | Farrells. | Wrightsville. |

Traskwood.
Gifford.
Malvern.
Walco.
Etta.
Saginaw Jct.
Elmore.
Donaldson.
Oak Leaf.
Witherspoon.
Daleville.
Arkadelphia.
Gum Springs.
Curtis.
Smithton.
Gurdon.
Whelen.
Reader.
Sayre.
Chidester.
Lester.
Camden.
Tate.
Elliott.
Kirkland.
Louann.
Griffin.
Smackover.
Norphlet.
McMurrain.

Pine Bluff.
Noble Lake.
Tamo.
Grady.
Verner.
Gould.
Dumas.
Walnut Lake.
Winchester.
Tillar.

16 stops.
102 miles.

Redfield.
Kearney.
Jeff. Springs.
Dexter.
Pine Bluff.
Fairfield.
Noble Lake.
Moscow.
Tamo.
Grady.
Verner.
Gould.
Lear.
Reedville.
Dumas.
Walnut Lake.
Winchester.
Tillar.

24 stops.
102 miles.

Woodson.
Farrells.
Redfield.
Kearney.
Jeff. Springs.
Eastwood.
Samples.
Dexter.
Baldwin.

15 stops.
43 miles.

36 stops.
147 miles.

5405

Train No. 104.

Tillar.
Walnut Lake.
Dumas.
Varner.
Grady.
Tamo.
Moscow.
Noble Lake.
Fairfield.
Pine Bluff.
Kearney.
Redfield.
Farrells.
E. Little Rock.

14 stops.
102 miles.

Train No. 106.

Tillar.
Winchester.
Walnut Lake.
Dumas.
Reedville.
Lear.
Gould.
Varner.
Grady.
Tamo.
Moscow.
Noble Lake.
Fairfield.
Pine Bluff.
Dexter.
Jeff. Springs.
Kearney.
Redfield.
Farrells.
Woodson.
Rottaken.
Wrightsville.
E. Little Rock.

23 stops.
102 miles.

Train No. 138.

Baldwin.
Dexter.
Samples.
Eastwood.
Jeff. Springs.
Kearney.
Redfield.
Farrells.
Woodson.
Rottaken.
Wrightsville.
Higgins.
Sweet Home.
College Station.
E. Little Rock.

15 stops.
43 miles.

Train No. 9-210.

Corning.
Knobel.
Paragould.
Nettleton.
Harrisburg.
Cherry Valley.
Vanndale.
Wynne.
Levesque.
Parkin.
Earle.
Crawfordsville.
Vincent.
Gavin.
St. Francis Club House.
Smithdale.
Princedale.
Grassy Lake.
Lansing.
Ebony.
Blanton.

21 stops.
139 miles.

Train No. 307.

Stonewall.
Gainesville.
Paragould.
Bethel.
Brookland.
Nettleton.
Ridge.
Greenfield.
Harrisburg.
White Hall.
Cherry Valley.
Vanndale.
Wynne.
Colt.
Caldwell.
Forrest City.
Bonair.
Haynes.
Wrightland.
Felton.
Marianna.
La Grange.
Lexa.
Latour Jct.
Ark. Midland Jct.
Hooker.
Lafe.

Train No. 309.

Colt.
Caldwell.
Forrest City.
Bonair.
Haynes.
Wrightland.
Felton.
Marianna.
La Grange.
Lexa.
Latour Jct.
Ark. Midland Jct.
Canaan.
White Oak.
Hyde Park.
Glenwood.
Huma.

17 stops.
58 miles.

Train No. 209-10.

Crawfordsville.
Earle.
Parkin.
Wynne.
Vanndale.
Cherry Valley.
Harrisburg.
Nettleton.
Paragould.
Stonewall.
Knobel.
Corning.
Club House.
St. Francis C. H.

14 stops.
139 miles.

Train No. 304.

Arkansas Mid. Jct.
Latour Jct.
Lexa.
La Grange.
Marianna.
Felton.
Wrightland.
Haynes.
Bonair.
Forrest City.
Caldwell.
Colt.
Wynne.
Vanndale.
Cherry Valley.
White Hall.
Harrisburg.
Greenfield.
Ridge.
Nettleton.
Brookland.
Bethel.
Paragould.
Gainesville.
Stonewall.
Hooker.
Lafe.

Smithville.
Hydrick.
Mershman.
Canaan.
White Oak.
Hyde Park.
Glenwood.
Huma.

35 stops.
140 miles.

Smithville.
Hydrick.
Mershman.
Canaan.
White Oak.
Hyde Park.
Glenwood.
Huma.

35 stops.
140 Miles.

5407

Train No. 310.
Ark. Midland Jct.
Latour Jct.
Lexa.
La Grange.
Marianna.
Felton.
Wrightland.
Haynes.
Bonair.
Forrest City.
Caldwell.
Colt.
Canaan.
White Oak.
Hyde Park.

Train No. 223.
Bridge Junction.
Almont.
Gavin.
Vincent.
Crawfordsville.
Earle.
Parkin.
Levesque.
Wynne.
Hamlin.
Fair Oaks.
Morton.
McCrory.
Jelks.
Fakes.

Train No. 205.
Bridge Jct.
Gavin.
Vincent.
Crawfordsville.
Earle.
Parkin.
Levesque.
Wynne.
Hamlin.
Fair Oaks.
McCrory.
Jelks.
Fakes.
New Augusta.
Rio Vista.

Train No. 203.
Wynne.
Fair Oaks.
New Augusta.

3 stops.
89 miles.

Glenwood.
Huma.

17 stops.
58 miles.

New Augusta.
Rio Vista.
Blanton.
Ebony.
Lansing.
Grassy Lake.
Smithdale.
McDonald.
St. Francis C. H.
Princedale.

25 stops.
89 miles.

Blanton.
Ebony.
Lansing.
Grassy Lake.
Smithdale.
Princedale.

21 stops.
89 miles.

5408

Train No. 202.

New Augusta.
McCrory.
Fair Oaks.
Wynne.
Bridge Jct.

5 stops.
89 miles.

Train No. 204.

Rio Vista.
New Augusta.
Fakes.
Jelks.
McCrory.
Morton.
Fair Oaks.
Hamlin.
Wynne.
Levesque.
Parkin.
Earle.
Crawfordsville.
Vincent.
Gavin.

Train No. 208.

Rio Vista.
New Augusta.
Fakes.
Jelks.
McCrory.
Morton.
Fair Oaks.
Hamlin.
Wynne.
Crowleys.
Levesque.
Parkin.
Earle.
Crawfordsville.
Vincent.

Train No. 103.

McGehee.
Dermott.
Blissville.
Morrell.
Montrose.
Portland.
Parkdale.
Wilmot.

8 stops.
46 miles.

Almont.
Bridge Jct.
Blanton.
Ebony.
Lansing.
Grassy Lake.
Smithdale.
McDonald.
St. Francis C. H.
Princedale.

25 stops.
89 miles.

Gavin.
Almont.
Bridge Jct.

18 stops.
89 miles.

| Train No. 105. | Train No. 104. | Train No. 106. | Train No. 325. |
|---|---|---|---|
| McGehee. | Wilmot. | Cypress. | Trippe Jct. |
| Dermott. | Parkdale. | Wilmot. | Halley. |
| Hudspeth. | Portland. | Parkdale. | Macon. |
| Blissville. | Montrose. | Sunshine. | Lake Village. |
| Morrell. | Blissville. | Portland. | Jennie. |
| Montrose. | Dermott. | Montrose. | Chicot. |
| Portland. | McGehee. | Morrell. | Eudora. |
| Parkdale. | | Blissville. | Readland. |
| Wilmot. | 7 stops. | Hudspeth. | Arkla. |
| Cypress. | 46 miles. | Dermott. | Hollywood. |
| Sunshine. | | McGehee. | Nordman. |
| 11 stops. | | 11 stops. | 11 stops. |
| 46 miles. | | 46 miles. | 47 miles. |

| Train No. 326. | Train No. 825. | Train No. 826. | Train No. 209. |
|---|---|---|---|
| Arkla. | Wilmot. | Arkansas City. | Crest. |
| Readland. | Monticello. | Boggy Bayou. | Cricket. |
| Eudora. | Deane. | Saline. | Myrtle. |
| Chicot. | Cominto. | Allis. | Bergman. |
| Jennie. | Collins. | Jeter. | Zinc. |
| Jennie. | Baxter. | Constance. | Pyatt. |
| Lake Village. | Dermott. | Halley. | Comal. |
| Macon. | Hurd. | Hurd. | Yellville. |
| Halley. | Halley. | Dermott. | Flippin. |
| Nordman. | Constance. | Baxter. | Cotter. |
| Hollywood. | Jeter. | Collins. | Buffalo. |
| Trippe Jct. | Allis. | Cominto. | Hayney. |
| | Saline. | Deane. | Norfolk. |
| 11 stops. | Boggy Bayou. | Monticello. | Herron. |
| 47 miles. | Arkansas City. | Wilmot. | Berry. |
| | | | Calico. |
| | 15 stops. | 15 stops. | Creswell. |
| | 57 miles. | 57 miles. | Wideman. |
| | | | Mount Olive. |
| | | | Sylamore. |
| | | | Handford. |
| | | | Guion. |
| | | | Penters Bluff. |
| | | | Walls Ferry. |
| | | | O'Neal. |
| | | | Earnharts. |
| | | | White River Jct. |

Batesville.
Moorefield.
Sulphur Rock.
Newark.
Paroquet.
Diaz.
Magness.
Vest.
St. Clairs Quarry.

36 stops.
180 miles.

5410

Train No. 210.
Diaz.
Paroquet.
Newark.
Sulphur Rock.
Moorefield.
Batesville.
White River Jct.
Earnharts.
O'Neal.
Walls Ferry.
Penters Bluff.
Guion.
Handford.
Sylamore.
Mount Olive.

Train No. 103.
Ft. Smith.
Van Buren.
Alma.
Dyer.
Mulberry.
White Oak.
Poping.
Ozark.
Altus.
Cole Hill.
Hartman.
Spadra.
Clarksville.
Cabin Creek.
Knoxville.
Piney.

Train No. 105.
Ft. Smith.
Van Buren.
Alma.
Mulberry.
Ozark.
Denning.
Clarkesville.
Russellville.
Atkins.
Morrelton.
Plummerville.
Conway.
Palarm.
Argenta.

14 stops.

Train No. 131.
Galla.
Arkins.
Blackville.
Germantown.
Morrelton.
Plummerville.
Menifee.
Gleason.
Conway.
Mayflower.
Palarm.
Marsche.
Argenta.

13 stops.
74 miles.

Wideman.
Creswell.
Calico.
Berry.
Herron.
Norfolk.
Hayney.
Buffalo.
Cotter.
Magnes.
Vest.
St. Clairs Quarry.
Flippin.
Yellville.
Comal.
Pyatt.
Zinc.
Bergman.
Myrtle.
Cricket.
Crest.

36 stops.
180 miles.

London.
Mill Creek.
Russellville.
Galla.
Atkins.
Blackville.
Germantown.
Morrelton.
Plummerville.
Menifee.
Gleason.
Conway.
Mayflower.
Palarm.
Marche.
Argenta.

32 stops.
161 miles.

164 Miles.

Train No. 133.
Mill Creek.
London.
Piney.
Knoxville.
Cabin Creek.
Clarkesville.
Spadra.
Hartman.
Coal Hill.
Altus.
Ozark.
Poping.
White Oak.
Mulberry.
Dyer.
Alma.
Van Buren.

17 stops.
87 miles.

Train No. 104.
Argenta.
Marche.
Palarm.
Mayflower.
Conway.
Gleason.
Menifee.
Plummerville.
Morrelton.
Germantown.
Blackville.
Atkins.
Galla.
Russellville.
Mill Creek.
London.
Piney.
Knoxville.
Cabin Creek.
Clarksville.
Spadra.
Hartman.
Coal Hill.
Altus.
Ozark.
Poping.
White Oak.

Train No. 106.
Argenta.
Palarm.
Conway.
Clarkesville.
Morrelton.
Atkins.
Russellville.
Clarksville.
Denning.
Ozark.
Mulberry.
Alma.
Van Buren.
Ft. Smith.

14 stops.
164 miles.

Train No. 132.
Argenta.
Marche.
Palarm.
Mayflower.
Conway.
Gleason.
Menifee.
Plummerville.
Morrelton.
Germantown.
Blackville.
Atkins.
Galla.

13 stops.
74 miles.

Train No. 134.
Mill Creek.
London.
Piney.
Knoxville.
Cabin Creek.
Clarksville.
Spadra.
Hartman.
Altus.

Mulberry.
Dyer.
Alma.
Van Buren.
Ft. Smith.

32 stops.
162 miles.

Coal Hill.
Ozark.
Poping.
White Oak.
Mulberry.
Dyer.
Alma.
Van Buren.

17 stops.
87 Miles.

5412 EXHIBIT FORTY-SEVEN.

5413 EXHIBIT No. 47.

*Statement of Capital Stock and Dividends, St. Louis, Iron Mountain & Southern Railway Company, Fiscal Years Ending June 30th, from 1904 to 1909, Inclusive.*

| | 1904. | 1905. | 1906. | 1907. | 1908. | 1909. |
|---|---|---|---|---|---|---|
| Average miles operated..... | 2,231.72 | 2,355.93 | 2,459.15 | 2,495.31 | 2,599.15 | 2,608.59 |
| Capital Stock..... | $25,788,435.00 | $29,390,098.59 | $44,390,098.59 | $44,390,098.59 | $44,391,298.59 | $44,391,298.59 |
| Dividends on stock. | 2,578,831.50 | 2,578,831.50 | 4,114,588.10 | 4,438,991.50 | 2,219,555.75 | 1,775,644.60 |
| Per cent of dividends..... | 10% | 10% | 10% | 10% | 5% | 4% |

5414 EXHIBIT FORTY-EIGHT.

5415–5678 EXHIBIT No. 48.

*St. Louis, Iron Mountain & Southern Railway Company, Fixed and Obligatory Charges, Fiscal Years Ending June 30th, 1906 and 1907.*

| | Year ending June 30th, 1906. | Year ending June 30th, 1907. |
|---|---|---|
| Taxes | $536,020.29 | $569,274.24 |
| Rentals, account Leased Roads | 86,220.00 | 86,220.00 |
| Interest on Bonds | 4,651,040.02 | 4,785,797.12 |
| Sundry Amounts | 182,596.88 | 250,870.75 |
| Total | $5,455,877.19 | $5,692,162.11 |
| Capital Stock | $44,390,098.59 | $44,390,098.59 |
| Dividend on Stock | 4,114,588.10 | 4,438,991.50 |
| Per cent of Dividend | 10% | 10% |
| Owned Mileage | 2,393.54 | 2,464.72 |

## EXHIBIT FIFTY-ONE.

## EXHIBIT No. 51.

| From Memphis, Tenn., To | Canned Goods. Carloads. | | | Canned Goods. Less Carloads in tin. | | | Iron, Bar, Band, Boiler; Horse and Mule Shoes. Carloads. | | | Iron, Bar, Band, Boiler; Horse and Mule Shoes. Less Carloads. | | | Wire and Nails. Carloads. | | | Wire and Nails. Less Carloads. | | | Lime. Carloads. | | | Lime. Less Carloads. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| *Sorrells | 30 | 24 | 6 | 40 | 33 | 7 | 20 | 17 | 3 | 31 | 27 | 4 | 18 | 17 | 1 | 31 | 27 | 4 | 13 | 13 | 0 | 27 | 27 | |
| *Faith | 30 | 25 | 5 | 40 | 34 | 6 | 20 | 17 | 3 | 31 | 27 | 4 | 18 | 17 | 1 | 31 | 27 | 4 | 13 | 13 | 0 | 27 | 27 | |
| *Kedron | 33 | 25 | 8 | 45 | 34 | 11 | 24 | 17 | 7 | 35 | 27 | 8 | 22 | 17 | 5 | 35 | 27 | 8 | 16 | 13 | 3 | 31 | 28 | |
| *Cabool | 36 | 25 | 11 | 50 | 34 | 16 | 27 | 18 | 9 | 39 | 29 | 10 | 25 | 18 | 7 | 39 | 29 | 10 | 19 | 13 | 6 | 35 | 28 | |
| Clio | 36 | 25 | 11 | 50 | 34 | 16 | 27 | 18 | 9 | 39 | 29 | 10 | 25 | 18 | 7 | 39 | 29 | 10 | 19 | 13 | 6 | 35 | 28 | |
| *Porters Mill | 36 | 25 | 11 | 50 | 34 | 16 | 27 | 18 | 9 | 39 | 29 | 10 | 25 | 18 | 7 | 39 | 29 | 10 | 19 | 13 | 6 | 35 | 28 | |
| Rison | 39 | 26 | 13 | 50 | 35 | 15 | 30 | 18 | 12 | 41 | 29 | 12 | 28 | 18 | 10 | 41 | 29 | 12 | 20 | 13 | 7 | 37 | 28 | |
| *Pool | 42 | 26 | 16 | 50 | 35 | 15 | 33 | 20 | 13 | 42 | 31 | 11 | 31 | 20 | 11 | 42 | 31 | 11 | 20 | 14 | 6 | 37 | 30 | |
| *Saline | 42 | 26 | 16 | 50 | 35 | 15 | 33 | 20 | 13 | 42 | 31 | 11 | 31 | 20 | 11 | 42 | 31 | 11 | 20 | 14 | 6 | 37 | 30 | |
| Draughon | 42 | 26 | 16 | 50 | 35 | 15 | 33 | 20 | 13 | 42 | 31 | 11 | 31 | 20 | 11 | 42 | 31 | 11 | 20 | 14 | 6 | 37 | 30 | |
| Kingsland | 42 | 27 | 15 | 50 | 36 | 14 | 33 | 20 | 13 | 42 | 31 | 11 | 31 | 20 | 11 | 42 | 31 | 11 | 20 | 14 | 6 | 37 | 30 | |
| *Clarks | 42 | 27 | 15 | 50 | 36 | 14 | 33 | 20 | 13 | 42 | 31 | 11 | 31 | 20 | 11 | 42 | 31 | 11 | 20 | 14 | 6 | 37 | 30 | |
| Fordyce | 44 | 28 | 16 | 50 | 37 | 13 | 38 | 20 | 18 | 45 | 31 | 14 | 36 | 20 | 16 | 45 | 31 | 14 | 20 | 14 | 6 | 37 | 30 | |
| Thornton | 44 | 28 | 16 | 50 | 37 | 13 | 38 | 20 | 18 | 45 | 31 | 14 | 36 | 20 | 16 | 45 | 31 | 14 | 20 | 14 | 6 | 37 | 30 | |
| *Little Bay | 44 | 29 | 15 | 50 | 38 | 12 | 38 | 20 | 18 | 45 | 31 | 14 | 36 | 20 | 16 | 45 | 31 | 14 | 20 | 14 | 6 | 37 | 30 | |
| *Harlow | 44 | 29 | 15 | 50 | 38 | 12 | 38 | 20 | 18 | 45 | 31 | 14 | 36 | 20 | 16 | 45 | 31 | 14 | 20 | 14 | 6 | 37 | 30 | |
| *Betts | 46 | 30 | 16 | 50 | 39 | 11 | 38 | 22 | 16 | 45 | 31 | 14 | 36 | 22 | 14 | 45 | 31 | 14 | 20 | 15 | 5 | 37 | 32 | |
| Bearden | 46 | 30 | 16 | 50 | 39 | 11 | 38 | 22 | 16 | 45 | 31 | 14 | 36 | 22 | 14 | 45 | 31 | 14 | 20 | 15 | 5 | 37 | 32 | |
| Millville | 48 | 30 | 18 | 52 | 39 | 13 | 38 | 22 | 16 | 46 | 31 | 15 | 37 | 22 | 15 | 46 | 31 | 15 | 20 | 15 | 5 | 38 | 32 | |
| Eagle Mills | 50 | 30 | 20 | 54 | 39 | 15 | 39 | 22 | 17 | 47 | 31 | 16 | 38 | 22 | 16 | 47 | 31 | 16 | 20 | 15 | 5 | 39 | 32 | |
| *Onalaska | 51 | 30 | 21 | 54 | 39 | 15 | 40 | 22 | 18 | 48 | 31 | 17 | 39 | 22 | 17 | 48 | 31 | 17 | 20 | 15 | 5 | 39 | 32 | |
| *Lake | 51 | 30 | 21 | 54 | 39 | 15 | 40 | 22 | 18 | 48 | 31 | 17 | 39 | 22 | 17 | 48 | 31 | 17 | 20 | 15 | 5 | 39 | 32 | |
| *Finn | 53 | 32 | 21 | 61 | 41 | 20 | 44 | 23 | 21 | 53 | 32 | 21 | 44 | 23 | 21 | 53 | 32 | 21 | 20 | 15½ | 4½ | 45 | 33 | |
| Buena Vista | 53 | 32 | 21 | 63 | 41 | 22 | 45 | 23 | 22 | 55 | 32 | 23 | 45 | 23 | 22 | 55 | 32 | 23 | 20 | 15½ | 4½ | 46 | 33 | |
| *Ogemaw | 53 | 32 | 21 | 65 | 41 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 20 | 15½ | 4½ | 47 | 33 | |
| Stephens | 53 | 32 | 20 | 65 | 41 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 20 | 15½ | 4½ | 47 | 33 | |
| Hodgsons | 53 | 32 | 21 | 65 | 41 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 20 | 15½ | 4½ | 47 | 33 | |
| *Milner | 53 | 33 | 20 | 65 | 41 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 20 | 15½ | 4½ | 47 | 33 | |
| McNeil | 53 | 33 | 20 | 65 | 41 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 20 | 15½ | 4½ | 47 | 33 | |
| Waldo | 53 | 33 | 20 | 65 | 41 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 20 | 15½ | 4½ | 47 | 33 | |
| *Lumber | 53 | 33 | 20 | 65 | 41 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 20 | 15½ | 4½ | 47 | 33 | |
| Buckner | 53 | 33 | 20 | 65 | 41 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 20 | 15½ | 4½ | 47 | 33 | |
| Stamps | 53 | 33 | 20 | 65 | 41 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 20 | 15½ | 4½ | 47 | 33 | |
| Lewisville | 53 | 33 | 20 | 65 | 41 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 45 | 23 | 22 | 56 | 32 | 24 | 20 | 15½ | 4½ | 47 | 33 | |

* No agent; freight must be prepaid.

Column No. 1. Rates in effect April 10th, 1900.
Column No. 2. Rates in effect September 6th, 1910.
Column No. 3. Decrease.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

| | | | Mattresses. | | | Spring beds S. U. | | | Packing house products. | | | Salt. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Less Carloads. | | | Less Carloads. | | | Less Carloads. | | | Less Carloads. | | | Carloads. | | | Less Carloads. | | |
| 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| 27 | 27 | 0 | 80 | 52 | 28 | 160 | 78½ | 81½ | 32 | 31 | 1 | 15 | 10 | 5 | 27 | 24 | 3 |
| 27 | 27 | 0 | 80 | 52 | 28 | 160 | 78½ | 81½ | 32 | 31 | 1 | 15 | 10 | 5 | 27 | 24 | 3 |
| 31 | 28 | 3 | 85 | 52 | 33 | 170 | 79½ | 90½ | 37 | 31 | 6 | 15 | 11 | 4 | 29 | 24 | 5 |
| 35 | 28 | 7 | 90 | 52 | 38 | 180 | 79½ | 100½ | 41 | 31 | 10 | 15 | 11 | 4 | 32 | 24 | 8 |
| 35 | 28 | 7 | 90 | 52 | 38 | 180 | 79½ | 100½ | 41 | 31 | 10 | 15 | 11 | 4 | 32 | 24 | 8 |
| 35 | 28 | 7 | 90 | 53 | 37 | 180 | 81½ | 98½ | 41 | 32 | 9 | 15 | 11 | 4 | 32 | 24 | 8 |
| 37 | 28 | 9 | 90 | 54 | 36 | 180 | 82½ | 97½ | 43 | 32 | 11 | 15 | 11 | 4 | 32 | 24 | 8 |
| 37 | 30 | 7 | 90 | 54 | 36 | 180 | 82½ | 97½ | 44 | 32 | 12 | 15 | 12 | 3 | 32 | 26 | 6 |
| 37 | 30 | 7 | 90 | 54 | 36 | 180 | 82½ | 97½ | 44 | 32 | 12 | 15 | 12 | 3 | 32 | 26 | 6 |
| 37 | 30 | 7 | 90 | 54 | 36 | 180 | 82½ | 97½ | 44 | 32 | 12 | 15 | 12 | 3 | 32 | 26 | 6 |
| 37 | 30 | 7 | 90 | 54 | 36 | 180 | 82½ | 97½ | 44 | 32 | 12 | 15 | 12 | 3 | 32 | 26 | 6 |
| 37 | 30 | 7 | 90 | 54 | 36 | 180 | 82½ | 97½ | 44 | 32 | 12 | 15 | 12 | 3 | 32 | 26 | 6 |
| 37 | 30 | 7 | 90 | 55 | 35 | 180 | 84½ | 95½ | 46 | 32 | 14 | 17 | 12 | 5 | 34 | 26 | 8 |
| 37 | 30 | 7 | 90 | 55 | 35 | 180 | 85½ | 94½ | 46 | 35 | 11 | 18 | 12 | 6 | 35 | 26 | 9 |
| 37 | 30 | 7 | 90 | 55 | 35 | 180 | 85½ | 94½ | 46 | 35 | 11 | 19 | 12 | 7 | 35 | 26 | 9 |
| 37 | 30 | 7 | 90 | 56 | 34 | 180 | 85½ | 94½ | 46 | 35 | 11 | 20 | 12 | 8 | 36 | 26 | 10 |
| 37 | 32 | 5 | 90 | 56 | 34 | 180 | 85½ | 94½ | 46 | 35 | 11 | 20 | 13 | 7 | 36 | 26 | 10 |
| 37 | 32 | 5 | 90 | 56 | 34 | 180 | 85½ | 94½ | 46 | 35 | 11 | 20 | 13 | 7 | 36 | 26 | 10 |
| 38 | 32 | 6 | 90 | 56 | 34 | 180 | 85½ | 94½ | 47 | 35 | 12 | 20 | 13 | 7 | 37 | 26 | 11 |
| 39 | 32 | 7 | 90 | 56 | 34 | 180 | 85½ | 94½ | 48 | 35 | 13 | 20 | 13 | 7 | 38 | 26 | 12 |
| 39 | 32 | 7 | 90 | 57 | 33 | 180 | 87½ | 92½ | 48 | 35 | 13 | 20 | 13 | 7 | 38 | 26 | 12 |
| 39 | 32 | 7 | 90 | 57 | 33 | 180 | 87½ | 92½ | 48 | 35 | 13 | 20 | 13 | 7 | 38 | 26 | 12 |
| 45 | 33 | 12 | 92 | 58 | 34 | 184 | 88½ | 95½ | 52 | 35 | 17 | 20 | 13 | 7 | 41 | 26 | 15 |
| 46 | 33 | 13 | 95 | 60 | 35 | 190 | 91½ | 98½ | 54 | 36 | 18 | 20 | 13½ | 6½ | 42 | 26 | 16 |
| 47 | 33 | 14 | 98 | 61 | 37 | 196 | 93½ | 102½ | 56 | 36 | 20 | 20 | 13½ | 6½ | 43 | 26 | 17 |
| 47 | 33 | 14 | 98 | 61 | 37 | 196 | 93½ | 102½ | 56 | 36 | 20 | 20 | 13½ | 6½ | 43 | 26 | 17 |
| 47 | 33 | 14 | 98 | 61 | 37 | 196 | 93½ | 102½ | 56 | 36 | 20 | 20 | 13½ | 6½ | 43 | 26 | 17 |
| 47 | 33 | 14 | 98 | 61 | 37 | 196 | 93½ | 102½ | 56 | 36 | 20 | 20 | 13½ | 6½ | 43 | 26 | 17 |
| 47 | 33 | 14 | 98 | 63 | 35 | 196 | 96½ | 99½ | 56 | 36 | 20 | 20 | 13½ | 6½ | 43 | 26 | 17 |
| 47 | 33 | 14 | 98 | 63 | 35 | 196 | 96½ | 99½ | 56 | 36 | 20 | 20 | 13½ | 6½ | 43 | 26 | 17 |
| 47 | 33 | 14 | 98 | 63 | 35 | 196 | 96½ | 99½ | 56 | 36 | 20 | 20 | 13½ | 6½ | 43 | 26 | 17 |
| 47 | 33 | 14 | 98 | 63 | 35 | 196 | 96½ | 99½ | 56 | 36 | 20 | 20 | 13½ | 6½ | 43 | 26 | 17 |
| 47 | 33 | 14 | 98 | 63 | 35 | 196 | 96½ | 99½ | 56 | 36 | 20 | 20 | 13½ | 6½ | 43 | 26 | 17 |
| 47 | 33 | 14 | 98 | 63 | 35 | 196 | 96½ | 99½ | 56 | 36 | 20 | 20 | 13½ | 6½ | 43 | 26 | 17 |

5679 EXHIBIT FIFTY.

5680 EXHIBIT No. 50.

*Class Rates to Little Rock and Pine Bluff.*

| From | 1 | 2 | 3 | 4 | 5 | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|---|
| Memphis | 70 | 60 | 45 | 32 | 24 | 25 | 20 | 17 | 14 | 10 |
| Cairo | 90 | 75 | 55 | 40 | 29 | 30 | 25 | 21 | 17 | 12 |
| Difference | 20 | 15 | 10 | 8 | 5 | 5 | 5 | 4 | 3 | 2 |
| Memphis | 70 | 60 | 45 | 32 | 24 | 25 | 20 | 17 | 14 | 10 |
| St. Louis | 1.00 | 85 | 65 | 45 | 34 | 35 | 30 | 25 | 20 | 15 |
| Difference | 30 | 25 | 20 | 13 | 10 | 10 | 10 | 8 | 6 | 5 |
| Memphis | 70 | 60 | 45 | 32 | 24 | 25 | 20 | 17 | 14 | 10 |
| *Kansas City | 1.10 | 90 | 75 | 55 | 43 | 45 | 40 | 30 | 27 | 24 |
| Difference | 40 | 30 | 30 | 23 | 19 | 20 | 20 | 13 | 13 | 14 |

*Tariff No. 1010.
Balance of rates are in Tariff No. 1374.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

(Here follows paster, marked pp. 5681 and 5682.)

EXHIBIT FIFTY-TWO.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Terminal Handling of Loaded Cars on Through Trains, October,* 1907.

| Into Hoxie, 10/1/07, 3:55 p. m. Train 2/71. | | Out of Hoxie. | Into Argenta, 10/2/07, 2:20 p. m. Train #55. | | Out of Argenta. |
|---|---|---|---|---|---|
| MP | 60208 | Oct. 1st, 11:20 p. m., Train #55. | MDT | 14976 | Oct. 2nd, 6:00 p. m., Train 1/81. |
| " | 15481 * | | " | 10870 | " " " " " |
| GT | 9708 | " " " " " | SAL | 22497 | " " " " " |
| DM&S | 19660 | " " " " " | MP | 34564 | " " " " " |
| MP | 33988 | " " " " " | PRR | 94484 | " " " " " |
| " | 30146 | " " " " " | " | 70134 | " " " " " |
| KCMO | 3386 | " " " " " | G&FS | 8093 | " " " " " |
| URT | 4202 | " " " " " | MP | 33988 | " " " " " |
| " | 6602 | " " " " " | " | 30146 | " " " " " |
| RI | 67864 | " " " " " | KCMO | 3386 | " " " " " |
| IM&S | 8590 | " " " " " | IM&S | 14558 | " " " " " |
| MP | 35352 | " " " " " | MP | 34788 | " " " " " |
| URT | 3447 | " " " " " | " | 13214 | " " " " " |
| SOU | 36649 * | | " | 17124 | " " " " " |
| RI | 34958 * | | ART | 5147 | " " " " " |
| IM&S | 14555 | " " " " " | MP | 26377 | " " " " " |
| MP | 34788 | " " " " " | PFE | 3657 | " " " " " |
| " | 13214 | " " " " " | MP | 18029 | " " " " " |
| " | 17124 | " " " " " | RC | 1095 | " " " " " |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| " | 22983 | * | | | | | |
| " | 27596 | | " | " | " | " | " |
| LV | 69582 | * | | | | | |
| MP | 27253 | | " | " | " | " | " |
| T&P | 13186 | | " | " | " | " | " |
| B&O | 65461 | | " | " | " | " | " |
| ART | 5147 | | " | " | " | " | " |
| MP | 26377 | | " | " | " | " | " |
| PFE | 3657 | | " | " | " | " | " |
| MP | 18029 | | " | " | " | " | " |
| SSRL | 1095 | | " | " | " | " | " |
| " | 1304 | | " | " | " | " | " |
| " | 1074 | | " | " | " | " | " |
| " | 1324 | | " | " | " | " | " |
| " | 3331 | | " | " | " | " | " |
| ART | 9085 | | " | " | " | " | " |
| " | 9417 | | " | " | " | " | " |
| " | 9589 | | " | " | " | " | " |
| SSRL | 2693 | | " | " | " | " | " |
| NYC | 95678 | | " | " | " | " | " |
| ART | 10741 | | " | " | " | " | " |
| " | 10377 | | " | " | " | " | " |
| " | 8558 | | " | " | " | " | " |
| " | 10121 | | " | " | " | " | " |
| SF | 31556 | | " | " | " | " | " |
| B&O | 181044 | | " | " | " | " | " |
| " | 71671 | | " | " | " | " | " |
| SF | 36663 | | " | " | " | " | " |
| MP | 25783 | * | | | | | |
| | 49 | | | | 42 | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| " | 1304 | " | " | " | " | " | |
| " | 1074 | " | " | " | " | " | |
| " | 1324 | " | " | " | " | " | |
| " | 3331 | " | " | " | " | " | |
| ART | 9085 | " | " | " | " | " | |
| " | 9417 | " | " | " | " | " | |
| " | 9589 | " | " | " | " | " | |
| RC | 2693 | " | " | " | " | " | |
| NYC | 95678 | " | " | " | " | " | |
| ART | 10741 | " | " | " | " | " | |
| " | 10377 | " | " | " | " | " | |
| " | 8558 | " | " | " | " | " | |
| " | 10121 | " | " | " | " | " | |
| SF | 31556 | * | | | | | |
| B&O | 181044 | " | " | " | " | " | |
| MP | 27596 | * | | | | | |
| T&P | 13186 | * | | | | | |
| B&O | 71671 | * | | | | | |
| SF | 36663 | * | | | | | |
| URT | 3447 | " | " | " | " | " | |
| GT | 9708 | * | | | | | |
| MP | 35352 | * | | | | | |
| B&O | 65461 | * | | | | | |
| MP | 27253 | * | | | | | |
| IM&S | 19660 | Oct. 4th, 4:00 p. m., Train 2/181 Ex. | | | | | |
| MP | 62608 | * | | | | | |
| URT | 4202 | " | " | " | " | " | " |
| " | 6602 | " | " | " | " | " | " |
| CRI&P | 52864 | " | " | " | " | " | " |
| IM&S | 8590 | " | " | " | " | " | " |

| | | | | | |
|---|---|---|---|---|---|
| PL&E | 2614 | Oct. 2nd, | 7:45 p. m., | Train | 2/81. |
| MP | 38716 | " 3d, | 4:55 a. m., | " | Ex. |
| IM&S | 11845 | " 4th, | 3:05 p. m., | " | " |
| CBT | 713 | " " | " | " | " |
| MP | 17413 | Oct. 2nd, | 6:00 p. m., | " | 1/81. |
| " | 33908 | " " | " | " | " |
| " | 12617 | " " | " | " | " |
| " | 25447 | " " | " | " | " |
| CB&Q | 92977 | " " | " | " | " |
| IM&S | 4808 | " " | 7:45 p. m., | " | 2/81. |
| SF | 12618 | " " | " | " | " |
| | 60 | | | 50 | |

*Not out on Train #55 Oct. 1st.

*Not out of Argenta Oct. 2nd.

5685

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Terminal Handling of Loaded Cars on Through Trains, October,* 1907.

| Into Hoxie, 10/6/07, 3:20 p. m. | | Out of Hoxie. | | | | | | Into Argenta. 10/7/07, 1:53 a. m. | | Out of Argenta. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T&P | 15730 | Oct. 6th, | 4:20 p. m., | Train | #55. | | | T&P | 15730 | Oct. 7th, | 5:10 a. m., | Train | #55 | & | Ex. |
| MP | 63757 | " | " | " | " | " | | MP | 63757 | " | " | " | " | " | " |
| " | 14576 | " | " | " | " | " | | " | 14576 | " | " | " | " | " | " |
| SW | 14386 | " | " | " | " | " | | SW | 14386 | " | " | " | " | " | " |
| RC | 1325 | " | " | " | " | " | | RC | 1325 | " | " | " | " | " | " |
| " | 1028 | " | " | " | " | " | | " | 1028 | " | " | " | " | " | " |
| " | 1300 | " | " | " | " | " | | " | 1300 | " | " | " | " | " | " |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ART | 4422 | * | | | | | Penn Co | 588546 | " | " | " | " | " | " |
| Penn Co | 588546 | " | " | " | " | " | RC | 3595 | " | " | " | " | " | " |
| RC | 3595 | " | " | " | " | " | " | 2349 | " | " | " | " | " | " |
| " | 2349 | " | " | " | " | " | " | 2716 | " | " | " | " | " | " |
| " | 2716 | " | " | " | " | " | ART | 10215 | " | " | " | " | " | " |
| ART | 10215 | " | " | " | " | " | " | 8857 | " | " | " | " | " | " |
| " | 8857 | " | " | " | " | " | RC | 3353 | " | " | " | " | " | " |
| RC | 3353 | " | " | " | " | " | MP | 16382 | " | " | " | " | " | " |
| MP | 16382 | " | " | " | " | " | " | 8896 | " | " | " | " | " | " |
| " | 8896 | " | " | " | " | " | C&EI | 2062 | " | " | " | " | " | " |
| C&EI | 2062 | " | " | " | " | " | IC | 18216 | " | " | " | " | " | " |
| IC | 18216 | " | " | " | " | " | MP | 20633 | " | " | " | " | " | " |
| MP | 20633 | " | " | " | " | " | CB | 2222 | " | " | " | " | " | " |
| CB | 2222 | " | " | " | " | " | MP | 15789 | " | " | " | " | " | " |
| MP | 15789 | " | " | " | " | " | SOU | 132261 | " | " | " | " | " | " |
| SOU | 132261 | " | " | " | " | " | MP | 16541 | " | " | " | " | " | " |
| MP | 16541 | " | " | " | " | " | D&RG | 11428 | " | " | " | " | " | " |
| D&RG | 11428 | " | " | " | " | " | ART | 9263 | " | " | " | " | " | " |
| ART | 9263 | " | " | " | " | " | " | 9168 | " | " | " | " | " | " |
| " | 9168 | " | " | " | " | " | " | 8687 | " | " | " | " | " | " |
| " | 8687 | " | " | " | " | " | CRI&EP | 250225 | " | " | " | " | " | " |
| CRI&EP | 250225 | " | " | " | " | " | T&P | 15834 | " | " | " | " | " | " |
| T&P | 15834 | " | " | " | " | " | " | 15833 | " | " | " | " | " | " |
| " | 15833 | " | " | " | " | " | " | 15835 | " | " | " | " | " | " |
| " | 15835 | " | " | " | " | " | " | 15830 | " | " | " | " | " | " |
| " | 15830 | " | " | " | " | " | " | 15829 | " | " | " | " | " | " |
| " | 15829 | " | " | " | " | " | " | 15828 | " | " | " | " | " | " |
| " | 15828 | " | " | " | " | " | SW | 20374 | " | " | " | " | " | " |
| SW | 20374 | " | " | " | " | " | IMEX | 17232 | " | " | " | " | " | " |
| IMEX | 17232 | " | " | " | " | " | | | | | | | | |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T&P | 15531 | " | " | " | " | " | T&P | 15531 | " | " | " | " | " | " |
| ART | 8809 | " | " | " | " | " | ART | 8809 | " | " | " | " | " | " |
| " | 5471 | " | " | " | " | " | " | 5471 | " | " | " | " | " | " |
| T&P | 15822 | " | " | " | " | " | T&P | 15822 | Oct. 7th, 11:30 p. m., | | | " | Ex. | |
| Big 4 | 5578 | " | " | " | " | " | Big 4 | 5518 | " 8th, 12:10 p. m., | | | " | 198. | |
| L&N | 94024 | " | " | " | " | " | I&N | 94024 | " 7th, 11:30 p. m., | | | " | Ex. | |
| RC | 3246 | " | " | " | " | " | RC | 3246 | " 7th, 5:10 a. m., | | | " | #55 & Ex. | |
| " | 3338 | " | " | " | " | " | " | 3338 | * | | | | | |
| ART | 9404 | " | " | " | " | " | ART | 9404 | " 7th, 5:10 a. m., | | | " | #55 & Ex. | |
| | 45 | | | | 44 | | MP | 34955 | | | | | | |
| | | | | | | | | 46 | | | 45 | | | |

*Not out of Hoxie on Train #55 Oct. 6th.

*Not out of Argenta on Oct. 7th.

5686 St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Terminal Handling of Loaded Cars on Through Trains, October* 1907.

| Into Hoxie. 10/12/07 2:50 p. m. Train 71. | | Out of Hoxie. | Into Argenta. 10/13/07 2.40 a. m. Trn. 55. | | Out of Argenta. |
|---|---|---|---|---|---|
| MP | 19027 | Oct. 12th 4:20 p. m., Train # 55. | Frisco | 28556 | Oct. 13th 6:10 a. m., Train # 55. |
| " | 26513 | " " " " " | MP | 26513 | " " " " " |
| CNO | 6346 | " " " " " | CNOTP | 6346 | " " " " " |
| ATL | 11034 | " " " " " | UTL | 11034 | " " " " " |
| MP | 33841 | " " " " " | MP | 33841 | " " " " " |
| WAB | 72683 | " " " " " | WAB | 72683 | " " " " " |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C&A | 27854 | " | " | " | " | " | C&A | 27854 | " | " | " | " | " |
| MP | 15445 | " | " | " | " | " | MP | 15445 | " | " | " | " | " |
| MK&T | 13090 | " | " | " | " | " | MK&T | 13090 | " | " | " | " | " |
| T&P | 15837 | " | " | " | " | " | T&P | 15837 | " | " | " | " | " |
| " | 15831 | " | " | " | " | " | " | 15831 | " | " | " | " | " |
| TP&V | 2457 | " | " | " | " | " | TP&V | 2457 | " | " | " | " | " |
| T&P | 15850 | " | " | " | " | " | T&P | 15850 | " | " | " | " | " |
| RC | 2509 | " | " | " | " | " | RC | 2509 | " | " | " | " | " |
| NCL | 6248 | " | " | " | " | " | NCL | 6248 | " | " | " | " | " |
| ART | 6523 | " | " | " | " | " | ART | 6523 | " | " | " | " | " |
| RC | 1334 | " | " | " | " | " | RC | 1334 | " | " | " | " | " |
| " | 1313 | " | " | " | " | " | " | 1313 | " | " | " | " | " |
| ART | 8628 | " | " | " | " | " | ART | 8628 | " | " | " | " | " |
| " | 8579 | " | " | " | " | " | " | 8519 | " | " | " | " | " |
| " | 9064 | " | " | " | " | " | " | 9064 | " | " | " | " | " |
| " | 9726 | " | " | " | " | " | " | 9726 | " | " | " | " | " |
| " | 9159 | " | " | " | " | " | " | 9159 | " | " | " | " | " |
| IM&S | 19625 | " | " | " | " | " | T&P | 15920 | " | " | " | " | " |
| WAB | 64469 | " | " | " | " | " | " | 15924 | " | " | " | " | " |
| T&P | 15920 | " | " | " | " | " | " | 15925 | " | " | " | " | " |
| " | 15924 | " | " | " | " | " | " | 15930 | " | " | " | " | " |
| " | 15925 | " | " | " | " | " | " | 15929 | " | " | " | " | " |
| " | 15930 | " | " | " | " | " | " | 15910 | " | " | " | " | " |
| " | 15929 | " | " | " | " | " | CRI&P | 32906 | " | " | " | " | " |
| " | 15910 | " | " | " | " | " | " | 32045 | " | " | " | " | " |
| CRI&P | 32906 | " | " | " | " | " | SW | 11094 | " | " | " | " | " |
| " | 32045 | " | " | " | " | " | SOU | 132330 | " | " | " | " | " |
| SW | 11094 | " | " | " | " | " | WAB | 70087 | " | " | " | " | " |
| SOU | 132330 | " | " | " | " | " | L&N | 90732 | " | " | " | " | " |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WAB | 70087 | " | " | " | " | " | MP | 21389 | " | " | " | " | " |
| L&N | 92732 | " | " | " | " | " | " | 28057 | " | " | " | " | " |
| MP | 21389 | " | " | " | " | " | SW | 17434 | " | " | " | " | " |
| " | 28057 | " | " | " | " | " | StL&BM | 1185 | " | " | " | " | " |
| SW | 17434 | " | " | " | " | " | MP | 25314 | " | " | " | " | " |
| StLBM | 1185 | " | " | " | " | " | " | 15632 | " | " | " | " | " |
| MP | 25314 | " | " | " | " | " | B&O | 83879 | " | " | " | " | " |
| " | 15632 | " | " | " | " | " | MP | 15334 | " | " | " | " | " |
| B&O | 83879 | " | " | " | " | " | " | 33107 | " | " | " | " | " |
| MP | 15334 | " | " | " | " | " | CP&StL | 25493 | " | " | " | " | " |
| " | 33107 | " | " | " | " | " | MP | 19027 | " | " | " | " | " |
| CRI&P | 57842 | " | " | " | " | " | CRI&P | 57842 | * | | | | |
| CP&StL | 25493 | " | " | " | " | " | IM&S | 19625 | * | | | | |
| | | | | | | | WAB | 64469 | * | | | | |
| | 48 | | | | 48 | | MP | 65263 | * | | | | |
| | | | | | | | " | 21171 | * | | | | |
| | | | | | | | IM&S | 17695 | * | | | | |
| | | | | | | | MP | 64321 | * | | | | |
| | | | | | | | | 53 | | | | 46 | |

* Not out of Argenta Train # 55, Oct. 13th.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Terminal Handling of Loaded Cars on Through Trains, October*, 1907.

| Into Van Buren. 10/21/07 12:15 p.m. Train Ex. 413. | | Out of Van Buren. 10/21/07 6:00 p. m. Train Ex. 1802. |
|---|---|---|
| SRL | 7290 | Out 10/21/07 6:00 p. m., Train Ex. 1802. |
| IM&S | 12988 | " " " " " " |
| SAL | 16346 | " " " " " " |
| CM&StP | 41806 | * |
| MP | 38840 | " " " " " " |
| T&P | 14657 | " " " " " " |
| CRI&P | 61058 | " " " " " " |
| MI&T | 33235 | " " " " " " |
| IM&S | 12245 | " " " " " " |
| MP | 34484 | * |
| SP | 88627 | " " " " " " |
| IM&S | 19756 | " " " " " " |
| CofNJ | 10089 | " " " " " " |
| MP | 26843 | " " " " " " |
| MC | 15176 | " " " " " " |
| MDT | 15051 | * |
| NCL | 4619 | " " " " " " |
| MP | 27212 | * |
| AT&SF | 29170 | * |
| StLSW | 6798 | * |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| T&P | 14992 | " | " | " | " | " | " |
| MP | 19828 | " | " | " | " | " | " |
| " | 5811 | " | " | " | " | " | " |
| " | 35461 | " | " | " | " | " | " |
| | 24 | 18 | | | | | |

* Not out of Van Buren October 21st.



5688 St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Terminal Handling of Loaded Cars on Through Trains, October*, 1907.

| Into McGehee. 10/2/07 11:30 a. m. Train #2-182. | | Out of McGehee. | | | | | |
|---|---|---|---|---|---|---|---|
| IM | 9671 | Oct. 10/3/07 10:00 a. m., Train # 182. | | | | | |
| DI&W | 37360 | " | " | " | " | " | |
| IM | 11352 | * | | | | | |
| MP | 22047 | " | " | " | " | " | |
| " | 16783 | " | " | " | " | " | |
| " | 35075 | " | " | " | " | " | |
| " | 12379 | " | " | " | " | " | |
| KCFS&M | 17880 | " | " | " | " | " | |
| SW | 10016 | " | " | " | " | " | |
| IM | 12736 | " | " | " | " | " | |
| MP | 37137 | " | " | " | " | " | |

| | | | | | | |
|---|---|---|---|---|---|---|
| " | 13740 | " | " | " | " | " |
| IM | 11821 | " | " | " | " | " |
| PCO | 286201 | " | " | " | " | " |
| MP | 24699 | " | " | " | " | " |
| B&O | 72950 | " | " | " | " | " |
| ACL | 30925 | " | " | " | " | " |
| MP | 60406 | " | " | " | " | " |
| CB&Q | 27449 | " | " | " | " | " |
| CB | 2241 | " | " | " | " | " |
| KCS | 13430 | " | " | " | " | " |
| MP | 16824 | " | " | " | " | " |
| GRI | 1121 | " | " | " | " | " |
| C&A | 17728 | " | " | " | " | " |
| C&O | 11877 | " | " | " | " | " |
| CM&StP | 33868 | " | " | " | " | " |
| MP | 22081 | " | " | " | " | " |
| C&A | 17796 | " | " | " | " | " |
| N&W | 20942 | " | " | " | " | " |
| DW | 80062 | " | " | " | " | " |
| M&O | 3646 | " | " | " | " | " |
| WAB | 59868 | " | " | " | " | " |
| TCSD | 22450 | " | " | " | " | " |
| MP | 37207 | " | " | " | " | " |
| PCO | 19005 | " | " | " | " | " |
| SOU | 36197 | " | " | " | " | " |
| MP | 30842 | " | " | " | " | " |
| CB&Q | 20935 | " | " | " | " | " |
| IM | 20289 | " | " | " | " | " |
| TBV | 1310 | " | " | " | " | " |
| MP | 1004 | " | " | " | " | " |

| | | | | | | |
|---|---|---|---|---|---|---|
| " | 15374 | " | " | " | " | " |
| " | 28116 | " | " | " | " | " |
| " | 62119 | " | " | " | " | " |
| NYCH | 16445 | " | " | " | " | " |
| BCR | 6 | " | " | " | " | " |
| NONE | 11823 | " | " | " | " | " |
| MC | 46393 | " | " | " | " | " |
| IM | 12743 | " | " | " | " | " |
| IaC | 2024 | " | " | " | " | " |
| IM | 13064 | " | " | " | " | " |
| MP | 25800 | " | " | " | " | " |
| | 52 | 51 | | | | |

* Not out of McGehee Train 182 Oct. 8nd.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Terminal Handling of Loaded Cars on Through Trains, October, 1907.*



| Into Wynne. 10/5/07. Train #1st 279-372. | | | Out of Wynne. | | | | | |
|---|---|---|---|---|---|---|---|---|
| IM | 15778 | | Oct. 10/6/07 | 11:05 a. m., | Train | Ex. | 836. | |
| DS&LA | 3766 | | " | " | " | " | " | " |
| MP | 25875 | | " | " | " | " | " | " |
| ART | 7171 | * | " | " | " | " | " | " |
| L&N | 6120 | | | | | | | |
| MP | 30814 | * | | | | | | |
| URT | 10620 | * | | | | | | |
| CNOTP | 6326 | | Oct. 10/6/07 | 4:00 a. m., | Train | Ex. | 837. | |
| L&N | 93524 | | " | " | " | " | " | " |
| StLSF | 30890 | | " | " | " | " | " | " |
| CRI&P | 57582 | | " | " | " | " | " | " |
| CB&Q | 101147 | | " | " | " | " | " | " |
| Frisco | 30685 | | " | " | " | " | " | " |
| " | 7898 | | " | " | " | " | " | " |
| C&EI | 37427 | | " | " | " | " | " | " |
| GTP | 302197 | | " | " | " | " | " | " |
| C&EI | 60375 | | " | " | " | " | " | " |
| IC | 29821 | | " | " | " | " | " | " |
| IC | 29593 | | " | " | " | " | " | " |
| EL | 63031 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| IC | 39656 | " | " | " | " | " | " |
| IM | 9711 | " | " | " | " | " | " |
| HLSW | 15066 | " | " | " | " | " | " |
| IC | 22176 | " | " | " | " | " | " |
| PMcKy | 20383 | " | " | " | " | " | " |
| C&NW | 100006 | " | " | " | " | " | " |
| MP | 35816 | " | " | " | " | " | " |
| StLSW | 21354 | " | " | " | " | " | " |
| IC | 22631 | " | " | " | " | " | " |
| StLSW | 12058 | " | " | " | " | " | " |
| N&W | 62985 | " | " | " | " | " | " |
| L&N | 4372 | " | " | " | " | " | " |
| | 32 | 29 | | | | | |

* Not out of Wynne Oct. 6th.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT FIFTY-FOUR.

EXHIBIT No. 54.

St. Louis, Iron Mountain & Southern Railway Company.

*Statement of Intrastate Freight Traffic, State of Arkansas.*

| Period. | Number of ton miles. | Revenue received. | Revenue at inhibited rates. | Increase in revenue at inhibited rates. | Per cent of increase in revenue. | Revenue received per ton mile. (Mills.) | Revenue per ton mile at inhibited rates. (Mills.) |
|---|---|---|---|---|---|---|---|
| July, 1907 | 6,854,704 | $90,093.20 | ..... | ..... | ..... | 13.14 | ..... |
| August, " | 8,013,508 | 107,326.19 | ..... | ..... | ..... | 13.39 | ..... |
| September, " | 8,128,991 | 107,608.37 | ..... | ..... | ..... | 13.24 | ..... |
| October, " | 9,622,508 | 131,286.45 | ..... | ..... | ..... | 13.64 | ..... |
| November, " | 8,203,644 | 107,528.30 | ..... | ..... | ..... | 13.11 | ..... |
| December, " | 7,036,944 | 96,405.66 | ..... | ..... | ..... | 13.70 | ..... |
| Total | 47,860,299 | $640,248.17 | ..... | ..... | ..... | 13.38 | ..... |
| December, 1908 | 6,195,674 | $136,294.11 | $94,023.07 | $42,271.04 | 45.0 | 22.00 | 15.17 |
| January, 1909 | 5,152,661 | 111,452.48 | 77,358.72 | 34,093.76 | 44.1 | 21.63 | 15.01 |
| February, " | 5,292,139 | 110,253.47 | 76,462.98 | 33,790.49 | 44. | 20.83 | 14.45 |
| March, " | 5,430,546 | 109,972.15 | 76,784.40 | 33,187.75 | 43.2 | 20.25 | 14.14 |
| April, " | 4,357,367 | 89,258.40 | 62,332.12 | 26,926.28 | 43.2 | 20.48 | 14.30 |
| May, " | 3,989,971 | 80,154.77 | 56,363.13 | 23,791.64 | 42.2 | 20.09 | 14.13 |
| Total | 30,418,358 | $637,385.38 | $443,324.42 | $194,060.96 | 43.8 | 20.95 | 14.57 |
| June, 1909 | 4,102,084 | $70,965.40 | $55,788.41 | $15,176.99 | 27.2 | 17.30 | 13.60 |
| July, " | 5,588,923 | 90,171.28 | 72,050.26 | 18,121.02 | 25.2 | 16.13 | 12.89 |
| August, " | 6,930,277 | 108,671.10 | 87,932.18 | 20,738.92 | 23.6 | 15.68 | 12.69 |
| September, " | 6,854,940 | 117,384.17 | 93,398.33 | 23,985.84 | 25.7 | 17.12 | 13.62 |
| October, " | 8,401,920 | 151,914.70 | 119,330.90 | 32,583.80 | 27.3 | 18.08 | 14.20 |
| November, " | 9,324,868 | 155,190.34 | 121,985.91 | 33,204.43 | 27.2 | 16.64 | 13.08 |
| Total | 41,203,012 | $694,296.99 | $550,487.99 | $143,811.00 | 26.12 | 16.85 | 13.36 |

NOTE.—Freight rates prior to November 2nd, 1908, were those of the Arkansas Commission; From November 2nd, 1908, to June 1st, 1909, the Company's tariff: Subsequent to June 1, 1909, the Court Tariff.

| | | |
|---|---|---|
| Average Revenue per ton mile, | Six Months, ending December 31, 1907 | 13.38 mills |
| " " " " " | January, 1909 | 21.63 " |
| | Per cent of Increase over 1907 | 61.7% |
| Average Revenue per ton mile, | January, 1909, under Commission Tariff | 15.01 mills |
| " " " " " | Per cent of Increase over 1907 | 44.1% |
| | Per cent of Increase January, 1909, under Commission Tariff over 1907 | 12.2% |
| Average Revenue per ton mile, | six months ending November 30, 1909, under Court Tariff | 16.85 mills |
| " " " " " | " " " " " 30, 1909, " Commission Tariff | 13.36 " |
| | Per cent of increase in 1909 over Commission Tariff | 26.1% |
| | Per cent of increase in 1909 under Commission Tariff over 1907 | nothing. |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley, Feild, D. C.

EXHIBIT FIFTY-FIVE.



EXHIBIT No. 55.

St. Louis, Iron Mountain & Southern Railway Company.

*Results of Operation in Intrastate Traffic in Arkansas for Six Months Ending December 31, 1907, Using the Basis Outlined by Judge Farrington in the Case of Southern Pacific Company vs. Bartine et al.* (170 *Federal Reporter*, 725).

| | | Total operating expenses. | | Freight operating expenses. |
|---|---|---|---|---|
| Transportation and Hire of Equipment | | $2,404,802.34 | $553,395.11 | $1,755,255.76 |
| Maintenance of Way | $1,054,676.51 | | 723,431.33 | |
| Maintenance of Equipment | 1,035,566.07 | | 88,734.42 | |
| Traffic | 142,010.50 | | 132,218.24 | |
| General Expenses | 292,985.43 | | ..... | |
| Dining Car Service—Bal. | 1,183.90 | 2,526,422.41 | | 1,497,779.10 |
| Total | | $4,931,224.75 | | $3,253,034.86 |
| Transportation Expense to Earnings | | 36.03% | | 35.85% |
| Other Operating Expense to Earnings | | 37.85% | | 30.59% |
| Total Expense to Earnings | | 73.88% | | 66.44% |

The Transportation cost of the total Traffic is 100.50% of the Transportation cost of the freight traffic.
The Transportation cost per ton per mile is $1,755,255.76 ÷ 660,163,995, or $0.0026588+. This figure multiplied by 100.5 is equal to $0.0026721 and represents the average cost of hauling one ton of freight one mile, and

this figure multiplied by three is equal to $0.008016 and represents the transportation cost of intrastate traffic per ton per mile.

The total number of ton miles of Intrastate freight was 47,860,299. Multiplying the average cost per ton mile ($0.008016) by the ton miles results in a charge of $383,648.16.

The average cost per ton mile for other operating Expenses is $1,497,779.10 ÷ 660,163,995, or $0.022688. Multiplying this amount by the number of ton miles of state freight results in a charge of $105,585.45 for state traffic.

*Recapitulation.*

| | | |
|---|---|---|
| Total revenue from Intrastate traffic, including Miscellaneous | | $656,717.58 |
| Transportation Expenses | $383,648.16 | |
| Other Operating Expenses | 108,585.45 | |
| Taxes and Rentals | 24,007.96 | |
| | | 516,241.57 |
| Net earnings, Intrastate freight | | $140,476.01 |
| Net earnings, intrastate passenger, as shown in Exhibit 3 on straight revenue basis | | 16,698.16 |
| Total net earnings, intrastate traffic | | $157,174.17 |
| Per cent of return on 1907 valuation of property | | 3.51% |
| Per cent of return on 1909 valuation of property | | 2.92% |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

## EXHIBIT FIFTY-SIX.

## EXHIBIT No. 56.

St. Louis, Iron Mountain & Southern Railway.

State of Arkansas.

*Statement Showing the Results of Operation on the St. L. I. M. & S. Ry. in the State of Arkansas for the Period of Six Months Ended December 31, 1907, on the Bases Outlined in the State's Exhibits "J," "K," "N," "O," and "Y," with Certain Revisions.—Freight Service.*

1. Maintenance of Equipment.

(*a*) Locomotives:

This account divided on the basis outlined in the State's exhibit is as follows:

| | | | |
|---|---|---|---|
| Yard Locomotive mileage | 130,150 | | |
| 50% added for extra repairs | 65,075 | 195,225 | 37.64% |
| Local Locomotive mileage | 70,583 | | |
| 75% added for extra mileage and repairs | 52,937 | 123,520 | 23.81 |
| Through Locomotive Mileage | | 199,981 | 38.55 |
| | | 518,726 | 100.00% |

| | Percentage. | Amount. |
|---|---|---|
| Yard Service | 37.64% | $69,135.80 |
| Local Service | 23.81 | 43,733.35 |
| Through Service | 38.55 | 70,807.25 |
| Total | 100.00 | $183,676.40 |

The expense of Maintenance of Yard Locomotives ($69,135.80) divided between state and interstate on the basis of the number of tons handled in the month of October, 1907, as shown in Exhibit No. 26, is as follows:

| | Percentage. | Amount. |
|---|---|---|
| Intrastate | 21.15% | $14,622.22 |
| Interstate (including transstate) | 78.85 | 54,513.58 |
| Total | 100.00 | $69,135.80 |

(*b*) Freight Cars:

The cost of repairs to freight cars divided on the basis used by the state, with the percentages revised to agree with the testimony of Mr. W. H. V. Rosing (page 235) is as follows:

| | | |
|---|---|---|
| Stopping and Starting | 32% | $152,926.60 |
| Terminal Handling | 23 | 109,916.00 |
| Other Expenses | 45 | 215,053.04 |
| Total | 100 | $477,895.64 |

Dividing each of the sub-divisions shown above on the basis adopted by the State and using other percentages, results in the following charge to Local and Through trains:

| Stopping and starting expenses: | Local. | Through. | Total. |
|---|---|---|---|
| Car Miles | 1,173,350 | 6,532,646 | 7,705,996 |
| Same, with local car miles multiplied by eight | 9,386,800 | 6,532,646 | 15,919,446 |
| Percentage of each | 58.96% | 41.04% | 100.00% |
| Expenses—Divided on above percentages | $90,165.52 | $62,761.08 | $152,926.60 |

| | | | |
|---|---|---|---|
| Terminal handling: | | | |
| Car Miles as above | 1,173,350 | 6,532,646 | 7,705,996 |
| Same, with local car miles multiplied by two | 2,346,700 | 6,532,646 | 8,879,346 |
| Percentage of each | 26.43% | 73.57% | 100.00% |
| Expenses—Divided on above percentages | $29,050.80 | $80,865.20 | $109,916.00 |

The balance of the expenses of freight car maintenance, is divided between local and through service in proportion to the number of car miles made in each class of service, as follows:

5728

| | Local. | Through. | Total. |
|---|---|---|---|
| Car Miles | 1,173,350 | 6,532,646 | 7,705,996 |
| Percentage of each | 15.22% | 84.78% | 100.00% |
| Expenses—Divided on above percentages | $32,731.07 | $182,321.97 | $215,053.04 |

The total cost of repairs to freight cars divided between local and through trains as shown above, is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Stopping and Starting | $90,165.52 | $62,761.08 | $152,926.60 |
| Terminal Handling | 29,050.80 | 80,865.20 | 109,916.00 |
| Other Expenses | 32,731.07 | 182,321.97 | 215,053.04 |
| Total | $151,947.39 | $325,948.25 | $477,895.64 |

(*c*) Supervision and General:

The total expenses under this head divided between local and through service and Intrastate and Interstate traffic on the basis of the direct charges as shown above, are as follows:

| | Direct charges. | Percentage. | Expenses. |
|---|---|---|---|
| Local trains | $195,680.74 | 29.58% | $18,297.98 |
| Through trains | 396,755.50 | 59.97 | 37,097.01 |
| Intrastate | 14,622.22 | 2.21 | 1,367.09 |
| Interstate | 54,513.58 | 8.24 | 5,097.21 |
| Total | $661,572.04 | 30 | $61,859.29 |

2. Traffic Expenses.

These expenses divided on the basis used by the State are as follows:

| | Freight revenue. | Percentage. | Amount. |
|---|---|---|---|
| Intrastate | $640,248.17 | 13.41% | $11,899.29 |
| Interstate | 4,133,210.33 | 86.59 | 76,835.13 |
| Total | $4,773,458.50 | 100.00 | $88,734.42 |

3. Transportation Expenses.

(*a*) Station Expenses:

This expense divided between Intrastate and Interstate traffic on the basis of the number of tons handled, assuming that each intrastate ton has two station handlings and 90% of the interstate tons has one and 10% has two station handlings, is as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Tons handled | 684,122 | 1,571,713 | 2,255,835 |
| Intrastate tons doubled to provide for two charges | 684,122 | ..... | 684,122 |
| 10% added to Interstate tons to provide for two charges | ..... | 157,171 | 157,171 |
| Total | $1,368,244 | $1,728,884 | $3,097,128 |
| | 44.18% | 55.82% | 100.00% |
| Station expenses divided on above percentages, are | $103,216.38 | $130,410.56 | $233,626.94 |

(*b*) Yard and Terminal Expenses:

These expenses divided between state and interstate traffic on the basis of the number of tons handled, as explained under the head of Maintenance of Yard Locomotives (1*a*.), is as follows:

| | Percentage. | Amount. |
|---|---|---|
| Intrastate | 21.15% | $62,042.99 |
| Interstate (including transstate) | 78.85 | 231,304.50 |
| Total | 100.00 | $293,347.49 |

5729 (c) Fuel and Locomotive Expenses:

These expenses, divided on the basis outlined in the State's exhibits, are as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Engine Miles | 70,583 | 199,981 | 270,564 |
| Add 3½% to local engine miles to equalize fuel consumption | 2,470 | ..... | 2,470 |
| Total | 73,053 | 199,981 | 273,034 |
| Percentage of each | 26.76% | 73.24% | 100.00% |
| Expenses divided on above percentages | $59,301.61 | $162,303.79 | $221,605.40 |

(d) Enginehouse expenses—Road:

This expense divided on the basis used by the State is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Total Engine Miles | 70,583 | 199,981 | 270,564 |
| 12% added to Local Engine Miles to cover extra expenses. | 8,470 | ..... | 8,470 |
| Total | 79,053 | 199,981 | 279,034 |
| Percentage of each | 28.33% | 71.67% | 100.00% |
| Expenses divided on above percentages | $15,194.55 | $38,439.58 | $53,634.13 |

(*e*) Road Enginemen and Trainmen:

This expense is divided on the basis outlined in the State's exhibit "K" and is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Total amount, October, 1907 | $29,229.30 | $53,162.56 | $82,391.86 |
| Percentage of each | 35.47% | 64.53% | 100.00% |
| Expenses divided on above percentages | $165,866.65 | $301,758.52 | $467,625.17 |

(*f*) Other Train Expenses:

This expense divided on the basis outlined by the State is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Train Miles | 70,583 | 196,512 | 267,095 |
| Percentage of each | 26.42% | 73.58% | 100.00% |
| Expenses divided on above percentages | $34,957.06 | $97,355.81 | $132,312.87 |

(*g*) Loss and Damage—Freight:

The expenses under this head are divided between intrastate and interstate business on the basis of the actual claims paid during the month of October, 1907, as adopted by the State, and are as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Claims Paid | $4,840.10 | $15,087.48 | $19,927.58 |
| Percentage of each | 24.29% | 75.71% | 100.00% |
| Expenses divided on above percentages | $30,972.03 | $96,537.35 | $127,509.38 |

(*h*) Supervision and General:

These expenses divided between local, through, intrastate and interstate business on the basis of the direct charges to each of these classes, are as follows:

5730

| | Direct expenses. | Percentage. | Amount. |
|---|---|---|---|
| Local Trains | $275,319.87 | 18.00% | $8,352.53 |
| Through Trains | 599,857.70 | 39.21 | 18,194.58 |
| Intrastate Traffic | 196,231.40 | 12.83 | 5,953.49 |
| Interstate Traffic | 458,252.41 | 29.96 | 13,902.32 |
| Total | $1,529,661.38 | 100.00 | $46,402.92 |

4. Maintenance of Way & Structures.

5. General Expenses.

These expenses have no direct relation to any particular class of service nor to any other item of expense, if they are to be considered what the State's witnesses term "Overhead Expenses," then, following their plan, they should be divided between local, through, and intrastate and interstate business on the basis of the charges for all other expenses of these classes, and the result is as follows:

| | Direct expenses. | Percentages. | Maint. of way & struct. | General expenses. |
|---|---|---|---|---|
| Local Trains | $497,651.12 | 20.84 | $115,327.54 | $27,554.28 |
| Through Trains | 1,051,904.79 | 44.05 | 243,770.55 | 58,242.13 |
| Intrastate Traffic | 230,073.49 | 9.63 | 53,291.95 | 12,732.62 |
| Interstate Traffic | 608,600.65 | 25.48 | 141,005.07 | 33,689.21 |
| Total | $2,388,230.05 | 100.00 | $553,395.11 | $132,218.24 |

6. Total Train Costs.

The total cost of local and through trains divided between intrastate and interstate freight on the basis of the ton miles of each class of freight on each class of trains, as shown in the State's Exhibit "I," is as follows:

| | Percentages. | Amount. |
|---|---|---|
| Local Trains: | | |
| Intrastate | 28.51% | $182,615.94 |
| Interstate | 71.49 | 457,917.00 |
| Total | 100.00 | $640,532.94 |
| Through Trains: | | |
| Intrastate | 5.59 | $75,683.99 |
| Interstate | 94.41 | 1,278,233.48 |
| Total | 100.00 | $1,353,917.47 |

7. Miscellaneous Revenue, Taxes, Rentals, Hire of Equipment and Value of Property.

These expenses divided between state and interstate on the basis adopted by the state and by the railroad company in its exhibits, are as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Freight Revenue | $640,248.17 | $4,133,210.33 | $4,773,458.50 |
| Percentage of each | 13.41% | 86.59% | 100.00% |
| Division on these percentages: | | | |
| Miscellaneous Revenue | $16,469.41 | $106,345.00 | $122,814.41 |
| Taxes | 21,851.02 | 141,094.67 | 162,945.69 |
| Rentals | 2,156.94 | 13,927.62 | 16,084.56 |
| Hire of Equipment | 24,029.57 | 155,161.89 | 179,191.46 |
| **Assessed Value of Property Doubled (1907)** | **$1,966,586.20** | **$12,698,486.15** | **$14,665,072.35** |
| **Assessed Value of Property Doubled (1909)** | **$2,367,859.44** | **$15,289,556.23** | **$17,657,415.67** |

EXHIBIT No. —.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Statement of Freight Operating Expenses in Arkansas for the Six Months Ended December 31, 1907, Divided between Local and Through Trains and between State and Interstate Traffic on the Bases Outlined in Exhibit —.*

| | Train Costs. | | Other Costs. | | |
|---|---|---|---|---|---|
| | Local. | Through. | Intrastate. | Interstate. | Local. |
| 1. Maintenance of Equipment: | | | | | |
| (a) Locomotives: | | | | | |
| (1) Yard | ..... | ..... | $14,622.22 | $54,513.58 | $69,135.80 |
| (2) Road | $43,733.35 | $70,807.25 | ..... | ..... | 114,540.60 |
| (b) Freight Cars | 151,947.39 | 325,948.25 | ..... | ..... | 477,895.64 |
| (c) Supervision and General | 18,297.98 | 37,097.01 | 1,367.09 | 5,097.21 | 61,859.29 |
| Total Maintenance of Equipment | $213,978.72 | $433,852.51 | $15,989.31 | $59,610.79 | $723,431.33 |
| 2. Traffic Expenses | ..... | ..... | $11,899.29 | $76,835.13 | $88,734.42 |
| 3. Transportation Expenses: | | | | | |
| (a) Station Expenses | ..... | ..... | $103,216.38 | $130,410.56 | $233,626.94 |
| (b) Yard and Terminal Expenses | ..... | ..... | 62,042.99 | 231,304.50 | 293,347.49 |
| (c) Fuel and Locomotive Expenses | $59,301.61 | $162,303.79 | ..... | ..... | 221,605.40 |
| (d) Enginehouse Expenses | 15,194.55 | 38,439.58 | ..... | ..... | 53,634.13 |
| (e) Road Enginemen and Trainmen | 165,866.65 | 301,758.52 | ..... | ..... | 467,625.17 |
| (f) Other Train Expenses | 34,957.06 | 97,355.81 | ..... | ..... | 132,312.87 |
| (g) Loss and Damage—Freight | ..... | ..... | 30,972.03 | 96,537.35 | 127,509.38 |
| (h) Supervision and General | 8,352.53 | 18,194.58 | 5,953.49 | 13,902.32 | 46,402.92 |
| Total Transportation Expenses | $283,672.40 | $618,052.28 | $202,184.89 | $472,154.73 | $1,576,064.30 |
| 4. Maintenance of Way & Structures | $115,327.54 | $243,770.55 | $53,291.97 | $141,005.07 | $553,395.11 |

| | | | | | |
|---|---|---|---|---|---|
| 5. General Expenses | $27,554.28 | $58,242.13 | $12,732.62 | $33,689.21 | $132,218.24 |
| 6. Total Operating Expenses | $640,532.94 | $1,353,917.47 | $296,098.06 | $783,294.93 | $3,073,843.40 |
| 7. Division of train costs between Intrastate and Interstate Business: | | | | | |
| (a) Local Trains: | | | | | |
| (1) Intrastate Freight 28.51% | *$182,615.94 | ..... | $182,615.94 | ..... | ..... |
| (2) Interstate Freight 71.49% | *$457,917.00 | ..... | ..... | $457,917.00 | ..... |
| (b) Through Trains: | | | | | |
| (1) Intrastate Freight 5.59% | ..... | *$75,683.99 | $75,683.99 | ..... | ..... |
| (2) Interstate Freight 94.41% | ..... | *1,278,233.48 | ..... | $1,278,233.48 | ..... |
| 8. Total Cost of Intrastate and Interstate Business | ..... | ..... | $554,397.99 | $2,519,445.41 | $3,073,843.40 |

[* Figures in red ink.]

EXHIBIT —.

St. Louis, Iron Mountain & Southern Railway.

State of Arkansas.

*Statement Showing the Results of Operation on the St. L., I. M. & S. Ry. in the State of Arkansas for the Period of Six Months Ended December 31, 1907, on the Bases Outlined in the State's Exhibits "L," "M," "N." and "O" with Certain Revisions.—Passenger Service.*

1. Maintenance of Equipment.

(*a*) Locomotives:

These expenses divided on a car mile basis, are as follows:

| | Car miles. | Percentages. | Expenses. |
|---|---|---|---|
| Coach | 785,703 | 59.38% | $98,844.90 |
| Pullman | 279,878 | 21.15% | 35,206.63 |
| Mail | 148,194 | 11.20% | 18,643.70 |
| Express | 109,496 | 8.27% | 13,766.38 |
| Total | 1,323,271 | 100.00 | $166,461.61 |

(*b*) Passenger Train Cars:

This expense is divided between each class of service on the basis of the car miles, with various allowances on the basis of the testimony of Mr. W. H. V. Rosing. Page 243.

| | Car miles. | Percentages. | Expenses. |
|---|---|---|---|
| Coach | 622,271 | 83.41% | $72,649.40 |
| 100% added for added cost | 622,271 | | |
| Baggage | 163,432 | | |
| Mail | 148,194 | 10.10 | 8,797.01 |
| 15% added for added cost | 22,229 | 6.49 | 5,652.74 |
| Express | 109,496 | | |
| Total | 1,687,893 | 100.00 | $87,099.15 |

(c) Supervision and General:

Expenses divided on the basis of the direct charges as shown above, are as follows:

| | Direct charges. | Percentages. | Expenses. |
|---|---|---|---|
| Coach | $171,494.30 | 67.63% | $39,613.58 |
| Pullman | 35,206.63 | 13.89 | 8,135.93 |
| Mail | 27,440.71 | 10.82 | 6,337.70 |
| Express | 19,419.12 | 7.66 | 4,486.77 |
| Total | $253,560.76 | 100.00 | $58,573.98 |

## 2. Traffic Expenses.

These expenses divided between intrastate and interstate traffic on the basis of the gross earnings of each class, are as follows:

| | Gross earnings. | Percentages. | Expenses. |
|---|---|---|---|
| Intrastate | $836,542.20 | 59.54% | $31,720.58 |
| Interstate | 568,476.21 | 40.46 | 21,555.50 |
| Total | $1,405,018.41 | 100.00 | $53,276.08 |

## 3. Transportation Expenses.

(*a*) Station Expenses:

These expenses divided on the basis adopted by the state, are as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Number of Passengers Handled during the six months ended December 31, 1907 | 1,444,540 | 257,950 | 1,702,490 |
| Add 100% to Intrastate business to represent use of two terminals | 1,444,540 | ..... | 1,444,540 |
| Total | 2,889,080 | 257,950 | 3,147,030 |
| Percentage of each | 91.80% | 8.20% | 100.00% |
| Expenses—Divided on above Percentages (after allowing $2,325.00 as cost of handling the mails) | $52,377.81 | $4,678.63 | $57,056.44 |

5733 (*b*) Yard & Train Expenses:

This expense divided on the basis adopted by the State is as follows:

| | Percentages. | Expenses. |
|---|---|---|
| Coach | 59.38% | $326,037.62 |
| Pullman | 21.15 | 116,128.26 |
| Mail | 11.20 | 61,495.81 |
| Express | 8.27 | 45,408.07 |
| Total | 100.00 | $549,069.76 |

(*c*) Loss and Damage to Baggage:

This expense divided on the basis adopted by the State is as follows:

| | Earnings. | Percentages. | Expenses. |
|---|---|---|---|
| Intrastate | $836,542.20 | 59.54% | $984.39 |
| Interstate | 568,476.21 | 40.46 | 668.92 |
| Total | $1,405,018.41 | 100.00 | $1,653.31 |

(*d*) Supervision and General:

These expenses are divided on the basis of the direct charges as apportioned above, the bases adopted by the State, and are as follows:

| | Direct charges. | Percentages. | Expenses. |
|---|---|---|---|
| Coach | $326,037.62 | 53.44% | $21,630.41 |
| Pullman | 116,128.26 | 19.03 | 7,702.59 |
| Intrastate | 53,362.20 | 8.75 | 3,541.65 |
| Interstate | 5,347.55 | 0.88 | 356.19 |
| Mail | 63,820.81 | 10.46 | 4,233.80 |
| Express | 45,408.07 | 7.44 | 3,011.42 |
| Total | $610,104.51 | 100.00 | $40,476.06 |

4. Maintenance of Way & Structures.

This expense, having no direct relation to any particular class of traffic, can be fairly considered an overhead expense, and, adopting the State's basis for expenses of that nature, it is divided on the basis of the direct charges to each class, as follows:

| | Direct charges. | Percentages. | Expenses. |
|---|---|---|---|
| Coach | $558,775.91 | 55.00 | $275,704.77 |
| Pullman | 167,173.41 | 16.46 | 82,510.92 |
| Intrastate | 88,624.43 | 8.72 | 43,711.74 |
| Interstate | 27,259.24 | 2.68 | 13,434.34 |
| Mail | 101,833.02 | 10.02 | 50,228.40 |
| Express | 72,325.38 | 7.12 | 35,691.23 |
| Total | $1,015,991.39 | 100.00 | $501,281.40 |

5. General Expenses.

(*a*) This expense, less the amount paid to Train Auditors, is divided between each class of service on the basis of the direct charges to each class, as adopted by the State and is as follows:

| | Percentages. | Expenses. |
|---|---|---|
| Coach | 55.00% | $63,742.27 |
| Pullman | 16.46 | 19,076.32 |
| Intrastate | 8.72 | 10,106.05 |
| Interstate | 2.68 | 3,105.99 |
| Mail | 10.02 | 11,612.68 |
| Express | 7.12 | 8,251.72 |
| Total | 100.00 | $115,895.03 |

5734 (*b*) The expenses of Train Auditors divided between intrastate and interstate service on the basis of the number of passengers handled, is as follows:

| | Number of passengers. | Percentage. | Expense. |
|---|---|---|---|
| Intrastate | 1,444,540 | 84.85% | $38,074.03 |
| Interstate | 257,950 | 15.15 | 6,798.13 |
| Total | 1,702,490 | 100.00 | $44,872.16 |

6. Division of Cost of Coach and Pullman Service Between Intrastate and Interstate Business.

The cost of Coach Service, $898,222.95, is divided between intrastate and interstate business in proportion to the total passenger miles of each class of traffic handled in coaches, during the month of October, 1907, and is as follows:

| | Passenger Miles. | Percentages. | Coach Service. |
|---|---|---|---|
| Intrastate | 6,736,409 | 64.91% | $583,036.52 |
| Interstate | 3,641,494 | 35.09 | 315,186.43 |
| Total | 10,377,903 | 100.00 | $898,222.95 |

The cost of Pullman service, $268,760.65, is divided between intrastate and interstate business on the basis of the total passenger miles of each class of traffic handled in Pullman cars, during the month of October, 1907, and is as follows:

| | Passenger Miles. | Percentages. | Pullman Service. |
|---|---|---|---|
| Intrastate | 547,124 | 25.00% | $67,190.16 |
| Interstate | 1,641,371 | 75.00 | 201,570.49 |
| Total | 2,188,495 | 100.00 | $268,760.65 |

7. Miscellaneous Revenue and Dining Car Deficit.

These expenses are divided between intrastate and interstate business on the gross earnings basis as adopted by the State, and are as follows:

| | Gross earnings. | Percentage. | Miscellaneous revenue. | Dining car deficit. |
|---|---|---|---|---|
| Intrastate | $836,543.20 | 59.54% | $22,170.87 | $704.89 |
| Interstate | 568,476.21 | 40.46 | 15,066.07 | 479.01 |
| Total | $1,405,018.41 | 100.00 | $37,236.94 | $1,183.90 |

8. Taxes, Rentals, Hire of Equipment and Value of Property.

These expenses are divided on the basis adopted by the State and are as follows:

| | Total earnings. | Percentage. | Taxes. | Rentals. | Hire of Equipment. |
|---|---|---|---|---|---|
| Intrastate | $858,713.07 | 48.28% | $28,582.96 | $2,821.46 | $499.21† |
| Interstate | 583,542.28 | 32.80 | 19,418.42 | 1,916.81 | 339.15† |
| Mail | 202,637.71 | 11.39 | 6,743.16 | 665.63 | 117.77† |
| Express | 133,910.82 | 7.53 | 4,457.95 | 440.05 | 77.86† |
| Total | $1,778,803.88 | 100.00 | $59,202.49 | $5,843.95 | $1,033.99† |

[†In red ink in copy.]

| | Value of property—1907. | Value of property—1909. |
|---|---|---|
| Intrastate | $2,572,459.62 | $3,097,358.66 |
| Interstate | 1,747,652.76 | 2,104,253.60 |
| Mail | 606,883.08 | 730,714.90 |
| Express | 401,214.19 | 483,080.17 |
| Total | $5,328,209.65 | $6,415,407.33 |

NOTE.—The records of the Company for the month of October, 1907, show the total number of passenger miles to be,

| | |
|---|---|
| Intrastate | 7,283,533 |
| Interstate | 5,282,865 |
| Total | 12,566,398 |

The Company's records also show that in October, 1907, there were 2,188,495 passenger miles, carried in Pullman Cars; on the State's assumption that 25% of the Pullman Car passenger miles is intrastate traffic, the division of passenger miles for October, 1907, may be made as follows:

| | Coach. | Pullman. | Total. |
|---|---|---|---|
| Intrastate | 6,736,409 | 547,124 | 7,283,533 |
| Interstate | 3,641,494 | 1,641,371 | 5,282,865 |
| Total | 10,377,903 | 2,188,495 | 12,566,398 |

(Here follow pasters, marked pp. 5735 and 5736.)

EXHIBIT No. —.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

*Statement of Passenger Operating Expenses in Arkansas for the Six Months Ended December 31, 1907, Divided between Each Class of Business on the Bases Outlined in Exhibit No. —.*

| | Car Costs. | | Other Costs. | | Car and Other Costs. | | Total. |
|---|---|---|---|---|---|---|---|
| | Coach. | Pullman. | Intrastate. | Interstate. | Mail. | Express. | |
| 1. Maintenance of Equipment: | | | | | | | |
| (a) Locomotives | $98,844.90 | $35,206.63 | ..... | ..... | $18,643.70 | $13,766.38 | $166,461.61 |
| (b) Passenger Train Cars | 72,649.40 | ..... | ..... | ..... | 8,797.01 | 5,652.74 | 87,099.15 |
| (c) Supervision and General | 39,613.58 | 8,135.93 | ..... | ..... | 6,337.70 | 4,486.77 | 58,573.98 |
| Total Maintenance of Equipment | $211,107.88 | $43,342.56 | ..... | ..... | $33,778.41 | $23,905.89 | $312,134.74 |
| 2. Traffic Expenses | ..... | ..... | $31,720.58 | 21,555.50 | ..... | ..... | $53,276.08 |
| 3. Transportation Expenses: | | | | | | | |
| (a) Station Expenses | ..... | ..... | $52,377.81 | $4,678.63 | $2,325.00 | ..... | $59,381.44 |
| (b) Yard & Train Expenses | $326,037.62 | $116,128.26 | ..... | ..... | 61,495.81 | $45,408.07 | 549,069.76 |
| (c) Loss & Damage to Baggage | ..... | ..... | 984.39 | 668.92 | ..... | ..... | 1,653.31 |
| (d) Supervision and General | 21,630.41 | 7,702.59 | 3,541.65 | 356.19 | 4,233.80 | 3,011.42 | 40,476.06 |
| Total Transportation Expenses | $347,668.03 | $123,830.85 | $56,903.85 | $5,703.74 | $68,054.61 | $48,419.49 | $650,580.57 |
| 4. Maintenance of Way & Structures | $275,704.77 | $82,510.92 | $43,711.74 | $13,434.34 | $50,228.40 | $35,691.23 | $501,281.40 |
| 5. General Expenses: | | | | | | | |
| (a) General Expenses | $63,742.27 | $19,076.32 | $10,106.05 | $3,105.99 | $11,612.68 | $8,251.72 | $115,895.03 |
| (b) Train Auditors | ..... | ..... | 38,074.03 | 6,798.13 | ..... | ..... | 44,872.16 |
| Total General Expenses | $63,742.27 | $19,076.32 | $48,180.08 | $9,904.12 | $11,612.68 | $8,251.72 | $160,767.19 |
| 6. Total Operating Expenses | $898,222.95 | $268,760.65 | $180,516.25 | $50,597.70 | $163,674.10 | $116,268.33 | $1,678,039.98 |
| 7. Division of Coach and Pullman Expense Between Intrastate and Interstate Business: | | | | | | | |
| (a) Coach: | | | | | | | |
| (1) Intrastate 64.91% | *$583,036.52 | ..... | $583,036.52 | ..... | ..... | ..... | ..... |
| (2) Interstate 35.09% | *315,186.43 | ..... | ..... | $315,186.43 | ..... | ..... | ..... |
| (b) Pullman: | | | | | | | |
| (1) Intrastate 25.00% | ..... | *$67,190.16 | $67,190.16 | ..... | ..... | ..... | ..... |
| (2) Interstate 75.00% | ..... | $201,570.49 | ..... | $201,570.49 | ..... | ..... | ..... |
| 8. Total Cost of Intrastate, Interstate, Mail, and Express Business | ..... | ..... | $830,742.93 | $567,354.62 | $163,674.10 | $116,268.33 | $1,678,039.98 |

[* Figures in red ink.]

EXHIBIT No. —.

**St. Louis, Iron Mountain & Southern Railway Company.**

**State of Arkansas.**

*Statement of Revenue, Expenses and Net Earnings in the State of Arkansas for the Six Months Ended December 31, 1907, Divided Between the Various Classes of Business on the Bases Outlined in Exhibits — and —.*

| | Freight. | | | Passenger. | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Intrastate. | Interstate. | Total. | Intrastate. | Interstate. | Mail. | Express. | Total. | Total Intrastate. | Total Interstate. | Total Business. |
| 1. Revenue: | | | | | | | | | | | |
| (a) Freight, Passenger, Mail and Express | $640,248.17 | $4,133,210.33 | $4,773,458.50 | $836,542.20 | $568,476.21 | $202,637.71 | $133,910.82 | $1741,566.94 | $1,476,790.37 | $4,701,686.54 | $6,515,025.44 |
| (b) Miscellaneous | 16,469.41 | 106,345.00 | 122,814.41 | 22,170.87 | 15,066.07 | ..... | ..... | 37,236.94 | 38,640.28 | 121,411.07 | 160,051.35 |
| Total Revenue | $656,717.58 | $4,239,555.33 | $4,896,272.91 | $858,713.07 | $583,542.28 | $202,637.71 | $133,910.82 | $1 778,803.88 | $1,515,430.65 | $4,823,097.61 | $6,675,076.79 |
| 2. Expenses: | | | | | | | | | | | |
| (a) Operating Expenses | $554,397.99 | $2,519,445.41 | $3,073,843.40 | $830,742.93 | $567,354.62 | $163,674.10 | $116,268.33 | $1,678,039.98 | $1,385,140.92 | $3,086,800.03 | $4,751,883.38 |
| (b) Taxes | 21,851.02 | 141,094.67 | 162,945.69 | 28,582.96 | 19,418.42 | 6,743.16 | 4,457.95 | 59,202.49 | 50,433.98 | 160,513.09 | 222,148.18 |
| (c) Rentals | 2,156.94 | 13.927.62 | 16,084.56 | 2,821.46 | 1,916.81 | 665.63 | 440.05 | 5,843.95 | 4,978.40 | 15,844.43 | 21,928.51 |
| (d) Hire of Equipment | 24,029.57 | 155,161.89 | 179,191.46 | *499.21 | *339.15 | *117.77 | *77.86 | *1,033.99 | 23,530.36 | 154,822.74 | 178,157.47 |
| (e) Dining Car Deficit | ..... | ..... | ..... | 704.89 | 479.01 | ..... | ..... | 1,183.90 | 704.89 | 479.01 | 1,183.90 |
| Total Expenses | $602,435.52 | $2,829,629.59 | $3,432,065.11 | $862,353.03 | $588,829.71 | $170,965.12 | $121,088.47 | $1,743,236.33 | $1,464,788.55 | $3,418,459.30 | $5,157,301.44 |
| 3. Net Earnings | $54,282.06 | $1,409,925.74 | $1,464,207.80 | *$3,639.96 | *$5,287.43 | $31,672.59 | $12,822.35 | $35,567.55 | $50,642.10 | $1,404,638.31 | $1,499,775.25 |
| 4. Assessed Value of the Property,—Doubled—1907 | 1,966,586.20 | $12,698,486.15 | $14,665,072.35 | $2,572,459.62 | $1,747,652.76 | $606,883.08 | $401,214.19 | $5,328,209.65 | $4,539,045.82 | $14,446,138.91 | $19,993,282.00 |
| Percentage of Net Earnings to Valuation | 2.76% | 11.10% | 9.98% | *0.14% | *0.30% | 5.22% | 3.20% | 0.67% | 1.12% | 9.72% | 7.50% |
| 5. Assessed Value of the Property,—Doubled—1909 | 2,367,859.44 | $15,289,556.23 | $17,657,415.67 | $3,097,358.66 | $2,104,253.60 | $730,714.90 | $483,080.17 | $6,415,407.33 | $5,465,218.10 | $17,393,809.83 | $24,072,823.00 |
| Percentage of Net Earnings to Valuation | 2.29% | 9.22% | 8.29% | *0.12% | *0.25% | 4.33% | 2.65% | 0.55% | 0.93% | 8.08% | 6.23% |

[* Figures in red ink.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5737 EXHIBIT FIFTY-SIX–A.

5738 EXHIBIT No. 56-A.

St. Louis, Iron Mountain & Southern Ry. Co.

State of Arkansas.

*Statement Showing the Results of Operation on the St. L., I. M. & S. Ry., as Reported in Exhibit No. 56, After Certain Changes Have Been Made in the Passenger Miles Carried in Pullman Cars.*

In making a check of the number of passenger miles carried in Pullman cars for the month of October, 1907, it was found that owing to duplications of certain passenger miles in the train auditors' reports, the passenger mileage in Pullman cars should be 1,936,121 instead of 2,188,495. This will result in the following changes in the figures shown in Exhibit No. 56.

| | Passenger miles. | | |
|---|---|---|---|
| | Coach. | Pullman. | Total. |
| Intrastate | 6,799,503 | 484,030 | 7,283,533 |
| Interstate | 3,830,774 | 1,452,091 | 5,282,865 |
| Total | 10,630,277 | 1,936,121 | 12,566,398 |

The cost of Coach Service, $898,222.95, divided between intrastate and interstate business in proportion to the total passenger miles of each class of traffic handled in coaches, during the month of October, 1907, is as follows:

| | Passenger miles. | Percentage. | Coach service. |
|---|---|---|---|
| Intrastate | 6,799,503 | 63.96 | $574,503.40 |
| Interstate | 3,830,774 | 36.04 | 323,719.55 |
| Total | 10,630,277 | 100.00 | $898,222.95 |

The cost of Pullman service, $268,760.65, divided between intrastate and interstate business on the basis of the total passenger miles of each class of traffic handled in Pullman cars, during the month of October, 1907, is as follows:

| | Passenger miles. | Percentage. | Coach service. |
|---|---|---|---|
| Intrastate | 484,030 | 25.00 | $67,190.16 |
| Interstate | 1,452,091 | 75.00 | 201,570.49 |
| Total | 1,936,121 | 100.00 | $268,760.65 |

After applying these changes to the figures shown in Exhibit No. 56 the total passenger expense divided between each class of business is as follows:

| | |
|---|---|
| Intrastate Passenger Expense | $822,209.81 |
| Interstate Passenger Expense | 575,887.74 |
| Mail Expense | 163,674.10 |
| Express Expense | 116,268.33 |
| Total | $1,678,039.98 |

These changes applied to the last page of Exhibit No. 56 shows the following result:

| | Net earnings. | Percentage of net earnings to 1907 valuation. | Percentage of net earnings to 1909 valuation. |
|---|---|---|---|
| Intrastate Frt. | $54,282.06 | 2.76% | 2.29% |
| Interstate " | 1,409,925.74 | 11.10 | 9.22 |
| Total Freight | $1,464,207.80 | 9.98 | 8.29 |
| Intrastate Pasgr. | 4,893.16 | 0.19 | 0.16 |
| Interstate " | 13,820.55* | 0.79* | 0.66* |
| Mail | 31,672.59 | 5.22 | 4.33 |
| Express | 12,822.35 | 3.20 | 2.65 |
| Total Passenger | $35,567.55 | 0.67 | 0.55 |
| Total Intrastate | 59,175.22 | 1.30 | 1.08 |
| Total Interstate | 1,396,105.19 | 9.66 | 8.03 |
| Total Business | $1,499,775.35 | 7.50 | 6.23 |

[*In red ink in copy.]

5739 Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT FIFTY-SEVEN.

EXHIBIT No. 57.

St. Louis, Iron Mountain & Southern Railway Company.

*Statement of Passenger Traffic, State of Arkansas.*

| Period. | Intrastate. | | | Interstate. | |
|---|---|---|---|---|---|
| | Passenger miles | Passenger revenue. | Revenue at inhibited rates. | Passenger miles. | Passenger revenue. |
| July, 1907 | 7,423,162 | $145,999.19 | ..... | 4,364,901 | $93,011.32 |
| August, 1 " | 7,444,054 | 146,161.32 | ..... | 4,606,915 | 87,026.99 |
| September, " | 7,326,264 | 140,493.51 | ..... | 5,288,855 | 101,820.05 |
| October, " | 7,283,533 | 138,271.49 | ..... | 5,282,865 | 97,546.47 |
| November, " | 6,594,605 | 126,464.22 | ..... | 5,819,868 | 105,004.80 |
| December, " | 7,415,287 | 141,944.63 | ..... | 5,905,031 | 103,880.09 |
| Total | 43,486,905 | $839,334.36 | ..... | 31,268,435 | $588,289.72 |
| Less adjustments | 130,909 | 2,792.16 | ..... | 781,811 | 19,913.51 |
| Total | 43,355,996 | $836,542.20 | ..... | 30,486,624 | $568,476.21 |
| July, 1909 | 5,588,319 | $145,935.05 | $110,118.54 | 4,349,603 | $101,381.25 |
| August, " | 5,713,075 | 152,068.28 | 112,826.50 | 5,091,814 | 106,815.15 |
| September, " | 5,506,776 | 148,196.01 | 108,974.55 | 5,994,817 | 133,908.98 |
| October, " | 6,541,367 | 172,922.35 | 130,085.63 | 5,536,695 | 123,395.60 |
| November, " | 6,533,488 | 169,624.12 | 130,042.94 | 3,556,852 | 85,414.30 |
| December, " | 6,889,293 | 178,418.37 | 136,570.82 | 5,462,660 | 126,437.69 |
| Total | 36,772,318 | $967,164.18 | $728,618.98 | 29,992,441 | $677,352.97 |

NOTE.—In 1907 the Passenger Rates were on the basis of Two Cents, and in 1909 on the basis of Three Cents; except in competitive territory where it is necessary to meet the two and one-half cent rate.

| | |
|---|---|
| Average revenue per passenger mile intrastate for six months ending December 31, 1907 | 1.930 cents. |
| " " " " " " " " " " " " 31, 1909 | 2.630 " |
| " " " " " " " " " " " " 31, 1909 on basis of 2¢ | 1.981 " |
| Percentage of increase in 1909 over 1907 | 36.2% |
| Percentage of increase in 1909 over a two cent basis | 32.8% |
| Average revenue per passenger mile interstate, for six months ending December 31, 1907 | 1.865 cents. |
| " " " " " " " " " " " " 31, 1909 | 2.258 " |
| Percentage of increase in 1909 over 1907 | 21.1% |

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5742

## EXHIBIT FIFTY-EIGHT.

5743

## EXHIBIT 58.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement Showing Revenue from State Freight and Passenger Traffic under Both Current and Inhibited Rates, for Fourteen Months Ending Dec.* 31, 1909.

| Month. | At Current Rates. | At Inhibited Rates. | Increase. | Per Cent of Increase. |
|---|---|---|---|---|
| | **Freight.** | | | |
| | (Railroad Tariff effective November 2, 1908.) | | | |
| November, 1908..... | $38,167.87 | $28,711.67 | $9,456.20 | 32.94 |
| December, " ..... | 38,426.49 | 25,789.74 | 12,636.75 | 49.00 |
| January, 1909..... | 30,916.26 | 20,863.89 | 10,052.37 | 48.18 |
| February, " ..... | 38,256.55 | 26,394.30 | 11,862.25 | 44.94 |
| March, " ..... | 41,098.24 | 27,187.76 | 13,910.48 | 51.16 |
| April, " ..... | 33,853.75 | 22,338.46 | 11,515.29 | 51.55 |
| May " ..... | 26,869.12 | 17,336.22 | 9,532.90 | 54.99 |
| Total R. R. Tariff..... | $247,588.28 | $168,622.04 | $78,966.24 | 46.83 |

(Court Tariff effective June 1, 1909.)

| | | | | | |
|---|---|---|---|---|---|
| June, | 1909..... | $22,955.19 | $17,417.15 | $5,538.04 | 31.80 |
| July, | " ..... | 28,368.84 | 21,998.19 | 6,370.65 | 28.96 |
| August, | " ..... | 33,260.94 | 26,037.49 | 7,223.45 | 27.74 |
| September, | " ..... | 34,556.49 | 27,005.32 | 7,551.17 | 27.96 |
| October, | " ..... | 41,147.18 | 32,143.44 | 9,003.74 | 28.01 |
| November, | " ..... | 43,856.17 | 33,313.89 | 10,542.28 | 31.65 |
| December, | " ..... | 29,724.80 | 22,524.51 | 7,200.29 | 31.96 |
| Total Crt. Tariff..... | | $233,869.61 | $180,439.99 | $53,429.62 | 29.61 |
| Total 14 months..... | | $481,457.89 | $349,062.03 | $132,395.86 | 37.93 |

Passenger.

(3¢ Rate Effective October 19, 1908—Thirteen Days in Oct. Omitted.)

| | | | | | |
|---|---|---|---|---|---|
| November, | 1908..... | $50,714.01 | $37,207.61 | $13,506.40 | 36.30 |
| December, | " ..... | 62,262.90 | 45,226.64 | 17,036.26 | 37.67 |
| January, | 1909..... | 42,271.64 | 30,774.85 | 11,496.79 | 37.36 |
| February, | " ..... | 39,519.43 | 28,985.94 | 10,533.49 | 36.34 |
| March, | " ..... | 44,369.60 | 32,665.26 | 11,704.34 | 35.83 |
| April, | " ..... | 41,468.23 | 30,515.44 | 10,952.79 | 35.89 |
| May, | " ..... | 42,125.58 | 31,391.03 | 10,734.55 | 34.20 |
| June, | " ..... | 40,962.46 | 30,062.50 | 10,899.96 | 36.26 |
| July, | " ..... | 46,650.31 | 34,115.32 | 12,534.99 | 36.74 |
| August, | " ..... | 48,531.87 | 34,830.00 | 13,701.87 | 39.34 |
| September, | " ..... | 45,828.38 | 32,980.72 | 12,847.66 | 38.96 |
| October, | " ..... | 54,792.67 | 39,960.68 | 14,831.99 | 37.12 |
| November, | " ..... | 55,466.68 | 39,984.26 | 15,482.42 | 38.72 |
| December, | " ..... | 59,045.50 | 42,547.87 | 16,497.63 | 38.77 |
| **Total** ..... | | **$674,009.26** | **$491,248.12** | **$182,761.14** | **37.20** |

Summary Since Court-tariff June 1, 1909, to December 31, 1909.

| | | | | |
|---|---|---|---|---|
| Freight | $233,869.61 | $180,439.99 | $53,429.62 | 29.61 |
| Passenger | 351,277.87 | 254,481.35 | 96,796.52 | 38.04 |
| Total | $585,147.48 | $434,921.34 | $150,226.14 | 34.54 |

Summary Entire Period.

| | | | | |
|---|---|---|---|---|
| Frt. R. R. Tariff | $247,588.28 | $168,622.04 | $78,966.24 | 46.83 |
| Frt. Court Tariff | 233,869.61 | 180,439.99 | 53,429.62 | 29.61 |
| Total Freight | $481,457.89 | $349,062.03 | $132,395.86 | 37.93 |
| Passenger | 674,009.26 | 491,248.12 | 182,761.14 | 37.20 |
| Grand Total... | $1,155,467.15 | $840,310.15 | $315,157.00 | 37.50 |

Endorsed: Filed June 8th, 1910. **W. P. Feild, Clerk,** by W. Presley Feild, D. C.

5745 EXHIBIT No. 59.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement of All Loaded Trans-State Cars Moved Through the State of Arkansas for Fifteen Days (1st to 15th) in October, 1908, Showing Actual Time Consumed and Miles Made Within the State Compared with the Schedule.*

Southbound.

| From— | To— | Distance (miles). | No. cars. | Car miles. | Total number of hours in Arkansas. | Average number miles per hour, including all stops en route. | Average schedule time (miles) per hour of freight trains, including all stops en route. | Average number hours per car in Arkansas. | Schedule time (hours) of freight trains. |
|---|---|---|---|---|---|---|---|---|---|
| St. Francis | Texarkana | 349 | 433 | 151,117 | 12,207 | 12.4 | 13.3 | 28.2 | 25.6 |
| St. Francis | Arkana | 344 | 114 | 39,216 | 3,467 | 11.3 | 13.6 | 30.4 | 25.0 |
| St. Francis | Stamps | 315 | 40 | 12,600 | 1,076 | 11.7 | 13.4 | 26.9 | 22.8 |
| Fair Oaks | Texarkana | 246 | 120 | 29,520 | 2,288 | 12.9 | 13.8 | 19.1 | 17.8 |
| Various | Various | Various | 227 | 18,592 | 3,368 | 5.5 | *.... | 14.8 | *.... |
| Total ..... | | | 934 | 251,045 | 22,406 | 11.2 | | | |

Northbound.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Texarkana | St. Francis | 349 | 290 | 101,210 | 17,894 | 5.7 | 12.4 | 61.7 | 28.1 |
| Arkana | St. Francis | **344** | **212** | **72,928** | 14,667 | 5.0 | 12.4 | 69.2 | 27.7 |
| Stamps | St. Francis | 315 | 102 | 32,130 | 6,103 | 5.3 | 12.5 | 59.8 | 25.3 |
| Various | Various | Various | 106 | 22,537 | 3,956 | 5.7 | *.... | 37.3 | *.... |
| Total ..... | | | 710 | 228,805 | 42,620 | 5.4 | | | |
| | | | | | Average all | 7.4 | | | |

*Impracticable to show the schedule time on this item on account of cars moving between various junction points.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5746 EXHIBIT SIXTY.

5747 EXHIBIT 60.

St. Louis Southwestern Railway Company.

State of Arkansas—Freight Service.

*Statement Showing Results of Operating Freight Service in the State of Arkansas, for the Period of Six Months Ended December 31, 1907, on the Bases Outlined in the State's Exhibit "R," with Certain Revisions.*

1—Maintenance of Equipment.

(*a*) Locomotives:

Divided on the basis adopted by the State is as follows:

| | | Mileage. | Percentages. | Expenses. |
|---|---|---|---|---|
| Yard Locomotive Mileage | 7,507 | | | |
| 50% added for extra repairs | 3,754 | 11,261 | 9.04% | $5,377.98 |
| Local Locomotive Mileage | 25,797 | | | |
| 75% added for extra mileage and repairs | 19,348 | 45,145 | 36.26% | 21,571.40 |
| Through Locomotive Mileage | | 68,118 | 54.70% | 32,541.52 |
| Total | | 124,524 | 100.00% | $59,490.90 |

Yard.

The maintenance of yard locomotives ($5,377.98) divided between Intrastate and Interstate on the masis of the number of tons handled (excluding trans-state tons), as shown in Exhibit "A," is as follows:

| | Tons. | Percentages. | Amount. |
|---|---|---|---|
| Intrastate | 19,013 | 25.34% | $1,362.78 |
| Interstate (excluding trans-state) | 56,012 | 74.66% | 4,015.20 |
| Total | 75,025 | 100.00% | $5,377.98 |

(*b*) Freight Cars:

Divided on the basis adopted by the State and the percentages revised to agree with the testimony of Mr. W. H. V. Rosing (Page 235), is as follows:

| | Percentages. | Expenses. |
|---|---|---|
| Stopping and Starting | 32% | $58,169.80 |
| Terminal Handling | 23% | 41,809.54 |
| Other Expenses | 45% | 81,801.28 |
| Total | 100% | $181,780.62 |

5748

Starting and Stopping Expenses.

Terminal Handling.

Divided on the basis adopted by the State, except that local trains are charged eight times more than through trains in proportion to car-miles, instead of four times, to agree with the testimony of Mr. Frank Ward (Page 618), is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Car-miles (October, 1908) | 430,911 | 2,269,559 | 2,700,470 |
| Same, with local multiplied by eight | 3,447,288 | 2,269,559 | 5,716,847 |
| Percentage of each | 60.30% | 39.70% | 100.00% |
| Expenses divided as above | $60,287.54 | $39,691.80 | $99,979.34 |

Other Expenses.

Divided on the basis adopted by the State is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Car miles (October, 1908) | 430,911 | 2,269,559 | 2,700,470 |
| Percentage of each | 15.96% | 84.04% | 100.00% |
| Expenses divided as above | $13,055.48 | $68,745.80 | $81,801.28 |

Freight Cars—Summary.

| | Local. | Through. | Total. |
|---|---|---|---|
| Stopping and Starting and Terminal Hdlg. | $60,287.54 | $39,691.80 | $99,979.34 |
| Other Expenses | 13,055.48 | 68,745.80 | 81,801.28 |
| Total | $73,343.02 | $108,437.60 | $181,780.62 |

(c) Supervision and General:

Divided on the basis adopted by the State is as follows:

| | Direct Charges. | Percentages. | Expenses. |
|---|---|---|---|
| Local Trains | $94,914.42 | 39.34% | $7,463.70 |
| Through Trains | 140,979.12 | 58.43 | 11,085.51 |
| Intrastate | 1,362.78 | .57 | 108.14 |
| Interstate | 4,015.20 | 1.66 | 314.94 |
| Total | $241,271.52 | 100.00% | $18,972.29 |

Divided on the basis adopted by the State is as follows:

| | Direct Revenue. | Percentages. | Expenses. |
|---|---|---|---|
| Intrastate | $175,515.42 | 9.78% | $5,849.70 |
| Interstate | 1,619,840.07 | 90.22% | 53,963.18 |
| Total | $1,795,355.49 | 100.00% | $59,812.88 |

3—Transportation Expenses.

(*a*) Station Expenses:

Divided on the basis adopted by the State in Exhibit "X" is as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Total tons (excluding trans-state) | 197,600 | 389,039 | 586,639 |
| Double the intra-state tons | 197,600 | ..... | 197,600 |
| Total | 395,200 | 389,039 | 784,239 |
| Percentage of each | 50.39% | 49.61% | 100.00% |
| Expenses divided as above | $23,944.68 | $23,574.04 | $47,518.72 |

(*b*) Yard and Terminal Expenses:

Divided between Intrastate and Interstate on basis of tons handled (trans-state excluded) the same as was done for Maintenance of Yard Locomotives (1-*a*), is as follows:

| | Percentages. | Expenses. |
|---|---|---|
| Intrastate | 25.34% | $14,308.34 |
| Interstate | 74.66% | 42,157.08 |
| Total | 100.00% | $56,465.42 |

(c) Fuel and Locomotive Expenses:

Divided on the basis adopted by the State is as follows:

| | Local | Through. | Total. |
|---|---|---|---|
| Percentage of each | 28.15% | 71.85% | 100.00% |
| Expenses divided as above | $21,923.95 | $55,958.63 | $77,882.58 |

5750 (d) Enginehouse Expenses—Road:

Divided on the basis adopted by the State is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Percentage of each | 43.10% | 56.90% | 100.00% |
| Expenses divided as above | $4,505.35 | $5,947.89 | $10,453.24 |

(e) Road Enginemen and Trainmen:

Divided on the basis adopted by the State is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Percentage of each | 39.85% | 60.15% | 100.00% |
| Expenses divided as above | $51,837.17 | $78,243.56 | $130,080.73 |

(*f*) Other Train Expenses:

Divided on the basis adopted by the State is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Percentage of each | 27.47% | 72.53% | 100.00% |
| Expenses divided as above | $8,186.55 | $21,615.24 | $29,801.79 |

(*g*) Loss and Damage—Freight:

Divided on the basis adopted by the State is as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Percentage of each | 9.54% | 90.46% | 100.00% |
| Expenses divided as above | $1,810.37 | $17,166.29 | $18,976.66 |

(*h*) Supervision and General:

Divided on the basis adopted by the State is as follows:

| | Direct Charges. | Percentages. | Expenses. |
|---|---|---|---|
| Local Trains | $86,453.02 | 23.29% | $3,875.94 |
| Through Trains | 161,765.32 | 43.58% | 7,252.61 |
| Intrastate | 40,063.39 | 10.80% | 1,797.34 |
| Interstate | 82,897.41 | 22.33% | 3,716.18 |
| Total | $371,179.14 | 100.00% | $16,642.07 |

## 4. Maintenance of Way and Structures.

## 5. General Expenses.

These expenses have no direct relation to either Local, Through, Intrastate or Interstate. If they are to be considered what the State's witnesses term "Overhead Expenses," then they should, following the State's plan, be divided between the several classes on basis of the direct charges to each, as follows:

| | Direct charges. | Percentages. | M. of W. & S. | General expenses. |
|---|---|---|---|---|
| Local Trains | $192,707.08 | 27.22% | $47,426.05 | $11,981.70 |
| Through Trains | 321,082.56 | 45.35% | 79,014.37 | 19,962.16 |
| Intrastate | 49,181.35 | 6.95% | 12,109.15 | 3,059.25 |
| Interstate | 144,906.91 | 20.48% | 35,682.78 | 9,014.88 |
| Total | $707,877.90 | 100.00% | $174,232.35 | $44,017.99 |

## 6. Total Train Costs.

Divided on the basis of intrastate and interstate ton-miles handled on local and through trains, as adopted by the State, using, however, the results for the month of October, 1908, as per State's Exhibit "P," is as follows:

| Local Trains: | Percentages. | Expenses. |
|---|---|---|
| Intrastate | 32.66% | $74,443.57 |
| Interstate | 67.34% | 153,491.43 |
| Total | 100.00% | $227,935.00 |

| | | |
|---|---|---|
| Through Trains: | | |
| Intrastate | 1.09% | $4,842.44 |
| Interstate | 98.91% | 439,418.30 |
| Total | 100.00% | $444,260.74 |

7. Miscellaneous Revenue, Taxes, Rentals, Hire of Equipment, and Value of Property.

Divided on the revenue basis adopted by both this Company and the State is as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Percentage of Freight Revenue | 9.78% | 90.22% | 100.00% |
| Division on these percentages: | | | |
| Miscellaneous Revenue | $2,450.97 | $22,610.05 | $25,061.02 |
| Taxes | $5,495.26 | $50,693.51 | $56,188.77 |
| Rentals (Credits) | 5,547.49* | 51,175.32* | 56,722.81* |
| Assessed value of property, 1908 doubled | $1,076,548.28 | $9,931,102.56 | $11,007,650.84 |
| Assessed value of property, 1909 doubled | $1,364,345.27 | $12,586,015.34 | $13,950,360.61 |

[*In red ink in copy.]

EXHIBIT —.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Recapitulation of Freight Operating Expenses for Six Months Ended December 31, 1907, as Submitted by the State in Exhibit "Q," Revised on Bases Explained in Succeeding Exhibit.*

| | Train costs. | | Other costs. | | |
|---|---|---|---|---|---|
| 1. Maintenance of Equipment: | Local. | Through. | Intrastate. | Interstate. | Total. |
| (a) Locomotives: | (1) | (2) | (3) | (4) | (5) |
| (1) Yard | ..... | ..... | $1,362.78 | $4,015.20 | $5,377.98 |
| (2) Road | $21,571.40 | $32,541.52 | ..... | ..... | 54,112.92 |
| (b) Freight Cars | 73,343.02 | 108,437.60 | ..... | ..... | 181,780.62 |
| (c) Supervision and General | 7,463.70 | 11,085.51 | 108.14 | 314.94 | 18,972.29 |
| Total Maintenance of Equipment. | $102,378.12 | $152,064.63 | $1,470.92 | $4,330.14 | $260,243.81 |
| 2. Traffic Expenses | ..... | ..... | $5,849.70 | $53,963.18 | $59,812.88 |
| 3. Transportation Expenses: | | | | | |
| (a) Station Expenses | ..... | ..... | $23,944.68 | $23,574.04 | $47,518.72 |
| (b) Yard and Terminal Expenses | ..... | ..... | 14,308.34 | 42,157.08 | 56,465.42 |
| (c) Fuel and Locomotive Expenses | $21,923.95 | $55,958.63 | ..... | ..... | 77,882.58 |
| (d) Enginehouse Expenses—Road | 4,505.35 | 5,947.89 | ..... | ..... | 10,453.24 |
| (e) Road Enginemen and Trainmen | 51,837.17 | 78,243.56 | ..... | ..... | 130,080.73 |
| (f) Other Train Expenses | 8,186.55 | 21,615.24 | ..... | ..... | 29,801.79 |
| (g) Loss and Damage—Freight | ..... | ..... | 1,810.37 | 17,166.29 | 18,976.66 |
| (h) Supervision and General | 3,875.94 | 7,252.61 | 1,797.34 | 3,716.18 | 16,642.07 |
| Total Transportation Expenses | $90,328.96 | $169,017.93 | $41,860.73 | $86,613.59 | $387,821.21 |

| | | | | | |
|---|---|---|---|---|---|
| 4. Maintenance of Way and Structures.... | $47,426.05 | $79,014.37 | $12,109.15 | $35,682.78 | $174,232.35 |
| 5. General Expenses ..... | $11,981.70 | $19,962.16 | $3,059.25 | $9,014.88 | $44,017.99 |
| 6. Total Train Costs and Other Operating Expenses ..... | $252,114.83 | $420,059.09 | $64,349.75 | $189,604.57 | $926,128.24 |
| 7. Division of Train Costs between Intrastate and Interstate Business on a Ton-Mile Basis: | | | | | |
| (*a*) Local Trains: | | | | | |
| (1) Intrastate Freight—32.66% of total ..... | $82,340.70‡ | ..... | $82,340.70 | ..... | ..... |
| (2) Interstate Freight—67.34% of total ..... | 169,774.13‡ | ..... | ..... | $169,774.13 | ..... |
| (*b*) Through Trains: | | | | | |
| (1) Intrastate Freight—1.09% of total ..... | ..... | $4,578.64* | 4,578.64 | ..... | ..... |
| (2) Interstate Freight—98.91% of total ..... | ..... | 415,480.45* | ..... | 415,480.45 | ..... |
| Total Cost of Intrastate and Interstate Business ..... | ..... | ..... | $151,269.09 | $774,859.15 | $926,128.24 |

[*In red ink in copy.]

EXHIBIT —.

St. Louis Southwestern Railway Company.

State of Arkansas—Passenger Service.

*Statement Showing Results of Operating Passenger Service in the State of Arkansas, for the Period of Six Months Ended December 31, 1907, on the Basis Outlined in the State's Exhibit "T," with Certain Revisions.*

1—Maintenance of Equipment.

(*a*) Locomotives:

Divided on the basis adopted by the State is as follows:

| | Car-Miles. | Percentages. | Expenses. |
|---|---|---|---|
| Coach | 221,159 | 64.73% | $29,431.20 |
| Pullman | 59,334 | 17.37% | 7,897.73 |
| Mail | 35,480 | 10.38% | 4,719.54 |
| Express | 25,683 | 7.52% | 3,419.17 |
| Total | 341,656 | 100.00% | $45,467.64 |

(*b*) Passenger Train Cars:

Divided on the car-mile basis adopted by the State with various allowances, as per testimony of Mr. W. H. V. Rosing (Page 243), is as follows:

| | Car-Miles. | Percentages. | Expenses. |
|---|---|---|---|
| Coach | 182,460 | 85.86% | $28,865.99 |
| 100% added for added cost | 182,460 | | |
| Baggage | 38,699 | | |
| Mail | 35,480 | 8.68% | 2,918.20 |
| 15% added for added cost | 5,322 | 5.46% | 1,835.65 |
| Express | 25,683 | | |
| Total | 470,104 | 100.00% | $33,619.84 |

(c) Supervision and General:

Divided on the basis adopted by the State is as follows:

| | Direct Charges. | Percentages. | Expenses. |
|---|---|---|---|
| Coach | $58,297.19 | 73.71% | $8,115.15 |
| Pullman | 7,897.73 | 9.99% | 1,099.86 |
| Mail | 7,637.74 | 9.66% | 1,063.52 |
| Express | 5,254.82 | 6.64% | 731.03 |
| Total | $79,087.48 | 100.00% | $11,009.56 |

5754

2—Traffic Expenses.

Divided on the revenue basis adopted by the State, with Mail and Express Revenue excluded, is as follows:

| | Gross Revenue. | Percentages. | Expenses. |
|---|---|---|---|
| Intrastate Passenger Revenue | $246,101.33 | 59.04% | $15,350.13 |
| Interstate Passenger Revenue | 170,735.14 | 40.96% | 10,649.41 |
| Total | $416,836.47 | 100.00% | $25,999.54 |

3—Transportation Expenses.

(a) Station Expenses:

Divided on the basis adopted by the State is as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Number Passengers Handled | 504,392 | 82,064 | 586,456 |
| Add 100% a/c two terminals | 504,392 | ..... | 504,392 |

| | | | |
|---|---|---|---|
| Total | 1,008,784 | 82,064 | 1,090,848 |
| Percentage of each | 92.48% | 7.52% | 100.00% |
| Expenses divided as above (after allowing $1,149.75 to Mail) | $22,974.45 | $1,868.16 | $24,842.61 |

(*b*) Yard and Train Expenses (Excluding Train Auditor's Expense):

Divided on the basis adopted by the State is as follows:

| | Car-Miles. | Percentages. | Expenses. |
|---|---|---|---|
| Coach | 221,159 | 64.73% | $84,809.06 |
| Pullman | 59,334 | 17.37% | 22,758.12 |
| Mail | 35,480 | 10.38% | 13,599.84 |
| Express | 25,683 | 7.52% | 9,852.68 |
| Total | 341,656 | 100.00% | $131,019.70 |

(*c*) Train Auditors' Expenses:

Divided on the basis of number of passengers handled, is as follows:

| | No. of Pass. Handled. | Percentages. | Expenses. |
|---|---|---|---|
| Intrastate | 504,392 | 86.00% | $7,670.67 |
| Interstate | 82,064 | 14.00% | 1,248.71 |
| Total | 586,456 | 100.00% | $8,919.38 |

(*d*) Loss and Damage—Baggage:

Divided on the revenue basis adopted by the State, is as follows:

| | Gross Revenue. | Percentages. | Expenses. |
|---|---|---|---|
| Intrastate Passenger Revenue | 246,101.33 | 59.04% | $246.22 |
| Interstate Passenger Revenue | 170,735.14 | 40.96% | 170.82 |
| Total | 416,836.47 | 100.00% | $417.04 |

5755 (*e*) Supervision and General:

Divided on the basis adopted by the State, is as follows:

| | Direct Charges. | Percentages. | Expenses. |
|---|---|---|---|
| Coach | $84,809.06 | 50.98% | $5,175.47 |
| Pullman | 22,758.12 | 13.68% | 1,388.79 |
| Intrastate | 30,891.34 | 18.57% | 1,885.22 |
| Interstate | 3,287.69 | 1.98% | 201.01 |
| Mail | 14,749.59 | 8.87% | 900.48 |
| Express | 9,852.68 | 5.92% | 601.30 |
| Total | $166,348.48 | 100.00% | $10,151.97 |

4—Maintenance of Way and Structures.

5—General Expenses.

These expenses have no direct relation to any particular class of traffic. If they are to be considered what the State's witnesses term "Overhead Expenses," then they should, following the State plan, be divided between the several classes on basis of the direct charges to each, as follows:

| | Direct Charges. | Percentages. | M. of W. & S. | General Expenses. |
|---|---|---|---|---|
| Coach | $156,396.87 | 53.46% | $67,890.43 | $12,359.68 |
| Pullman | 33,144.50 | 11.33% | 14,388.30 | 2,619.44 |
| Intrastate | 48,126.69 | 16.45% | 26,890.34 | 3,803.15 |
| Interstate | 14,138.11 | 4.83% | 6,133.76 | 1,116.67 |
| Mail | 24,351.33 | 8.32% | 10,565.81 | 1,923.54 |
| Express | 16,439.53 | 5.61% | 7,124.31 | 1,297.00 |
| Total | $292,597.03 | 100.00% | $126,992.95 | $23,119.48 |

6—Division of Cost of Coach and Pullman Service.

No record of the passenger-miles made in Pullman cars during any of the months, July to December, 1907, is available, but for the month of June, 1910, which month is about an average of the six months ended December 31, 1907, the records of the Company show:

| | |
|---|---|
| Passenger-miles in Coaches | 2,574,781 or 90.26% |
| Passenger-miles in Pullman | 277,764, or 9.74% |

9.74% of the total passenger-miles for the six months ended Dec. 31, 1907, should, therefore, be deducted (in the arbitrary proportion of Intrastate 25% and Interstate 75%, adopted by the State) before arriving at the percentages for dividing coach expenses between Intrastate and Interstate, as follows:

| 5756 Percentage for Division of Coach Expenses: | Pass-Miles Six Mos. Ended Dec., 1907. | Intrastate. | Interstate. |
|---|---|---|---|
| Total | 22,275,753 | 12,345,719 | 9,930,034 |
| Less Pullman Pass., 9.74% | 2,169,659 | 542,415 | 1,627,244 |
| | 20,106,094 | 11,803,304 | 8,302,790 |
| Percentages | 100.00% | 58.71% | 41.29% |

| Percentages for Division of Pullman Expenses: | Pass-Miles Six Mos. Ended Dec., 1907. | Intrastate. | Interstate. |
|---|---|---|---|
| Total | 2,169,659 | 542.415 | 1,627,244 |
| Percentages (arbitrary) | 100.00% | 25.00% | 75.00% |

| Division. | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Coach Expenses | $139,935.44 | $97,711.54 | $236,646.98 |
| Pullman Expenses | 12,538.06 | 37,614.18 | 50,152.24 |
| Total | $151,473.50 | $135,325.72 | $286,799.22 |

7—Miscellaneous Revenue, Taxes, Rentals, Outside Operations and Value of Property.

Divided on the revenue basis adopted by both this Company and the State, is as follows:

| | Intrastate. | Interstate. | Mail. | Express. | Total. |
|---|---|---|---|---|---|
| Miscl. Rev. | $5,081.63 | $3,525.47 | $..... | $..... | $8,607.10 |
| Out. Op. (def.) | 811.38 | 562.91 | ..... | ..... | 1,374.29 |
| Taxes | 8,077.78 | 5,603.89 | 1,068.16 | 1,098.28 | 15,848.11 |
| Rentals | 1,299.67 | 901.64 | 171.86 | 176.71 | 2,549.88 |

| Assessed Value of Property: | Year 1908 Doubled. | Year 1909 Doubled. |
|---|---|---|
| Intrastate | $1,540,304.82 | $1,952,079.33 |
| Interstate | 1,068,573.24 | 1,354,238.28 |
| Mail | 203,681.66 | 258,132.52 |
| Express | 209,423.44 | 265,409.26 |
| Total | $3,021,983.16 | $3,829,859.39 |

NOTE.—If item 3*b* "Yard and Train Expenses" was divided between Intrastate, Interstate, Mail and Express, on a straight revenue basis, the result would be as follows:

| | Gross Revenue. | Percentages. | Expenses. |
|---|---|---|---|
| Intrastate | $251,182.96 | 50.97% | $66,780.74 |
| Interstate | 174,260.61 | 35.36% | 46,328.57 |
| Mail | 33,218.77 | 6.74% | 8,830.73 |
| Express | 34,155.57 | 6.93% | 9,079.66 |
| Total | $492,817.91 | 100.00% | $131,019.70 |

If this basis is used, it will change the final results as follows:

| | Increase. | Decrease. |
|---|---|---|
| Intrastate Expense | $18,138.42 | $..... |
| Interstate Expense | ..... | 9,255.98 |
| Mail Expense | ..... | 7,657.41 |
| Express Expense | ..... | 1,225.03 |
| Total | $18,138.42 | $18,138.42 |

EXHIBIT —.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Recapitulation of Passenger Operating Expenses for Six Months Ended December 31, 1907, as Submitted by the State in Exhibit "8," Revised on Bases Explained in Succeeding Exhibit.*

| | Train costs. | | Other costs. | | Train and other costs. | | Total. |
|---|---|---|---|---|---|---|---|
| | Coach. | Pullman. | Intrastate. | Interstate. | Mail. | Express. | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1. Maintenance of Equipment: | | | | | | | |
| (a) Locomotive | $29,431.20 | $7,897.73 | $ ..... | $ ..... | $4,719.54 | $3,419.17 | $45,467.64 |
| (b) Passenger Train Cars | 28,865.99 | ..... | ..... | ..... | 2,918.20 | 1,835.65 | 33,619.84 |
| (c) Supervision and General | 8,115.15 | 1,099.86 | ..... | ..... | 1,063.52 | 731.03 | 11,009.56 |
| Total Maintenance of Equipment | $66,412.34 | $8,997.59 | $ ..... | $ ..... | $8,701.26 | $5,985.85 | $90,097.04 |
| 2. Traffic Expenses | $ ..... | $ ..... | $15,350.13 | $10,649.41 | $ ..... | $ ..... | $25,999.54 |
| 3. Transportation Expenses: | | | | | | | |
| (a) Station Expenses | $ ..... | $ ..... | $22,974.45 | $1,868.16 | $1,149.75 | $ ..... | $25,992.36 |
| (b) Yard and Train Expenses | 84,809.06 | 22,758.12 | ..... | ..... | 13,599.84 | 9,852.68 | 131,019.70 |
| (c) Train Auditors' Expense | ..... | ..... | 7,670.67 | 1,248.71 | ..... | ..... | 8,919.38 |
| (d) Loss and Damage—Baggage | ..... | ..... | 246.22 | 170.82 | ..... | ..... | 417.04 |
| (e) Supervision and General | 5,175.47 | 1,388.79 | 1,885.22 | 201.01 | 900.48 | 601.00 | 10,151.97 |
| Total Transportation Expenses | $89,984.53 | $24,146.91 | $32,776.56 | $3,488.70 | $15,650.07 | $10,453.68 | $176,500.45 |
| 4. Maintenance of Way and Structures | $67,890.43 | $14,388.30 | $20,890.34 | $6,133.76 | $10,565.81 | $7,124.31 | $126,992.95 |
| 5. General Expenses | $12,359.68 | $2,619.44 | $3,803.15 | $1,116.67 | 1,923.54 | $1,297.00 | $23,119.48 |
| Total Operating Expenses | $236,646.98 | $50,152.24 | $72,820.18 | $21,388.54 | $36,840.68 | $24,860.84 | $442,709.46 |

EXHIBIT —.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Summary of Operating Revenues, Operating Expenses, etc., Net Revenue, Valuation of Property and Return Thereon for Six Months Ended December 31, 1907, as Submitted by the State in Exhibit "U," Revised on Bases Explained in Immediately Preceding Exhibits.*

| | Freight. | | | Passenger. | | | | | Total Business. |
|---|---|---|---|---|---|---|---|---|---|
| | Intrastate. (1) | Interstate. (2) | Total. (3) | Intrastate. (4) | Interstate. (5) | Mail. (6) | Express. (7) | Total. (8) | (9) |
| 1. Revenue: | | | | | | | | | |
| (*a*) Freight, Passenger, Mail and Express..... | $173,064.45 | $1,597,230.02 | $1,770,294.47 | $246,101.33 | $170,735.14 | $33,218.77 | $34,155.57 | $484,210.81 | $2,254,505.28 |
| (*b*) Miscellaneous ..... | 2,450.97 | 22,610.05 | 25,061.02 | 5,081.63 | 3,525.47 | ..... | ..... | 8,607.10 | 33,668.12 |
| Total Revenue ..... | $175,515.42 | $1,619,840.07 | $1,795,355.49 | $251,182.96 | $174,260.61 | $33,218.77 | $34,155.57 | $492,817.91 | $2,288,173.40 |
| 2. Expenses: | | | | | | | | | |
| (*a*) Operating Expenses ..... | $151,269.09 | $774,859.15 | $926,128.24 | $224,293.68 | $156,714.26 | $36,840.68 | $24,860.84 | $442,709.46 | $1,368,837.70 |
| (*b*) Taxes ..... | 5,495.26 | 50,693.51 | 56,188.77 | 8,077.78 | 5,603.89 | 1,068.16 | 1,098.28 | 15,848.11 | 72,036.88 |
| (*c*) Rentals ..... | 5,547.49† | 51,175.32† | 56,722.81† | 1,299.67 | 901.64 | 171.86 | 176.71 | 2,549.88 | 54,172.93† |
| (*d*) Outside Operations (Def.)..... | ..... | ..... | ..... | 811.38 | 562.91 | ..... | ..... | 1,374.29 | 1,374.29 |
| Total Expenses ..... | $151,216.86 | $774,377.34 | $925,594.20 | $234,482.51 | $163,782.70 | $38,080.70 | $26,135.83 | $462,481.74 | $1,388,075.94 |
| 3.*Net Revenue ..... | $24,298.56 | $845,462.73 | $869,761.29 | $16,700.45 | $10,477.91 | $4,861.93† | $8,019.74 | $30,336.17 | $900,097.46 |
| 4. Asesssed Value of Property, 1908, Doubled..... | $1,076,548.28 | $9,931,102.56 | $11,007,650.84 | $1,540,304.82 | $1,068,573.24 | $203,681.66 | $209,423.44 | $3,021,983.16 | $14,029,634.00 |
| *Percentage of Net Revenue to Valuation..... | 2.26% | 8.51% | 7.90% | 1.08% | 0.98% | 2.39%† | 3.83% | 1.00% | 6.42% |
| 5. Assessed Value of Property, 1909, Doubled..... | $1,364,345.27 | $12,586,015.34 | $13,950,360.61 | $1,952,079.33 | $1,354,238.28 | $258,132.52 | $265,409.26 | $3,829,859.39 | $17,780,220.00 |
| *Percentage of Net Revenue to Valuation..... | 1.78% | 6.72% | 6.23% | 0.86% | 0.77% | 1.88%† | 3.02% | 0.79% | 5.06% |

* The "Net Revenue" and the "Percentage of Net Revenue to Valuation" given herein, are based on the returns for the largest half of the fiscal year ended June 30, 1908, and it is, therefore, improper to arbitrarily double this percentage, or to cut the valuation half in two, and call the result the rate of annual return on the investment. For all business in Arkansas the net revenue for the six months, July to December, 1907, was 40.16% greater than the net revenue for the six months, January to June, 1908. To equalize the net revenue for the six months ended December 31, 1907, to a basis of one-half of the year, it would be necessary to reduce the same 20%.

[† In red ink in copy.]

EXHIBIT —.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Summary of Revenues, Expenses, and Net Revenue for the Six Months Ended December 31, 1907, Divided Between Intrastate, Interstate, Mail and Express Business, on Bases used by the State (Exhibit "V") Revised as per Immediately Preceding Statements.*

| | Intrastate. | | | Interstate. | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Freight. | Passenger. | Total. | Freight. | Passenger. | Total. | Mail Business. | Express Business. | Total. |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1. Revenue | $175,515.42 | $251,182.96 | $426,698.38 | $1,619,840.07 | $174,260.61 | $1,794,100.68 | $33,218.77 | $34,155.57 | $2,288,173.40 |
| 2. Expenses | 151,216.86 | 234,482.51 | 385,699.37 | 774,377.34 | 163,782.70 | 938,160.04 | 38,080.70 | 26,135.83 | 1,388,075.94 |
| 3.*Net Revenue | $24,298.56 | $16,700.45 | $40,999.01 | $845,462.73 | $10,477.91 | $855,940.64 | $4,861.93† | $8,019.74 | $900,097.46 |
| 4. Assessed Value of Property Doubled—1908 | $1,076,548.28 | $1,540,304.82 | $2,616,853.10 | $9,931,102.56 | $1,068,573.24 | $10,999,675.80 | $203,681.66 | $209,423.44 | $14,029,634.00 |
| *Percentage of Net Revenue to Valuation | 2.26% | 1.08% | 1.57% | 8.51% | 0.98% | 7.78% | 2.39%† | 3.83% | 6.42% |
| 5. Assessed Value of Property Doubled—1909 | $1,364,345.27 | $1,952,079.33 | $3,316,424.60 | $12,586,015.34 | $1,354,238.28 | $13,940,253.62 | $258,132.52 | $265,409.26 | $17,780,220.00 |
| *Percentage of Net Revenue to Valuation | 1.78% | 0.86% | 1.24% | 6.72% | 0.77% | 6.14% | 1.88%† | 3.02% | 5.06% |

* The "Net Revenue" and the "Percentage of Net Revenue to Valuation" given herein, are based on the returns for the largest half of the fiscal year ended June 30, 1908, and it is, therefore, improper to arbitrarily double this percentage, or to cut the valuation half in two, and call the result the rate of annual return on the investment. For all business in Arkansas the net revenue for the six months July to December, 1907, was 40.16% greater than the net revenue for the six months, January to June, 1908. To equalize the net revenue for the six months ended December 31, 1907, to a basis of one-half of the year, it would be necessary to reduce the same 20%.

[† In red ink in copy.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5760 EXHIBIT "A."

5761 EXHIBIT "A."

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement of Trans-State, Inter-State and State Freight Handled During the Month of January, 1909.*

| Character of freight. | (1) Number of tons. | (2) Percentage of total tons. | (3) Revenue. | (4) Percentage of total revenue. | (5) Average amount received per ton. | (6) Number of tons one mile. | (7) Percentage total ton miles. | (8) Average amount received per ton per mile. (Mills.) | (9) Average length of haul. (Miles.) |
|---|---|---|---|---|---|---|---|---|---|
| Trans-State: | | | | | | | | | |
| 1. Carload | 48,205 | 36.00 | $83,552.23 | 30.67 | $1.7333 | 13,827,834 | 52.53 | 6.042 | 286.85 |
| 2. Less than car-load | 10,654 | 7.96 | 55,865.95 | 20.50 | 5.2437 | 3,265,547 | 12.40 | 17.108 | 306.51 |
| 3. Total Trans-State | 58,859 | 43.96 | 139,418.18 | 51.17 | 2.3687 | 17,093,381 | 64.93 | 8.156 | 290.41 |
| Inter-State: | | | | | | | | | |
| 4. Carload | 48,422 | 36.17 | 71,923.72 | 26.40 | 1.4854 | 7,526,599 | 28.59 | 9.556 | 155.44 |
| 5. Less than Carload | 7,590 | 5.67 | 30,212.20 | 11.08 | 3.9805 | 929,537 | 3.53 | 32.502 | 122.47 |
| 6. Total Inter-State | 56,012 | 41.84 | 102,135.92 | 37.48 | $1.8235 | 8,456,136 | 32.12 | 12.078 | 150.97 |
| Intra-State: | | | | | | | | | |
| 7. Carload | 16,707 | 12.48 | 20,498.29 | 7.52 | 1.2269 | 693,255 | 2.64 | 29.568 | 41.49 |
| 8. Less than Carload | 2,306 | 1.72 | 10,417.97 | 3.83 | 4.5178 | 82,238 | .31 | 126.681 | 35.66 |
| 9. Total Intra-State | 19,013 | 14.20 | 30,916.26 | 11.35 | 1.6261 | 775,493 | 2.95 | 39.867 | 40.79 |
| 10. Grand Total | 133,884 | 100.00 | 272,470.36 | 100.00 | 2.0351 | 26,325,010 | 100.00 | 10.350 | 196.62 |
| Total Inter-State (Line one to six): | | | | | | | | | |
| 11. Carload | 96,627 | 72.17 | 155,475.95 | 57.06 | 1.6090 | 21,354,433 | 81.12 | 7.281 | 221.00 |
| 12. Less than carload | 18,244 | 13.63 | 86,078.15 | 31.59 | 4.7182 | 4,195,084 | 15.93 | 20.519 | 229.94 |
| 13. Total | 114,871 | 85.80 | 241,554.10 | 88.65 | 2.1028 | 25,549,517 | 97.05 | 9.454 | 222.42 |
| 14. All Carload—Total | 113,334 | 84.65 | 175,974.24 | 64.58 | 1.5527 | 22,047,688 | 83.75 | 7.982 | 194.54 |
| 15. All less than Carload—Total | 20,550 | 15.35 | 96,496.12 | 35.42 | 4.6957 | 4,277,322 | 16.25 | 22.560 | 208.54 |

NOTE.—The Average haul of all Interstate Freight for the entire St. Louis Southwestern Railway Company System regardless of State lines, for the year ending June 30th, 1909, was 344.41 miles.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

6. Division of Cost of Coach and Pullman Service Between Intrastate and Interstate Business:

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| (*a*) Coach: | | | | | | | |
| (1) Intrastate—58.71% of total. | *$138,935.44 | $..... | $138,935.44 | $..... | $..... | $..... | $..... |
| (2) Interstate—41.29% of total. | *97,711.54 | ..... | ..... | 97,711.54 | ..... | ..... | ..... |
| (*b*) Pullman: | | | | | | | |
| (1) Intrastate—27.85% of total. | ..... | *12,538.06 | 12,538.06 | ..... | ..... | ..... | ..... |
| (2) Interstate—72.15% of total. | ..... | *37,614.18 | ..... | 37,614.18 | ..... | ..... | ..... |
| Total Cost of Intrastate, Interstate, Mail and Express Business ..... | ..... | ..... | $224,293.68 | $156,714.26 | $36,840.68 | $24,860.84 | $442,709.46 |

[*In red ink in copy.]

(Here follow pasters, marked pp. 5758-5761.)

5762 EXHIBIT "B."

5763 EXHIBIT "B."

DEFENDANT'S EXHIBIT "B."

*All Changes in the Commission's Tariff Since July,* 1903, *to April* 15*th,* 1908.

Bagging and ties and buckles: (Amdt. 15 to Commission's Tariff #1, effective 9/15-03; change from 3rd class to 250% of CL rating; reduction 39%: Figuring on following distances and rates:

Miles: 25-50-75-100-200.
3rd: 19-27-32-37-54. Total 169.
New rates: 15-17½-20-22½-27½. Total 102½.
Reduction 39%.

Cotton Seed CS Meal CS Hulls, LCL, (Am'd't 18, effective 6-15-04, 4th class to L. C. L. corn rates:
4th: 16-22-27-32-42. Total 139.
New rates: 14-15-20-24-30. " 103.
Reduction 26%.

Common soap & Soap Powder (Am'd't 18, effective 6-15-04) CL 5th Class to PH.P rates:
5th: 12-17-19-24-32. Total 104.
New Rates: 8-10-12-15-17. 62.
Reduction 41%.

Less CL 4th Class to PHP rates:
4th: 16-22-27-32-42. Total 139.
New rates: 11-14-14-16-19. " 74.
Reduction 46%.

Wooden Cross Arms LCL 4th class to 300% of CL Lbr. rate (Am'd't 18, effective 6-15-04):
4th: 16-22-27-32-42. Totals 139.
New rates: 9-12-13½-15-21. 70½.
Reduction 49%.

Fire brick, CL (Am'd't 19 7-1-04) Class E to Com'd'y rate:
Class E: 5-7-8-10-13. Totals 43.
New rates: 4-4-6-7-10. 31.
Reduction 28%.

Fire brick, LCL (Am'd't 19-7/1/04) 4th Class to Com'd'y rates:
4th Class: 16-22-27-32-42. Total 139.
New Rates: 12-12-18-21-30. 93.
Reduction 39%.

Wagons, farm and log CL; (Am'd't 19-7/1/04) Class A to Com'd'y rates:

A: 12-18-20-26-33. Total 109.
New Rates: 9-13-15-18-26. 81.
Reduction 30%.
L. CL. 1st to Com.: 24-32-42-47-71. Total 216.
18-26-30-36-52. 162. 25% reduction.

5764 Cidar, ginger ale, pop soda, mineral and spring water CL (Am'd't 2 to classification rulings) Effective 6-15-04, changed to Class "C."

Agricultural implements, Am'd't 2 to classification rulings, Oct. 3, '04, provision for 1 stop in transit for $5. charge.

Plow Points, plow irons, etc. L. C. L., Am'd't 5 to classification rulings, from 2nd class to 3rd class May 25th, '05.

2nd: 21-30-37-42-63. Total 193.
3rd: 19-27-32-37-54. 169.
Reduction 13%.

Canned goods, LCL Am'd't 5, classification rulings; this amendment construes item pickles to include capers, catsup, horse radish, mustard olives, pepper sauce, and salad dressing.

Portable houses: Am'd't 5 to classification rulings; effective June 26-05; provides new rating of 3 cts. per cwt. higher than lumber rates.

Hay, Am'd't 5 to classification rulings, 7-25-05, provides that hay may be shipped with flour or corn, and articles taking same rates, at the highest rates of any article loaded in the car.

Rule in regard to return shipments, Am'd't 5 to classification rulings 8-5-05; rule re-written, not to make changes but to make the meaning plain.

Bagging and ties, LCL am'd't 5 to classification ruling, 8-19-05, change from 250% to 150% of CL bagging rates:

250%: 15-17½-20-22½-27½. Total 102½.
150%: 9-10½-12-13½-16½. 61½.
Reduction 40%.

Sugar, CL Am'd't 5 to classification rulings, 11-20-05; reduces rates for distances exceeding 200 miles, 3%.

Mince meat; am'd't 5, classification rulings, 11-20-05; added to canned goods mixture; rates:

4th: 16-22-27-32-42. Total 139.
New rate: 12-15-17-18-20. " 82.
Reduction 41%.

3 Mile rate for CL; am'd't 5 to classification rulings, 11-20-05; reduced to 1¢ per 100 pounds; minimum $5. per car; former rates on different commodities ranged from 2 to 5¢ per 100.

Concrete building material, CL/ from Class E to 150% of brick rates; am'd't 5 to classification rulings, 11-20-05.

Class E: 5-7-8-10-13. Total 43.
New rates: 2-2-3-3½-5. 15½.
Reduction 66%.

5765 Vinegar and cidar CL and LCL Am'd't 5 to classification ruling, changed from 5th to CL Com'd'y, effective 11-20-05:
5th: 12-17-19-24-32. Total 104.
New rates: 5-7-10-11-13 46.
Reduction 56%.

Added to vegetable mx. LCL 4th to commodity:
4th: 16-22-27-32-42. Total 139.
New rates: 10-14-20-22-25. 91.
Reduction —.

Machinery to be repaired CL, changed from "A" to ½ of "A," effective 11-20-05:
A: 12-18-20-26-33. Total 109.
New rate: 6-9-10-13-16½. 54½.
Reduction 35%.

Machinery LCL (Voluntary) Saw mills, etc. 1st to 3rd:
1st: 24-32-42-47-71. Total 216.
New rates: 19-27-32-37-54. 169.
Reduction 22%.

Millet seed CL, Am'd't 5 to classifications rulings effective 5-6-06, changed from Class A to corn rates:
A: 12-18-20-26-33. Total 109.
New R.: 4-5-7-8-10. 34.
Reduction 69%.

L. C. L., changed from 3rd class to corn rates:
3rd: 19-27-32-37-54. Total 169.
New Rates: 14-15-20-24-30. 103.
Reduction 39%.

Iron Grate bars LCL Am'd't 5 to classification rulings, 5-6-06, 50 to 100 lbs. weight changed from 1st to 4th class:
1st: 24-32-42-47-71. Total 216.
New rates: 16-22-27-32-42. 139.
Reduction 36%.

Alfalfa, broom corn, clover and grass seed, Am'd't 5 to classification rulings, 5-6-06: CL changed from Class A to corn rates:
Class A: 12-18-20-26-33. Total 109.
New rates: 4-5-7-8-10. " 34.
Reduction 69%.

L. C. L., changed from 3rd to corn rates:
3rd: 19-27-32-37-54. Total 169.
New rates: 14-15-20-24-30. 103.
Reduction 39%.

Wire and Nails mxd., Am'd't 14 SDT 2, 1-20-05:
L. C. L. changed from 5th class to commodity, added to wire fencing, poultry netting, wire hoop, wire stretchers, and wire gates.
5th Class: 12-17-19-24-32. Total 104.
New rates: 6-8-10-11-14. 49.
Reduction 53%.

L. C. L., approximately changed from 3rd to commodity:
3rd: 19-27-32-37-54. Total 169.
New R.: 12-14-14-15-20. 75.
Reduction 55%.

5766 Saw dust added to cord wood, Am. 2 SDT 2, 3-20-05, CL changed from Class "E" to Commodity:
Class E: 5-7-8-10-13. Total 43.
New rates: 2-2-2½-5. 14½.
Reduction 66%.

Rice, Bran and Rice hulls, added to corn mxs, am'd't 2 to SDT 2 CL, changed from Class B to commodity:
Class B: 9-13-15-18-26. Total 81.
New rates: 4-5-7-8-10. 34.
Reduction 58%.

LCL 4th class changed to commodity:
4th Class: 14-15-20-24-30. Total 139.
New rates: 16-22-27-32-42. 103.
Reduction 26%.

Wheelbarrows Am. 14 to SDT 2, 11-20-05, CL changed from Class A to commodity:
Class "A": 12-18-20-26-33. Total 109.
New rates: 10-15-17-22-28. 92.
Reduction 16%.

Sawed and bent shapes for Agr. implements; Am. 14 to SDT 2, 11-20-05, CL changed from lumber and 5¢ to Lumber:
Old rate: 8-9-9½-10½. Total 48½.
New rate: 3-4-4½-5-7. 23½.
Reduction 53%.

Clariphos & Mexota, 11-20 05, added to veg. mx., account new drinks, small change.
Minimum charge rule changed 12-22-06:
35-25-25.
25-40-60.

Cotton, flat rate, amd. 15, 9-16-07, no change, as providing for concentration only. 10-12-14-15-40.
Handles CL, Am'd't 15. 2-1-08, changed from 5¢ and 1 br. to 3¢ and 1 br.; reduction of 2¢ per cwt.
Dowell Pins, Am'd't 15, 2-20-08, 1 br. & 5¢ not previously classified.
Mining Cars, Am'd't 15, 2-1-08, added to farm wagon rates; changed from Class A to Com..
Class "A": 12-18-20-26-33. Total 109.
Com.: 9-13-15-18-26. 81.
Reduction 36%.

Plow handles, Am'd't 15, 3-18-07, shellaced added.

5767 Coal and Coke and Slack.

S. D. T. #2. Am'd't 14, Effect. Nov. 1, 1906.

| | Coal. | Slack. | Coal. | Slack. | |
|---|---|---|---|---|---|
| 25 mi... | 50 | 50 | 50 | 45 | |
| 50 " .. | 50 | 50 | 50 | 45 | |
| 75 " .. | 75 | 70 | 75 | 60 | |
| 100 " .. | 95 | 80 | 95 | 70 | |
| 150 " .. | 115 | 105 | 110 | 90 | |
| 200 " .. | 140 | 130 | 140 | 120 | |
| Total.. | 555 | | 520 | | 6% decrease. |
| | | 485 | | 430 | 11% reduction slack. |

Main change was joint rate brought to cont. mileage basis.

Ordinary effect 15¢ per ton, equivalent to reduction at

| Miles. | | | | |
|---|---|---|---|---|
| 150 | 115<br>110 | 12% | 105<br>90 | 15% |
| 200 | 155<br>140 | 10% | 135<br>120 | 11% |
| 250 | 180<br>165 | 8% | 160<br>145 | 10% |

Oil, Carload. C. L.

| | 5th class. S. D. T. #2. | Commod. sup. 11 to #2, 9, 22, '06. | 75% of 5th class, sup. 13, 2, 1, '07. | Commod. sup. 14, March 18, '07. | |
|---|---|---|---|---|---|
| 25 mi..... | 16 | 6 | 9 | 7 | |
| 50 " .... | 17 | 8½ | 12¾ | 8 | |
| 75 " .... | 19 | 9½ | 14¼ | 10 | |
| 100 " .... | 24 | 12 | 18 | 12 | |
| 200 " .... | 32 | 16 | 24 | 16 | |
| 300 " .... | 37 | 18½ | 27¾ | 19 | |
| | 141 | 70½ | 105¾ | 72 | Net Reduct. |
| C. L... | 100% | 50% | 75% | 51% | 49% |

L. C. L.

| | | | | |
|---|---|---|---|---|
| 75 mi.... | 16 | 8 | 12 | 9 |
| 50 " .... | 22 | 11 | 16½ | 11 |
| 75 " .... | 27 | 13½ | 20¼ | 14 |
| 100 " .... | 32 | 16 | 24 | 16 |
| 200 " .... | 42 | 21 | 31½ | 21 |
| 300 " .... | 47 | 23 | 35¼ | 25 |
| | 186 | 92½ | 139½ | 96 |
| L. C. L.. | 100% | 50% | 75% | 52% |

L. C. L. Net Reduction, 48%

Excelsior, Am'd't 15, effective 4-15-1908, changed commodity at certain distances:

Old rate: 6-8-10-12-18, Total 54.
New rate: 6-8- 8- 9-13. 44.

Reduction 19%.

Iron Articles, Am'd't 15, effective 4-15-'08, certain articles added, viz: Angle, channel, hoop, *SKeep,* Tank iron and boiler plates, band iron, for water tanks, cisterns, and conduits, nail plates, washers, sash weights, shingle bands, iron and steel bolts and
5768 nuts, rock and brock face iron siding; account interstate mixture; changed from approximately 4th Class to commodity.

4th Class Approx.: 16-22-27-32-42. Total 139.
Com. 12-14-14-15-20. 75.
Reduction 46%.

Carload Approx.:

5th Class: 12-17-19-24-32. Total 104.
Com. 6- 8-10-11-14. 49.
Reduction 53%.

Rough Rice, changed from rice to rough rice:
8-8-10- 11- 13. Total 50.
4-5-6½-7½-12½. 35½.
Reduction 29%.

5769 Endorsed: Filed July 18th, 1910. W. P. Field, Clerk, by W. Presley Field, D. C.

| | Between trains. | | Between | |
|---|---|---|---|---|
| 1. Maintenance of Way: | Local. | Through. | Intrastate. | Interstate. |
| Accounts 1 to 27 | Basis car miles straight. | | | |
| 2. Maintenance of Equipment: | | | | |
| (a) Locomotives: | | | | |
| (1) Yard | Yard engine mileage. | | | |
| (2) Road | Road engine mileage. | | | |
| (b) Freight Train cars 38, 39, 40 | Straight car miles. | | | |
| (c) Accounts 28, and 47 to 56, Supervision and General | On basis direct Maintenance of Equipment. | | | |
| 3. Traffic Expenses: | | | | |
| Accounts 57 to 65 | On basis total direct for actual expenses accrued within the state. | | | |
| 4. Transportation Expenses: | | | | |
| (a) Station Expenses—Accounts 68, 72, 100 | On basis tons handled length of haul considered. | | | |
| (b) Yard and Terminal Expenses, Accounts 73 to 84 | On basis of cars handled. | | | |
| (c) Fuel and Road Locomotive Expenses, Accounts 88 to 91 | Actual and on basis of actual. | | | |

(*d*) Engine House Expenses—Road, Account 87....Engine miles.

(*e*) Road enginemen and trainmen, Accounts 86, 94..Actual.

(*f*) Other train expenses, Accounts 95, 96, 97, 99, 108, 109, 110.....Train miles.

(*g*) Loss and Damage—Freight, Account 106.....Actual.

(*h*) All Other freight.....On basis direct.

5. General Expenses .....On basis of total above.

Final apportionment of all above grand total train costs on basis of ton miles.

Endorsed: Filed July 18th, 1910. W. P. Feild, Cleerk. By W. Presley Feild, D. C. "C."

5772 EXHIBIT "D."

5773 EXHIBIT "D."

Sept. 8th, 1903:

Commission's Standard Freight Distance Tariff Rates made effective on the Searcy & Des Arc R. R. on application of the Rock Island.

Nov. 3rd, 1903:

Complaint of Kerlin Lumber Co. vs. St. Louis Southwestern Railway Dismissed.

Nov. 24th, 1903:

Application of Pine Bluff merchants for flat rates on uncompressed cotton—dismissed.

Feb. 23rd, 1904:

Application of Texarkana Merchants to equalize rates from Texarkana to points north on the Cotton Belt Ry. and Iron Mountain Ry. with the rates from Little Rock and Pine Bluff—denied and dismissed.

Feb. 5th, 1904:

Application of Prescott & Northwest R. R. to be excepted from Commission's Joint Tariff granted.

May 4th, 1904:

Cotton Belt Lumber Co. vs. Cotton Belt Railway for overcharge—Complaint dismissed.

June 7th, 1904:

Proposed change in Classification on Buggies and Carriages dismissed.

Nov. 4th, 1904:

Louisiana & Northwest Railway. The Commission made order allowing this road to charge $.50 passenger fare between McNeil and Magnolia—regular fare $.25.

5774 Aug. 9th, 1905:

Resolution of Commissioner B. B. Hudgins providing for reduction of passenger fare on lines of 75 miles or more to 2½ cents per mile—resolution defeated.

May 9th, 1906:

Petition of citizens of Lake Village, Ark., for increased passenger service on the Iron Mountain Railway—dismissed.

Oct. 10th, 1906:

Dyer, Ark.—Petition for Depot—Dismissed.

Jan. 9th, 1907:

Oil Rates raised at requests of Railroad Companies.

Apr. 3d, 1907:

Complaint of Rose City Cotton Oil Co. against Iron Mountain Railway and Cotton Belt Railway, that twenty days was required to transport one car from Rose City Mill to Conway, Arkansas—dismissed, it appearing that a portion of the delay was chargeable to complainant.

October 3d, 1907:

Petition for Agency at Cross Roads, Rock Island Railroad—denied.

Feb. 5th, 1908:

1. Tyronza, Arkansas—Petition for agency, Frisco Railroad—denied.

2. Proposed ruling in regard to discontinuing passenger
5775 trains, provided that the Commission be given notice on such occasions—after a full hearing, it appearing that the proposed ruling would work a hardship on the railroad companies, the matter was dismissed.

Application for reduction in rates on private cars, show cars, peddler cars, etc.—dismissed, it appearing that present rates charged by the railroads was reasonable and just.

Mar. 4th, 1908:

Application of the National Oil & Fuel Co., of Muskogee, Oklahoma, for commodity rate on crude oil was denied, it appearing that rates now in effect are reasonable.

May 6th, 1908:

(1) Petition for depot at Comal, Arkansas—dismissed.
(2) Petition for Sunday train service on Greenwood Branch of Iron Mountain Railway—dismissed.
(3) Application to require the Iron Mountain Railway Co. to fence its right of way in Arkansas, south of Little Rock—dismissed.

May 21, 1908:

Application of M. & N. A. R. R. to apply the Short Line Passenger Rate (three cents per mile) on each of the sections of its line of railway south of Leslie, Arkansas—granted.

June 4th, 1908:

(1) Pine City, Ark., Arkansas Midland Ry., Petition for Depot—dismissed.
(2) Moscow, Ark., Iron Mountain Railway, petition for railroad agency—dismissed.

(3) Simms, Ark., Rock Island Ry., petition for depot—
5776 dismissed.

(4) Wickes, Ark., Kansas City Southern Railway—petition for telegraph service—dismissed.

(5) Cove, Arkansas, Petition for telegraph service—dismissed.

(6) Application of Bryant Lumber Company for reduction of Rough Material Rates, denied.

Oct. 21st, 1908:

Danville, Arkansas—petition for night operator—dismissed. Rock Island.

Application of Little Rock jobbers for commodity rate on soda, carloads,—denied and dismissed.

5777 Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5778 EXHIBIT "E."

5779 EXHIBIT E.

*Answer to Judge Hill's Queries as Shown on Pages 4 and 5 of Typewritten Testimony Taken at Little Rock, Ark., on April 19, 1910.*

| Item. | Ton miles for six months ending Dec. 31, 1907. | Avg. revenue per ton per mile for January, 1909. | Assumed revenue for six months ending Dec. 31, 1907, based on the average revenue per ton per mile for January, 1909. |
|---|---|---|---|
| State | 8,512,807 | $0.039867 | $339,380.07 |
| Interstate | 184,831,455 | 0.009454 | 1,747,396.07 |

| Item. | Assumed rev. for six months ending Dec. 31, 1907. | Per cent. | Actual revenue for six months ending Dec. 31, 1907. | Per cent. |
|---|---|---|---|---|
| Freight—State | $339,380.07 | 16.07 | $173,064.45 | 9.64 |
| Freight—Interstate | 1,747,396.57 | 82.74 | 1,597,230.02 | 88.96 |
| Miscellaneous | 25,061.02 | 1.19 | 25,061.02 | 1.40 |
| Total | $2,111,837.66 | 100.00 | $1,795,355.49 | 100.00 |

1.19% of total Freight Expenses ($11,020.92) is chargeable to Miscellaneous, leaving $915,107.32 to be divided between State and Interstate Freight.

Results Based on Formula Prescribed for Exhibit No. 23.

| Item. | Per cent. | Assumed revenue and division of expenses. | Amt. under Judge Vandeventer's theory of 100% ex. cost for State business. |
|---|---|---|---|
| State Frt. Revenue | 16.26 | $339,380.07 | ..... |
| Interstate Frt. Rev | 83.74 | 1,747,396.57 | ..... |
| | 100.00 | $2,086,776.64 | ..... |
| State Frt. Expenses | 16.26 | $148,796.45 | $256,047.03— 27.98% |
| Interstate Frt. Exps | 83.74 | 766,310.87 | 659,060.29— 72.02% |
| | 100.00 | $915,107.32 | $915,107.32—100.00% |

5780

Summary, State Traffic Only.

| | Straight revenue basis. | 100% extra cost basis. |
|---|---|---|
| Revenue | $339,380.07 | $339,380.07 |
| Expenses | 148,796.45 | 256,047.03 |
| Balance | $190,583.62 | $83,333.04 |

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5781 EXHIBIT "F."

5782 EXHIBIT F.

*Comparative Rates from Memphis to Points on White River Branch of the St. Louis, Iron Mountain and Southern Railway Against Rates for Equal Distance—Commission Tariff No. 3 and Court Tariff.*

| To— | From— | 1 | 2 | 3 | 4 | 5 | Distance. |
|---|---|---|---|---|---|---|---|
| Guion. | Memphis | 69 | 59 | 47 | 40 | 30 | 172 Miles. |
| | Com. Tariff #3 | 66 | 59 | 51 | 40 | 30 | |
| | Court Tariff | 71 | 63 | 55 | 40 | 32 | |
| Sylamore. | Memphis | 70 | 59 | 47 | 40 | 30 | 184 Miles. |
| | Com. Tariff #3 | 68 | 61 | 52 | 41 | 31 | |
| | Court Tariff | 73 | 65 | 56 | 41 | 33 | |
| Calico. | Memphis | 70 | 59 | 47 | 40 | 30 | 201 Miles. |
| | Com. Tariff #3 | 74 | 66 | 50 | 43 | 32 | |
| | Court Tariff | 77 | 68 | 58 | 43 | 34 | |
| Cotter. | Memphis | 70 | 59 | 47 | 40 | 30 | 241 Miles. |
| | Com. Tariff #3 | 79 | 72 | 47 | 44 | 30 | |
| | Court Tariff | 85 | 72 | 60 | 45 | 36 | |

Office of Merchants Freight Bureau, Little Rock, Arkansas, April 28th, 1910.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5783 EXHIBIT "G."

5784 EXHIBIT "G."

St. Louis Southwestern Railway Company.

In State of Arkansas.

*Statement covering six months ended December 30, 1907, prepared in answer to request of Judge Hill, showing assumed Revenues on bases of State Freight, 96.1% increase over actual; Interstate Freight, 9.4% increase over actual; State Passenger, 35.0% increase over actual; Interstate Passenger, no increase over actual; Miscellaneous, no increase over actual; and also showing the actual Operating Expenses, Taxes and Rentals divided between the several classes of traffic on the basis of the assumed Gross Revenues, ascertained as above; also double the assessed valuation divided on the same Gross Revenue basis and the per cent of return on said valuation.*

| Item. | Gross revenues. | Per cent of frt. or pass. | Per cent of total. | Operating expenses, taxes, rentals, etc. | Net revenues. | Double the assessed valuation. | Return per annum equal to |
|---|---|---|---|---|---|---|---|
| Freight—State ..... | $339,380.07 | 16.07 | 12.61 | $148,742.99 | $190,637.08 | $1,769,136.85 | 21.52% |
| Pass.—State ..... | 332,236.80 | 57.39 | 12.34 | 265,418.26 | 66,818.54 | 1,731,256.83 | 7.72% |
| Total, State ..... | $671,616.87 | ..... | ..... | $414,161.25 | $257,455.62 | $3,500,393.68 | 14.72% |
| Freight—Interstate ... | $1,747,396.57 | 82.74 | 64.95 | $765,836.64 | $981,559.93 | $9,112,247.28 | 21.52% |
| Pass.—Interstate ..... | 170,735.14 | 29.49 | 6.35 | 136,385.87 | 34,349.27 | 890,881.76 | 7.72% |
| Total, Interstate..... | $1,918,131.71 | ..... | ..... | $902,222.51 | $1,015,909.20 | $10,003,129.04 | 20.32% |
| Misc. Freight..... | $25,061.02 | 1.19 | .93 | $11,014.57 | $14,046.45 | $130,475.60 | 21.52% |
| Misc. Passenger..... | $75,981.44 | 13.12 | 2.82 | $60,677.61 | $15,303.83 | $395,635.68 | 7.72% |
| Grand Total ..... | $2,690,791.04 | ..... | 100.00 | $1,388,075.94 | $1,302,715.10 | $14,029,634.00 | 18.58% |

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5785 EXHIBIT "H."

5786 EXHIBIT "H."

St. Louis Southwestern Railway Company.

In State of Arkansas.

*Statement Supplmental to Exhibit No. 33, Prepared in Answer to Request of Judge Hill, Showing Operating Expenses, Taxes, Rentals, etc., and Double the Assessed Valuation of Property, Divided Between the Several Classes of Traffic on Basis of Actual Gross Revenues, for Six Months Ended December 31, 1907.*

| Item. | Gross revenues. | Per cent of frt. or pass. | Per cent of total. | Operating expenses, taxes, rentals, etc. | Net revenues. | Double the assessed valuation. | Return per annum equal to |
|---|---|---|---|---|---|---|---|
| Freight—State ..... | $173,064.45 | 9.64 | 7.56 | $89,227.28 | $83,837.17 | $1,060,640.33 | 15.80% |
| Pass.—State ..... | 246,101.33 | 49.94 | 10.76 | 230,963.38 | 15,137.95 | 1,509,588.62 | 2.00% |
| Total, State ..... | $419,165.78 | ..... | ..... | $320,190.66 | $98,975.12 | $2,570,228.95 | 7.70% |
| Freight—Interstate ... | $1,597,230.02 | 88.96 | 69.80 | $823,408.60 | $773,821.42 | $9,792,684.53 | 15.80% |
| Pass.—Interstate ..... | 170,735.14 | 34.64 | 7.46 | 160,203.68 | 10,531.46 | 1,046,610.70 | 2.00% |
| Total, Interstate .... | $1,767,965.16 | ..... | ..... | $983,612.28 | $784,352.88 | $10,839,295.23 | 14.46% |
| Misc. Freight ..... | $25,061.02 | 1.40 | 1.10 | $12,958.32 | $12,102.70 | $154,325.97 | 15.80% |
| Misc. Passenger ..... | $75,981.44 | 15.42 | 3.32 | $71,314.68 | $4,666.76 | $465,783.85 | 2.00% |
| Grand Total ..... | $2,288,173.40 | ..... | 100.00 | $84,273.00 | $900,097.46 | $14,029,634.00 | 12.84% |
| | | | | $1,398,075.94 | | | |

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5787 EXHIBIT "I."

5788 EXHIBIT "I."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

*Freight Statistics—October,* 1907.

| | Local Trains. | Through Trains. | Total. |
|---|---|---|---|
| | Ton Miles of Freight Carried. | | |
| Interstate: | | | |
| Carload | 8,991,484 | 96,992,097 | 105,983,581 |
| Less-than-carload | 638,036 | 4,075,841 | 4,713,877 |
| Total | 9,629,520 | 101,067,938 | 110,697,458 |
| Percentage of each | 8.70% | 91.30% | 100.00% |
| Intrastate: | | | |
| Carload | 3,382,246 | 5,982,552 | 9,364,798 |
| Less-than-carload | 459,204 | ..... | 459,204 |
| Total | 3,841,450 | 5,982,552 | 9,824,002 |
| Percentage of each | 39.10% | 60.90% | 100.00% |
| Total Revenue Freight..... | 13,470,970 | 107,050,490 | 120,521,460 |
| Percentage of each | 11.18% | 88.82% | 100.00% |

Ton Mileage of Each Class of Train—Expressed in Percentages.

| | | | |
|---|---|---|---|
| Interstate: | | | |
| Carload | 66.74% | 90.60% | 87.94% |
| Less-than-carload | 4.75 | 3.81 | 3.91 |
| Total | 71.49% | 94.41% | 91.85% |
| Intrastate: | | | |
| Carload | 25.10% | 5.59% | 7.77% |
| Less-than-carload | 3.41 | ..... | .38 |
| Total | 28.51% | 5.59% | 8.15% |
| Total Revenue Freight | 100.00% | 100.00% | 100.00% |
| Mileage Statistics: | | | |
| Car Miles | 1,112,865 | 6,333,610 | 7,446,475 |
| Caboose-Miles | 60,485 | 199,036 | 259,521 |
| Engine-Miles | 70,583 | 199,981 | 270,564 |
| Total | 1,243,933 | 6,732,627 | 7,976,560 |
| Percentage of each class | 15.59% | 84.41% | 100.00% |
| Train-Miles | 70,583 | 196,512 | 267,095 |
| Percentage of each class | 26.42% | 73.58% | 100.00% |
| Engine-Miles | 70,583 | 199,981 | 270,564 |
| Percentage of each class | 26.08% | 73.92% | 100.00% |

| | | | |
|---|---|---|---|
| Freight-Car and Caboose-Miles | 1,173,350 | 6,532,646 | 7,705,996 |
| Percentage of each class | 15.22% | 84.78% | 100.00% |
| Average number of cars per train | 16.6 | 33.2 | 28.9 |
| Number of Trains run | 1,116 | 2,758 | 3,874 |
| Average length of run in miles | 63.2 | 70.8 | 68.9 |
| Average loading of revenue freight (considering all cars)—in tons | 12.1 | 16.1 | 16.2 |
| Average loading of revenue freight (considering loaded cars only)—in tons | 14.7 | 19.2 | 18.6 |
| Number of cars handled in and out of terminals where yard engines are maintained | 32,232 | 133,482 | 165,714 |
| Percentage of each | 19.46% | 80.54% | 100.00% |

5789 Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5790 EXHIBIT "J."

5791 EXHIBIT "J."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

*Statement of Freight Operating Expenses in Arkansas for the Six Months Ended December 31, 1907, Divided between Local and Through Train Service and between Intrastate and Interstate Business.*

| | Train Costs. | | Other Costs. | | Total. |
|---|---|---|---|---|---|
| | Local. (1) | Through. (2) | Intrastate. (3) | Interstate. (4) | (5) |
| 1. Maintenance of Way and Structures..... | $93,966.49 | $459,428.62 | ..... | ..... | $553,395.11 |
| 2. Maintenance of Equipment: | | | | | |
| (a) Locomotives: | | | | | |
| (1) Yard ..... | $13,453.83 | $55,681.97 | ..... | ..... | $69,135.80 |
| (2) Road ..... | 43,733.35 | 70,807.25 | ..... | ..... | 114,540.60 |
| (b) Freight Cars ..... | 107,288.53 | 370,607.11 | ..... | ..... | 477,895.64 |
| (c) Supervision and General..... | 15,378.22 | 46,481.07 | ..... | ..... | 61,859.29 |
| Total Maintenance of Equipment... | $179,853.93 | $543,577.40 | ..... | ..... | $723,431.33 |
| 3. Traffic Expenses ..... | ..... | ..... | $11,899.29 | $76,835.13 | $88,734.42 |
| 4. Transportation Expenses: | | | | | |
| (a) Station Expenses ..... | ..... | ..... | $77,821.13 | $155,805.81 | $233,626.94 |
| (b) Yard and Terminal Expenses..... | $57,085.42 | $236,262.07 | ..... | ..... | 293,347.49 |
| (c) Fuel and Locomotive Expenses..... | 59,301.61 | 162,303.79 | ..... | ..... | 221,605.40 |
| (d) Enginehouse Expenses ..... | 15,194.55 | 38,439.58 | ..... | ..... | 53,634.13 |
| (e) Road Enginemen and Trainmen..... | 165,866.65 | 301,758.52 | ..... | ..... | 467,625.17 |
| (f) Other Train Expenses..... | 34,957.06 | 97,355.81 | ..... | ..... | 132,312.87 |
| (g) Loss and Damage—Freight..... | ..... | ..... | 30,972.03 | 96,537.35 | 127,509.38 |
| (h) Supervision and General..... | 10,083.35 | 25,363.84 | 3,209.25 | 7,656.48 | 46,402.92 |
| Total Transportation Expenses..... | $342,488.64 | $861,483.61 | $112,092.41 | $259,999.64 | $1,576,064.30 |
| 5. General Expenses ..... | $27,699.72 | $83,799.92 | $5,579.61 | $15,138.99 | $132,218.24 |
| 6. Total Operating Expenses ..... | $644,008.78 | $1,948,289.55 | $129,571.31 | $351,973.76 | $3,073,843.40 |

| | | | | | |
|---|---|---|---|---|---|
| 7. Division of Train Costs between Intrastate and Interstate Business: | | | | | |
| (a) Local Trains: | | | | | |
| (1) Intrastate Freight—26.00% of Total | *$167,442.28 | ..... | 167,442.28 | ..... | ..... |
| (2) Interstate Freight—74.00% of Total | *476,566.50 | ..... | ..... | 476,566.50 | ..... |
| (b) Through Trains: | | | | | |
| (1) Intrastate Freight— 4.96% of Total | ..... | *$96,635.16 | 96,635.16 | ..... | ..... |
| (2) Interstate Freight—95.04% of Total | ..... | *1,851,654.39 | ..... | 1,851,654.39 | ..... |
| 8. Total Cost of Intrastate and Interstate Business | ..... | ..... | $393,648.75 | $2,680,194.65 | $3,073,843.40 |

[* Figures in red ink.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

*Bases Used in Arriving at Cost of Local and Through Freight Service and Intrastate and Interstate Freight Business in Arkansas for the Six Months Ended December* 31, 1907.

1. Maintenance of Way and Structures.

The proportion of these expenses applicable to the freight business, as shown by the statements in this case submitted by the Company, has been divided between local and through train service on the basis of the total engine and car miles of each class during the month of October, 1907, that month being considered representative of the business for the six months ended December 31, 1907. In arriving at the number of engine and car miles we have added 50% to the engine mileage of local trains for station switching, and have assumed that each engine mile was equivalent to 2½ car miles. The total engine and car miles, with the percentage and amount of expenses chargeable to each class of service on this basis, are as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Engine Miles | 70,583 | 199,981 | 270,564 |
| 50% added to Local Engine Mileage for station Switching | 35,292 | ..... | 35,292 |
| Total | 105,875 | 199,981 | 305,856 |

| | | | |
|---|---|---|---|
| Engine Miles as above, multiplied by 2½ to get equivalent in car miles | 264,688 | 499,952 | 764,640 |
| Freight Car and Caboose Miles | 1,173,350 | 6,532,646 | 7,705,996 |
| Total | 1,438,038 | 7,032,598 | 8,470,636 |
| Percentage of each | 16.98% | 83.02% | 100.00% |
| Expenses—Divided on above percentages | $93,966.49 | $459,428.62 | $553,395.11 |

2. Maintenance of Equipment.

(a) Locomotives:

The expenses under this head are divided between yard, and local and through road locomotives on the basis of the locomotive mileage of each class during the month of October, 1907. We have added 50% to the mileage made by yard locomotives to provide for the possible extra maintenance due to yard service; have added 50% to the mileage of road locomotives in local service to provide for the possible extra switching mileage, and again have added 50% to the switching mileage of the local engines thus ascertained to provide for the possible extra maintenance due to switching service (making 75% added to the local engine mileage). The division between yard, and local and through road locomotives on this basis is as follows:

5794

| | | Mileage. | Percentage. |
|---|---|---|---|
| Yard Locomotive Mileage | 130,150 | | |
| 50% added for extra repairs | 65,075 | | |
| | | 195,225 | 37.64% |
| Local Locomotive Mileage | 70,583 | | |
| 75% added for extra Mileage and Repairs | 52,937 | | |
| | | 123,520 | 23.81 |
| Through Locomotive Mileage | | 199,981 | 38.55 |
| Total | | 518,726 | 100.00% |

The total expenses under this head amount to $183,676.40. The amount chargeable to yard locomotives on this basis is 37.64%, or $69,135.80; the amount chargeable to the local service is 23.81%, or $43,733.35, and the amount chargeable to through service is 38.55% or $70,807.25.

The expense of maintenance of yard locomotives ($69,135.80) is divided between local and through service on the basis of the number of cars of each class of service handled by yard engines during the month of October, 1907. The total number of cars handled at terminals, where yard engines were maintained, together with the percentage and amount of expenses chargeable to each class of service, is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Cars Handled | 32,232 | 133,482 | 165,714 |
| Percentage of each | 19.46% | 80.54% | 100.00% |
| Expenses—Divided on above percentages | $13,453.83 | $55,681.97 | $69,135.80 |

(*b*) Freight Cars:

The total amount of expense for Maintenance of Freight Cars is $477,895.64. This amount is apportioned to Arkansas by the Railway Company on a car mileage basis. In dividing this expense between local and through service, however, we have taken into consideration the element of repairs due to the stopping and starting of trains at way stations, and repairs due to extra terminal handling of cars in local service. Mr. A. M. Wellington, in his work on "Railway Location" (Page 203) says that the stopping and starting at way stations is the cause of approximately 21.5% of the repair expenses of freight cars, and that the terminal handling is the cause of approximately 13.5% of the repair expenses. Taking these elements into consideration, the maintenance expenses may be divided as follows:

| | | | |
|---|---|---|---|
| Stopping and Starting | 21.5% | $102,747.56 | |
| Terminal Handling | 13.5 | 64,515.91 | |
| | | | $167,263.47 |
| Other Expenses | 65.% | ..... | 310,632.17 |
| Total | | | $477,895.64 |

5795 Assuming that each local train makes a stop say each five miles and each through train a stop say each twenty miles, the local service should be charged with four times as much as the through service, in proportion to car mileage for the expenses due to stopping and starting. Assuming also that each car in local service receives two terminal handlings (including handling at local stations) to each terminal handling of a car in through service, the local service should be charged with two times as much as the through service, in proportion to car mileage, for the expenses due to terminal handling. These items may, therefore, be divided between local and through service on the following basis:

| Stopping and Starting Expenses: | Local. | Through. | Total. |
|---|---|---|---|
| Car Miles | 1,173,350 | 6,532,646 | 7,705,996 |
| Same, with local car miles multiplied by four | 4,693,400 | 6,532,646 | 11,226,046 |
| Percentage of each | 41.81% | 58.19% | 100.00% |
| Expenses—Divided on above percentages | $42,958.75 | $59,788.81 | $102,747.56 |
| Terminal Handling: | | | |
| Car Miles as above | 1,173,350 | 6,532,646 | 7,705,996 |
| Same, with local car miles multiplied by two | 2,346,700 | 6,532,646 | 8,879,346 |
| Percentage of each | 26.43% | 73.57% | 100.00% |
| Expenses—Divided on above percentages | $17,051.56 | $47,464.35 | $64,515.91 |

The balance of the expenses of freight car maintenance, $310,632.17 is divided between local and through service in proportion to the number of car miles made in each class of service, as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Car Miles | 1,173,350 | 6,532,646 | 7,705,996 |
| Percentage of each | 15.22% | 84.78% | 100.00% |
| Expenses—Divided on above percentages | $47,278.22 | $263,353.95 | $310,632.17 |

The total expenses of maintenance of freight cars chargeable to each class of service, under the plans outlined above, are as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Stopping and starting | $42,958.75 | $59,788.81 | $102,747.56 |
| Terminal Handling | 17,051.56 | 47,464.35 | 64,515.91 |
| Other Expenses | 47,278.22 | 263,353.95 | 310,632.17 |
| Total | $107,288.53 | $370,607.11 | $477,895.64 |

(*c*) Supervision and General:

The total expenses under this head are divided between local and through service on the basis of the direct charges for maintenance of equipment, as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Direct Expenses | $164,475.71 | $497,096.33 | $661,572.04 |
| Percentage of each | 24.86% | 75.14% | 100.00% |
| Expenses—Divided on above percentages | $15,378.22 | $46,481.07 | $61,859.29 |

3. Traffic Expenses.

These expenses are incurred in securing and looking after traffic. The amount apportioned to the State of Arkansas is based on the revenue train mileage in that State as compared with the revenue train mileage of the whole road. We have divided these expenses on a straight revenue basis, although of the opinion that this unduly burdens the intrastate business, owing to the fact that a considerable portion of the traffic expense, is incurred in the effort to secure competitive business, while it is well known that intrastate business is largely non-competitive. The basis of dividing these expenses between intrastate and interstate business is as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Total Freight Revenue | $640,248.17 | $4,133,210.33 | $4,773,458.50 |
| Percentage of each | 13.41% | 86.59% | 100.00% |
| Expenses—Divided on above percentages | $11,899.29 | $76,835.13 | $88,734.42 |

4. Transportation Expenses.

(a) Station Expenses:

These expenses cannot be divided between the two classes of train service, as they are not train expenses. They may, however, be divided between intrastate and interstate business in proportion to the volume of traffic of each class handled in the State. We have divided the expenses between intrastate and interstate business on the basis of the number of tons of each class of traffic, assuming, however, that each intrastate ton was handled twice and each interstate ton once, as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Total Tons | 684,122 | 2,739,131 | 3,423,253 |
| Double number of Intrastate tons in order to provide for two handlings | 684,122 | ..... | 684,122 |
| Total | 1,368,244 | 2,739,131 | 4,107,375 |
| Percentage of each | 33.31% | 66.69% | 100.00% |
| Expenses—Divided on above percentages | $77,821.13 | $155,805.81 | $233,626.94 |

(*b*) Yard and Terminal Expenses:

These expenses are divided between local and through business on the basis of the number of cars handled at terminals, as explained under the head of Maintenance of Yard Locomotives (2*a*). Of the total expenses, 19.46%, or $57,085.42 are charged to local trains; and 80.54%, or $236,262.07, are charged to through trains.

5797 (*c*) Fuel and Locomotive Expenses:

According to a test made on the St. Louis Southwestern Railway during the month of October, 1908, the local engines consumed 3½% more fuel per engine mile than the through engines. Assuming that the same conditions would prevail on the St. Louis, Iron Mountain & Southern Railway during October, 1907, the fuel and the miscellaneous locomotive expenses would be divided between local and through service on the following basis:

| | Local. | Through. | Total. |
|---|---|---|---|
| Engine Miles | 70,583 | 199,981 | 270,564 |
| Add 3½% to local engine miles to equalize fuel consumption | 2,470 | ..... | 2,470 |
| Total | 73,053 | 199,981 | 273,034 |
| Percentage of each | 26.76% | 73.24% | 100.00% |

We have used these percentages in dividing fuel and miscellaneous locomotive expenses for the six months ended December 31, 1907, amounting to $221,605.40. The amount charged to local service is 26.76%, or $59,-301.61; and the amount charged to through service is 73.24%, or $162,303.79.

(*d*) Enginehouse Expenses—Road:

These expenses, amounting to $53,634.13, are divided between local and through service on the basis of the engine miles of each class of service during the month of October, 1907, assuming, however, that the local engines require 12% more enginehouse service per engine mile than the through engine. This assumption is based on the average engine run in the two classes of service. The engine miles and the percentages on which the expenses are divided, are as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Total Engine Miles | 70,583 | 199,981 | 270,564 |
| 12% added to Local Engine Miles to cover extra expenses | 8,470 | ..... | 8,470 |
| Total | 79,053 | 199,981 | 279,034 |
| Percentage of each | 28.33% | 71.67% | 100.00% |
| Expenses—Divided on above percentages | $15,194.55 | $38,439.58 | $53,634.13 |

(*e*) Road Enginemen and Trainmen:

An actual division of these expenses was made by us during the month of October, 1907, as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Total Amount | $29,229.30 | $53,162.56 | $82,391.86 |
| Percentage of each | 35.47% | 64.53% | 100.00% |

5798 We have used these percentages in dividing the total expenses under this head for the six months ended December 31, 1907. These expenses amounted to $467,625.17, of which 35.47%, or $165,866.65, are charged to local service, and 64.53%, or $301,758.52, are charged to through service.

(*f*) Other Train Expenses:

These expenses are such as are incident to, or generally caused by, the operation of trains, and not included in the preceding classifications. They are divided between local and through service in proportion to the train miles of each class of service, during the month of October, 1907, as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Train Miles | 70,583 | 196,512 | 267,095 |
| Percentage of each | 26.42% | 73.58% | 100.00% |
| Expenses—Divided on above percentages | $34,957.06 | $97,355.81 | $132,312.87 |

(*g*) Loss and Damage—Freight:

The expenses under this head are divided between intrastate and interstate business on the basis of the actual claims paid during the month of October, 1907, as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Claims Paid | $4,840.10 | $15,087.48 | $19,927.58 |
| Percentage of each | 24.29% | 75.71% | 100.00% |
| Expenses—Divided on above percentages | $30,972.03 | $96,537.35 | $127,509.38 |

(*h*) Supervision and General:

These expenses are divided between local, through, intrastate, and interstate business on the basis of the direct charges to each of these classes, as follows:

| | Train costs. | | Other costs. | | |
|---|---|---|---|---|---|
| | Local. | Through. | Intrastate. | Interstate. | Total. |
| Direct Expenses | $332,405.29 | $836,119.77 | $108,793.16 | $252,343.16 | $1,529,661.38 |
| Percentage of each | 21.73% | 54.66% | 7.11% | 16.50% | 100.00% |
| Expenses—divided on above percentages | $10,083.35 | $25,363.84 | $3,299.25 | $7,656.48 | $46,402.92 |

5. General Expenses.

These expenses are general to all classes of service. They may, therefore, be apportioned to local and through and intrastate and interstate business, on the basis of the direct charges for all other expenses of these classes,
5799 that being, perhaps, the best measure of the supervision necessary for each. The total direct charges and the percentage of general expenses applicable to each, are as follows:

| | Train costs. | | Other costs. | | |
|---|---|---|---|---|---|
| | Local. | Through. | Intrastate. | Interstate. | Total. |
| Direct Expenses | $616,309.06 | $1,864,489.63 | $123,991.70 | $336,834.77 | $2,941,625.16 |
| Percentage of each | 20.95% | 63.38% | 4.22% | 11.45% | 100.00% |
| Expenses—divided on above percentages | $27,699.72 | $83,799.92 | $5,579.61 | $15,138.99 | $132,218.24 |

6. Total Operating Expenses.

The total freight operating expenses are, as hereinbefore explained, divided between local and through train service, and intrastate and interstate business. The train costs are intended to include everything relating to the direct cost of the movement of freight trains, with all expenses incident to such movement. Station expenses and other items which do not affect the expenses of train operations are divided between intrastate and interstate business direct.

7. Method of Dividing Train Costs.

During the month of October, 1907, 39.10% of all Intrastate ton-miles and 8.70% of all Interstate ton-miles of freight were handled on local trains; and 60.90% of all Intrastate and 91.30% of all Interstate ton-miles were handled on through trains. Assuming that these same relative conditions would exist during the six months ended December 31, 1907, the total ton-miles of Intrastate and Interstate freight handled during that period would have been divided between local and through service as follows:

Local Trains:

| | |
|---|---|
| Intrastate Business—39.10% of 47,860,299 ton-miles during six months' period | 18,713,377 |
| Interstate Business—8.70% of 612,303,696 ton-miles during six months' period | 53,270,422 |
| Total | 71,983,799 |

Through Trains:

| | |
|---|---|
| Intrastate Business—60.90% of 47,860,299 ton-miles during six months' period | 29,146,922 |
| Interstate Business—91.30% of 612,303,696 ton-miles during six months' period | 559,033,274 |
| Total | 588,180,196 |

5800 In the accompanying statement, train costs are divided between Intrastate and Interstate business in proportion to the volume of traffic of each kind handled in each class of service, as ascertained above. The percentages used and the train costs divided are as follows:

| Local Trains: | Ton miles. | Percentage. | Train costs divided. |
|---|---|---|---|
| Intrastate Business | 18,713,377 | 26.00% | $167,442.28 |
| Interstate Business | 53,270,422 | 74.00% | 476,566.50 |
| Total | 71,983,799 | 100.00% | $644,008.78 |
| **Through Trains:** | | | |
| Intrastate Business | 29,146,922 | 4.96% | $96,635.16 |
| Interstate Business | 559,033,274 | 95.04 | 1,851,654.39 |
| Total | 588,180,196 | 100.00% | $1,948,289.55 |

8. Total Cost of Intrastate and Interstate Business.

The total cost of these two classes of business is ascertained in the manner hereinbefore explained. These counts are carried into the "Statement of Revenue, Expenses, etc.," as item 2*a* (Operating Expenses) in columns #1 and 2.

Miscellaneous Revenue, Taxes, Rentals, Hire of Equipment, and Value of Property.

In the "Statement of Revenue, Expenses, etc.," the items under this head have been divided between intrastate and interstate business on a straight revenue basis, as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Freight Revenue | $640,248.17 | $4,133,210.33 | $4,773,458.50 |
| Percentage of each | 13.41% | 86.59% | 100.00% |
| Division on these percentages: | | | |
| Miscellaneous Revenue | $16,469.41 | $106,345.00 | $122,814.41 |
| Taxes | $21,851.02 | 141,094.67 | $162,945.69 |
| Rentals | 2,156.94 | 13,927.62 | 16,084.56 |
| Hire of Equipment | 24,029.57 | 155,161.89 | 179,191.46 |
| Assessed Value of Property Doubled | $1,966,586.20 | $12,698,486.15 | $14,665,072.35 |

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

(Here follows paster, marked pp. 5801 and 5802.)

5801 EXHIBIT "L."

5802 EXHIBIT "L."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

*Statement of Passenger Operating Expenses in Arkansas—for the Six Months Ended December 31, 1907—Divided Between Train and Other Costs, and Between Intrastate, Interstate, Mail, and Express Business.*

| | Train costs. | | Other costs. | | Train and other costs. | | |
|---|---|---|---|---|---|---|---|
| | Coach. (1) | Pullman. (2) | Intrastate (3) | Interstate. (4) | Mail. (5) | Express. (6) | Total. (7) |
| 1. Maintenance of Way and Structures | $284,577.45 | $106,021.02 | ..... | ..... | $58,900.56 | $51,782.37 | $501,281.40 |
| 2. Maintenance of Equipment: | | | | | | | |
| (a) Locomotives | $94,500.26 | $35,206.63 | ..... | ..... | $19,559.24 | $17,195.48 | $166,461.61 |
| (b) Passenger Train Cars | 62,711.39 | ..... | ..... | ..... | 12,969.06 | 11,418.70 | 87,099.15 |
| (c) Supervision and General | 36,321.73 | 8,130.07 | ..... | ..... | 7,509.18 | 6,613.00 | 58,573.98 |
| Total Maintenance of Equipment | $193,533.38 | $43,336.70 | ..... | ..... | $40,037.48 | $35,227.18 | $312,134.74 |
| 3. Traffic Expenses | ..... | ..... | $25,588.50 | $17,389.31 | $6,196.01 | $4,102.26 | $53,276.08 |
| 4. Transportation Expenses: | | | | | | | |
| (a) Station Expenses | ..... | ..... | ..... | $4,678.63 | $2,325.00 | ..... | $59,381.44 |
| (b) Yard and Train Expenses | $311,706.90 | $116,128.25 | $52,377.81 | ..... | 64,515.70 | $56,718.91 | 549,069.76 |
| (c) Loss and Damage—Baggage | ..... | ..... | 984.39 | 668.92 | ..... | ..... | 1,653.31 |
| (d) Supervision and General | 20,679.22 | 7,702.59 | 3,541.66 | 356.19 | 4,432.13 | 3,764.27 | 40,476.06 |
| Total Transportation Expenses | $332,386.12 | $123,830.84 | $56,903.86 | $5,703.74 | $71,272.83 | $60,483.18 | $650,580.57 |
| 5. General Expenses | $85,881.83 | $28,938.10 | $8,745.74 | $2,443.66 | $18,697.22 | $16,060.64 | $160,767.19 |
| 6. Total Operating Expenses | $896,378.78 | $302,126.66 | $91,238.10 | $25,536.71 | $195,104.10 | $167,655.63 | $1,678,039.98 |
| 7. Division of Coach and Pullman Costs Between Intrastate and Interstate Business: | | | | | | | |
| (a) Coach: | | | | | | | |
| (1) Intrastate—58.71% of Total | *$526,263.98 | ..... | 526,263.98 | ..... | ..... | ..... | ..... |
| (2) Interstate—41.29% of Total | *370,114.80 | ..... | ..... | 370,114.80 | ..... | ..... | ..... |
| (b) Pullman: | | | | | | | |
| (1) Intrastate—25% of Total | ..... | *$75,531.67 | 75,531.67 | ..... | ..... | ..... | ..... |
| (2) Interstate—75% of Total | ..... | *226,594.99 | ..... | 226,594.99 | ..... | ..... | ..... |
| 8. Total Cost of Intrastate, Interstate, Mail, and Express Business | | | $693,033.75 | $622,246.50 | $195,104.10 | $167,655.63 | $1,678,039.98 |

[* In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5803 EXHIBIT "M."

5804 EXHIBIT "M."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

*Bases Used in Arriving at Cost of Intrastate and Interstate and Interstate Passenger and Mail and Express Business in Arkansas for the Six Months Ended December* 31, 1907.

As nearly all passenger trains on the St. Louis Iron Mountain and Southern Railway Company do a local business, we have not considered it necessary to make any division of expenses as between local and through service. Our statement of operating expenses covers the six months ended December 31, 1907, and the division of expenses is between coach and Pullman service, and intrastate, interstate, mail, and express business. In general, the expenses are divided on a car-mile basis, the mileage used be considered representative of the entire period. The coach in mileage from month to month, the figures used may being that of October, 1907. As there is very little change mileage includes the mileage of baggage, dining and parlor cars. The various classes of expenses are divided as follows:

1—Maintenance of Way and Structures.

Expenses divided between Coach, Pullman, Mail, and Express service on a car-mile basis, as follows:

| | Car-Miles. | Percentage. | Expenses. |
|---|---|---|---|
| Coach | 751,229 | 56.77% | $284,577.45 |
| Pullman | 279,848 | 21.15 | 106,021.02 |
| Mail | 155,398 | 11.75 | 58,900.56 |
| Express | 136,766 | 10.33 | 51,782.37 |
| **Total** | 1,323,241 | 100.00% | $501,281.40 |

2—Maintenance of Equipment.

(*a*) Locomotives:

Expenses divided between Coach, Pullman, Mail, and Express service on a car-mile basis, as in the case of Maintenance of Way and Structures, as follows:

| | Percentage. | Expenses. |
|---|---|---|
| Coach | 56.77% | $94,500.26 |
| Pullman | 21.15 | 35,206.63 |
| Mail | 11.75 | 19,559.24 |
| Express | 10.33 | 17,195.48 |
| Total | 100.00% | $166,461.61 |

5805 (*b*) Passenger Train Cars:

Expenses divided between Coach, Mail, and Express service on a car-mile basis, as follows:

| | Car-Miles. | Percentage. | Expenses. |
|---|---|---|---|
| Coach | 751,229 | 72.00% | $62,711.39 |
| Mail | 155,398 | 14.89 | 12,969.06 |
| Express | 136,766 | 13.11 | 11,418.70 |
| Total | 1,043,393 | 100.00% | $87,099.15 |

(*c*) Supervision and General:

Expenses divided between Coach, Pullman, Mail, and Express service on the basis of the direct charges as apportioned, as follows:

| | Direct Charges. | Percentage. | Expenses. |
|---|---|---|---|
| Coach | $157,211.65 | 62.01% | $36,321.73 |
| Pullman | 35,206.63 | 13.88 | 8,130.07 |
| Mail | 32,528.30 | 12.82 | 7,509.18 |
| Express | 28,614.18 | 11.29 | 6,613.00 |
| Total | $253,560.76 | 100.00% | $58,573.98 |

3—Traffic Expenses.

Expenses divided between Intrastate, Interstate, Mail and Express business on a gross earnings basis, as follows:

| | Gross Earnings. | Percentage. | Expenses. |
|---|---|---|---|
| Intrastate | $836,540.20 | 48.03% | $25,588.50 |
| Interstate | 568,476.21 | 32.64 | 17,389.31 |
| Mail | 202,637.71 | 11.63 | 6,196.01 |
| Express | 133,910.82 | 7.70 | 4,102.26 |
| Total | $1,741,566.94 | 100.00% | $53,276.08 |

4—Transportation Expenses.

(a) Station Expenses:

Divided between Intrastate and Interstate business on the basis of the number of passengers of each class handled after making an allowance of about ten cents per day for the handling of mails at certain stations; and assuming that each intrastate passenger makes use of two terminals and each interstate passenger makes use of one terminal, as follows:

| | Intrastate. | Interstate | Total. |
|---|---|---|---|
| Number of Passengers Handled during the six months ended December 31, 1907 | 1,444,540 | 257,950 | 1,702,490 |
| Add 100% to Intrastate business to represent use of two terminals | 1,444,540 | ..... | 1,444,540 |
| Total | 2,889,080 | 257,950 | 3,147,030 |
| Percentage of each | 91.80% | 8.20% | 100.00% |
| Expenses—Divided on above Percentages (after allowing $2,325.00 as cost of handling the mails) | $52,377.81 | $4,678.63 | $57,056.44 |

(*b*) Yard and Train Expenses:

Divided between Coach, Pullman, Mail and Express service on a car-mile basis, as in the case of Maintenance of Way and Structures, as follows:

| | Percentage. | Expenses. |
|---|---|---|
| Coach | 56.77% | $311,706.90 |
| Pullman | 21.15 | 116,128.25 |
| Mail | 11.75 | 64,515.70 |
| Express | 10.33 | 56,718.91 |
| Total | 100.00 | $549,069.76 |

(c) Loss and Damage—Baggage:

Expenses divided between intrastate and interstate business in proportion to the gross earnings of each, as follows:

| | Earnings. | Percentage. | Expenses. |
|---|---|---|---|
| Intrastate | $836,542.20 | 59.54% | $984.39 |
| Interstate | 568,476.21 | 40.46 | 668.92 |
| Total | $1,405,018.41 | 100.00% | $1,654.31 |

(d) Supervision and General:

Expenses divided between Coach, Pullman, Intrastate, Interstate, Mail, and Express business on the basis of the direct charges as apportioned above, as follows:

| | Direct Charges. | Percentage. | Expenses. |
|---|---|---|---|
| Coach | $311,706.90 | 51.09% | $20,679.22 |
| Pullman | 116,128.25 | 19.03 | 7,702.59 |
| Intrastate | 53,362.20 | 8.75 | 3,541.66 |
| Interstate | 5,347.55 | .88 | 356.19 |
| Mail | 66,840.70 | 10.95 | 4,432.13 |
| Express | 56,718.91 | 9.30 | 3,764.27 |
| Total | $610,104.51 | 100.00% | $40,476.06 |

5—General Expenses.

Divided between all classes of service on the basis of the direct charges to each class, as follows:

| | Direct Charges. | Percentage. | Expenses. |
|---|---|---|---|
| Coach | $810,496.95 | 53.42% | $85.881.83 |
| Pullman | 273,188.56 | 18.00 | 28,938.10 |
| Intrastate | 82,492.36 | 5.44 | 8,745.74 |
| Interstate | 23,093.05 | 1.52 | 2,443.66 |
| Mail | 176,406.88 | 11.63 | 18,697.22 |
| Express | 151,594.99 | 9.99 | 16,060.64 |
| Total | $1,517,272.79 | 100.00% | $160,767.19 |

6—Total Operating Expenses.

The total operating expenses are, as hereinbefore explained, divided between Coach, Pullman, Intrastate, Interstate, Mail, and Express business. The amounts charged to intrastate and interstate business are expenses not chargeable to the cost of train service. The expenses charged to mail and express business represent the total operating expenses assignable to those two classes of business. The expenses charged to coach and Pullman service represent the proportion of train expenses assignable to the hauling of passengers.

7—Division of Cost of Coach and Pullman Service Between Intrastate and Interstate Business.

The cost of coach service, $896,378.78, is divided between intrastate and interstate business in proportion to the total passenger miles of each class of traffic during the six months ended December 31, 1907, as follows:

| | Passenger Miles. | Percentage. | Coach Service. |
|---|---|---|---|
| Intrastate | 43,355,996 | 58.71% | $526,263.98 |
| Interstate | 30,486,624 | 41.29% | 370,114.80 |
| Total | 73,842,620 | 100.00% | $896,378.78 |

The cost of Pullman service, $302,126.66, is divided between intrastate and interstate business on the basis of 25% intrastate and 75% interstate, as follows:

| | Percentage. | Pullman Service. |
|---|---|---|
| Intrastate | 25% | $75,531.67 |
| Interstate | 75 | 226,59.99 |
| Total | 100% | $302,126.66 |

8—Total Cost of Intrastate, Interstate, Mail and Express Business.

5808

The cost of Coach and Pullman service divided as above and added to the other costs of intrastate and interstate business gives the total cost of these two classes of business for the six months ended December 31, 1907. The cost of Mail and Express business was ascertained before making the division of Coach and Pullman expenses. These costs are carried to the "Statement of Revenue, Expenses, Etc.," as item 2*a* (Operating Expenses) in columns #4, 5, 6, and 7.

Miscellaneous Revenue, Taxes, Rentals, Hire of Equipment, Dining Car Deficit, and Value of Property.

Miscellaneous revenue and dining car deficit are divided between intrastate and interstate business in proportion to the gross earnings of each class, as follows:

TORN PAGES

| | Gross Earnings. | Percentage. | Miscellaneous Revenue. | Dining-car deficit. |
|---|---|---|---|---|
| Intrastate | $836,542.20 | 59.54% | $22,170.87 | $704.89 |
| Interstate | 568,476.21 | 40.46 | 15,066.07 | 479.01 |
| Total | $1,405,018.41 | 100.00% | $37,236.94 | $1,183.90 |

Taxes, Rentals, Hire of Equipment, and value of Property are divided between intrastate, interstate, mail, and express business in proportion to the total earnings of each class, including the miscellaneous earnings above apportioned, as follows:

| | Total Earnings. | Percentage. | Taxes. | Rentals. | Hire of equipment. | Value of property. |
|---|---|---|---|---|---|---|
| Intrastate | $858,713.07 | 48.28% | $28,582.96 | $2,821.46 | *$499.21 | $2,572,459.62 |
| Interstate | 583,542.28 | 32.80 | 19,418.42 | 1,916.81 | *339.15 | 1,747,652.76 |
| Mail | 202,637.71 | 11.39 | 6,743.16 | 665.63 | *117.77 | 606,883.08 |
| Express | 133,910.82 | 7.53 | 4,457.95 | 440.05 | *77.86 | 401,214.19 |
| Total | $1,778,803.88 | 100.00% | $59,292.49 | $5,843.95 | *$1,033.99 | $5,328,209.65 |

*In red ink in copy.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

(Here follow pasters, marked pp. 5809-5812.)

EXHIBIT "N."



EXHIBIT "N."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

*Statement of Revenue, Expenses, and Net Earnings in Arkansas for the Six Months Ended December 31, 1907, with Miscellaneous Earnings, Taxes, Rentals, Hire of Equipment, Dining Car Deficit, and Value of Property Divided between the Various Classes of Business on a Gross Revenue Basis.*

| | Freight. | | | Passenger. | | | | | Total Business. |
|---|---|---|---|---|---|---|---|---|---|
| | Intrastate. (1) | Interstate. (2) | Total. (3) | Intrastate. (4) | Interstate. (5) | Mail. (6) | Express. (7) | Total. (8) | (9) |
| 1. Revenue: | | | | | | | | | |
| (a) Freight, Passenger, Mail and Express | $640,248.17 | $4,133,210.33 | $4,773,458.50 | $836,542.20 | $568,476.21 | $202,637.71 | $133,910.82 | $1,741,566.94 | $6,515,025.44 |
| (b) Miscellaneous | 16,469.41 | 106,345.00 | 122,814.41 | 22,170.87 | 15,066.07 | ..... | ..... | 37,236.94 | 160,051.35 |
| Total Revenue | $656,717.58 | $4,239,555.33 | $4,896,272.91 | $858,713.07 | $583,542.28 | $202,637.71 | $133,910.82 | $1,778,803.88 | $6,675,076.79 |
| 2. Expenses: | | | | | | | | | |
| (a) Operating Expenses | $393,648.73 | $2,680,194.65 | $3,073,843.40 | $693,033.75 | $622,246.60 | $195,104.10 | $167,655.63 | $1,678,039.98 | $4,751,883.38 |
| (b) Taxes | 21,851.02 | 141,094.67 | 162,945.69 | 28,582.96 | 19,418.42 | 6,743.16 | 4,457.95 | 59,202.49 | 222,148.18 |
| (c) Rentals | 2,156.94 | 13,927.62 | 16,084.56 | 2,821.46 | 1,916.81 | 665.63 | 440.05 | 5,843.95 | 21,928.51 |
| (d) Hire of Equipment | 24,029.57 | 155,161.89 | 179,191.46 | *499.21 | *339.15 | *117.77 | *77.86 | *1,033.99 | 178,157.47 |
| (e) Dining Car Deficit | ..... | ..... | ..... | 704.89 | 479.01 | ..... | ..... | 1,183.90 | 1,183.90 |
| Total Expenses | $441,686.28 | $2,990,378.83 | $3,432,065.11 | $724,643.85 | $643,721.59 | $202,395.12 | $172,475.77 | $1,743,236.33 | $5,175,301.44 |
| 3. Net Earnings | $215,031.30 | $1,249,176.50 | $1,464,207.80 | $134,069.22 | *$60,179.31 | $242.59 | *$38,564.95 | $35,567.57 | $1,499,775.35 |
| 4. Assessed Value of Property Doubled | $1,966,586.20 | $12,698,486.15 | $14,665,072.35 | $2,572,459.62 | $1,747,652.76 | $606,883.08 | $401,214.19 | $5,328,209.65 | $19,993,282.00 |
| 5. Percentage of Net Earnings to Valuation. | 10.93% | 9.84% | 9.98% | 5.21% | *3.44% | .04% | *9.01% | .67% | 7.50% |

[* Figures in red ink.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5811 EXHIBIT "O."

5812 EXHIBIT "O."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

*Summary of Revenue, Expenses, and Net Earnings in Arkansas—for the Six Months Ended December 31, 1907—Divided Between Intrastate, Interstate, Mail, and Express Business.*

| | Intrastate. | | | Interstate. | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Freight. | Passenger. | Total. | Freight. | Passenger. | Total. | Mail business. | Express business. | Total business. |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1. Revenue | $656,717.58 | $858,713.07 | $1,515,430.65 | $4,239,555.33 | $583,542.28 | $4,823,097.61 | $202,637.71 | $133,910.82 | $6,675,076.79 |
| 2. Expenses | 441,686.28 | 724,643.85 | 1,166,330.13 | 2,990,378.83 | 643,721.59 | 3,634,100.42 | 202,395.12 | 172,475.77 | 5,175,301.44 |
| 3. Net Earnings | $215,031.30 | $134,069.22 | $349,100.52 | $1,249,176.50 | *$60,179.31 | $1,188,997.19 | $242.59 | *$38,564.95 | $1,499,775.35 |
| 4. Assessed Value of Property Doubled | $1,966,586.20 | $2,572,459.62 | $4,539,045.82 | $12,698,486.15 | $1,747,652.76 | $14,446,138.91 | $606,883.08 | $401,214.19 | $19,993,282.00 |
| 5. Percentage of Net Earnings to Valuation | 10.93% | 5.21% | 7.69% | 9.84% | *3.44% | 8.23% | .04% | *9.61% | 7.50% |

[* In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

EXHIBIT "P."



EXHIBIT "P."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

*Freight Statistics—October,* 1908.

| Ton-miles of Freight Carried: | Local trains. | Through trains. | Total. |
|---|---|---|---|
| Interstate: | | | |
| Carload | 1,816,989 | 24,802,246 | 26,619,235 |
| Less-than-carload | 419,372 | 2,048,658 | 2,468,030 |
| Total | 2,236,361 | 26,850,904 | 29,087,265 |
| Percentage of each | 7.69% | 92.31% | 100.00% |
| Intrastate: | | | |
| Carload | 982,914 | 275,587 | 1,258,501 |
| Less-than-carload | 101,666 | 21,136 | 122,802 |
| Total | 1,084,580 | 296,723 | 1,381,303 |
| Percentage of each | 78.52% | 21.48% | 100.00% |
| Total Revenue Freight | 3,320,941 | 27,147,627 | 30,468,568 |
| Percentage of each | 10.90% | 89.10% | 100.00% |

| | | | |
|---|---|---|---|
| Ton-mileage on each class of Train—Expressed in Percentages: | | | |
| Interstate: | | | |
| Carload | 54.71% | 91.36% | 87.37% |
| Less-than-carload | 12.63 | 7.55 | 8.10 |
| Total | 67.34% | 98.91% | 95.47% |
| Intrastate | 29.59% | 1.02% | 4.13% |
| Carload | 3.07 | .07 | .40 |
| Less-than-carload | 32.66% | 1.09% | 53% |
| Total Revenue Freight | 100.00% | 100.00% | 100.00% |
| Mileage Statistics: | | | |
| Car-Miles | 406,532 | 2,201,441 | 2,607,973 |
| Caboose-Miles | 24,379 | 68,118 | 92,497 |
| Engine-Miles | 25,797 | 68,118 | 93,915 |
| Total | 456,708 | 2,337,677 | 2,794,385 |
| Percentage of each class | 16.34% | 83.66% | 100.00% |
| Train-Miles (also Locomotive-Miles) | 25,797 | 68,118 | 93,915 |
| Percentage of each class | 27.47 | 72.53% | 100.00% |
| Freight-Car and Caboose-Miles | 430,911 | 2,269,559 | 2,700,470 |
| Percentage of each class | 15.96% | 84.04% | 100.00% |
| Average number of cars per train | 16.8 | 33.3 | 28.8 |

| | | | |
|---|---|---|---|
| Number of trains run | 450 | 639 | 1,089 |
| Average length of run in miles | 57.3 | 106.6 | 86.2 |
| Average loading of revenue freight (considering all cars)—in tons | 8.17 | 12.33 | 11.68 |
| Average loading of revenue freight (loaded cars only)—in tons: | | | |
| Less-than-carload | 4.07 | 7.04 | 6.14 |
| Carload | 20.11 | 19.65 | 19.70 |
| Total | 12.43 | 17.29 | 16.58 |
| Number of cars handled in and out of terminals where yard engines are maintained | 4,333 | 30,639 | 34,972 |
| Percentage of each | 12.39% | 87.61% | 100.00% |

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5815

EXHIBIT "Q."

5816

EXHIBIT "Q."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

*Statement of Freight Operating Expenses in Arkansas for the Six Months Ended December 31, 1907, Divided between Local and Through Train Service and between Intrastate and Interstate Business.*

| | Train Costs. | | Other Costs. | | |
|---|---|---|---|---|---|
| | Local. (1) | Through. (2) | Intrastate. (3) | Interstate. (4) | Total. (5) |
| 1. Maintenance of Way and Structures..... | $30,978.51 | $143,253.84 | ..... | ..... | $174,232.35 |
| 2. Maintenance of Equipment: | | | | | |
| (a) Locomotives: | | | | | |
| (1) Yard ..... | $666.33 | $4,711.65 | ..... | ..... | $5,377.98 |
| (2) Road ..... | 21,571.40 | 32,541.52 | ..... | ..... | 54,112.92 |
| (b) Freight Cars ..... | 46,317.70 | 135,462.92 | ..... | ..... | 181,780.62 |
| (c) Supervision and General..... | 5,390.03 | 13,582.26 | ..... | ..... | 18,972.29 |
| Total Maintenance of Equipment.... | $73,945.46 | $186,298.35 | ..... | ..... | $260,243.81 |
| 3. Traffic Expenses ..... | ..... | ..... | $5,849.70 | $53,963.18 | $59,812.88 |
| 4. Transportation Expense: | | | | | |
| (a) Station Expenses ..... | ..... | ..... | $15,738.20 | $31,780.52 | $47,518.72 |
| (b) Yard and Terminal Expenses..... | $9,144.70 | $47,320.72 | ..... | ..... | 56,465.42 |
| (c) Fuel and Locomotive Expenses..... | 21,923.95 | 55,958.63 | ..... | ..... | 77,882.58 |
| (d) Enginehouse Expenses—Road ..... | 4,505.35 | 5,947.89 | ..... | ..... | 10,453.24 |
| (e) Road Enginemen and Trainmen ..... | 51,837.17 | 78,243.56 | ..... | ..... | 130,080.73 |
| (f) Other Train Expenses ..... | 8,186.55 | 21,615.24 | ..... | ..... | 29,801.79 |

| | | | | | |
|---|---|---|---|---|---|
| (g) Loss and Damage—Freight | ..... | ..... | 1,810.37 | 17,166.29 | 18,976.66 |
| (h) Supervision and General | 4,287.00 | 9,374.48 | 787.17 | 2,193.42 | 16,642.07 |
| Total Transportation Expenses | $99,884.72 | $218,460.52 | $18,335.74 | $51,140.23 | $387,821.21 |
| 5. General Expenses | $10,220.98 | $27,348.38 | $1,206.09 | $5,242.54 | $44,017.99 |
| 6. Total Operating Expenses | $215,029.67 | $575,361.09 | $25,391.53 | $110,345.95 | $926,128.24 |
| 7. Division of Train Costs Between Intrastate and Interstate Business: | | | | | |
| (a) Local Trains: | | | | | |
| (1) Intrastate Freight—31.99% of Total | *$68,787.99 | ..... | 68,787.99 | ..... | ..... |
| (2) Interstate Freight—68.01% of Total | *146,241.68 | ..... | ..... | 146,241.68 | ..... |
| (b) Through Trains: | | | | | |
| (1) Intrastate Freight—1.06% of Total | ..... | *$6,098.83 | 6,098.83 | ..... | ..... |
| (2) Interstate Freight—98.94% of Total | ..... | *569,262.26 | ..... | 569,262.26 | ..... |
| 8. Total Cost of Intrastate and Interstate Business | ..... | ..... | $100,278.35 | $825,849.89 | $926,128.24 |

[* Figures in red ink.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5817 EXHIBIT "R."

5818 EXHIBIT "R."

State of Kansas—Rate Matter.

St. Louis Southwestern Railway Company.

*Bases Used in Arriving at Cost of Local and Through Freight Service and Intrastate and Interstate Freight Business in Arkansas—for the Six Months Ended December* 31, 1907.

1—Maintenance of Way and Structures.

The proportion of these expenses applicable to the freight business as shown by the statements in this case, submitted by the Company, has been divided between local and through train service on the basis of the total engine and car miles of each class during the month of October, 1908, that month being considered representative of the business for the six months ended December 31, 1907. In arriving at the number of engine and car miles, we have added 50% to the engine mileage of local trains for station switching, and have assumed that each engine mile was equivalent to 2½ car miles. The total engine and car miles, with the percentage and amount of expenses chargeable to each class of service on this basis, are as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Engine Miles | 25,797 | 68,118 | 93,915 |
| 50% added to Local Engine Miles for Station Switching. | 12,899 | ..... | 12,899 |
| Total | 38,696 | 68,118 | 106,814 |

| | | | |
|---|---|---|---|
| Engine Miles as above multiplied by 2½ to get equivalent in car miles | 96,740 | 170,295 | 267,035 |
| Car Miles | 406,532 | 2,201,441 | 2,607,973 |
| Caboose Miles | 24,379 | 68,118 | 92,497 |
| Total | 527,651 | 2,439,854 | 2,967,505 |
| Percentage of each | 17.78% | 82.22% | 100.00% |
| Expenses—Divided on above Percentages | $30,978.51 | $143,253.84 | $174,232.35 |

2—Maintenance of Equipment.

(*a*) Locomotives:

The expenses under this head are divided between yard, and local and through road locomotives on the basis of the locomotive mileage of each class during the month of October, 1908. We have added 50% to the mileage made by yard locomotives to provide for the possible extra maintenance due to yard service; have added 50% to the mileage of road locomotives in local service to provide for the possible extra switching mileage, and again have added 50% to the switching mileage of the local train engines thus ascertained to provide for the possible extra maintenance due to switching service (making 75% added to the local engine mileage). The division be-
5819 tween yard, and local and through road locomotives on this basis is as follows:

| | | Mileage. | Percentage. |
|---|---|---|---|
| Yard Locomotive Mileage | 7,507 | | |
| 50% added for extra repairs | 3,754 | | |
| | | 11,261 | 9.04% |
| Local Locomotive Mileage | 25,797 | | |
| 75% added for extra mileage and repairs | 19,348 | | |
| | | 45,145 | 36.26 |
| Through Locomotive Mileage | | 68,118 | 54.70 |
| Total | | 124,524 | 100.00% |

The total expenses under this head amount to $59,490.90. The amount chargeable to yard locomotives on this basis is 9.04%, or $5,377.98; the amount chargeable to the local service is 36.26%, or $21,571.40, and the amount chargeable to through service is 54.70%, or $32,541.52.

The expense of maintenance of yard locomotives ($5,377.98) is divided between local and through service on the basis of the number of cars of each class of service handled by yard engines during the month of October, 1908. The total number of cars handled at terminals, where yard engines were maintained, together with the percentage and amount of expense chargeable to each class of service, is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Cars Handled | 4,333 | 30,639 | 34,972 |
| Percentage of each | 12.39% | 87.61% | 100.00% |
| Expenses—Divided on above percentages | $666.33 | $4,711.65 | $5,377.98 |

(*b*) Freight Cars:

The total amount of expense for maintenance of freight cars is $181,780.62. This amount is apportioned to Arkansas by the Railway Company on a car mileage basis. In dividing this expense between local and through service, however, we have taken into consideration the element of repairs due to the stopping and starting of trains at way stations, and repairs due to extra terminal handling of cars in local service. Mr. A. M. Wellington, in his work on "Railway Location" (Page 203) says that the stopping and starting at way stations is the cause of approximately 21.5% of the repair expenses of freight cars, and that the terminal handling is the cause of approximately 13.5% of the repair expenses. Taking these elements into consideration, the maintenance expenses may be divided as follows:

| | | | |
|---|---|---|---|
| Stopping and starting | 21.5% | $39,082.83 | |
| Terminal Handling | 13.5 | 24,540.39 | |
| | | | $63,623.22 |
| Other Expenses | | 65% | 118,157.40 |
| Total | | | $181,780.62 |

5820 Assuming that each local train makes a stop, say, each five miles and each through train a stop, say, each twenty miles the local service should be charged with four times as much as the through service, in proportion to car mileage, for the expenses due to stopping aand starting. Assuming also that each car in local service received four terminal handlings (including handling at local stations) to each terminal handling of a car in through service, the local service should be charged with four times as much as the through service, in proportion to car mileage, for the expenses due to terminal handling. Both of these items may, therefore, be divided between local and through service on the following basis:

| | Local. | Through. | Total. |
|---|---|---|---|
| Car Miles (October, 1908) | 430,911 | 2,269,559 | 2,700,470 |
| Same, with local car miles multiplied by four | 1,723,644 | 2,269,559 | 3,993,203 |
| Percentage of each | 43.16% | 56.84% | 100.00% |
| Expenses—Divided on above Percentages | $27,459.78 | $36,163.44 | $63,623.22 |

The balance of the expenses of freight car maintenance, $118,157.40, is divided between local and through service in proportion to the number of car miles made in each class of service, as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Car Miles (October, 1908) | 430,911 | 2,269,559 | 2,700,470 |
| Percentage of each | 15.96% | 84.04% | 100.00% |
| Expenses—Divided on above Percentages | $18,857.92 | $99,299.48 | $118,157.40 |

The total expenses of maintenance of freight cars chargeable to each class of service, under the plans outlined above, are as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Stopping and Starting and Terminal Handling..... | $27,459.78 | $36,163.44 | $63,623.22 |
| Other Expenses ..... | 18,857.92 | 99,299.48 | 118,157.40 |
| Total ..... | $46,317.70 | $135,462.92 | $181,780.62 |

(c) Supervision and General:

The total expenses under this head are divided between local and through service on the basis of the direct charges for maintenance of equipment, as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Direct Expenses ..... | $68,555.43 | $172,716.09 | $241,271.52 |
| Percentage of each ..... | 28.41% | 71.59% | 100.00% |
| Expenses—Divided on above percentages..... | $5,390.03 | $13,582.26 | $18,972.29 |

5821 3—Traffic Expenses.

These expenses are incurred in securing and looking after traffic. The amount apportioned to the State of Arkansas is based on the revenue train mileage in that State as compared with the revenue train mileage of the whole road. We have divided these expenses on a straight revenue basis, although of the opinion that this unduly burdens the intrastate business, owing to the fact that a considerable portion of the traffic expense is incurred in the effort to secure competitive business, while it is well known that intrastate business is largely noncompetitive. The basis of dividing these expenses between intrastate and interstate business is as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Total Freight Revenue..... | $175,515.42 | $1,619,840.07 | $1,795,355.49 |
| Percentage of each ..... | 9.78% | 90.22% | 100.00% |
| Expenses—Divided on above Percentages..... | $5,849.70 | $53,963.18 | $59,812.88 |

## 4—Transportation Expenses.

(*a*) Station Expenses:

These expenses cannot be divided between the two classes of train service, as they are not train expenses. They may, however, be divided between intrastate and interstate business in proportion to the volume of traffic of each class handled in the State. We have divided the expenses between the intrastate and interstate business on the basis of the number of tons of each class of traffic, assuming, however, that each intrastate ton was handled twice and each interstate ton once, as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Total Tons | 197,600 | 797,865 | 995,465 |
| Double number of Intrastate Tons in order to provide for two handlings | 197,600 | ..... | 197,600 |
| Total | 395,200 | 797,865 | 1,193,065 |
| Percentage of each | 33.12% | 66.88% | 100.00% |
| Expenses—Divided on above Percentages | $15,738.20 | $31,780.52 | $47,518.72 |

(*b*) Yard and Terminal Expenses:

These expenses are divided between local and through business on the basis of the number of cars handled at terminals, as explained under the head of Maintenance of Yard Locomotives (2*a*). Of the total expenses, 5822 $2,452.50 are the expenses of the Little Rock Terminals, and are charged entirely to local trains; of the balance of these expenses, 12.39%, or $6,692.20 are charged to local trains; and 87.61%, or $47,320.72, are charged to through trains. The $2,452.50 of Little Rock expenses, and $6,692.20 of other expenses, make $9,144.70 of yard expenses charged to local trains.

(*c*) Fuel and Locomotive Expenses:

The Railway Company ascertained the actual consumption of fuel by local and through engines during the month of October, 1908. The value of the fuel consumed was as follows:

| | Local engines. | Through engines. | Total. |
|---|---|---|---|
| Total Amount | $3,868.72 | $9,873.40 | $13,742.12 |
| Percentage of each | 28.15% | 71.85% | 100.00% |

We have used these percentages in dividing fuel and the miscellaneous locomotive expenses for the six months ended December 31, 1907, amounting to $77,882.58. The amount charged to local service is 28.15%, or $21,-923.95; and the amount charged to through service is 71.85%, or $55,958.63.

(*d*) Enginehouse Expenses—Road:

These expenses, amounting to $10,453.24, are divided between local and through service on the basis of the engine miles of each class of service during the month of October, 1908, assuming, however, that the local engines require twice as much enginehouse service per engine mile as the through engine. This assumption is based on the average engine run in the two classes of service. The engine miles and the percentages on which the expenses are divided, are as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Total Engine Miles | 25,797 | 68,118 | 93,915 |
| 100% Added to Local Engine Miles to Cover Extra Expenses | 25,797 | ..... | 25,797 |
| Total | 51,594 | 68,118 | 119,712 |
| Percentage of each | 43.10% | 56.90% | 100.00% |
| Expenses—Divided on above Percentages | $4,505.35 | $5,947.89 | $10,453.24 |

(*e*) Road Enginemen and Trainmen:

The Railway Company made an actual division of these expenses during the month of October, 1908, as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Total Amount | $9,025.75 | $13,625.21 | $22,650.96 |
| Percentage of each | 39.85% | 60.15% | 100.00% |

We have used these percentages in dividing the total expenses under this head for the six months ended December 31, 1907. These expenses amounted to $130,080.73, of which 39.85%, or $51,837.17, are charged to local service, and 60.15%, or $78,243.56, are charged to through service.

(*f*) Other Train Expenses:

These expenses are such as are incident to or generally caused by the operation of trains, and not included in the preceding classifications. They are divided between local and through service in proportion to the train miles of each class of service during the month of October, 1908, as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Train Miles | 25,797 | 68,118 | 93,915 |
| Percentage of each | 27.47% | 72.53% | 100.00% |
| Expenses—Divided on above percentages | $8,186.55 | $21,615.24 | $29,801.79 |

(*g*) Loss and Damage—Freight:

The expenses under this head are divided between intrastate and interstate business on the basis of the actual claims paid during the month of October, 1908, as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Claims Paid | $471.22 | $4,468.99 | $4,940.21 |
| Percentage of each | 9.54% | 90.46% | 100.00% |
| Expenses—Divided on above Percentages | $1,810.37 | $17,166.29 | $18,976.66 |

(*h*) Supervision and General:

These expenses are divided between local, through, intrastate, and interstate business on the basis of the direct charges to each of these classes, as follows:

| | | | | | |
|---|---|---|---|---|---|
| Direct Expenses ..... | $95,597.72 | $209,086.04 | $17,548.57 | $48,946.81 | $371,179.14 |

| | Train costs. | | Other costs. | | |
|---|---|---|---|---|---|
| | Local. | Through. | Intrastate. | Interstate. | Total. |
| Percentage of each ..... | 25.76% | 56.33% | 4.73% | 13.18% | 100.00% |
| Expenses—Divided on above Percentages ..... | $4,287.00 | $9,374.48 | $787.17 | $2,193.42 | $16,642.07 |

5824

5—General Expenses.

These expenses are general to all classes of service. They may, therefore, be apportioned to local and through and intrastate and interstate business on the basis of the direct charges for all other expenses of these classes that being perhaps the best measure of the supervision necessary for each. The total direct charges and the percentage of general expenses applicable to each, are as follows:

| | Train costs. | | Other costs. | | |
|---|---|---|---|---|---|
| | Local. | Through. | Intrastate. | Interstate. | Total. |
| Direct Expenses ..... | $204,808.69 | $548,012.71 | $24,185.44 | $105,103.41 | $882,110.25 |
| Percentage of each..... | 23.22% | 62.13% | 2.74% | 11.91% | 100.00% |
| Expenses—Divided on above Percentages ..... | $10,220.98 | $27,348.38 | $1,206.09 | $5,242.54 | $44,017.99 |

6—Total Operating Expenses.

The total freight operating expenses are, as hereinbefore explained, divided between local and through train service and intrastate and interstate business. The train costs are intended to include everything relating to the direct cost of the movement of freight trains, with all expenses incident to such movement. Station expenses and other items which do not affect the expenses of train operation are divided between intrastate and interstate business direct.

7—Method of Dividing Train Costs.

During the month of October, 1908, 78.52% of all intrastate ton-miles and 7.69% of all interstate ton-miles of freight were handled on local trains; and 21.48% of all intrastate and 93.31% of all interstate ton-miles were handled on through trains. Assuming that these same relative conditions would exist during the six months ended December 31, 1907, the total ton-miles of intrastate and interstate freight handled during that period would have been divided between local and through service as follows:

| | |
|---|---|
| Local Trains: | |
| Intrastate Business—78.52% of 8,512 ton-miles during six months' period | 6,684,256 |
| Interstate Business—7.69% of 184,831,455 ton-miles, during six months' period | 14,213,539 |
| Total | 20,897,795 |
| 5825 Through Trains: | |
| Intrastate Business—21.48% of 8,512,807 ton-mile during six months' period | 1,828,551 |
| Interstate Business—92.31% of 184,831,455 ton-miles during six months' period | 170,617,916 |
| Total | 172,446,467 |

In the accompanying statement, train costs are divided between intrastate and interstate business in proportion to the volume of traffic of each kind handled in each class of service, as hereinbefore ascertained. The percentages used and the train costs divided, are as follows:

| Local Trains: | Ton miles. | Percentage. | Train costs. Divided. |
|---|---|---|---|
| Intrastate business | 6,684,256 | 31.99% | $68,787.99 |
| Interstate business | 14,213,539 | 68.01 | 146,241.68 |
| Total | 20,897,795 | 100.00% | $215,029.67 |
| Through Trains: | | | |
| Intrastate business | 1,828,551 | 1.06% | $6,098.83 |
| Interstate business | 170,617,916 | 98.94 | 569,262.26 |
| Total | 172,446,467 | 100.00% | $575,361.09 |

8—Total Cost of Intrastate and Interstate Business.

The total cost of these two classes of business is ascertained in the manner hereinbefore explained. These costs are carried into the "Statement of Revenue, Expenses, etc." as item 2*a* (Operating Expenses) in columns #1 and #2.

Miscellaneous Revenue, Taxes, and Rentals and Value of Property.

In the "Statement of Revenue, Expenses, Etc.," the items under this head have been divided between intrastate and interstate business on a straight revenue basis, as follows:

EXHIBIT "S."

EXHIBIT "S."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

*Statement of Passenger Operating Expenses in Arkansas—for the Six Months Ended December 31, 1907—Divided Between Train and Other Costs and Between Intrastate, Interstate, Mail, and Express Business.*

| | Train costs. | | Other costs. | | Train and other costs. | | |
|---|---|---|---|---|---|---|---|
| | Coach. | Pullman. | Intrastate. | Interstate. | Mail. | Express. | Total. |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1. Maintenance of Way and Structures | $82,202.54 | $22,058.67 | ..... | ..... | $13,181.87 | $9,549.87 | $126,992.95 |
| 2. Maintenance of Equipment: | | | | | | | |
| (a) Locomotives | $29,431.20 | $7,897.73 | ..... | ..... | $4,719.54 | $3,419.17 | $45,467.64 |
| (b) Passenger Train Cars | 26,334.42 | ..... | ..... | ..... | 4,226.01 | 3,059.41 | 33,619.84 |
| (c) Supervision and General | 7,762.84 | 1,099.86 | ..... | ..... | 1,245.18 | 901.68 | 11,009.56 |
| Total Maintenance of Equipment | $63,528.46 | $8,997.59 | ..... | ..... | $10,190.73 | $7,380.26 | $90,097.04 |
| 3. Traffic Expenses | ..... | ..... | $13,251.96 | $9,193.44 | $1,752.37 | $1,801.77 | $25,999.54 |
| 4. Transportation Expenses: | | | | | | | |
| (a) Station Expenses | ..... | ..... | $22,974.45 | $1,868.16 | $1,149.75 | ..... | $25,992.36 |
| (b) Yard and Train Expenses | $90,582.57 | $24,307.42 | ..... | ..... | 14,525.67 | $10,523.42 | 139,939.08 |
| (c) Loss and Damage—Baggage | ..... | ..... | 246.22 | 170.82 | ..... | ..... | 417.04 |
| (d) Supervision and General | 5,527.75 | 1,483.20 | 1,417.21 | 124.87 | 956.32 | 642.62 | 10,151.97 |
| Total Transportation Expenses | $96,110.32 | $25,790.62 | $24,637.88 | $2,163.85 | $16,631.74 | $11,166.04 | $176,500.45 |
| 5. General Expenses | $13,326.07 | $3,132.69 | $2,087.69 | $626.54 | $2,300.39 | $1,646.10 | $23,119.48 |
| 6. Total Operating Expenses | $255,167.39 | $59,979.57 | $39,977.53 | $11,983.83 | $44,057.10 | $11,544.04 | $442,709.46 |
| 7. Division of Cost of Coach and Pullman Service Between Intrastate and Interstate Business: | | | | | | | |
| (a) Coach: | | | | | | | |
| (1) Intrastate—55.42% of Total | *$141,413.77 | ..... | 141,413.77 | ..... | ..... | ..... | ..... |
| (2) Interstate—44.58% of Total | *113,753.62 | ..... | ..... | 113,753.62 | ..... | ..... | ..... |
| (b) Pullman: | | | | | | | |
| (1) Intrastate—25% of Total | ..... | *$14,994.89 | 14,994.89 | ..... | ..... | ..... | ..... |
| (2) Interstate—75% of Total | ..... | *44,984.68 | ..... | 44,984.68 | ..... | ..... | ..... |
| 8. Total Cost of Intrastate, Interstate, Mail and Express Business | | | $196,386.19 | $170,722.13 | $44,057.10 | $31,544.04 | $442,709.46 |

[* In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Freight Revenue | $173,064.45 | $1,597,230.02 | $1,770,294.47 |
| Percentage of each | 9.78% | 90.22% | 100.00% |
| Division of these Percentages: | | | |
| Miscellaneous Revenue | $2,450.97 | $22,610.05 | $25,061.02 |
| Taxes | $5,495.26 | $50,693.51 | $56,188.77 |
| Rentals (Credits in Red) | *5,547.49 | *51,175.32 | *56,722.81 |
| Assessed Value of Property Doubled | $538,274.14 | $4,965,551.28 | $5,503,825.42 |

[*In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

(Here follows paster, marked p. 5826.)

5827 EXHIBIT "T."

5828 EXHIBIT "T".

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

*Bases Used in Arriving at Cost of Intrastate and Interstate Passenger and Mail and Express Business in Arkansas—For the Six Months Ended December* 31, 1907.

All passenger trains on the St. Louis Southwestern Railway Company do a local business, and it has, therefore, been unnecessary to make any division of expenses as between local and through service. Our statement of operating expenses covers the six months ended December 31, 1907, and the division of expenses is between Coach and Pullman service, and Intrastate, Interstate, Mail, and Express business. In general, the expenses are divided on a car-mile basis, the mileage used being that of October, 1908. As there is very little change in mileage from month to month, the figures used may be considered representative of the entire period. The Coach mileage includes the mileage of baggage and parlor cars. The various classes of expenses are divided as follows:

1. *Maintenance of Way and Structures.*

Expenses divided between Coach, Pullman, Mail and Express service on a car-mile basis, as follows:

| | Car-Miles. | Percentage. | Expenses. |
|---|---|---|---|
| Coach | 221,159 | 64.73% | $82,202.54 |
| Pullman | 59,334 | 17.37% | 22,058.67 |
| Mail | 35,480 | 10.38 | 13,181.87 |
| Express | 25,683 | 7.52 | 9,549.87 |
| Total | 341,656 | 100.00% | $126,992.95 |

2. *Maintenance of Equipment.*

(a) Locomotives:

Expenses divided between Coach, Pullman, Mail and Express service on a car-mile basis, as in the case of Maintenance of Way and Structures, as follows:

| | Percentage. | Expenses. |
|---|---|---|
| Coach | 64.73 | $29,431.20 |
| Pullman | 17.37 | 7,897.73 |
| Mail | 10.38 | 4,719.54 |
| Express | 7.52 | 3,419.17 |
| Total | 100.00% | $45,467.64 |

(*b*) Passenger Train Cars:

Expenses divided between Coach, Mail, and Express service on a car-mile basis, as follows:

5829

| | Car-Miles. | Percentage. | Expenses. |
|---|---|---|---|
| Coach | 221,159 | 78.33% | $26,334.42 |
| Mail | 35,480 | 12.57 | 4,226.01 |
| Express | 25,683 | 9.10 | 3,059.41 |
| Total | 282,322 | 100.00% | $33,619.84 |

(*c*) Supervision and General:

Expenses divided between Coach, Pullman, Mail and Express service on the basis of the direct charges as apportioned above, as follows:

| | Direct Charges. | Percentage. | Expenses. |
|---|---|---|---|
| Coach | $55,765.62 | 70.51% | $7,762.84 |
| Pullman | 7,897.73 | 9.99 | 1,099.86 |
| Mail | 8,945.55 | 11.31 | 1,245.18 |
| Express | 6,478.58 | 8.19 | 901.68 |
| Total | $79,087.48 | 100.00% | $11,009.56 |

3. *Traffic Expenses.*

Expenses divided between Intrastate, Interstate, Mail, and Express business on a gross earning basis, as follows:

| | Gross Earnings. | Percentage. | Expenses. |
|---|---|---|---|
| Intrastate | $251,182.96 | 50.97% | $13,251.96 |
| Interstate | 174,260.61 | 35.36 | 9,193.44 |
| Mail | 33,218.77 | 6.74 | 1,752.37 |
| Express | 34,155.57 | 6.93 | 1,801.77 |
| Total | $492,817.91 | 100.00% | $25,999.54 |

4. *Transportation Expenses.*

(*a*) Station Expenses:

Divided between Intrastate and Interstate business on the basis of the number of passengers of each class handled after making an allowance of about ten cents per day for the handling of mails at certain stations; and assuming that each intrastate passenger makes use of two terminals and each interstate passenger makes use of one terminal, as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Number of Passengers handled during the six months ended December 31, 1907..... | 504,392 | 82,064 | 586,456 |
| Add 100% to Intrastate business to represent use of two terminals ..... | 504,392 | ..... | 504,392 |
| Total ..... | 1,008,784 | 82,064 | 1,090,848 |
| Percentage of each..... | 92.48% | 7.52% | 100.00% |
| Expenses divided on above percentage (after allowing $1,149.75 as cost of handling the mails)..... | $22,974.45 | $1,868.16 | $24,842.61 |

(*b*) Yard and Train Expenses:

Divided between Coach, Pullman, Mail and Express service on a car-mile basis, as in the case of Maintenance of Way and Structures, as follows:

5829½

| | Percentage. | Expenses. |
|---|---|---|
| Coach ..... | 64.73% | $90,582.57 |
| Pullman ..... | 17.37 | 24,307.42 |
| Mail ..... | 10.38 | 14,525.67 |
| Express ..... | 7.52 | 10,523.42 |
| Total ..... | 100.00% | $139,939.08 |

(*c*) Loss and Damage—Baggage:

Expense divided between intrastate and interstate business in proportion to the gross earnings of each, as follows:

| | Earnings. | Percentage. | Expenses. |
|---|---|---|---|
| Intrastate ..... | $246,101.33 | 59.04% | $246.22 |
| Interstate ..... | 170,735.14 | 40.96 | 170.82 |
| Total ..... | $416,836.47 | 100.00% | $417.04 |

(*d*) Supervision and General:

Expenses divided between Coach, Pullman, Intrastate, Interstate Mail, and Express business on the basis of the direct charges as apportioned above, as follows:

| | Direct Charges. | Percentage. | Expenses. |
|---|---|---|---|
| Coach | $90,582.57 | 54.45% | $5,527.75 |
| Pullman | 24,307.42 | 14.61 | 1,483.20 |
| Intrastate | 23,220.67 | 13.96 | 1,417.21 |
| Interstate | 2,038.98 | 1.23 | 124.87 |
| Mail | 15,675.42 | 9.42 | 956.32 |
| Express | 10,523.42 | 6.33 | 642.62 |
| Total | $166,348.48 | 100.00% | $10,151.97 |

5. *General Expenses.*

Divided between all classes of service on the basis of the direct charges to each class, as follows:

| | Direct Charges. | Percentage. | Expenses. |
|---|---|---|---|
| Coach | $241,841.32 | 57.64% | $13,326.07 |
| Pullman | 56,846.88 | 13.55 | 3,132.69 |
| Intrastate | 37,889.84 | 9.03 | 2,087.69 |
| Interstate | 11,357.29 | 2.71 | 626.54 |
| Mail | 41,756.71 | 9.95 | 2,300.39 |
| Express | 29,897.94 | 7.12 | 1,646.10 |
| Total | $419,589.98 | 100.00% | $23,119.48 |

6. *Total Operating Expenses.*

The total operating expenses are, as hereinbefore explained, divided between Coach, Pullman, Intrastate, Interstate, Mail and Express business. The amounts charged to Intrastate, and Interstate business are expenses not chargeable to the cost of train service. The expenses charged to Mail and Express business represent the total operating expenses assignable to these two classes of business.
5830 The expenses charged to Coach and Pullman service represent the proportion of train expenses assignable to the hauling of passengers.

7. *Division of Cost of Coach and Pullman Service Between Intrastate and Interstate Business.*

The cost of Pullman service, $59,979.57, is divided between Intrastate and interstate business in proportion to the total passenger miles of each class of traffic during the six months ended December 31, 1907, as follows:

| | Passenger Miles. | Percentage. | Coach Service. |
|---|---|---|---|
| Intrastate | 12,345,719 | 55.42% | $141,413.77 |
| Interstate | 9,930,034 | 44.58 | 113,753.62 |
| Total | 22,275,753 | 100.00% | $255,167.39 |

The cost of Pullman service, $59,919.57, is divided between Intrastate and Interstate business on the basis of 25% Intrastate and 75% Interstate, as follows:

| | Percentage. | Pullman Service. |
|---|---|---|
| Intrastate | 25% | $14,994.89 |
| Interstate | 75 | 44,984.68 |
| Total | 100% | $59,979.57 |

8. *Total Cost of Intrastate, Interstate, Mail and Express Business.*

The cost of Coach and Pullman service divided as above and added to the other costs of Intrastate and Interstate business gives the total cost of these two classes of business for the six months ended December 31, 1907. The cost of Mail and Express business was ascertained before making the division of Coach and Pullman expenses. These costs are carried to the "Statement of Revenue, Expenses, etc.," as item 2*a*. (Operating Expenses) in columns #4, 5, 6 and 7.

*Miscellaneous Revenue, Taxes, Rentals, Outside Operations, and Value of Property.*

Miscellaneous Revenue and Outside Operations (Dining car deficit) are divided between Intrastate and Interstate business in proportion to the gross earnings of each class, as follows:

5831

| | Gross Earnings. | Percentage. | Miscellaneous Revenue. | Outside Operations. |
|---|---|---|---|---|
| Intrastate | $246,101.33 | 59.04% | $5,081.63 | $811.38 |
| Interstate | 170,735.14 | 40.96% | 3.525.47 | 562.91 |
| Total | $416,836.47 | 100.00% | $8,607.10 | $1,374.29 |

Taxes, Rentals and Value of Property are divided between Intrastate, Interstate Mail and Express business in proportion to the total earnings of each class, including the miscellaneous earnings above apportioned, as follows:

| | Total Earnings. | Per-centage. | Taxes. | Rentals. | Value of Property. |
|---|---|---|---|---|---|
| Intrastate | $251,182.96 | 50.97% | $8,077.78 | $1,299.67 | $770.152.41 |
| Interstate | 174,260.61 | 35.36 | 5,603.89 | 901.64 | 534,286.62 |
| Mail | 33,218.77 | 6.74 | 1,068.16 | 171.86 | 101,840.83 |
| Express | 34,155.57 | 6.93 | 1,098.28 | 176.71 | 104,711.72 |
| Total | $492,817.91 | 100.00% | $15,848.11 | $2,549.88 | $1,510,991.58 |

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

(Here follow pasters, marked pp. 5832-5835.)

5832 EXHIBIT "U."

5833 EXHIBIT "U."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

*Statement of Revenue, Expenses, and Net Earnings in Arkansas—for the Six Months Ended December 31, 1907—with Miscellaneous Earnings, Taxes, Rentals, Outside Operations, and Value of Property Divided Between the Various Classes of Business on a Gross Revenue Basis.*

| | Freight. | | | Passenger. | | | | | Total Business. |
|---|---|---|---|---|---|---|---|---|---|
| | Intrastate. | Interstate. | Total. | Intrastate. | Interstate. | Mail. | Express. | Total. | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1. Revenue: | | | | | | | | | |
| (*a*) Freight, Passenger, Mail, and Express | $173,064.45 | $1,597,230.02 | $1,770,294.47 | $246,101.33 | $170,735.14 | $33,218.77 | $34,155.57 | $484,210.81 | $2,254,505.28 |
| (*b*) Miscellaneous | 2,450.97 | 22,610.05 | 25,061.02 | 5,081.63 | 3,525.47 | ..... | ..... | 8,607.10 | 33,668.12 |
| Total Revenue | $175,515.42 | $1,619,840.07 | $1,795,355.49 | $251,182.96 | $174,260.61 | $33,218.77 | $34,155.57 | $492,817.91 | $2,288,173.40 |
| 2. Expenses: | | | | | | | | | |
| (*a*) Operating Expenses | $100,278.35 | $825,849.89 | $926,128.24 | $196,386.19 | $170,722.13 | $44,057.10 | $31,544.04 | $442,709.46 | $1,368,837.70 |
| (*b*) Taxes | 5,495.26 | 50,693.51 | 56,188.77 | 8,077.78 | 5,603.89 | 1,068.16 | 1,098.28 | 15,848.11 | 72,036.88 |
| (*c*) Rentals | *5,547.49 | *51,175.32 | *56,722.81 | 1,299.67 | 901.64 | 171.86 | 176.71 | 2,549.88 | *54,172.93 |
| (*d*) Outside Operations | ..... | ..... | ..... | 811.38 | 562.91 | ..... | ..... | 1,374.29 | 1,374.29 |
| Total Expenses | $100,226.12 | $825,368.08 | $925,594.20 | $206,575.02 | $177,790.57 | $45,297.12 | $32,819.03 | $462,481.74 | $1,388,075.94 |
| 3. Net Earnings | $75,289.30 | $794,471.99 | $869,761.29 | $44,607.94 | *$3,529.96 | *$12,078.35 | $1,336.54 | $30,336.17 | $900,097.46 |
| 4. Assessed value of property doubled | $38,274.14 | $4,965,551.28 | $5,503,825.42 | $770,152.41 | $534,296.62 | $101,840.83 | $104,711.72 | $1,510,991.58 | $7,014,817.00 |
| 5. Percentage of net earnings to valuation | 13.99% | 16.00% | 15.80% | 5.79% | .66% | *11.86% | 1.28% | 2.01% | 12.83% |

[*Figures in red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5834 EXHIBIT "V."

5835 EXHIBIT "V."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

*Summary of Revenue, Expenses, and Net Earnings in Arkansas for the Six Months Ended December 31, 1907, Divided Between Intrastate, Interstate, Mail, and Express Business.*

| | Intrastate. | | | Interstate. | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Freight. | Passenger. | Total. | Freight. | Passenger. | Total. | Mail business. | Express business. | Total business. |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1. Revenue | $175,515.42 | $251,182.96 | $426,698.38 | $1,619,840.07 | $174,260.61 | $1,794,100.68 | $33,218.77 | $34,155.57 | $2,288,173.40 |
| 2. Expenses | 100,226.12 | 206,575.02 | 306,801.14 | 825,368.08 | 177,790.57 | 1,003,158.65 | 45,297.12 | 32,819.03 | 1,388,075.94 |
| 3. Net Earnings | $75,289.30 | $44,607.94 | $119,897.24 | $794,471.99 | *$3,529.96 | $790,942.03 | *$12,078.35 | $1,336.54 | $900,097.46 |
| 4. Assessed Value of Property Doubled | $538,274.14 | $770,152.41 | $1,308,426.55 | $4,965,551.28 | $534,286.62 | $5,499,837.90 | $101,840.83 | $104,711.72 | $7,014,817.00 |
| 5. Percentage of Net Earnings to Valuation | 13.99% | 5.79% | 9.16% | 16.00% | *.66% | 14.38% | *11.86% | 1.28% | 12.83% |

[* In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5836 EXHIBIT "W."

5837 EXHIBIT "W."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

*Tonnage Capacity of Engines in Freight Service as Shown by Official Time Cards (Issued for the Government of Employés Only), Effective During the Last Half of* 1909, *Compared on the Various Operating Districts Over Which So-called "Trans-state" Trains Would Pass Through the State of Arkansas. (As Various Classes of Engines With Varying Tonnage Ratings Are in Service on the Different Districts, the Maximum Rating on Each District Has Been Used Below as the Basis of Comparison.)*

An engine hauling a train into Arkansas from the north on the main line could haul into Hoxie terminal 2,300 tons gross of trans-state freight, destined beyond Texarkana. From Hoxie to Argenta the maximum rating of any engine being 2,000 tons gross the train would have to be reduced 300 tons at Hoxie; from Argenta to Texarkana the maximum rating of any engine being 1,600 tons a further reduction of 400 tons would have to be made at Argenta.

It is apparent that on the main line in Arkansas the maximum possible gross tonnage of a train of trans-state freight would be 700 tons less South of Argenta than it was North of Hoxie.

An engine hauling a train into Arkansas from the north on the main line, consisting of trans-state freight only, destined to Louisiana points via Argenta and Alexandria could haul into Hoxie 2,300 tons gross. From Hoxie to Argenta 2,000 tons gross. From Argenta to Pine Bluff the maximum rating of any engine is shown as 2,000 tons gross; from Pine Bluff to McGehee 2,400 tons gross; and from McGehee to Riverton, Louisiana 1,800 tons gross.

It is apparent that in traversing the route indicated above a so-called "trans-state" train would be reduced 300 tons at Hoxie, and even if allowed to run from Pine Bluff to McGehee without being increased to the maximum rating for that portion of the line would have to be reduced 200 tons at McGehee. It will be noted that when the train went south from McGehee into Louisiana it could carry as a maximum 500 tons less than it contained when it came into the State.

Traffic from Louisiana Points to Points in Other States via Little Rock and Any Line of the Iron Mountain to the Arkansas Border.

The maximum rating for any engine from Riverton, Louisiana to McGehee, Arkansas, is shown as 1,800 tons gross. If a train of this weight were allowed to run unbroken and without increase of

tonnage from McGehee to Pine Bluff (although the maxi-
5838 mum for that piece of road is 2,400 tons gross), assuming that 1,800 tons was the rating of the engine hauling the train when it reached Pine Bluff, its tonnage would have to be reduced to 1,550 tons, at Pine Bluff, unless a change of engines was effected at that point, and an engine of higher rating substituted. This procedure is improbable, however, as Pine Bluff is about the middle of a regular through freight division which extends from McGehee to Argenta.

A "trans-state" train coming into Arkansas from Oklahoma and beyond, destined beyond Texarkana via Argenta could not consist, according to the rating table, of more than 1,500 tons gross. This rating would apply as a maximum through Van Buren and as far south as Conway, from which latter point the rating to Argenta is given as 1,750 tons gross for an engine which could haul 1,500 tons to Conway. South of Argenta the maximum rating is given in the table as 1,600 tons gross. If no change were made in the train at Conway or Argenta the engine would not realize its full efficiency by 250 tons between Conway and Argenta, and by 100 tons between Argenta and Texarkana. On the other hand, if the tonnage were increased 250 tons at Conway it would have to be reduced 150 tons at Argenta.

"Trans-state Traffic to and from Memphis via Bald Knob.

Moving West from Memphis a train of trans-state freight reaching the main line at Bald Knob, and which if its engine had the highest tonnage rating on that line would carry out of Memphis 1,550 tons gross, would have to reduce at Levesque to 800 tons which rating would prevail as far as Crowley's from which point it would have to run light to Bald Knob or fill out at Crowley's to 1,550 tons the rating between Crowley's and Bald Knob.

Traffic moving in the opposite direction to that referred to in the preceding paragraph, would move under maximum tonnage rating of 1,550 tons from Bald Knob to Wynne, 800 tons from Wynne to Crowley's, and 1,550 tons from Crowley's to Memphis. Bald Knob to Memphis is one through freight division.

5839 Trans-state traffic coming into Arkansas via the White River division and destined to any point beyond the borders of Arkansas would be subjected to the following fluctuations in maximum engine rating between the Missouri-Arkansas State line and Newport on the main line. An engine could bring into Cotter from the North a maximum of 725 tons gross. (Cotter is the most Northerly terminal in Arkansas on the White River Division.)

From Cotter to Batesville the maximum rating for any engine is shown 1,400 tons gross and from Batesville to Newport the maximum rating of the same engine is but 700 tons gross.

From Cotter to Newport is one through freight division, and it is apparent that a "trans-state" train coming into Arkansas from the North on this division hauling the maximum tonnage of its engine as far as Cotter would either have to fill out 675 tons at Cotter or

run light that amount from Cotter to Batesville, and reduce 25 tons at the latter point to conform to the maximum rating between Batesville and Newport.

Fluctuation in Engine Tonnage Ratings Between the Termini of a Through Freight Division.

Such fluctuations occur on the White River Division at Batesville located between Cotter and Newport, the termini of a through freight division. It also occurs on the Central division at Conway, between Van Buren and Argenta, the termini of a through freight division. It also occurs at Pine Bluff, located between Argenta and McGehee, the termini of a through freight run on the Arkansas Division. It also occurs at Wynne, Levesque, and Crowley's all of which three points are located between Bald Knob and Memphis, the termini of a through freight run on the Memphis division.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5840 EXHIBIT "X."

5841 EXHIBIT "X."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

*Station Expenses—Freight.*

On the basis of the showing made by the St. Louis Southwestern Railway Company during the month of January, 1909 (Exhibit "A") 51.24% of the total interstate tonnage is trans-state tonnage. Deducting this proportion from the interstate tonnage for the six months ended December 31, 1907, leaves 389,039 tons of interstate freight. Assuming that this is the only interstate tonnage receiving station attention, the percentage on which the station expenses would be divided would be ascertained as follows:

| | | | |
|---|---|---|---|
| Intra-state tons ..... | 197,600 | | |
| Doubled, to represent two handlings. | 197,600 | | |
| | | 395,200 = | 50.39% |
| Interstate tons (excluding trans-state)..... | | 389,039 = | 49.61% |
| Total..... | | 784,239 = | 100.00% |

50.39% amounts to 17.27% more than the percentage (33.12% used in our Exhibit "Q," and this would represent a total increase in intrastate expenses as follows:

| | | |
|---|---|---|
| Transportation Expenses: | | |
| Station | $8,206.48 | |
| Supervision and General | 367.79 | |
| | | $8,574.27 |
| General Expenses | | 426.97 |
| Total | | $9,001.24 |

This amount, $9,001.24, deducted from net earnings of $119,-897.24, shown by Exhibit "V," would leave $110,896.00 as the net earnings on State business, after making the above allowance for trans-state freight, and without considering any extra station service for cotton, grain, and lumber, practically all of which is interstate. $110,896.00 equals an earning of 8.48% on the value of the property devoted to State business.

*Terminal Handling of Trans-state Freight.*

Conceding, for the sake of the argument, that a proportion of the trans-state cars on through trains do not receive as much terminal handling as we have assumed in Exhibit "R," and reducing the number of terminal handlings of cars in through service by 25% on that account, the result would be as follows:

| | | | |
|---|---|---|---|
| Cars handled for local trains | | 4,333 = | 15.86% |
| Cars handled for through trains | 30,639 | | |
| Less 25% | 7,660 | | |
| | | 22,979 = | 84.14% |
| Total | | 27,312 = | 100.00% |

5842 15.86% amounts to 3.47% more than the percentage (12.39%) used in Exhibit "Q," and this would represent an increase in local train expenses as follows:

| | | |
|---|---|---|
| Maintenance: | | |
| Yard Locomotives | $186.62 | |
| Supervision and General | 15.18 | |
| | | $201.80 |
| Transportation: | | |
| Yard and Terminal Expenses | $1,959.35 | |
| Supervision and General | 88.20 | |
| | | 2,047.55 |
| General Expenses | | 110.04 |
| Total | | $2,359.39 |

Of this increase, 30.93%, or $729.76 would be chargeable to State business. This amount deducted from the $110,896.00 of State earnings shown above, would leave net earnings of $110,166.24, or 8.42% on the value of property devoted to State business.

*Traffic Expenses.*

On the other hand, if traffic expenses were divided between State and Interstate business on a ton-mile basis, the State expenses would be decreased by $3,217.93, and the State earnings increased accordingly. This amount, added to the $110,166.24 of State earnings shown above, would make the State earnings $113,384.17, or 8.67% on the value of property devoted to State business.

*Maintenance of Way Expenses.*

If maintenance of way expenses had been apportioned on a gross-ton-mile basis instead of a car-mile basis, the amount chargeable to local service would have been 14.96% of the total expenses, instead of 17.78%, the percentage used in Exhibit "R." This decrease in percentage would have reduced local train expenses by $5,159.85, of which 30.93%, or $1,595.94, would be applicable to State business. This amount would increase the State earnings shown above to $114,980.11, or 8.79% on the value of property devoted to State business.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5843 EXHIBIT "Y."

5844 EXHIBIT "Y."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

*Station Expenses—Freight.*

On the basis of the showing made by the St. Louis, Iron Mountain & Southern Railway Company during the month of October, 1907 (Exhibit #26), 42.62% of the total interstate tonnage handled during that month was trans-state tonnage. Deducting this proportion from the interstate tonnage for the six months ended December 31, 1907, leaves 1,571,713 tons of interstate business. Assuming that this is the only interstate tonnage receiving station attention, the percentage on which the station expenses would be divided would be ascertained as follows:

| | | | |
|---|---|---|---|
| Intrastate tons | 684,122 | | |
| Doubled, to represent two handlings | 684,122 | | |
| | | 1,368,244 = | 46.54% |
| Interstate tons (excluding trans-state) | | 1,571,713 = | 53.46% |
| Total | | 2,939,957 = | 100.00% |

46.54% amounts to 13.23% more than the percentage (33.31%) used in our Exhibit "J," and this would represent a total increase in intrastate expenses as follows:

| | | |
|---|---|---|
| Transportation Expenses: | | |
| Station Expenses | $30,908.84 | |
| Supervision and General | 937.34 | |
| | | $31,846.18 |
| General Expenses | | 1,427.96 |
| Total | | $33,274.14 |

This amount, $33,274.14, deducted from net earnings of $349,-100.52, shown by Exhibit "O," would leave $315,826.38 as the net earnings on State business, after making the above allowance for trans-state freight, and without considering any extra station service for cotton, grain, and lumber, or for Memphis and Ft. Smith tonnage, practically all of which is interstate. $315,826.38 equals an earning of 6.96% on the value of property devoted to State business.

*Terminal Handling of Trans-state Freight.*

Conceding, for the sake of the argument, that a proportion of the trans-state cars on through trains do not receive as much terminal handling as we have assumed in Exhibit "K," and reducing the number of terminal handlings of cars in through service by
5845 25% on that account, the result would be as follows:

| | | | |
|---|---|---|---|
| Cars handled for local trains | | 32,232 = | 24.35% |
| Cars handled for through trains | 133,482 | | |
| Less 25% | 33,370 | | |
| | | 100,112 = | 75.65% |
| Total | | 132,344 = | 100.00% |

24.35% amounts to 4.89% more than the percentage (19.46%) used in Exhibit "J," and this would represent an increase in local train expenses as follows:

| | | |
|---|---|---|
| Maintenance: | | |
| Yard Locomotives | $3,380.74 | |
| Supervision and General | 315.48 | |
| | | $3,696.22 |
| Transportation: | | |
| Yard and Terminal Expenses | $14,344.69 | |
| Supervision and General | 436.19 | |
| | | 14,780.88 |
| General Expenses | | 832.97 |
| Total | | $19,310.07 |

Of this increase, 21.04%, or $4,062.84, would be chargeable to State business. This amount, deducted from the $315,826.38 of State earnings shown above, would leave net earnings of $311,763.54, or 6.87% on the value of property devoted to State business.

*Traffic Expenses.*

On the other hand, if traffic expenses were divided between State and Interstate business on a ton-mile basis, the State expenses would be decreased by $5,717.25, and the earnings increased accordingly. This amount, added to the $311,763.54 of State earnings shown above, would make the State earnings $317,480.79, or 6.99% on the value of property devoted to State business.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5846 EXHIBIT "Z."

5847-5856 EXHIBIT "Z."

State of Arkansas—Rate Matter.

*Comparison of Revenue and Expenses per Train Mile for the Years Ended June 30, 1897 and 1907, as Shown by the Interstate Commerce Commission Reports for Those Years.*

| | Per Train Mile. | | |
|---|---|---|---|
| | Operating Revenue. | Operating Expenses. | Net Revenue. |
| Entire United States: | | | |
| Year ended June 30, 1907 | $2.18 | $1.47 | $.71 |
| Year ended June 30, 1897 | 1.38 | .93 | .45 |
| Increase | $.80 | $.54 | $.26 |
| Percent of Increase | 58% | 58% | 58% |
| Group 8: | | | |
| Year ended June 30, 1907 | $2.07 | $1.35 | $.72 |
| Year ended June 30, 1897 | 1.31 | .92 | .39 |
| Increase | $.76 | $.43 | $.33 |
| Percent of Increase | 58% | 47% | 85% |
| St. Louis, Iron Mountain & Southern: | | | |
| Year ended June 30, 1907 | $2.17 | $1.36 | $.81 |
| Year ended June 30, 1897 | 1.45 | .97 | .48 |
| Increase | $.72 | $.39 | $.33 |
| Percent of Increase | 50% | 40% | 69% |
| St. Louis Southwestern: | | | |
| Year ended June 30, 1907 | $2.65 | $1.57 | $1.08 |
| Year ended June 30, 1897 | 1.55 | 1.14 | .41 |
| Increase | $1.10 | $.43 | $.67 |
| Percent of Increase | 71% | 38% | 163% |

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5857 EXHIBIT "E-1."

5858 EXHIBIT E-1.

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

*Statement Showing the Ton-miles and Percentages of Freight Taken up on the Company's Books and Records During the Month of October,* 1908, *and the Ton-miles and Percentages of Freight Actually Transported During that Month, as Shown by Exhibits* 19 *and* 20.

Taken up on Company's Books and Records.

| | Ton-miles. | Percentages. |
|---|---|---|
| Intrastate Freight | 1,372,093 | 4.525% |
| Interstate Freight | 28,952,919 | 95.475 |
| Total | 30,325,012 | 100.000% |

Actually Transported (See Exhibits #19 and 20).

| | | |
|---|---|---|
| Intrastate Freight | 1,381,303 | 4.534% |
| Interstate Freight | 29,087,265 | 95.466 |
| Total | 30,468,568 | 100.000% |

NOTE.—This shows a difference due to the "lap-over" at the beginning and end of the month of 9/1000 of one per cent.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5859 EXHIBIT "F-1."

5860 EXHIBIT "F-1."

State of Arkansas—Rate Matter.

*Freight and Passenger Statistics Compiled from the Report of the Interstate Commerce Commission, for the Entire United States, Group 8, St. Louis, Iron Mountain & Southern and St. Louis Southwestern Railway Companies, for the Period of Ten Years Ended June 30, 1907.*

| | Freight statistics. | | | | Passenger statistics. | | | |
|---|---|---|---|---|---|---|---|---|
| Year ended June 30.— | Tons carried one mile (millions). | Freight train mileage (millions). | Average train load (tons). | Average receipts per ton-mile (cents). | Passengers carried one mile (millions). | Passenger train mileage (millions). | Passengers per train mile. | Average receipts per passenger mile (cents). |
| Entire United States: | | | | | | | | |
| 1897 | 95,139 | 464 | 204 | .798 | 12,256 | 335 | 37 | 2.022 |
| 1898 | 114,077 | 503 | 226 | .753 | 13,379 | 334 | 39 | 1.973 |
| 1899 | 123,667 | 507 | 243 | .724 | 14,591 | 347 | 41 | 1.978 |
| 1900 | 141,596 | 492 | 270 | .729 | 16,038 | 363 | 41 | 2.003 |
| 1901 | 147,077 | 491 | 281 | .750 | 17,353 | 385 | 42 | 2.013 |
| 1902 | 157,289 | 499 | 296 | .757 | 19,689 | 405 | 45 | 1.986 |
| 1903 | 173,221 | 526 | 310 | .763 | 20,915 | 425 | 46 | 2.006 |
| 1904 | 174,522 | 535 | 307 | .780 | 21,923 | 440 | 46 | 2.006 |
| 1905 | 186,463 | 546 | 322 | .766 | 23,800 | 459 | 48 | 1.962 |
| 1906 | 215,877 | 594 | 344 | .748 | 25,167 | 479 | 49 | 2.003 |
| 1907 | 236,601 | 629 | 357 | .759 | 27,718 | 509 | 51 | 2.014 |
| Increase in ten years—per cent.... | 148.7% | 35.5% | 75% | *4.9% | 126.1% | 51.9% | 37.8% | *.4% |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Group 8: | | | | | | | | |
| 1897 | 6,333 | 41 | 151 | 1.079 | 652 | 24 | 26 | 2.315 |
| 1898 | 8,243 | 49 | 166 | .961 | 811 | 26 | 31 | 2.218 |
| 1899 | 8,080 | 47 | 170 | .968 | 892 | 27 | 33 | 2.217 |
| 1900 | 9,170 | 45 | 186 | .964 | 1,018 | 28 | 31 | 2.240 |
| 1901 | 10,604 | 46 | 213 | .971 | 1,183 | 31 | 34 | 2.260 |
| 1902 | 11,426 | 49 | 216 | .978 | 1,403 | 33 | 37 | 2.236 |
| 1903 | 12,541 | 50 | 229 | .962 | 1,476 | 36 | 36 | 2.232 |
| 1904 | 12,985 | 52 | 229 | .998 | 1,648 | 39 | 37 | 2.263 |
| 1905 | 13,133 | 53 | 228 | .988 | 2,006 | 44 | 41 | 2.108 |
| 1906 | 15,589 | 58 | 246 | .947 | 2,076 | 45 | 41 | 2.213 |
| 1907 | 17,406 | 61 | 265 | .966 | 2,295 | 49 | 42 | 2.291 |
| Increase in ten years—per cent | 174.8% | 46.7% | 75.3% | *10.5% | 252% | 100.7% | 61.5% | *1% |
| St. Louis, Iron Mountain & Southern: | | | | | | | | |
| 1897 | 1,007 | 4.7 | 213 | .818 | 76.5 | 2.8 | 27 | 2.374 |
| 1907 | 2,408 | 6.4 | 374 | .733 | 194.5 | 4.8 | 39 | 2.419 |
| Increase in ten years—per cent | 139.1% | 36.2% | 75.6% | *10.4% | 154.2% | 71.4% | 44.4% | 1.9% |
| St. Louis Southwestern: | | | | | | | | |
| 1897 | 245 | 1.2 | 203 | .972 | 17.9 | .7 | 26 | 2.301 |
| 1907 | 532 | 1.4 | 373 | .979 | 48.8 | 1.2 | 41 | 2.320 |
| Increase in ten years—per-cent | 117.1% | 14.3% | 83.7% | .7% | 172.6% | 71.4% | 57.7% | .8% |

* These percentages represent decreases. [In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5861 EXHIBIT "G-1."

5862 EXHIBIT "G-1."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

*Cost and Net Earnings of Intrastate Freight Business in Arkansas for the Six Months Ended December 31, 1907, Using the Basis Outlined by Judge Farrington in the Case of Southern Pacific Company vs. Bartine et al.* (170 *Federal Reporter*, 725).

Basis Outlined by Judge Farrington.

| Class of freight. | Ton miles. | Percentage used for all expenses except transportation (straight ton mile basis). | Percentage used for transportation expenses (state costing three times as much as interstate). |
|---|---|---|---|
| Intrastate | 47,860,299 | 7.25% | 19.00% |
| Interstate | 612,303,696 | 92.75 | 81.00 |
| Total | 660,163,995 | 100.00% | 100.00% |

Cost of Intrastate Freight.

| | All freight. | | | Intrastate freight. |
|---|---|---|---|---|
| Transportation Expenses | $1,576,064.30 | × | 19.00% = | $299,452.22 |
| Maintenance of Way | $553,395.11 | | | |
| Maintenance of Equipment | 723,431.33 | | | |
| Traffic Expenses | 88,734.42 | | | |
| General Expenses | 132,218.24 | | | |
| | 1,497,779.10 | × | 7.25% = | 108,588.98 |
| Total | $3,073,843.40 | | | $408,041.20 |

| | |
|---|---|
| Taxes, Rentals, and Hire of Equipment (See our Exhibit in this case) | 48,037.53 |
| Total Cost of Intrastate Freight | $456,078.73 |
| Total Revenue from Intrastate Freight | 656,717.58 |
| Net Earnings—Intrastate Freight | $200,638.85 |
| Net Earnings—Intrastate Passenger | 134,069.22 |
| Total Net Intrastate Earnings (7.37% on Value of Property) | $334,708.07 |

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5863 EXHIBIT "H–1."

5864 EXHIBIT "H–1."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

*Cost and Net Earnings of Intrastate Freight Business in Arkansas for the Six Months Ended December* 31, 1907, *Using the Basis Outlined by Judge Farrington in the Case of Southern Pacific Company vs. Bartine et al.* (170 *Federal Reporter,* 725).

| Class of freight. | Ton miles. | Percentage used for all expenses except transportation (straight ton mile basis). | Percentage used for transportation expenses (state costing three times as much as interstate). |
|---|---|---|---|
| Basis Outlined by Judge Farrington. | | | |
| Intrastate | 8,512,807 | 4.40% | 12.13% |
| Interstate | 184,831,455 | 95.60 | 87.87 |
| Total | 193,344,262 | 100.00% | 100.00% |

Cost of Intrastate Freight.

| | | All freight. | | Intrastate freight. |
|---|---|---|---|---|
| Transportation Expenses | | $387,821.21 | x 12.13% = | $47,042.71 |
| Maintenance of Way | $174,232.35 | | | |
| Maintenance of Equipment | 260,243.81 | | | |
| Traffic Expenses | 59,812.88 | | | |
| General Expenses | 44,017.99 | | | |
| | | 538,307.03 | x 4.40% = | 23,685.51 |
| Total | | $926,128.24 | | $70,728.22 |

| | |
|---|---|
| Taxes, Rentals, and Hire of Equipment (See our Exhibit in this case) | *52.23 |
| Total Cost of Intrastate Freight | $70,675.99 |
| Total Revenue from Intrastate Freight | 175,515.42 |
| Net Earnings—Intrastate Freight | $104,839.43 |
| Net Earnings—Intrastate Passenger | 44,607.94 |
| Total Net Intrastate Earnings (11.42% on Value of Property) | $149,447.37 |

[* In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

2865 EXHIBIT "I–1."

5866 EXHIBIT "I-1."

Def't's Exhibit I-1. T. F. Wharton, 6/22/10.

In the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas.

In Chancery.

WILBUR F. BOYLE, Complainant,
vs.
ST. LOUIS AND SAN FRANCISCO RAILROAD COMPANY and R. P. Allen, John Crockett, and J. E. Hampton, Railroad Commissioners of the State of Arkansas, and W. W. Dickinson and T. H. Bunch, Defendants.

*Affidavit of E. K. Voorhees.*

CITY OF ST. LOUIS,
*State of Missouri, ss:*

E. K. Voorhees, of lawful age, being first duly sworn on oath, deposes and says he resides at St. Louis, Mo., and that his occupation is that of general freight agent of the St. Louis and San Francisco Railroad Company, one of the defendants in the foregoing entitled case and that he has filled such position since July 1, 1904, and that his duties and employment as said general freight agent are to have general charge of the freight business of said railroad company under the supervision of the freight traffic manager of said railroad company and that prior to occupying such position he was in the service of said railroad company or of railroad companies owning and operating railroads which are now leased and operated by said defendant railroad company in the capacity of assistant general freight agent, commercial agent and local freight agent, for a period of about fifteen years and prior to that time he was in the service of said other railroad company or companies in the station service thereof for about six years.

Affiant states that he is acquainted now and has been for many years last past with the conditions existing upon the lines of railroads of said railroad company in the State of Arkansas, with reference to the transportation of freight, and the rates and earnings therefrom and the conditions surrounding such transportation, within the State of Arkansas.

Affiant states that in the early part of September 1908, he was directed and instructed by the freight traffic manager of said railroad company to prepare and submit a schedule of freight rates to be applied on the lines of said railroad company within the State of Arkansas to take the place of the Standard Freight Distance Tariff No. 3 of the Railroad Commission of Arkansas, the defendant rail-

road company having been enjoined in the Federal Courts from continuing the use of said Distance Tariff No. 3.

5867 Affiant further states that in the preparation of such tariff he took into consideration the rates in effect in other states where transportation conditions were somewhat similar to those existing in the State of Arkansas and also gave due consideration to the rates operated on interstate traffic to and from and through the State of Arkansas and other states similarly located, and further gave consideration to all other elements usually entering into the fixing of freight rates to the end that the schedule so prepared might contain rates which were reasonable, not alone from the standpoint of the carrier, but would be reasonable from the standpoint of the public and would not discriminate for nor against the citizens of the State of Arkansas nor the citizens of other states.

Affiant further states that he was directed and instructed to cooperate with the officials of other Arkansas railroads and to discuss and consider with them, in conference the schedule of rates which should be operated within the State of Arkansas in lieu of the said Standard Freight Distance Tariff No. 3.

Affiant states that early in September, 1908, he met representatives of the freight traffic departments of other railroads operating in the said State, in conference, and that said conference remained in session about fifteen days, and as a result the representative of each line recommended to his company the adoption of a schedule of charges to apply within the State of Arkansas in place of the said Standard Freight Distance Tariff No. 3.

Affiant states that the chief traffic officers of the lines named gave careful consideration to the schedule that was recommended and that before any schedule was adopted and published by the several lines conferences were held with a large number of Arkansas shippers who would be affected by the changes in rates, also with the Railroad Commission of Arkansas and that all objections which were offered by said shippers and receivers or the Railroad Commission of Arkansas were given due and proper consideration and a number of modifications were made in the rates first recommended before they were finally made effective by the several railroad companies, on November 2, 1908.

Affiant states that the representatives of the several lines discussed and considered the relations which should exist between the several class rates and after much study and comparison with the rates in other states and with the class rates applied on interstate traffic in various portions of the territory west of the Mississippi River and other elements affecting the fixing of class rates, it was decided to recommend that the various classes should bear the following relation each to the other:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E Classes. |
|---|---|---|---|---|---|---|---|---|---|
| 100 | 83⅓ | 66⅔ | 50 | 40 | 45 | 36 | 30 | 25 | 20 Per cent. |

Affiant repeats that this decision was reached only after full discussion by the representatives of the several lines and that

5868 such recommendation was adopted by the chief traffic officers of the several railroad companies only after careful consid-

eration and the affiant says that the relation of the class rates resulting from the application of this principle is fair and reasonable and just as applied to the traffic within the State of Arkansas.

Affiant says that in determining the class rates which should be embodied in its recommendation representatives of the several railroads gave careful consideration to the interstate rates applying to, from and through the State of Arkansas and in other localities and also to the class rates in effect in other states. It was found that the class rates applicable from Memphis, Tennessee, to Little Rock, Arkansas, distance of about 135 miles, were:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 70 | 60 | 45 | 36 | 27 | 29 | 22 | 18 | 15 | 12 |

The rates established by the carriers to apply within the State of Arkansas for similar distance are:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 70 | 58 | 47 | 35 | 28 | 32 | 25 | 21 | 18 | 14 |

The rates from Memphis to Fort Smith, distance of about 302 miles, were found to be:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 102 | 87 | 67 | 49 | 40 | 42 | 35 | 30 | 28 | 23 |

The rates established by the various Arkansas railroads to apply on state traffic for similar distance, 310 miles and over 300 miles are:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 101 | 84 | 67 | 51 | 40 | 45 | 35 | 30 | 25 | 20 |

The rates from St. Louis, Missouri, to Little Rock, Arkansas, a distance of 345 miles, were found to be:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 100 | 85 | 65 | 49 | 37 | 39 | 32 | 27 | 23 | 18 |

Tariffs established by the various Arkansas railroads to apply on Arkansas state traffic are, for similar distance, 350 miles and over 345 miles:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 105 | 88 | 70 | 53 | 42 | 47 | 37 | 32 | 26 | 21 |

and that these examples illustrate the fact that the class rates recommended by the said representatives of the several lines approximate the rates which are applicable between interstate points and points within the State of Arkansas. There are very few instances in which the rates for the same distances interstate to, from and through Arkansas are materially lower than the rates now charged by the rail-

roads within the State of Arkansas, and there are numerous cases where such interstate rates are higher than the rates within the State of Arkansas. For instances: Memphis to Eldorado, Arkansas, distance 264 miles, the rates are:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 110 | 93 | 78 | 59 | 43 | 46 | 38 | 30 | 26 | 22 |

The rates for the same distance within the State of Arkansas are:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 96 | 80 | 64 | 48 | 38 | 43 | 34 | 29 | 24 | 19 |

5869–5956 Memphis, Tennessee, to Texarkana, Arkansas, distance 291 miles, the rates are:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 117 | 105 | 96 | 79 | 60 | 62 | 50 | 42 | 36 | 29 |

Rates for same distance within the State of Arkansas are:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 100 | 83 | 67 | 50 | 40 | 45 | 35 | 30 | 25 | 20 |

Affiant states that the representatives of the several lines give careful consideration to the large number of special commodity rates shown in Standard Freight Distance Tariff No. 3 applicable on shipments of various commodities in less than carload quantities and the decision was reached that the tariff should not include special commodity rates on less than carload shipments of any articles, it being found on investigation and study that in other states similarly situated commodity rates were not usually applied on less than carload shipments but the classification ratings were used and the same thing is true with respect to the rates on interstate traffic, except that, during the period when the Standard Freight Distance Tariff No. 3 was in effect and which provides for special low rates on certain commodities in less than carload quantities, the carriers were obliged, in order to avoid discrimination against interstate shipments, to provide in interstate tariffs for commodity rates bearing a proper relation to the commodity rates established by the Railroad Commission of Arkansas applicable from the borders of the state to points within the state. The representatives of the several railroads therefore concluded that the application of any principle of classification different from the Western Classification between points in Arkansas would result in discriminations and was indefensible. This principle of applying class rates in preference to commodity rates on all shipments excepting heavy and bulky articles in carload lots is the practice in vogue in other surrounding states also on interstate shipments and is supported by many rulings of the Interstate Commerce Commission and by numerous text writers on the subject.

* * * * * * *

5957 The following opinion of Court was delivered and filed in the cause:

In the United States Circuit Court for the Western Division of the Eastern District of Arkansas.

No. 1637.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY and ST. LOUIS, IRON MOUNTAIN AND SOUTHERN RAILWAY COMPANY, Complainant-,
vs.
ROBERT P. ALLEN, et als.

Moore, Smith and Moore for Complainant-.
Joseph M. Hill and James H. Harrod for Defendants.

*Opinion of Court.*

5958 Published in 187 Fed. page 290.

*Opinion*

May 3, 1911.

Hon. JACOB TRIEBER, *Judge.*

The St. Louis, Iron Mountain & Southern Railway Co., which will be referred to herein as the Iron Mountain Railway, and the St. Louis Southwestern Railway Co., referred to as the Southwestern Railway Co., instituted these proceedings against the Board of Railroad Commissioners of the State of Arkansas to enjoin the enforcement of the freight and passenger tariffs promulgated by that board in pursuance of the powers delegated to it by the laws of the State of Arkansas. The grounds upon which the relief is sought are that the rates which apply solely to intrastate traffic are non-compensatory and confiscatory when applied to the entire intrastate business of each of the companies. A preliminary injunction was granted in 1908 by Mr. Justice Van Devanter, then one of the Circuit Judges of this circuit. His opinion is reported in 163 Fed. 141. In 1909 the temporary injunction was modified by this Court, 168 Fed. 720. The pleadings were perfected and a large volume of testimony taken by the parties. At the urgent request of counsel for all parties the services of a master to make findings of facts and state his conclusions of law were dispensed with, notwithstand-
5959 ing what was said in Chicago, Minneapolis & St. Paul Ry. v. Tompkins, 176 U. S. 167, and the cause heard by the Court upon the pleadings and proofs.

It is thought best that at the threshold of these cases the most important principles of law applicable to cases of this nature should be stated; these are rules of law which have been so frequently determined by the highest court of the land that they may now be properly regarded as elementary, and for this reason it will be sufficient

to merely state them without unduly lengthening this opinion with a long list of citations to sustain them.

(*a*) A State has the power to establish rates to be charged by common carriers for the exclusive intra-state carriage of freight and passengers, and this may be done by direct action of the law-making department or a commission to whom that department of the government has by law delegated it.

(*b*) The rates thus established must be reasonable and fair to the carriers as well as the public. The State may not make rates so as to confiscate the carrier's property; nor can the carrier make rates which are oppressive to those who by necessity are compelled to employ its services. Whether they are so or not is a question for judicial investigation and determination.

(*c*) Presumptively, rates thus established by authority are reasonable and just, and the burden of proof to show the contrary is upon the party attacking them.

(*d*) To justify courts to set aside rates thus established it is incumbent upon the carriers to prove by evidence which is clear, unequivocal and convincing and leaves the Court reasonably free from doubt that they are unjust, that they amount to a taking of property without just compensation and that to make them compen-
5960 satory the rates would not have to be so high as to make them oppressive to the public.

(*e*) The rights of carriers and the public are reciprocal. The carrier is entitled to ask a fair return upon the value of its property which it employs for the public convenience, and the public is entitled to demand that no more be exacted from it for the use of the public highway than the services rendered are reasonably worth, and not be oppressive.

Before passing upon the evidence and the law arising therefrom there are some other important rules of law raised by counsel for both parties which should be determined at this time, for some of them, if sustained, would relieve the Court of the necessity of examining the voluminous evidence in these cases, and others will, to a great extent, control the final conclusions to be drawn from the evidence.

*Interference with Interstate Commerce.*

It is claimed that as the rates prescribed for intrastate business, freight as well as passenger, necessarily affect interstate rates, such acts of the States, whether by direct legislation or through a commission clothed with such power, although limited by the provisions of the statute to intrastate business exclusively, are a burden upon interstate commerce and therefore violative of the commerce clause of the National Constitution.

That intrastate tariffs bear certain relations to, and to some extent control interstate rates cannot be doubted. The evidence in this case establishes that fact conclusively, and even in the
5961 absence of such evidence the Court would be justified to take judicial notice of it. No better illustration is needed than the facts and conclusions of law in Gulf C. & S. F. Ry. Co. v. Texas,

204 U. S. 403, 413. And this seems to be the rule adopted by the Interstate Commerce Commission since the decision in the Gulf R. R. case. Ambrey Semple v. Galveston, Etc., Ry. Co., 17 I. C. C. 267, and Rule 56-B of Administrative Rules. Although the Texas case was one involving freight only, the same principle applies to passenger rates. In fact, it is more apparent in the latter than in the former. Even in the absence of a rule to that effect by the Interstate Commerce Commission or of decisions of the courts. If the States of Arkansas, Texas and Missouri each enact a two-cent rate fare it would be folly for a carrier to attempt to charge a higher rate for interstate or trans-state passengers in those States, for passengers would purchase tickets to the State line of each State at the reduced local rates and thus defeat the higher interstate rates, although the State rates are by the statutes of these State limited to intrastate transportation solely. As stated by Mr. Justice Brewer in his opinion in Gulf C. & S. F. Ry. Co. v. Texas:

"In this respect there is no difference between an interstate passenger and interstate transportation. If Hardin, for instance, had purchased at Hudson an interstate ticket for Texarkana, intending all the while after he reached Texarkana to go on to Goldthwaite, he would not be entitled on his arrival at Texarkana to a new ticket from Texarkana to Goldthwaite at the proportionate fraction of the rate prescribed by the Interstate Commerce Commission for carriage from Hudson to Goldthwaite. The one contract of the rail-
5962 road company having been finished he must make a new contract for his carriage to Goldthwaite, and that would be subject to the laws of the State within which that carriage was to be made."

Nor does the intention of the shipper or passenger to avoid the higher interstate rates by the purchase of tickets or shipments at the lower interstate rates change the rule of law. On that point Mr. Justice Brewer in the Gulf case answered negatively the question thus propounded:

"If the only contract of shipment was for local transportation would the State law in respect to the mode of transportation be set one side by the Federal law in respect to interstate transportation on the ground that the shipper intended after the one contract of shipment had been completed, to forward the goods to some place outside the State?"

But does the fact that these intrastate rates bear such relation to interstate rates necessarily make the statutes of a State regulating charges for intrastate transportation by carriers engaged in interstate as well as intrastate commerce void? No authorities directly sustaining this claim have been cited to the Court, although the cases in which statutes of this nature have been attacked are numerous. The only cases cited are those holding in general terms that State statutes which amount to some regulation of foreign or interstate commerce, or which directly or by their necessary operation, burden interstate commerce are invalid as violative of the commerce clause of the National Constitution. On the other hand Mr. Justice
5963 Brewer in Ames v. Union Pacific Ry Co., 64 Fed. 165, 172, affirmed sub nominee Smyth v. Ames, 169 U. S. 466, expressly held:

"Neither can I understand how the reduction of local rates, as a matter of law, interferes with interstate rates. It is true the companies may, for their own convenience to secure business, or for any other reason, rearrange their interstate rates and make them conform to the local rates prescribed by the statute, but surely there is no legal compulsion. The statute of the State does not work a change in interstate rates any more than an act of Congress prescribing interstate rates will legally work a change in local rates. Railroad companies cannot plead their own convenience or the effects of competition between themselves and other companies in restraint of the otherwise undeniable power of the State."

Louisville & Nashville Ry. Co v. Eubank, 184 U. S. 27, cited for complainants, is not in point, as all that was decided in that case was that a State cannot compel carriers to adjust their intrastate rates with reference to their interstate rates.

But it is urged that in the Ames case the evidence failed to show the effect of the State rates on interstate rates, while in the cases at bar that fact is fully established. In Peik v. Chicago, etc., Ry. Co, 94 U. S. 164, 177, Mr Chief Justice Waite speaking for the Court on a contention of this nature said:

"As to the effect of the statute as a regulation of interstate commerce. The law is confined to State commerce or such interstate commerce as directly affects the people of Wisconsin. Until Congress acts in reference to the relations of this company to interstate commerce, it is certainly within the power of Wisconsin to regu-
5964 late its fares, etc., so far as they are of domestic concern. With the people of Wisconsin this company has domestic relations. Incidentally these may reach beyond the State. But certainly until Congress undertakes to legislate for those who are without the State, Wisconsin may provide for those within, even though it may indirectly affect those without."

While that part of the opinion which holds that a State may regulate such "interstate business as affects the people of Wisconsin" has been severely criticised if not overruled by later decisions, that part applying to the intrastate traffic has never been questioned and has been repeatedly followed. But, treating the question as one never before authoritatively determined, the conclusion of the Court, upon well-settled principles of elementary law, is that this contention of complainants cannot be sustained. The right of every sovereign State to regulate public service corporations and the rates to be charged by them, subject to the provisions of the fourteenth amendment prohibiting deprivation of one's property without due process of law and other provisions of the National Constitution, rests upon the police powers, which "are nothing more or less than the powers of government inherent in every sovereignty." License Cases, 5 How. 583; Reagan v. Farmers Loan & Trust Co., 154 U. S. 362, 393; Smythe v. Ames, 169 U. S. 466, 521.

While, generally speaking, the police power of a State is said to extend to the protection of "the public health, the public morals, and the public safety," the law does not recognize those as the extent

of the power, but, as stated by Mr. Justice Harlan in Chicago
5965 B. & Q. Ry. Co. v. Drainage Commissioners, 200 U. S. 561, 592:

"We hold that the police power of a State embraces regulations designed to promote the public convenience and the general prosperity, as well as the regulations designed to promote the public health, the public morals or the public safety."

In Lake Shore, Etc., Ry. Co. v. Ohio, 173 U. S. 285, the same learned Justice after reviewing the previous decisions of that Court, states the conclusions of the Court in the following language:

"Now it is evident that these cases (referring to the cases cited in the opinion) had no reference to the health, morals, or safety of the people of the State, but only to the public convenience. They recognized the fundamental principle that, outside of the field directly occupied by the general government under the powers granted to it by the Constitution, all questions arising within a State that relate to its internal order or that involve the public convenience or the general good, are primarily for the determination of the State, and that its legislative enactments relating to these subjects, and which are not inconsistent with the State Constitution are to be respected and enforced in the courts of the Union if they do not by their operation directly entrench upon the authority of the United States or violate some right protected by the National Constitution. The power here referred to is, to use the words of Chief Justice Shaw, the power 'to make, ordain and establish all manner of wholesome and reasonable laws, statutes and ordinances, either with penalties or without, not repugnant to the Constitution, as they shall judge to be for the good and wel-
5966 fare of the commonwealth and of the subjects of the same.' Commonwealth v. Alger, 7 Cush. 53, 85. * * * It may be that such legislation is not within the 'police power' of a State as those words have been sometimes, although inaccurately, used, but in our opinion, the power, whether called police, governmental or legislative, exists in each State, by appropriate enactments not forbidden by its own Constitution or by the Constitution of the United States, to regulate the relative rights and duties of all persons and corporations within its jurisdiction, and therefore to provide for the public convenience and the public good. This power in the States is entirely distinct from any power granted to the general government, although when exercised it may sometimes reach subjects over which national legislation can be constitutionally extended."

In Noble State Bank v. Haskell, decided January 3, 1911, and not yet reported, involving a banking law providing for a guaranty fund to secure depositors, Mr. Justice Holmes in speaking of the police power said:

"It may be said in a general way that the police power extends to all the great public needs. It may be put forth in aid of what is sanctioned by usage or held by the prevailing morality or strong and preponderate opinion to be greatly and immediately necessary to the public welfare."

Among other cases in which the same rule is recognized the following may be appropriately referred to. Canfield v. United States,

167 U. S. 518, 525; Chicago, Etc., R. R. Co. v. Nebraska, 170 U. S. 57, 73; Lake Shore, Etc., Ry. Co. v. Smith, 173 U. S. 684, 689; Bacon v. Walker, 204 U. S. 311, 318; Western Union Tel. Co. v. Milling Co., 218 U. S. 406.

5967 Professor Stimson of Harvard University in his able work on "Popular Law-making" says on that subject on page 164:

"Some writers endeavor to justify, under our Constitution, the regulation of rates by the principle of eminent domain; but this source seems far-fetched and unnecessary. It is, of course, done under the police power, but the precedent for that use of the police power is to be found in the history of English law and statutes. Thus we have noted in the Statute of Westminster I. A. D. 1275, that excessive toll contrary to the common custom of the realm was forbidden in market towns. The very phraseology of this statute indicates the antiquity of the doctrine that tolls must be reasonable; but toll was always a technical term, not for ordinary prices of commodities, but for a use or service which was in some way dependent upon law or ordinance."

The same views are expressed in 3 Thompson on Corporations, Sec. 2950, et seq., and Freund on Police Power, Sec. 377.

It has been held by eminent authority that the police power is founded upon that maxim of public policy, salus populi suprema lex.

Chief Justice Shaw in Commonwealth v. Alger, 7 Cush. 53, 85, after holding that certain powers are not exercised under the right of eminent domain, but the police power, says:

"The power we allude to is the police power, the power vested in the Legislature by the Constitution, to make, ordain and establish all manner of wholesome and reasonable laws, statutes and ordinances, either with penalties or without, not repugnant to the

5968 Constitution, as they shall judge to be for the good and welfare of the commonwealth, and of the subjects of the same."

The leading case on the subject of the State's power to regulate rates of corporations engaged in the management of public utilities is Munn v. Illinois, 94 U. S. 113, 125. Mr. Chief Justice Waite in his opinion in that case, after carefully reviewing the English as well as American authorities on that subject and referring to the police power as authority for such legislation, epitomizes his conclusions as follows:

"But we need not go further. Enough has already been said to show that when private property is devoted to public use it is subject to public regulation."

In Sands v. Manistee River Imp. Co. 123 U. S. 295 (8 S. Ct. 113, 30 L. Ed. 149), Mr. Justice Field, delivering the unanimous opinion of the Court, said on that subject:

"The internal commerce of a State—that is, the commerce which is wholly confined within its limits—is as much under its control as foreign or interstate commerce is under the control of the general government."

Mr. Justice Bradley, who concurred in the judgment in the Munn case, in his dissenting opinion in the Sinking Fund Cases, 99 U. S. 700, 747, explains the issue involved therein by saying:

"The inquiry there was as to the extent of the police power in cases where the public interest is affected."

If then the power to regulate carriers' rates rests upon the
5969 police power which, under the decisions cited is in fact co-extensive with the governmental power of the State, it requires no extended argument to prove that a regulation or statute of a state enacted under that power is not void because it incidentally affects the commerce clause or any other provision of the National Constitution, especially if it is not in conflict with any act of Congress on that subject or when Congress has not seen proper to act upon that subject. In the Legal Tender Cases, 12 Wall. 457, 551, it was claimed that a statute making depreciated currency a legal tender for the payment of debts previously contracted was in conflict with the spirit of the fifth amendment to the Constitution, but the Court in overruling that contention said:

"That provision has always been understood as referring only to a direct appropriation and not to consequential injuries resulting from the exercise of lawful power. It has never been supposed to have any bearing upon or to inhibit laws that indirectly work harm and loss to individuals. A new tariff, an embargo, a draft or a war may inevitably bring upon individuals great loss, may, indeed, render property almost valueless and may destroy the worth of contracts, but whoever supposed that because of this a tariff could not be changed or a non-intercourse act or an embargo be enacted or a war be declared?"

In Sherlock v. Alling, 93 U. S. 99, 103, it was held:

"In conferring upon Congress the regulation of commerce, it was never intended to cut the States off from legislating on all subjects relating to the health, life and safety of their citizens, though the legislation might indirectly affect the commerce of the country.

Legislation, in a great variety of ways, may affect commerce
5970 and persons engaged in it without constituting a regulation of it, within the meaning of the Constitution. * * * And it may be said generally, that the legislation of a State, not directed against commerce or any of its regulations, but relating to the rights, duties and liabilities of citizens and only indirectly and remotely affecting the operations of commerce, is of obligatory force upon citizens within its territorial jurisdiction, whether on land or water, or engaged in commerce, foreign or interstate, or any other pursuit."

In Hennington v. Georgia, 163 U. S., 299, 317, a statute of the State of Georgia prohibiting the running of freight trains on Sundays was attacked as an interference with interstate freight trains but it was upheld as a proper exercise of the police power of the State, although incidentally affecting interstate commerce. The Court, after reviewing the authorities on the subject, held:

"These authorities make it clear that the legislative enactments of the State passed under the admitted police powers, and having a real relation to the domestic peace, order, health and safety of their people, but which, by their necessary operation, affect to some extent, or for a limited time, the conduct of commerce among the

States, are yet not invalid by force alone of the grant of power to Congress to regulate such commerce, and if not obnoxious to some other constitutional provision, or destructive to some right secured by the fundamental law, are to be respected in the courts of the Union until they are superseded and displaced by some act of Congress passed in execution of the power granted to it by the Constitution."

5971 Other cases in which the same principle of law is recognized are Railroad Co. v. Fuller, 17 Wall. 560; Escanada Company v. Chicago, 107 U. S. 678, 687; Stone v. Mississippi, 111 U. S. 746, 751; Beer Company v. Massachusetts, 97 U. S. 25, 32; Railroad Commission Cases, 116 U. S. 307, 325; Mugler v. Kansas, 123 U. S. 623, 667; Plumley v. Massachusetts, 155 U. S. 461, 472; Kidd v. Pearson, 128 U. S. 1, 20; Greer v. Connecticut, 161 U. S. 519, 534; Smith v. Alabama, 124 U. S. 465, 480; N. Y. N. H. & H. R. R. Co. v. New York, 165 U. S. 628, 631; Potapso Guano Co. v. North Carolina Board, 171 U. S. 345, 350; Erb v. Morash, 177 U. S. 584; Gladson v. Minnesota, 166 U. S. 427, 430; Pennsylvania Railway Co. v. Hughes, 191 U. S. 477, 488; Crossman v. Lurman, 192 U. S. 189, 196; Austin v. Tennessee, 197 U. S. 343, 349; Pabst Brewing Co. v. Crenshaw, 198 U. S. 17, 26; McLean v. Denver & Rio Grande R. R. Co., 203 U. S. 38, 50; Hudson Water Co. v. McCarter, 209 U. S. 349, 357; Chicago, R. I. & Pacific Ry. Co. v. Arkansas, — U. S. — decided February 20, 1911, and not yet reported; Duluth Brewing & Malt Co. v. City of Superior, 123 Fed. 357, 59 C. C. A. 481, 485; Logan & Bryan v. Postal Telegraph Co. (C. C.), 157 Fed. 570.

In Covington, Etc., Bridge Co. v. Kentucky, 154 U. S. 204, 209, 210 (14 S. Ct. 1087, 38 L. Ed. 962), it was held that the class of commerce in which the power of the State is exclusive is that

"which concerns the strictly internal commerce of the State, and while the regulations of the State may affect interstate commerce indirectly, their bearing on it is so remote that it cannot be termed in any just sense an interference. * * * Congress has no power to interfere with police regulations relating exclusively to the internal trade of the States."

5972 Another matter not to be overlooked is if the State is without the power to regulate purely intrastate transportation because it affects interstate traffic indirectly, where is it vested? Congress is clearly without power to do so, and of course it cannot delegate to a commission a power it does not itself possess. In Gibbons v. Ogden, 9 Wheat. 195, the leading case on that subject, the rule of law, which has never been questioned since but always followed, was settled that the power committed to Congress by the Constitution does not extend to commerce wholly within the State. In the language of Chief Justice Marshall, "The enumeration presupposes something not enumerated, and that something, if we regard the language or the subject of the sentence, must be the exclusively internal commerce of a State.

"There can be but one rate, fixed by one authority, whether that

authority be the State or Congress." Hanley v. Kansas City Southern Ry. Co., 187 U. S. 617, 620. If complainants' contention is correct, transportation companies, so far as the exclusively internal commerce of a State is concerned, are beyond all control, either from the State or National Government, for as determined in Gibbons v. Ogden, supra, the Constitution excluded that class of commerce from the powers vested in Congress by the commerce clause, and as all State rates indirectly affect interstate rates they are, if complainants' contention is right, also void.

The result of such a construction would be that the States do not possess one of the most important powers inherent in every government. The adoption of such a construction by the courts would be justifiable only if any other would do violence to a plain provision of the National Constitution or principles of law so firmly
5973 established by previous decisions of the highest court of the land that there is no longer room for construction. In the language of Mr. Justice Peckham in Addyston Pipe & Steel Co. v. United States, 175 U. S. 211, 231:

"If neither Congress nor the State Legislatures have such power then we are brought to the somewhat extraordinary position that there is no authority, State or National, which can legislate upon that subject or prohibit such contracts. This cannot be the case."

Since preparing this part of the opinion that of Judge Sanborn, the senior Circuit Judge of this circuit, in Shepard v. Northern Pacific Ry. Co., 184 Fed. 765, has been received and carefully considered. The great learning of that eminent jurist entitles every opinion of his to the very highest consideration, and if not conclusive on this Court is certainly very persuasive. A careful examination of the facts found in that case by the Master and the Court shows that they differ very materially from those established by the evidence in these cases. How necessary it is to determine questions of that nature upon the particular facts of each case is thus pointed out by that learned Judge in his opinion:

"The reduction of local rates does not interfere with interstate rates 'as a matter of law,' yet it may do so as a matter of fact. Whether or not the general and sweeping reductions in local rates in Minnesota necessarily interfere with interstate rates and interstate commerce is in this case, as it must be in every case, a question of fact. The facts which determine that question in this case
5974 have been set forth in this opinion at great length, because it is upon them, and not upon legal inferences, that the answer to the question, whether or not the effect of the necessary operation of the acts and orders challenged is substantially to burden interstate commerce, now rests. Those facts are that it was not for 'their own convenience,' but at great inconvenience and loss, not on account of the 'effect of competition between themselves and other companies,' but because these acts and orders, the prohibition of discrimination between localities by the interstate commerce act and the laws of trade, forced them to do so, that the defendants reduced their interstate commerce rates to a parity with the local rates and submitted to the loss of interstate revenue this action entailed."

The schedule of rates adopted by the Minnesota State Commission as stated in that opinion, was such "that each rate for each class for any distance bore such an exact relation to each other rate that given one rate out of the schedule any other rate could be ascertained by mathematical calculation and without reference to the schedule itself."

It was also shown that a number of cities in that State were situated side by side with cities of the adjoining States of Wisconsin and North Dakota. These cities being the same distance they had always been accorded like rates, in and out, by the railroads, and a failure by the companies to maintain like rates for these cities would seriously impair the power to transact their interstate business with these cities in the neighboring States; and the natural effect of these lower Minnesota State rates would give to the cities of that State on its border line an undue and unjust preference, an advantage, in fact, over the neighboring cities in adjoining States.

5975 The same conditions applied to the passenger traffic.

From these facts the conclusions reached by the Master and approved by the Court were that the natural and inevitable effect of these reductions was to compel the railroad companies to give an undue and unreasonable preference to localities in the State of Minnesota over those in adjoining States in violation of the interstate commerce act of Congress. The Court said:

"The effect of the necessary operation of these acts and orders was substantially to burden and directly to regulate the interstate commerce of the companies by causing the transformation of that part of their transportation upon which their former interstate rates were higher than the sums of the locals over the border towns in Minnesota into local commerce at those sums, or by causing the companies to reduce their interstate fares and rates affected by the reduced local fares and rates to a parity therewith. This effect was unavoidable because the interstate commerce law prohibited the companies from giving to Minnesota towns and cities the undue and unreasonable advantage and from subjecting the cities and towns of other States in the vicinity to the undue and unreasonable disadvantages which a maintenance of their former interstate fares and rates and prescibed local fares and rates would have wrought, and because passengers and freight will move at the lowest available rates."

No such facts were proven in these cases, and for this reason the Court is of the opinion that the conclusions reached in the Shepard case are not applicable to these cases.

5976 *Rates in Other States.*

It is claimed by the attorneys for the State that as there is no evidence that the rates sought to be enjoined are lower than those in other States, it must be presumed that they are reasonable. But that is not the law. On the contrary, assuming that the evidence introduced establishes the fact that the rates now attacked are no lower than those charged in other States, that, of itself, would not be

sufficient to sustain this claim, especially in the absence of proof that all the conditions are the same. As stated by Mr. Justice Brewer, then Circuit Judge, in Chicaga & N. W. Ry. vs. Dey, 35 Fed. 886, 881:

"The fact that it is higher or lower (the schedule of rates) than other schedules in force elsewhere or at other times in this State, does not necessarily determine its validity."

In Ames v. Union Pacific Ry. Co., 64 Fed. 165, 188, that same proposition was advanced and denied by the Court. Mr. Justice Brewer in his opinion disposed of the contention by saying:

"It is, however, urged by the defendants, that in the general tariffs of these companies there is an inequality; that the rates in Nebraska are higher than those in adjoining States; and that the reduction by house rule 33 simply establishes an inequality between Nebraska and the other States through which the carriers run. The question is asked, are not the people of Nebraska entitled to as cheap rates as the people of Iowa? Of course, relatively, they are. That is, the carriers must not discriminate against the people of any one State.

But not necessarily absolutely as cheap, for the kind and
5977 amount of business and the cost thereof are factors which determine largely the question of rates, and these vary in the several States. The volume of business in one State may be greater per mile, while the cost of construction and maintenance is less. Hence, to enforce the same rates in both States might result in one in great injustice, while in the other it would only be reasonable and fair. Comparisons, therefore, between the rates of two States are of little value, unless all the elements that enter into the problem are present. It may be true, as testified by some of the witnesses, that the existing local rates in Nebraska are forty per cent higher than similar rates in the State of Iowa, but it is also true that mileage earnings in Iowa are greater than in Nebraska. In Iowa there are two hundred and thirty people to each mile of railroad, while in Nebraska there are only one hundred and ninety, and as a general rule the more people there are the more business there is. Hence, a mere difference between the rates in two States is of comparatively little significance."

Upon appeal, this excerpt was quoted in full and approved by the Supreme Court, that Court saying:

"In these views we concur, and it is unnecessary to add anything to what was said by the Circuit Court on that point." 169 U. S. 540.

*Existing Conditions.*

It is next claimed that in determining whether rates are reasonable or unreasonable, the controlling factors are "the kind of business, the amount of business, and the commercial conditions", Counsel then proceed to elaborate "in other words, a railroad that

has a virtual monopoly of the business of more than a million
5978 people, with all the business it can do all the time in hauling the coal and lumber, farm products and merchandise, is not

entitled to the rate that a carrier would deserve that serves a sparsely settled community with only an occasional haul". While this is true in some respects, it is equally true that such a carrier is entitled to rates sufficiently high to enable it to earn sufficient net profits to pay a reasonable interest on its investment, if it can be done without making the rates so high as to be oppressive. While a road "serving a sparsely settled community with only an occasional haul" would not be justified in charging rates sufficiently high to earn the same return, or in some extreme cases any return, on its investment, if such rates have to be so high as to be oppressive, that is no reason for making the rates of a carrier that has more business so low as to make them non-compensatory, for if that were the law, how would it benefit the carrier that its road is doing all the business it can handle? This question has been fully settled by numerous decisions of the courts, and without quoting from them, the following will be found sustaining the rules of law as stated in paragraphs "*b*" and "*e*" of this opinion. Reagan v. Farmers Loan & Trust Co., 154 U. S. 362; San Diego, etc., Co. v. Jasper, 189 U. S. 439, 466; Wilcox v. Consolidated Gas Company, 212 U. S. 19, 48; In re Arkansas Railroad Rates, 168 Fed. (C. C.) 720, 733.

*Limit of Time in Proofs.*

It is further claimed that the evidence on the part of complainants is confined to six months from July 1st to December 31st, 1907. It is true that the main evidence of the Iron Mountain Railway is
5979 confined to that period, and in the absence of other evidence or some satisfactory explanation for its omission, should not be considered as sufficient to set aside the acts of a sovereign state. But there is also evidence of the business for other periods. The earnings and expenditures of the Iron Mountain Railway for the six months ending June 30, 1907, appear in Exhibit "8" to Mr. Johnson's testimony and show the earnings for that period to be smaller than the later period, although the two cents per mile passenger rate did not go into effect until April, 1907. The business of the Southwestern Railway Company earnings and operating expenses for the entire fiscal year ending June 30th, 1908, is shown by Exhibit "11" to Mr. Kimbell's testimony. It is also shown by undisputed evidence that the year 1907 was one of the most prosperous years for both railways; that the effects of the financial panic were not felt by them at all until the latter part of November, 1907, and then only slightly, while they were more seriously felt during the year 1908. Exhibit "45" of Mr. Johnson, which is a statement of the gross earnings of the Iron Mountain for each six months' period from January 1st, 1900, to June 30, 1908, shows that the gross earnings for the period ending December 31st, 1907, were the largest of any period and the gross earnings per mile above the average of the eight years preceding it. The six months' period ending December 31st, 1907, is, therefore, the least favorable to the complainants, and for this reason no cause for complaint on the part of the State.

In addition to these facts counsel for the State in reply to a question from the Court, admitted that the officials of these railways not only produced all documents, books, waybills and other
5980 papers which would throw light on the subject, and furnished all information in their possession whenever requested by counsel for the State, but also permitted the attorneys and expert accountants for the State free access to all the books, accounts and other papers in their possession, having such as were at division points sent to headquarters when requested to enable them to prepare the defense or verifying the exhibits presented by complainants. In view of these facts there is no substantial ground for the claim that the period selected by complainants was unfair to the State or insufficient to enable the Court to determine the issues in these cases, or that the earnings and expenditures for these periods do not show a fair average of the business of complainants, at least fair to the defense. The fact that the able counsel for the State and expert accountants did not call for data of other periods than those produced by complainants and in evidence, is, if not conclusive at least persuasive that they considered the evidence offered sufficient for a just determination of the issues involved.

*Personal Injuries.*

It is also claimed that complainants are not entitled to "charge in the expense of operation the sums they paid for injuries to persons." This claim cannot be treated seriously. It is true, as claimed by counsel, "that the people of Arkansas are not insurers of the risks of the railroad business," but on the other hand, such accidents cannot be wholly avoided, and as there is no pretense that they were willful or intentional on the part of the officials of the companies they must be considered as unavoidable risks of operation of
5981 the business. Many persons and corporations engaged in industrial pursuits of a character dangerous to employés or others, insure themselves against such loss, and the premiums paid therefor are charged to expense of operation. Railroads, or rather these roads, for reasons which are not explained by the evidence in these cases, but probably economic, carry their own insurance against such losses and charge them as expense of operation as they would otherwise charge the premiums paid for the insurance if they obtained it from insurance companies. As these indemnity insurance companies make the charge high enough to cover the expense of the management of their business and a profit on their investment, the policy of the railroad companies is probably most economical.

*Premature Filing of Suit.*

It is next claimed that before applying for relief to this Court complainants should have applied to the commission, and only upon its refusal to grant it would an appeal to the courts lie. Prentis v.

Atlantic Coast Line, 211 U. S. 210, is relied on as sustaining this contention, but neither the facts nor the conclusions of the Court in that case are applicable to these now under consideration. In fact, so far as that case is applicable it is a strong authority against this claim. There the rates were made by a commission clothed with judicial functions, its acts subject to review by appeal to the Supreme Court of the State. Pending such appeal a writ of supersedeas may be obtained which would suspend operation of the action appealed from until the final disposition of the appeal. Yet the Court held that no matter what the statute called the acts of the commission,

5982 they were legislative and not judicial, but as the remedy by appeal had not been exhausted when the suits were instituted, the Circuit Court should have required them to exhaust their remedy by appeal before granting the injunction. The decision was placed upon the ground of comity, the Court saying:

"It seems to us only a just recognition of the solicitude with which their rights have been guarded that they should make sure that the State in its final legislative action would not respect what they think their rights to be before resorting to the Courts of the United States. * * * As our decision does not go upon a denial of power to entertain the bills at the present stage, but upon our view as to what is the most proper and orderly course in cases of this sort when practicable, it seems to us that the bills should be retained for the present to await the results of the appeals if the companies see fit to take them."

The opinion in that case is fully explained in Willcox v. Consolidated Gas Co., supra, and by Judge Hook in A. T. & S. F. Ry. Co. v. Love, 174 Fed. (C. C.) 59, and M. K. & T. Ry. Co. v. Love, 177 Fed. (C. C.) 493, affirmed March 28, 1911, — Fed. —, — C. C. A. —; the last cited cases arose under the Constitution and laws of Oklahoma, which were similar to those of Virginia, where the Prentis case arose.

In addition it may be proper to refer in this connection to the fact that Mr. Hampton, for a number of years, and at the time of the institution of these suits, a member of the Arkansas State Railroad Commission, and for two years its chairman, testified that "all the reductions of rates made by the commission were after public hearings to which the railroads were invited, and which they attended, and most always against their protest and objections."

5983 *Acquiescence.*

It is next claimed that the freight tariffs now attacked had been in force without any material change for five years before this bill was filed and the claim made that they were confiscatory; that this long delay was such an acquiescence as to prevent a court of equity from granting an injunction at this late day to restrain their further enforcement. While such long acquiescence undoubtedly raises a very strong presumption that the rates are reasonable, if the conditions are the same, it would not be conclusive, as changed conditions might overthrow this presumption entirely. The law is well settled

that rates made by a commission on one or more commodities so low as to be non-compensatory for the transportation of those particular commodities, do not justify an interference by the courts unless it is further shown that these rates would reduce the net earnings of the carrier on its entire business to an extent that they would cease to be compensatory. Minneapolis & St. Louis Ry. Co. v. Minnesota, 186 U. S. 257, 268; Atlantic Coast Line R. R. Co. v. North Carolina Corporation Commission, 206 U. S. 1, 24; Northern Pacific Ry. Co. v. North Dakota, 216 U. S. 579; Railway Company v. Gill, 54 Ark. 112, 115, affirmed in 156 U. S. 649, 665; Railway Company v. Smith, 60 Ark. 221, 244.

It is, therefore, incumbent upon the carrier complaining to show that the earnings of its entire business, after deducting the legitimate expenses, are non-compensatory within the meaning of the law before it is entitled to such relief as is sought in these cases.

The freight rates established eight years ago may have been high enough under conditions then prevailing to be compensatory.
5984 The increase of wages of employés and of material necessary for the operation of the road having been gradual, as shown by the evidence, although, as claimed, decreasing the net profits, may have left it doubtful whether they had ceased to be compensatory within the meaning of the law.

Additional burdens, and consequent expenditures, imposed on railroads between 1903 and 1907 by legislation, State and national, for the purpose of protecting the lives of passengers and employés, or protecting them from injury or adding to the comfort of the public, may have reduced the net earnings still lower and yet not so low as to make them confiscatory, but when in 1907 the passenger rates were reduced by the Legislature of Arkansas from three to two cents per mile, a reduction of 33⅓% on the gross earnings from the entire passenger traffic, this, added to the former reductions and increased expenditures, may have resulted, after a fair trial, in convincing complainants that the net profits from all the earnings in the State had reached almost the vanishing point. It was then that they were, for the first time, in position to invoke the aid of the courts with any reasonable prospect of success.

Another important factor to be considered in connection with this claim is that the evidence (Exhibit 30) establishes conclusively that in the ten years preceding the institution of these actions there has been a steady and very considerable increase in the cost of everything necessary for the maintenance and operation of the road, taxes and the cost of labor. It is true that by improvement of methods better results are obtained, and the cost thereby considerably reduced.
But, on the whole, it is claimed that the cost of operation has
5985 increased much more than the saving. The comparison of net earnings of the roads for the years 1897 and 1907, as shown by Exhibit "Z" of defendants, is not fair, as the report of the Interstate Commerce Commission, from which these figures were obtained, also shows that there was a great depression of railroad traffic at that time, and only in June, 1897, i. e., the last month of the

twelve covered by that report, did the earnings of the railroads show a healthy revival of commercial conditions.

The commission in that report say (page 9):

"A review of the statistics of operation since 1890 would disclose the fact that each year ending June 30, from 1890 to 1893, inclusive, closed with an increase in net and gross earnings as compared with the previous year. The year 1893-4, however, proved to be a disastrous one for railways, the gross earnings being less $147,000,000, and the net earnings $50,000,000 than the corresponding items of the previous year. The year 1894-5 showed practically no recovery from the depression of the previous year. The year 1895-6 closed with an increase in gross earnings of $74,000,000 and net earnings of $27,000,000. But this movement toward better conditions did not continue during the year covered by the present report, which as compared with 1896 shows again a decrease in gross earnings of $28,000,000, and in net earnings of $7,000,000. It was not until June, 1897, that is to say, the last month of the twelve covered by this report, that the railway earnings showed a healthy revival of commercial conditions. This fact indicates the character of the year covered by the present report, and must be held in mind by one who endeavors to interpret the figures about to be presented."

On the other hand the evidence shows that the year 1907
5986 with which the comparison was made, was one of the best in the history of railroads. As claimed by the testimony of Mr. McPherson, the increased efficiency of operation had been overcome, and far outrun by the forces working against it; that the increased rate of wages; the increased cost of material; the burdens imposed by legislation, and the increase of taxes, had "far outrun" the benefits that had accrued from those improvements.

"And even acquiescence in past continuing injury does not estop their victim from enjoying their future continuance." Layton Pure Food Co. v. Church & Dwight Co., 182 Fed. 35, 41, — C. C. A. —; Love v. A. T. & S. F. Ry. Co., — Fed. —, — C. C. A. —, and authorities cited there.

As stated by Judge Sanborn in the last cited case:

"Courts of equity have plenary power, and it is often their duty to issue mandatory injunctions to restore and then maintain a condition of things that has been wrongfully disturbed or changed.

Under such conditions it cannot be said that they had acquiesced for such a period of time as to preclude a court of equity from granting them relief if otherwise entitled thereto, especially in view of the testimony of Commisisoner Hampton that "the reductions in rates were made most always against their protest and objections." Whether they have succeeded in establishing such a state of facts by the evidence in the cases at bar can only be determined from a careful, analytical examination of the proofs and the application of the rules of law governing such cases.

2595

5987 *Continued Loss.*

It is next claimed that to entitle plaintiffs to an injunction it must be shown that they will suffer a "continued loss," and in support of that it is contended that the lower freight rates and the reduced passenger rates will increase the volume of traffic to such an extent as to make up the decrease of those reductions. This claim is wholly speculative. In the language of Mr. Justice Brewer in Chicago N. W. Ry. Co. v. Dey, supra, in reply to a similar contention:

"But speculations as to the future are not guides for judicial action; courts determine rights upon existing facts. Of course, there is always a possibility of the future; good crops may increase transportation business; poor crops reduce; high or low rates may likewise affect; but the only fair judicial test is to apply the rates to the business that has been done in the past and see whether upon that basis such rates will be remunerative or compel the transaction of business at a loss." 35 Fed. 881.

A year's trial after the two cents passenger rate had been put into effect, it is claimed by complainants, and that is the gist of their complaint, has demonstrated that the rates then in force were confiscatory and reduced the earnings of the entire business to a point which makes them non-compensatory. If this is found to be true from the proofs they are clearly entitled to relief. To avoid any injustice by changed conditions in the future, as prophesied by counsel for the State, the Court has the power to retain control of the cases with leave reserved to defendants to move the Court at any time for a reinvestigation of the question of the reasonableness of

5988 these rates, as was done by Mr. Justice Brewer in Ames v. Union Pacific Railway Co., supra. Nor would a permanent injunction in these cases prevent the commission from making new rates sufficiently low to protect the public from oppression and yet not so low as to make them confiscatory of the investment of the roads.

*Are the Rates Confiscatory?*

The matter of most importance to be determined is whether the rates, freight and passenger, in force at the time of the institution of these actions by order of the State Railroad Commission and the Legislature of the State, were so unreasonably low as to justify the Court to enjoin their enforcement upon the ground that they are non-compensatory to an extent which makes them practically confiscatory of complainants' property. To determine that question it is necessary for the Court to ascertain and make findings what the investment of each road is; what its gross earnings from the intrastate traffic, freight and passenger, are; what the expenditures necessary for the proper management of the roads are; how to apportion the investment and expenditures between the intra and interstate business; what the net earnings from all the intrastate traffic are, and what would be a reasonable return on the investment.

*Investment.*

By the acts of complainants the Court is relieved of a very difficult problem, that of the valuation of the property. In the bills of complaint the railroads only ask for compensatory rates on the basis of valuation according to the assessment of their property for
5989 taxation by the State of Arkansas made by the State Board of Railroad Assessors. Its reasonableness is, of course, conceded by the defendants, and, therefore, there is no necessity for the Court to determine what rules should govern in ascertaining what the investments on which complainants are entitled to a reasonable compensation are. It is proper to state here that it is agreed by the Parties that the assessments for taxation in the State of Arkansas are on a basis of fifty per cent of the real value of the property and that these assessments were made on that basis. For this reason the assesments must be doubled to ascertain the real value of the property. The values of the two roads thus assessed in this State when doubled, are:

| | |
|---|---|
| Iron Mountain | $39,986,564 |
| Southwestern | 14,029,634 |

The Gross Earnings.

The next question to be determined is what are the gross earnings from the entire business in the State of Arkansas, the expenditures therefor, and the cost of the intrastate business as distinguished from the interstate. The facts relating to this item are undisputed and show the earnings of the Iron Mountain for the six months ending December 31, 1907, to be:

Freight Revenue.

| | Amount. | Percentage of total revenue in state. |
|---|---|---|
| Intrastate | -$640,248.17 | 9.59% |
| Interstate | 4,133,210.33 | 61.92% |
| Miscellaneous | 122,814.41 | 1.84% |
| Total | $4,896,272.91 | 73.35% |

5990 Passenger Revenue.

| | | |
|---|---|---|
| Intrastate | $836,542.20 | 12.53% |
| Interstate | 568,476.21 | 8.52% |
| Miscellaneous | 373,785.47 | 5.60% |
| Total | $1,778,803.88 | 26.65% |
| Grand total from Freight and passengers in the State of Arkansas | $6,675,076.79 | 100.00% |

The earnings for the Southwestern Railway Company for the same period are:

Freight Revenue.

| | Amount. | Percentage of all earnings in state. |
|---|---|---|
| Intrastate | $173,064.45 | 7.56% |
| Interstate | 1,597,230.02 | 69.80% |
| Miscellaneous | 25,061.02 | 1.01% |
| Total | $1,795,355.49 | 78.37% |

Passenger Revenue.

| | | |
|---|---|---|
| Intrastate | $246,101.33 | 10.76% |
| Interstate | 170,735.14 | 7.46% |
| Miscellaneous | 75,981.44 | 3.41% |
| Total | $492,817.91 | 21.63% |
| Grand total | $2,288,173.40 | 100.00% |

Miscellaneous Earnings and Expenses.

In computing the net earnings the accountants for complainants have entirely eliminated the earnings from, as well as the expenditure for, what is termed "miscellaneous sources," neither crediting the intrastate earnings with any portion of this item nor charging them with any part of its expenses. The explanation given for this omission is that it is impossible to suggest any method whereby this item, which arises from state and intrastate traffic, can be separated or divided between them, either as to earnings or expenses.
5991 That it cannot be ascertained with mathematical accuracy is no doubt true, but neither can the apportionment of expenditures between the state and interstate or passenger and freight business be accurately ascertained. The exhibits filed by both companies specify the items which make up these miscellaneous items, and judging from them the Court is of the opinion that to divide them on the basis of the earnings from each source will be as approximately right as is possible without injustice to either of the parties. The Court can conceive of no good reason why these earnings from miscellaneous sources should not be credited to the state business in the proportion they bear thereto, and the expenses apportioned in the same manner, and that is the best conclusion which can be reached from the evidence in these cases.

The intrastate business of the express companies is not so insignificant as to justify a finding that there is neither profit nor loss from it for the railroads, and this applies also to the earnings from carriage of the mails. The local rates for express packages are considerably higher than those for the through carriage owing to the short haul, and the railroads receive the compensation on the basis

of gross earnings of the express company. From the evidence in this record the Court is of the opinion that the earnings from express traffic are, if anything, more profitable than from the passenger traffic, while mail probably yields a smaller net profit, but upon the whole all of the items classed as "miscellaneous earnings" will yield as much revenue as other sources of transportation. The Court therefore holds that the miscellaneous earnings should be credited to the other earnings, and as there is no evidence in the record which will enable the Court to divide them with mathematical exact-
5992 ness between the state and interstate earnings, they will be apportioned on the revenue basis, which will be as near correct as any other basis which can be adopted from the evidence in this record.

Omitted Earnings.

The next items to be considered for the purpose of determining the earnings of the complainants are those which counsel for the State claim are omitted from the statements filed by the Iron Mountain Railroad Company but are properly chargeable to it.

The evidence establishes the fact that as a part of the consideration for the exclusive privilege granted to the Pacific Express Company, The Missouri Pacific Railway Company, which is the owner of the entire capital stock of the Iron Mountain Railway Company, and therefore in absolute control thereof, received $2,400,000 of the express company's capital stock, or forty per cent of the entire capital stock. This was paid to them without any other consideration so far as the evidence shows.

There is a further provision in the contract that this capital stock shall not be increased above six million dollars without the consent of the railway company, which would indicate that if there is an increase of the capital stock of the express company the railway company will be entitled to forty per cent of this increase without paying any other consideration therefor than the privileges granted by the contract. It recites, "The said second party (the express company) in consideration of this contract and the rights and privileges accorded by it, agrees to give to the said party of the first part $2,400,000 of its capital stock (and it is agreed that
5993 the capital stock of the second party shall not be increased above six million dollars, without the consent of the first party)."

The evidence also establishes the fact that the Missouri Pacific Railway Company receives now, and for years has received from the express company, an annual dividend of six per cent on this stock, amounting to $144,000 annually Whether any larger earnings have been placed in the surplus and the value of the stock thus increased does not appear from the evidence. Although the express company, under this contract, enjoys the exclusive privilege over the Iron Mountain road, no part of this annual dividend, which is a part of the consideration, is credited to that road. As the contract expressly provides for the privilege of the railroad company to have the exclusive right on all trains from St. Louis to Texarkana, which

is the exclusive territory of the Iron Mountain Railway, controlled by the Missouri Pacific Railway, and also covers all lines "owned, operated and controlled by the Missouri Pacific Railway", which includes all other branches of the Iron Mountain Railway, the latter is clearly entitled in a court of equity to its pro rata share of this annual dividend, for in equity The Missouri Pacific Railway holds that stock as trustee for itself and its subsidiary lines. There is no evidence in this record that any other lines are interested in this contract except The Missouri Pacific and the Iron Mountain Railways, nor is there any evidence other than the mileage owned and operated by these two roads which could serve as a basis for division. The Court, therefore, adopts the mileage of the two roads as the proper basis. The mileage of the Missouri Pacific Railway and lines operated by it is 3,491.68 miles and that of the Iron Mountain
5994 2,599.15 miles, a total of 6,090.83 miles Of the Iron Mountain mileage 1,355.09 miles are in the State of Arkansas. Upon this mileage basis the Iron Mountain is entitled to receive of this dividend $31,968 for the State of Arkansas for the year, and for six months to one-half of that sum, amounting to $15,984, to be divided between the state and interstate business as other passenger revenues derived from miscellaneous sources are apportioned.

It is next claimed that the hotel, dining room, saloon, lunch stand and checking privileges in the Union Passenger Station at Little Rock, although of an annual rental value, as shown by the evidence, of $4,200.00 has been granted to the occupants for the nominal rental of one dollar per annum. While there can be no doubt that the company has a right in so far as it alone is concerned to give away any of its property, in a controversy of this nature, involving the claim that the revenues derived from its business in the State under the tariffs fixed by the State, are so small as to make them confiscatory, it cannot be permitted to do so and should be charged with the reasonable value of its property which, by its permission, is used by others not for the benefit of the railroad but for their individual profit. If by charging the value of these privileges, or any other matters which the law permits the carrier to charge for, the earnings on the rates fixed by the State are shown to be compensatory, it has no right to complain and insist upon higher rates to enable it to act generously toward favorites. Generosity cannot be practiced at the expense of justice, nor should it be permitted to be dispensed at the cost of others No evidence has been offered by the company to explain why these valuable privileges are given
5995 away; no consideration of any kind is shown to have passed to the company therefor. The evidence shows that the expense of repairs and preserving the premises in proper condition is also borne by the railroad company. The finding must therefore be that this generosity ought not to be charged to the people of the State, but the loss must be borne by the railway company. Neither the statutes nor orders of the commission require it to give this or any of its other property away. It had a right and it was its duty, so far as its claim in this cause is affected thereby, to charge and collect the fair value thereof. Knoxville v. Water Co., 212 U. S. 1, 12.

The reasonable rental value of these premises is found by the Court from the evidence to be $4,200.00 per annum, and for six months amounts to $2,100.00, which should be added to the miscellaneous earnings from passenger traffic in the State, to be properly apportioned between state and interstate earnings on the same basis as other miscellaneous passenger earnings are divided.

It is also claimed by the State that the Bunch Elevator was the property of the Iron Mountain Company and its rental value $20,000 a year, but was rented to the Bunch Company for the nominal sum of one dollar per annum. There is no evidence to warrant a finding that the elevator was the sole property of the railroad company at that time. The only testimony on that point is that the records of the railway company show that one dollar per annum is received for the rental, but whether that is for the use of the right-of-way of the railway company on which the elevator stands or for the elevator itself is nowhere shown.

In another proceeding had in the bankruptcy court for
5996 this district it appeared that the Bunch Company was the real owner of that elevator and the railroad company, since the institution of this suit, purchased it from the trustee in bankruptcy of the Bunch Company, with the approval of the Court, paying therefor the sum of $93,665 to the trustee in bankruptcy of the Bunch Company. Although this fact was not put in evidence in this case, still as there is no evidence which the Court feels would warrant it to make a finding that the railroad company was the owner of the elevator and that its rental value is as claimed, the Court finds that this claim of the State cannot be sustained.

Another claim made by the State is that among the expenses charged to the business of this State there is an item for repairs of all the tools and machinery in the shops of the railway company at Argenta, Arkansas, although the repair work there is not limited to the cars of the Iron Mountain but includes cars of the entire Missouri Pacific system. The amount charged to the State of Arkansas on this account is $48,671.67, or 77% of the entire amount paid out at that shop for the repairs of these tools. It is claimed that this large sum is expended at the Argenta shops because they are the largest of the entire system. The other shops are in Missouri and Kansas, but they are much smaller. There are also some other small repair shops on other parts of the system. There is nothing in the evidence to indicate what would be a proper sum to be charged, but it is claimed that as this State is charged on equipment with only 55% of the cost of repairs, the charge on this item should be no higher. The evidence shows that the cars requiring repairs are usually sent to the nearest shop, and as many of the cars of the Missouri Pacific equipment, when needed, were used on the Iron Mountain Railway, these cars when in need of repairs were
5997 sent to the Argenta shops. There is no claim that the cost of the repairs of the cars is not properly divided between the two systems, but the cost of the repairs of the tools, it is claimed is not. It is shown by the testimony introduced on the part of the railway company that 90% of the cost of the repairs of these tools is caused by repairs of locomotives, and these all belong to the Iron Mountain

Railway Company and none to The Missouri Pacific Railway. There would, therefore, be only ten per cent of this amount which would be improperly charged. The difference would only be 22% of this ten per cent, and when divided into the six months' period would leave the amount so insignificant, less than $150.00, that the net earnings can hardly be said to be affected by it.

Objections are also made by the State to the item, among the expenses, of a fine imposed on the Iron Mountain Railway by a court of this State for a violation of the law prohibiting the giving of free passes to members of the Legislature. The evidence fails to show whether this was done with the knowledge or approval of the higher officials of the company or by the inferior officials for whose acts the company is, under the statute, responsible. As there is no presumption of an unlawful intent, in the absence of proof, the Court is not inclined to sustain this claim without determining whether it could under any circumstances be sustained.

Objections are also made to the expenses of the Memphis and Ft. Smith terminals charged entirely to the Arkansas business, although all of the Memphis business being in the State of Tennessee is interstate, and a very considerable part of the Ft. Smith traffic is
5998 of that nature and all the earnings are credited to interstate business. The uncontradicted evidence shows that the Memphis terminal, which is the terminal point of that branch of the Iron Mountain, is used exclusively for the Arkansas business and differs in no respect from what would be incurred if it were in this State on the west side of the Mississippi River instead of being in Memphis on the east side of that river. This also applies to the Ft. Smith terminals in so far as the Arkansas business is concerned, the Oklahoma business being charged to that State with its proportion of expense These matters will be considered and allowance made therefor when considering the apportionment of expenses between the state and interstate business, and thus the injustice to the intrastate business rectified.

Another claim is that the State of Arkansas is charged with part of the salaries paid to Messrs. Phelps and Seibert, shown by the accounts of the Iron Mountain to have been connected with the legal department at the headquarters in the City of St. Louis, Mo., and of Mr. Cox, who was, during the year 1907, residing at Little Rock. It is claimed on the part of the State that the services of these parties were for lobbying and therefore not a proper charge. But there is no evidence to sustain the claim that the salaries were paid for such services. The failure of the railway company to show what the services were for which they were compensated does not justify the Court in finding upon a mere suspicion that they were for services which are unlawful and against public policy. The burdens to prove an unlawful act is upon the party charging it, and will not be presumed in the absence of evidence to that effect.

The rentals paid by the Iron Mountain Railway for the
5999 use of the Van Buren Bridge of the St. Louis & San Francisco Railway Company, and for the use of the tracks of the Southwestern Railway from Paragould, Arkansas, to the Missouri State line, both being used solely for interstate traffic, it is claimed

by the State that no part of that expense should be charged to the intrastate business. The Court finds from the evidence that while the intrastate business makes no use of these facilities and therefore obtains no direct benefit from them, the indirect benefits, by relieving the tracks of the company of the interstate trains using these leased facilities would make it inequitable not to charge it with its proportion. The amounts involved are comparatively small, still that fact alone would not prevent the Court from making allowance therefore if, in its opinion, it would be equitable to do so.

It is also claimed that the intrastate business should not be charged with any of the expense of commercial agents and solicitors employed by the railway companies in different sections of the country, because, the contention is, they only soilcit interstate business. But the evidence on the part of the railway companies shows that indirectly the intrastate business receives its full share of the business obtained through these agents. If a theatrical company intending to come to Arkansas is induced to come over that road into the State they will then continue to use that road for its intrastate trips to other cities in the State. Also new industries and homeseekers induced by the efforts of these men to locate in this State adds materially to their intrastate business. For these reasons the Court is of the opinion that the State business is properly chargeable
6000 with its proportion of that expense.

Some other matters of this nature involving small amounts have been presented by the learned counsel for the State. They were each and every one carefully considered and are disallowed. To state them and the reasons for the conclusions reached would make this opinion too lengthy and the amounts involved are too small to justify it.

The items which the Court finds should be charged to the companies and added to the miscellaneous earnings of the passenger service of the Iron Mountain Railway for the six months period are: For dividend from Pacific Express Company $15,984; rents from passenger station at Little Rock $2,100, a total of $18,084.00, making a total of miscellaneous earnings from passenger revenue $391,869.47. By adding these sums to the other passenger revenue it naturally changes the percentages to some extent. As changed they will be as follows:

Iron Mountain Railway.

*Passenger Revenue.*

| | Amount. | Percentage of passenger revenue. |
|---|---|---|
| State | $ 836,542.20 | 46.55 |
| Interstate | 563,476.21 | 31.64 |
| Miscellaneous | 391,869.47 | 21.81 |
| Total passenger earnings | $1,796,887.88 | 100.00 |

Dividing the miscellaneous earnings between state and interstate upon that basis the result is:

| | Passenger Revenue. | Per cent. | Miscellaneous. | Total. |
|---|---|---|---|---|
| State ....$ | 836,542.20 | 59.54% | $233,318.80 | $1,069,861.00 |
| Interstate | 568,476.21 | 40.46% | 158,550.67 | 727,026.88 |
| Total ...$ | 1,405,018.41 | 100.00% | $391,869.47 | 1,796,887.88 |

6001 Dividing the miscellaneous of the freight earnings between the state and interstate we have the following results:

| | Freight Revenue. | Per cent. | Miscellaneous. | Total. |
|---|---|---|---|---|
| State ....$ | 640,248.17 | 13.41% | $ 16,469.41 | $ 656,717.58 |
| Interstate | 4,133,210.33 | 86.59% | 106,345.00 | 4,239,555.33 |
| Total ..$ | 4,773,458.50 | 100.00% | $122,814.41 | $4,896,272.91 |

This makes the total earnings of the Iron Mountain Railway in the State of Arkansas for the six months ending December 31, 1907, $6,693,160.79.

Making the same division of the miscellaneous for the Southwestern Railway for the six months ending December 31, 1907, the result is:

*Passenger Service.*

| | Revenue. | Per cent. | Miscellaneous. | Total. |
|---|---|---|---|---|
| State ....$ | 246,101.33 | 59.04% | $ 44,859.44 | $ 290,960.77 |
| Interstate | 170,735.14 | 40.96% | 31,122.00 | 201,857.14 |
| Total ..$ | 416,836.47 | 100.00% | $ 2,450.97 | $ 175,515.42 |

*Freight Revenue.*

| | Revenue. | Per cent. | Miscellaneous. | Total. |
|---|---|---|---|---|
| State ....$ | 173,064.45 | 9.78% | $ 2,450.97 | $ 175,515.42 |
| Interstate | 1,597,230.02 | 90.22% | 22,610.05 | 1,619,840.07 |
| Total ..$ | 1,770,294.47 | 100.00% | $ 25,061.02 | $1.795,355.49 |

Total earnings of Southwestern in the State of Arkansas for the six months' period ending December 31, 1907, $2,288,173.40.

*Apportionment of Valuation of Property.*

What bases should be adopted for the purpose of apportioning the valuation of the property to each of the two classes of earnings, the state and interstate, in order to enable the Court to determine

whether the earnings of the railroads from its intrastate
6002 business under the rates established by the State Railroad Commission are compensatory?

As the issues in these cases involve the entire intrastate business in the State of Arkansas, freight as well as passenger, it is immaterial how the valuation of the property is apportioned between the freight and passenger service. After ascertaining the proportionate net earnings from all sources of the intrastate business, it can be ascertained what they yield on the entire investment, as apportioned between the state and interstate business, and the main issue involve, whether the rates are compensatory or confiscatory, satisfactorily determined.

On the part of complainants it is claimed that the revenue basis pure and simple should be adopted for that purpose, because it is claimed that values of railroad property, like all other property depend to a great extent upon its producing capacity and net earnings. On the other hand it is claimed that the division should be made on the basis of the ton mileage, because that is the use to which the property is put, and it is urged that the higher the rates for intrastate traffic are the greater will be the proportion of the valuation charged to that part of the earnings. Or, in the language of the learned counsel, "when they use the revenue to divide the property instead of using the ton miles, and the ton mileage as the expression of the use of the property, they have assigned 90 per cent more, that is the relation that seven bears to thirteen per cent, to the state business upon which they expect to earn a return. * * * When they have divided the property on a revenue basis it takes almost double
the use of the property; they have assigned 90 per cent more
6003 property to State use than it actually uses in addition to assigning 100 per cent on account of the double amount of State business revenue per ton per mile over interstate."

In estimating the value of property its net income, if not the most important, is certainly a very important factor. A building in New York City is valued much higher than a building exactly like it and the erection of which cost the same price, situated in Little Rock. The reason therefor is that the income from its rentals is much higher in the former city than in the latter. So a building in Little Rock, or any other city, on its main business street, is of much greater value than if standing in the suburbs, although both buildings may be exactly alike, put to the same uses and cost the same. That the same rule should and does apply to railroads is shown by the market value of the stocks. While the share of a railroad whose earnings enable it to pay a six per cent dividend annually will command a premium on its face value, those of a railroad earning no dividends and whose income is barely sufficient to earn the fixed charges are practically worthless, or will sell for a very low price, and that only on speculative grounds.

Take two roads, one in a level country with practically no grades, inexpensive to maintain, and constructed by reason of these facts, at a low cost, while another road built in a mountainous, rocky country where it was necessary to do a great deal of expensive blasting

of rock, building tunnels, with heavy grades and many curves. The latter road cost probably three or four times as much to build as the former, yet, owing to the level grades, absence of sharp curves and more productive lands along its line, the earnings of the
6004 former are much greater than of the latter. Not only that, but owing to the grades, the one road can carry only half as many cars as the other; the consumption of fuel; added to these the greater outlay for wages to employes, cause expenses to be so great as to leave small net earnings for that road whose cost was greatest, while the net earnings of the other are sufficient to pay large dividends. Can there be any doubt that the value of the first will be much greater than the latter, and that its shares will sell for a much higher price? The value of every investment or property is measured, to a large extent at least, by the value of its use, not by its use divorced from its value. The value of a railroad for taxation it has been uniformly held by the courts, may properly be determined by the value of its bonds and stocks. Without citing the numerous cases decided by the courts, both state and national, approving this method of assessing railroad, telegraph and other property of this nature, the following may be referred to:

State Railroad Tax Cases, 92 U. S. 575; Kentucky Railroad Tax Cases, 115 U. S. 321; Western Union Telegraph Co. vs. Massachusetts, 125 U. S. 530; Pullman Co. vs. Pennsylvania, 141 U. S. 18; Columbus, Southern Railway Co., vs. Wright, 151 U. S. 470; Pittsburgh, Etc., R. R. Co., vs. Barkus, 154 U. S. 421; Adams Express Co. vs. Ohio, 166 U. S. 186, where the Court said:

"Whatever property is worth for the purpose of income and sale it is worth for the purpose of taxation."

And this is the rule sanctioned by the Supreme Court of Arkansas. Wells Fargo Express Co. vs. Crawford County, 63 Ark. 576.

This is evidently the rule recognized and acted on by the
6005 railroad assessing board of the State of Arkansas as shown by the evidence in this case. The main line of the Iron Mountain Railroad is practically a water level road; no mountains to cross, no rocks to blast or tunnels to excavate, and the leading commercial cities and industries of the State along its line. On the other hand the White River Branch of that road was the most expensive road ever constructed in the State. Miles of it had to be cut out of rock and tunnels cut through rocky mountains; there are no large cities along its line, and the country is sparsely settled owing to the heavy grades and the many curves made necessary by the topography of the country it cannot possibly carry as many cars to a train and transport freight as economically as the main line. The State officials, charged by law with the duty of assessing the property, must have taken these facts into consideration when they assessed those railroads. The White River Branch, in spite of its great cost, was in 1907 valued by that board at $19,000 per mile and assessed on the basis of 50 per cent of its value at $9,500, while the main line was valued at $45,000 per mile and assessed at 50 per cent of that sum at $22,500 per mile.

For these reasons the earning capacity of a railroad is the most

important factor to be taken into consideration in determining its value. As shown above, it has been taken into consideration by the assessing officers of the State and should be taken into consideration for the purpose of determining the apportionment of values in this case. If by reason of the higher rates allowed by the State tariff the net earings of the property are increased the value of the
6006 property is correspondingly increased and the assessment for taxation made accordingly.

The proportions assignable to the intrastate business in the State based upon the assessments of 1907 for the six months ending December 31, 1907, are:

| | |
|---|---|
| Iron Mountain | $5,158,266.75 |
| Southwestern | 1,430,321.18 |

*Bases for Apportionment of Expense.*

The most important and serious problem to be determined is the basis to be adopted for apportioning the expense between the inter and intrastate business.

Smyth v. Ames, 169 U. S. 466, 541, has conclusively established as a rule of law that "the reasonableness or unreasonableness of rates prescribed by a state for the transportation of persons and property wholly within its limits must be determined without reference to the interstate business. The State cannot justify unreasonably low rates for domestic transportation, considered alone, upon the ground that the carrier is earning large profits on its interstate business, over which, so far as rates are concerned, the State has no control." It is therefore absolutely necessary to determine how these expenses should be apportioned between the two classes of earnings without injustice to either party.

All parties agree that there are no fixed bases which will enable the Court or the most experienced railroad statistician to make that apportionment with mathematical accuracy. All that can be done is to adopt those bases which will come nearest being right. As stated by Mr. Justice Brewer in Chicago, Etc., Ry. v. Tompkins, 176 U. S. 167, 178:

6007 "If the Court meant simply that it could not determine that fact (the actual cost of the local earnings) with mathematical accuracy, basing it upon testimony of the exact amount of money paid out for doing such work, it is undoubtedly true, but there are many things that have to be determined by court and jury in respect to which mathematical accuracy is not possible. Take the ordinary cases of condemnation of real estate. * * * Such testimony is not to be disregarded simply because it cannot demonstrate by figures the exact amount or per cent of the extra cost. It is obvious on a little reflection that the cost of moving local freight is greater than that of moving through freight, and equally obvious that it is almost, if not quite impossible to determine the difference with mathematical accuracy."

The first matter to be considered is what theory to adopt. Counsel, as well as accountants, statisticians and railroad men of experience

differ as to which one should be adopted. On the part of complainants it is claimed that the straight revenue basis furnishes an approximately correct result of the net earnings of each class of traffic, and no other will come as near it. On the other hand the contention on the part of the State is that for freight the ton mile basis, and for passenger earnings the passenger-mile basis, will produce the more correct results. The train-mile basis is conceded by all as the least accurate.

This question is not raised for the first time in these cases. It seems to have been considered as an important factor in every rate case and has perplexed other courts as much as it has this. The authorities on the subject are anything but harmonious, although the largest number of decisions, especially of the national courts,
6008 favors the contention of complainants. But a careful consideration of the facts in each case and the various methods employed to reach results shows that neither of them will produce approximately correct results if no other factors are taken into consideration.

The straight revenue theory as advanced by the learned counsel and accountants of the railroads is clearly wrong, as none of them takes into consideration the increased rates charged for the intrastate traffic. No further proof of the fallacy of this theory is required than the examples and calculations of the accountants for the railroads in the exhibits filed with their testimony. Mr. Nay, who, at the time he testified, had thirty-seven years' experience as a railroad accountant, having begun as a clerk of statistics, and was at the time his testimony in these cases was taken the comptroller of the Chicago, Rock Island & Pacific Railway Co., one of the great railroad systems of the country, gave the following illustration for the purpose of establishing the correctness of his theory and to controvert, as he states, "an argument which is sometimes used to the effect that using the revenue basis is like traveling in a circle, and those who take that position claim that when the revenue of intrastate traffic is doubled the operating expenses are also doubled and the end is just the same as in the beginning." He thereupon gives the following illustration to demonstrate the fallacy of that argument, as he states:

"First take for illustration a small railroad with freight operating revenue of $100,000 and freight operating expenses of $80,000, of which the intrastate freight traffic is $25,000 and the interstate freight traffic is $75,000. We have the following statement:

6009

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Operating freight revenue.. | $25,000.00 | $75,000.00 | $100,000.00 |
| Operating freight expenses, divide the expense between the intrastate and interstate on a revenue basis and it would be as follows. ..... | 20,000.00 | 60,000.00 | 80,000.00 |
| Net operating freight revenue ..... | $5,000.00 | $15,000.00 | $20,000.00 |

"Suppose that the rates on intrastate freight traffic are increased so as to exactly double the intrastate freight revenue, leaving the interstate freight revenue just the same, and the operating freight expenses exactly the same, an impossible condition in actual practice, but the extreme condition is used in order to emphasize the error of the argument that doubling the intrastate revenue in such a case would double the interstate expenses. After doubling the intrastate freight revenue just mentioned we would have the following statement:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Operating freight revenue... | $50,000.00 | $75,000.00 | $125,000.00 |
| Operating freight expenses to intrastate revenue, nearly 40% of the total revenue, the operating expenses of $80,000 divided on the revenue basis would now be ..... | 32,000.00 | 48,000.00 | 80,000.00 |
| Net operating freight revenue ..... | $18,000.00 | $27,000.00 | $45,000.00 |

From this it will be seen that although the intrastate freight earnings were increased $25,000 after the intrastate tariff rates had been raised 100 per cent without any increase in expenditures, in the final result it is the beneficiary to the extent of $13,000 only, while the interstate earnings, with no increase in these rates, increased $12,000.

Mr. R. E. Kimbell, the auditor of one of the complainant railroads, was requested to make a similar calculation, and the
6010 result was the same as that of Mr. Nay. His calculations are filed as Exhibit 23 to his deposition.

That such a rule cannot be adopted was clearly shown by Mr. Justice Brewer in Chicago, Milwaukee & St. Paul Ry. Co. v. Tompkins, where, speaking of such a contention, he said:

"But that there was some fallacy in this reasoning would seem to be suggested by the fact that although the defendants' schedule would have reduced the actual receipts 15 per cent on the passenger and 17 per cent on the freight business, the earnings capacity for the last year was diminished only one-tenth of 1 per cent. Such a result indicates that there is something wrong in the process by which the conclusion is reached. That there was can be made apparent by further computations, and in them we will take even numbers as more easy of comprehension. Suppose the total value of the property in South Dakota was $10,000,000, and the total receipts both from interstate and local business were $1,000,000, one-half from each. Then, according to the method pursued by the trial court, the value of the property used in earning local receipts would be $5,000,000, and the per cent of receipts to value would be 10 per cent. The interstate receipts being unchanged, let the local receipts by a proposed schedule be reduced to one-fifth of what they had been, so that instead of receiving $500,000 the company only re-

ceives $100,000. The total receipts for interstate and local business being then $600,000, the valuation of $10,000,000, divided between the two, would give to the property engaged in earning interstate receipts in round numbers $8,333,000, and to that engaged in earning local receipts $1,667,000. But if $1,667,000 worth of property earns $100,000 it earns 6 per cent. In other words, although
6011 the actual receipts from local business are only one-fifth of what they were, the earning capacity is three-fifths of what it was. And turning to the other side of the problem, it appears that if the value of the property engaged in interstate business is to be taken as $8,333,000, and it earned $500,000, its earning capacity was the same as that employed in local business—6 per cent. So that although the rates for interstate business be undisturbed, the process by which the trial court reached its conclusion discloses the same reduction in the earning capacity of the property employed in interstate business as in that employed in local business, in which the rates are reduced." 176 U. S. 176.

On the other hand, if the ton-mile basis is adopted for the division of the operating expenses between inter and intrastate earnings, without considering the additional expenses of the local business, which it is conceded by all exists, although they differ as to the percentages, the result would be just as far wrong as the other. But if proper allowances are made for the higher rate received for local business and also for the increased cost of the local business, as it appears from the evidence, it is wholly immaterial which of these two theories is adopted, whether the revenue or the ton-mile basis, as the results will be the same. As an illustration of the correctness of this statement the following example will serve. Adopt as factors that the entire earnings in the State from freight are $2,000,000; that $750,000 of that was realized from 75,000,000 ton miles of intrastate freight, and $1,250,000 from 250,000,000 ton miles of interstate business, thus showing that from the intrastate business the earnings were 1 cent per ton mile and from the interstate
6012 business 5 mills per ton mile; the articles carried, it is assumed, are practically the same. The cost of the entire business was $1,500,000, and the cost of the local business is 200 per cent greater than that of the through business. The calculations on these factors on the revenue and ton-mile basis *were* made by the accountants of the railroads and of the State are as follows:

Calculations made by accountants of the railroads:

Revenue Basis.

| | Amount. | Per cent. | | |
|---|---|---|---|---|
| Intrastate..... | $750,000 | 37.50x1½— | 56.25— | 47.37 |
| Interstate ..... | 1,250,000 | 62.50 | 62.50 | 52.63 |
| | $2,000,000 | 100.00 | 118.75 | 100.00 |

The total expenditures of $1,500,000 divided upon these percentages and deducted from the gross earnings will result in the following net earnings:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Gross revenue..... | $750,000 | $1,250,000 | $2,000,000 |
| Operating Expenses... | 710,550 | 789,450 | 1,500,000 |
| Net earnings... | $39,450 | $460,550 | $500,000 |
| Ton miles..... | 75,000,000 | 250,000,000 | 325,000,000 |
| Cost per ton mile..... | 9.474 | 3.158 | 4.615 |

Ton Mile Basis.

| | Amount | Per cent. | | |
|---|---|---|---|---|
| Intrastate ..... | 75,000,000 | 23.08x3— | 69.24— | 47.37 |
| Interstate ..... | 250,000,000 | 76.92 | 76.92— | 52.63 |
| Total ..... | 325,000,000 | 100.00 | 146.16 | 100.00 |

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Gross revenue..... | $750,000 | $1,250,000 | $2,000,000 |
| Operating expenses, per cent. | 47.37 | 52.63 | 100.00 |
| | $710,550 | $789,450 | $1,500,000 |
| Net earnings..... | $39,450 | $460,550 | $500,000 |

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Ton miles..... | 75,000,000 | 250,000,000 | 325,000,000 |
| Cost per ton mile..... | 9.474 | 3.158 | 4.615 |

6013 Calculations made by accountant for the State:

Revenue Basis.

| | Intrastate. | Interstate. |
|---|---|---|
| Interstate 62.5%—5 mills per ton mile)<br>Intrastate 37.5%—1 cent per ton mile) | $750,000 | $1,250,000 |
| Expenses (State costing 200% more than interstate, or three times as much as interstate, on ton mile basis, thus allowing 200% greater cost on ton mile basis),<br>Interstate 52.63%—$.003158 per ton mile;<br>Intrastate 47.37%—$.009474 per ton mile. | 710,550 | 789,450 |
| Net earnings on this basis..... | $39,450 | $460,550 |

Ton Mile Basis

| | | |
|---|---|---|
| Interstate 62.5%—½ cent per ton mile;<br>Interstate 37.5%—1 cent per ton mile.... | $750,000 | $1,250,000 |
| Expenses (State costing 3 times as much as interstate per ton mile),<br>Interstate 52.63%—$.003158 per ton mile;<br>Intrastate 47.37%—$.009474 per ton mile. | 710,550 | 789,450 |
| Net earnings on this basis..... | $39,450 | $460,550 |

The same result is reached by applying to the ton mile basis the rule laid down by Mr. Justice Van Devanter when the temporary injunctions in these cases were granted by him.

| | Tonnage per mile. | |
|---|---|---|
| Interstate | 250,000,000— | 250,000,000 |
| Intrastate | 75,000,000x3— | 225,000,000 |
| Total | | 475,000,000 ton miles |

Dividing the $1,500,000 expense by the sum of 475,000,000 shows the cost per ton mile to be $.003158.

| | |
|---|---|
| Interstate | 250,000,000x$.003158—$789,450 |
| Intrastate | 225,000,000x$.003158—$710,550 |

Deducting these sums from the earnings leaves:

| | Earnings. | Expenses. | Net earnings. |
|---|---|---|---|
| Interstate | $1,250,000 | $789,450 | $460,550 |
| Intrastate | 750,000 | 710,550 | 39,450 |
| Total | 2,000,000 | $1,500,000 | $500,000 |

6014 From this it clearly appears that a great deal of this voluminous testimony of the accountants for both parties as to what theory should be adopted, and the elaborate argument of counsel on that question need only be made use of for the purpose of ascertaining some of the items which will show the difference of cost between the two classes of traffic. For that purpose the testimony on the difference of cost, as well as difference in rates will have to be carefully considered, and the findings will determine how the apportionment should be made.

While the evidence is of such a nature that whatever conclusions the Court may reach they will not be mathematically accurate, it differs in no respect from other uncertain questions of fact which have to be determined by a court or jury, as stated in the excerpt from the Tompkins case hereinbefore copied. But to ascertain the cost of the different items of expense it is impossible to adopt either theory to the exclusion of the others in all matters. For some items the revenue theory will necessarily have to be adopted, while in others the ton mileage, car mileage or train mileage are the only basis which will enable the Court to determine from the evidence in these cases how the different items of expenditures should be apportioned. After ascertaining the difference of the cost of expenditures and the difference in the rates between state and interstate transportation, the final determination of what the net earnings of each road on its intrastate business are can be as correctly ascertained by adopting the revenue as the ton-mile basis.

6015 Inter and Intrastate Tariff Rates.—Freight.

Whether the ton mile, car mile, train mile or revenue basis is adopted to arrive at correct results it is necessary to ascertain the relation of the tariff rates charged for the interstate business and those charged for the intrastate business, for if the latter are sufficiently high to make up the difference in cost found to exist between the two then that difference has been fully provided for, and to make any additional allowance therefor would be doubling the cost and to that extent doing an injustice to the State. Or, in other words, if the evidence shows that while the interstate earnings are compensatory, the intrastate rates are so low as to make them non-compensatory, and if it is shown that the difference in cost of the two classes of traffic is 100 per cent, but that the rates for the intrastate are 100 per cent higher than those charged by the roads for the through traffic, then there would be no cause for interference by courts. That the interstate rates are too low is not claimed in these cases, the intrastate rates being the only ones complained of. In fact, it is shown by the evidence that the net earnings of the entire Iron Mountain system were sufficient to pay for the year 1907 and for several years prior thereto a dividend of 10 per cent on its capital stock, after paying the interest on its bonded indebtedness.

Taking up the freight tariffs first, it is claimed on the part of the State that the rates charged for the State business exceed those for the through business on the Iron Mountain 98 per cent, the earnings for the local business being 13.377 mills per ton mile and for the through business 6.75 mills, and on the South-
6016 western they exceed 141 per cent, the earnings for the local business being 20.945 mills and for the through 8.665 mills for the ton mile. The statistics of the two roads, as shown by the statements filed, sustain these figures, but it must be conceded that unless the commodities hauled in the State and through business are practically the same these figures cannot be adopted as proper factors for the determination of that question. This is easily proven by the following simple example: If the state business carries one-half high-class traffic at 3 cents a ton mile and one-half low class at 1 cent per ton mile, the average of the entire traffic would be 2 cents; but if it carries only 25 per cent high-class commodities at 3 cents and 75 per cent low class at 1 cent, the average would at once be reduced to 1.5 cents per ton mile, a difference of 33 1-3 per cent.

The heaviest tonnage in interstate traffic consists of lumber and grain, which are carried at the lowest rates; grain constitutes 13.75 per cent of the entire tonnage on the Iron Mountain, and something less on the Southwestern. The grain tonnage in local traffic is practically negligible. Other commodities of a low class, such as cement, salt and iron, are transported almost exclusively in interstate traffic, while practically very few, if any, very low class commodities are carried in local traffic to the exclusion of the through. But it is unnecessary to go into details to show that the difference in the earnings of the two traffics is largely affected by the commodities carried and the changes in ton-mile earnings at different times are caused by the shifting of the commodities transported. In the

opinion of the Court this is conclusively shown by the fact that although the rates, inter as well as intrastate, of both roads, the Iron Mountain and Southwestern, as established by the Arkansas
6017 Railroad Commission, and the tariffs published by the roads for interstate business, are identical, the earnings of the Southwestern on local business are 20.945 mills per ton mile, while those of the Iron Mountain are only 13.377 mills, a difference of over 55 per cent, and on interstate business the earnings of the Southwestern are 8.665 mills and those of the Iron Mountain 6.75, a difference of 20 per cent. This difference is, in part at least, explained by the fact that the Iron Mountain carries a great deal of coal in inter as well as intrastate traffic, having branches through the coal fields of the State, 22.83 per cent of the entire state traffic of the Iron Mountain being of that character. This is carried at an average of 6 mills per ton mile against 13.377 mills for the entire business. The Southwestern transports very little coal, practically none local and comparatively little interstate. Other low commodities carried in much larger quantities locally by the Iron Mountain than the Southwestern are stone, brick and lumber, the local lumber carried on the main line of the Iron Mountain and especially when reduced to ton miles being considerably greater than on the Southwestern, owing to the fact that most of the large cities of the State are on that line and the number of saw-mills on the north half of that line in the State being few as compared with those on the Southwestern. The Arkansas standard distance tariff shows that stone, which constitutes 7.20 per cent of the total state traffic on the Iron Mountain, was required to be carried at an average rate of 5¼ mills per ton mile; lime, brick and cement, which constitute 6.13 per cent, were carried at the same rate. The length of the haul is another important matter to be considered, for as the rate per mile
6018 gets lower, under the State distance tariff, as the distance increases, the shorter the haul the greater the revenue is per ton mile.

That the shifting of commodities is the principal cause of these differences in earnings per ton mile is further shown by the testimony of Mr. Kimbell. At the request of counsel for the State he prepared a statement (Exhibit G) of the earnings of the Southwestern for the month of January, 1909, after the temporary injunction had been granted, and the higher rates made by that road had been put in effect. This showed an increase of 96.1 per cent of the intrastate earnings for the ton mile; but a statement prepared by him showing the revenue under the then current rates, and what they would have been under the commission rates (Exhibit 58) shows that the actual increase of the rates was only 48.18 per cent, a difference of almost 100 per cent.

It is therefore impossible to adopt these figures as proper factors for the purpose of ascertaining the difference between the two rates. The only method by which this can be ascertained with anything near accuracy is to compare the state rates as established by the State Railroad Commission with the interstate tariffs of the railroads, taking into consideration the different commodities and quantities

carried in local and through traffic. And this comparison is at best only approximately correct. The transstate rates are considerably lower than the Arkansas state rates and they constitute 51.16 per cent of the entire tonnage in Arkansas over the Iron Mountain and considerably more on the Southwestern. For some commodities the interstate rates, especially between Arkansas and Louisiana
6019 and Missouri and Arkansas, are higher than the local rates. This is due to the fact that in many instances they are carried under the State tariff at commodity rates while under the interstate tariffs they are transported at class rates. The lowest rates in the interstate, or rather transstate traffic, are those which are controlled by zones and common points, there being 2,600 common points in the State of Texas which carry the same rates regardless of distance. On behalf of the railroads it is claimed these great differences are more apparent than real. The Texas common points are explained very fully and clearly by Mr. Perkins. He says:

"In establishing the rates to this territory from St. Louis and the east we have a peculiar condition in that the Texas territory is entered by the transportation lines from three sides out of a possible four. The M. K. & T., the Santa Fe and the Frisco enter the State from the north; the Iron Mountain, the Cotton Belt, the V. S. & P. and the T. & P. from the east; the Southern Pacific, the Illinois Central and also the steamer lines from the Atlantic Coast enter from the south. Denison, Texas, a point in the extreme northern part of the State, and reached by the M. K. & T. and Frisco, will produce the minimum haul for those two lines from St. Louis or the east, while a similar shipment to the same point of destination handled by the Illinois Central and the Southern Pacific through New Orleans, Houston and then north, would offer the maximum haul for that route. A shipment to Houston, Texas, routed via M. K. & T., the Santa Fe or Frisco, would offer nearly the maximum haul for shipments handled by either of these routes; while if routed via the Illinois Central or the Southern Pacific would yield the maxi-
6020 mum haul via that route. This is true in nearly all parts of the State and indicates very largely why a blanket zone in the State of Texas is necessary. If the Cotton Belt or the Iron Mountain railroads were the only routes by which to reach the State of Texas the conditions would be entirely different. We could then, and would no doubt, make our rates on a graded scale, making them higher as they proceeded south or southeast through the State."

The transstate lumber business is ten per cent of the entire transstate, equal to over five per cent of the entire tonnage. The roads only solicit that business nearest to them, and in any event it is hardly reasonable to suppose that any considerable business originating in the southern part of Texas would be given to the roads entering the State from the north or vice versa, as the delay in the transportation, which must be considerable, would be sufficient to prevent it. Besides, the connecting lines will naturally transfer their freight to the shortest line in order to obtain for their roads the maximum proportion possible. This also applies to the citrus movement from California, which the testimony shows is not solicited by

these roads, and practically none transported over their lines, in fact none over the Southwestern.

Mr. Watson, the assistant general freight agent of the Southwestern, in testifying to refusals to accept shipments offered to his road where, owing to river competition, the rate was too low to be profitable, gave the following explanation when asked what the principle upon which traffic men act in determining when they will not solicit or take business:

"When the business is unremunerative or will not yield a fair rate for the services we are required to perform after deduct-
6021 ing the arbitrary we must pay."

This, he declares, is a universal rule with his road and all others.

The lumber and grain zones are controlled by commercial and competitive conditions and yield but small profits at the rates carried, but on the other hand cars loaded with grain from the north are loaded with lumber on the return trip, thus creating a reciprocal haul, which is an important item in the earnings of every road, and is taken into consideration by all rate makers. Besides the low rates on lumber, enabling the mills of the far south to compete with those farther north and nearer the commercial centers, aid in the development of the country, which would otherwise remain unsettled and thus gives the roads considerable high-class traffic and creates local business which otherwise would not exist. To that extent the local traffic is indirectly benefited. In addition to this, the State tariff also provides for some zones for commercial reasons and competition necessarily compels the consideration of competitive points. In order to enable coal mine operators in the extreme western part of the State to compete with those nearer the center of the State the State Commission has made a blanket rate, applying the Coal Hill rate, which is 114 miles from Little Rock, the railroad and geographical center of the State, to all mines west of it in Logan, Franklin and Sebastian counties, extending to the western State line, a difference of over fifty miles in some instances. It has also made the Spadra rate applicable to all coal mines on the Dardanelle and Russellville road to all points in the State north, south and east of Little Rock. On sugar there is a blanket rate, including in those
6022 rates every road in the State regardless of the number of roads over which it is handled, to all points 150 miles and over. Competitive points in the State take the tariff of the shortest road of necessity, for it is a rule in railroad tariffs which may be called axiomatic that the shortest road establishes the rate for all competitive roads in that territory. While the competitive points in Arkansas are not so many, still, considering the length of the hauls and the volume of business (8 per cent only of the entire traffic on the Iron Mountain and 2.95 per cent on the Southwestern) they are sufficiently numerous to require consideration in determining the difference in rates. A few illustrations will show what they are. The following are some of the points which are competitive and therefore must be served by all roads at the rate fixed by the shortest road. From Little Rock to other points of the state the differences in mileage are here given:

Camden:

Iron Mountain..... 93 miles
Southwestern.....124.5 miles

Fordyce:

Rock Island..... 82 miles
Southwestern..... 95 miles

Warren:

Rock Island..... 86 miles
Iron Mountain.....149 miles

Helena:

Iron Mountain.....160 miles
Rock Island and Arkansas Midland.....118 miles

Paragould:

Iron Mountain.....163 miles
Southwestern.....197 miles

Jonesboro:

Iron Mountain.....147 miles
Southwestern.....176 miles

6023 Newport:

Iron Mountain..... 83 miles
Rock Island.....117 miles

Texarkana:

Iron Mountain.....145 miles
Southwestern.....207 miles

Forrest City:

Iron Mountain.....117 miles
Rock Island..... 88 miles

Brinkley:

Rock Island..... 64 miles
Southwestern.....101 miles

Crossett:

Iron Mountain.....114 miles
Rock Island.....138 miles

Hope:

Iron Mountain.....112 miles
Southwestern.....173 miles

Bridge Junction:

Iron Mountain.....146 miles
Rock Island.....129 miles
Southwestern.....185 miles

Texarkana to Ft. Smith:

| | |
|---|---|
| Iron Mountain | 208 miles |
| Kansas City Southern | 160 miles |

Helena to Pine Bluff:

| | |
|---|---|
| Iron Mountain | 203 miles |

Southwestern and Arkansas:

| | |
|---|---|
| Midland | 100 miles |

As it is conceded by all parties that the longer the haul the less expense per mile the zones naturally increase with the length of the haul. This is fully recognized by the Arkansas Railroad Commission in its distance tariff. With few exceptions, as the distance increases the mileage rates proportionately decrease.

6024 In the class rates the increase in the rates is made every five miles for the first 100 miles. When the distance is over 100 miles the increase of rates is for every 10 and in some instances 20 miles, and over 200 miles for every twenty or thirty miles. The commodities tariff, under which the great bulk of the local business moves, with few exceptions, increases the rates every 25 miles for the first 100 miles, and if over 100 miles for every fifty miles and on a number of commodities the zones are larger. On lumber and other forest products, for the first one hundred miles, the increase in rates is every twenty-five miles, and over one hundred miles every fifty miles. The same difference is made on packing-house products and grain. On salt the same rates apply to two hundred miles as to one hundred miles. For forest products, rough material, when the manufactured product is reshipped over the same line bringing in the rough material, the rates are much lower than the regular tariff; for the first fifty miles it is two cents a hundred, for the next fifty miles two and one-half cents, for the next fifty miles three and one-half cents, from 150 to 250 miles five cents, and over 250 miles eight cents. As nearly all the lumber when manufactured is reshipped this latter rate practically applies to nearly all through material of forest products except that carried to the mills by the tap lines. As construed by the Supreme Court of the State this rate also applies when the reshipment of the manufactured product is made to points outside the State of Arkansas. Chapman & Dewey Lumber Co. v. Jonesboro L. C. & E. Ry. Co., 24 Ark. Law Rep. 535.

6025 Another important matter to be considered in this connection is the fact that the Arkansas distance tariff in fixing the minimum weight of carloads is on an average 40 per cent lower than for interstate transportation. The only commodity for which the minimum is fixed at 40,000 pounds is fire brick, and the only commodities at 30,000 pounds a car are common brick, sawdust, iron, staves and stone. Coal at 25,000 pounds, eighteen commodities, including lumber and forest products, at 24,000 pounds, and the rest at 20,000 pounds and less. On the other hand the average capacity of the Iron Mountain cars is 67,000 pounds, and the minimum fixed by the western classification on through business

averages 40 per cent more than that of the State. Most of the coal cars used in interstate traffic carry 100,000 pounds.

The difference between the minimum of carloads as established by the State Commission and the western classification was ascertained by the Court by comparing the two item by item, and the difference of 40 per cent in favor of the interstate is a very conservative estimate.

Taking all these matters into consideration, and after careful calculations, which it is unnecessary if not impossible to set out in this opinion, the finding of the Court is that, altogether, the intrastate freight rates in force at the time of the institution of these actions and in 1907 were 50 per cent higher than the inter an dtransstate.

*Passengers.*

While the rates for passengers apparently are the same for intra and interstate, the evidence shows that the actual charge for, or rather revenue from, the state business is greater, due, no doubt, to the much longer haul and competitive conditions. For the
6026 period in controversy the actual fares collected for each passenger mile on the Iron Mountain was: Intrastate, 1.929 cents; interstate, 1.865 cents, a difference of 3.48 per cent, for which allowance will be made.

*Expenses Between State and Interstate.*

That there is a material difference between the expense of state and interstate business is conceded by all. On the part of the State it is claimed this difference is not exceeding 87 per cent, while on the part of the railroads the contention is that it is much greater. This 87 per cent is the result of the calculations after deducting the share with which the interstate traffic is chargeable for its proportion of the freight carried on local trains. The actual difference between the expense of local and through trains per ton mile, as calculated by the State's accountants, and testified by Mr. Hamilton, is 162.67 per cent. But, it is claimed, as a large proportion of the freight transported on local trains is interstate, that part of it should be charged with its proportionate share of this additional cost, and when that is done the actual difference in cost, it is claimed, is 87 per cent. The lowest estimate made by any witness for complainants seems to be that it is at least 200 per cent greater, while some estimate it as much as 700 per cent. The witnesses for the railroads do not base their opinions upon itemized statements, as no records were kept by either of the roads for the purpose of dividing the expenses between the state and interstate business, but as all these witnesses are men who have been engaged in railroad work and connected with railroads from their earliest manhood, starting at the bottom of the
6027 ladder and now occupying most responsible positions, some as general managers, comptrollers, auditors, superintendents and other high positions, it is claimed that their testimony, based upon their great experience, should be controlling. These witnesses for the railroads all agree on the one point, that to divide these expenses

on any other than the revenue theory would not give accurate results; that their practical experience enables them to determine from a given state of facts the difference of cost between state and through business on percentages as nearly correct as it is possible to arrive at, unless separate accounts of the expenditures had been kept, not only for the inter and intrastate business, but also the transstate.

On the other hand the accountants for the State offered in evidence schedules which they claim are based on facts as they appeared from the records of the railroads when such were obtainable, and on the experience of men long in the railroad service when factors had to be adopted arbitrarily. The scheme for obtaining these facts is new, never having been used by any accountants in any of the numerous rate suits which have heretofore been before the courts. It was devised by Mr. Wharton, a member of the firm of Haskins & Sells, expert accountants of national reputation. Mr. Wharton himself testifies frankly that he has had no practical experience in the management of any work on railroads; that his knowledge of railroad accounting is limited to what he acquired from his connection as one of the accountants for the State of Missouri in the railroad rate litigation of that State and the testimony of the expert railroad men who testified in those cases; that he also consulted with railroad men of experience and from the knowl-
6028 edge thus acquired he has evolved the scheme now presented to the Court on behalf of the State. Who the railroad men whom he consulted are, or what their experience at that time was, what positions they had ever occupied with railroads, he fails to state, except that Mr. Hamilton, who is one of the accountants employed by his firm, and under whose supervision most of the work offered in evidence was conducted, had for a number of years been in the employ of railroads. Mr. Hamilton, who was present at the protracted hearing of this case and explained to the Court many of the items in the statements filed as exhibits for the State, impressed the Court as a man of ability, a fine accountant and a fair witness.

In this connection it is but proper for the Court to say that all the witnesses in these cases impressed the Court as having testified as intelligently and as fairly as is possible. It is true they differ widely in their views, but it is an acknowledged psychological fact that the opinions entertained for years by a man cannot be discarded at once, and that all persons are to a certain extent influenced in their views by their environments, as well as the duties they are called upon to discharge for others.

But the experience of Mr. Hamilton in connection with the management of a railroad, when compared with that of the witnesses introduced for the complainants, is very limited. At the age of fifteen he began as a messenger boy for a railroad and continued in different positions until 1906, when at the age of thirty-two he entered the employ of Haskins & Sells as accountant and has been in their employ ever since. Their and his employment has always been as accountants for the State and in opposition to the claims of the carriers; his employment by railroads was always in a
6029 subordinate position, his highest position being that of chief clerk to a chief of a division; his duties were practically all of a

clerical nature. Since he has been in the employ of Haskins & Sells he assisted in gathering evidence and making investigations for the use of the State in the Missouri rate cases, acting under the direction of a superior official of that firm. But whatever the experience or lack of experience of these gentlemen may be, the statistics, as far as they go, and the assumptions although adopted arbitrarily where they could find no accurate data from the records, are of considerable value so far as they have not been successfully attacked by witnesses of greater experience introduced by complainants in rebuttal. That they cannot be adopted by the Court as a whole will no doubt be admitted by the learned counsel for the State, for not only have many of them been shown to be based upon arbitrary assumptions which are incorrect, but many important items which contribute materially to the greater cost of the State business are conclusively shown to have been wholly overlooked by them. But, in the opinion of the Court, the scheme itself furnishes the best method of solving this problem that has been called to the attention of the Court, depending, of course, upon the correctness of the numerous factors necessary to obtain accurate results.

To determine these important issues under consideration the Court intends to adopt their scheme and ascertain in that manner, in connection with all the other testimony in these cases, the difference in the cost of the intrastate as compared with the through business, and it is of the opinion that in this way it will reach conclusions as nearly accurate as from the evidence is possible. That it
6030 will be mathematically accurate the Court does not claim for it, but that is impossible, no matter what bases or schemes are adopted.

*Freight.*

A most serious objection made is that the calculations of the State's accountants are based on the business of one month only and treated as representative of a year or even a six months' period, their schedules being based on the business of the Iron Mountain during the month of October, 1907, and of the Southwestern the month of October, 1908. The reasons therefor are stated to be that the roads furnished these statements, Exhibit 26 being that of the Iron Mountain, and Exhibits 19 and 20 of the Southwestern. The auditors and statisticians of the roads who prepared and filed these statements deny emphatically that they represent a fair average of one-twelfth of a year's or one-sixth of a half year's earnings or expenses of either road, and give the following explanation for preparing these statements. On the part of the Iron Mountain it is claimed that it was prepared at the request of the State's accountants and filed in compliance with that request; that of the Southwestern was prepared for the purpose of ascertaining as near as possible the relative business and cost thereof as soon as possible after the temporary injunctions in these cases had been granted; that they were granted in September, 1908, and the test was made the first month thereafter; that it will show a fair relative condition of the business of the entire

year is practically admitted, but it is emphatically denied that it shows such a fair average of the year's business as will enable the Court to reach even an approximately correct conclusion as to what the average cost of the year's or half year's business is. The
6031 testimony establishes conclusively that the freight earnings of these roads for the month of October of any year are greater than those of any other month of that year. Exhibit 54, which gives the ton miles of the intrastate freight of the Iron Mountain for the six months ending December 31, 1907, shows that the average of ton miles for one month was 7,976,716, while that for the month of October of that period was 9,622,508 ton miles, a difference of over twenty per cent. The revenue received for the same period shows a still greater difference. The average revenue for one month during that period was $106,708.03, while that for the month of October was $131,286.45, a difference of nearly twenty-two per cent in favor of the month of October. The interstate freight mileage for the six months' period averages 102,050,616 ton miles, while that carried in October exceeds that average 8,646,842 ton miles, nearly eight per cent. The Southwestern did not file any statistics for the latter half of the year 1908, the year its October test was made, but has filed statistics for the last half of 1907 and the first half of 1908. But it would not be fair to make a comparison with the first half of 1908, as the evidence shows that while in 1907 the traffic was the most prosperous the roads had ever enjoyed, that of the first half of 1908 was very much less, owing to the financial crisis then felt most severely by the railroads of the country. But the conditions of the two roads, the sections traversed by them, are, so far as freight transportation is concerned, so nearly alike, with the exception of some of the low-class commodities, that it may be assumed that the results would be the same, after making allowance for the differences mentioned.

It is also shown in evidence that owing to the exception-
6032 ally large business of the railroads during the year 1907 it was almost impossbile for these roads to carry all the freight offered to them for transportation. The freight yards were all congested, and in order to move the freight from five to eight hundred tons of interstate freight (this includes the dead weight) would be sent on each local train, thus relieving to some extent the congested condition, but materially increasing the amount of through freight carried on local trains. As these conditions were exceptional and the month of October, as shown, cannot be considered as an average of the year's business, they should not be considered as representative of those prevailing in normal times. But there is sufficient evidence to enable the Court to make proper allowances which will equalize these conditions.

As the October business exceeded that of the average month of the six months' period over 20 per cent. multiplying it by that factor of course increases the entire totals by that amount, and as the greater the tonnage the smaller the proportionate cost, all calculations should be made, when that month is used as the basis, after a reduction of 20 per cent, which will leave over 2 per cent of the

earnings (the earnings for that month being 22 per cent greater than the average) for the additional expenses incurred by reason of the increased tonnage. It is also established by the evidence that errors were made in the tonnage of many cars transported during that month. On thirty-four cars the errors were found to run from 2,000 to 34,000 pounds a car. The investigation of Mr. Hamilton was confined solely to the records of the local cars, and they constituted, according to his testimony, 11.18 per cent of all the cars moved on the Iron Mountain that month and 10.09 per cent.
6033 of the Southwestern. Other serious objections made to the fairness of adopting the business of the month of October as a basis for a year's or six months' period are the inaccuracy of his figures, but these can be corrected when the final calculations are made if not corrected in the calculations made in detail.

*Apportionment of Expenses.*

The schedules of apportionment of expenses submitted by the accountants for the State will each be taken up separately and findings made on them. The items which it is claimed by complainants were omitted will be considered separately hereafter.

*Freight Operating Expenses.*

1. Maintenance of Way and Structures.

Objections are made to this item as compiled by the accountants for the State upon the ground that it is guess-work solely, and that there is no basis upon which there can be a proper apportionment except upon the straight revenue theory. It would serve no useful purpose to state the many objections made except the one which, in the opinion of the Court, is controlling. The overwhelming weight of the testimony shows that but a small part of the expenditures for maintenance of way and structures is caused by the operation of trains. Stations, platforms and fences are but very slightly, if at all, affected by the operation of trains. Nor are the roadbed, ties and ballast nearly as much affected by the operation of trains as by other causes. The greatest expense, it is shown by the testimony, is due to deterioration and action of the elements regardless
6034 of the operation of trains. It is claimed by the witnesses introduced on behalf of the complainants that from 75 per cent to 90 per cent of this expense is due to the action of the elements and only from 10 per cent to 25 per cent to the operation of trains. In view of these facts any attempt to apportion this item of expense on the ton, car or train mileage basis would be an injustice to the roads. The Court is of the opinion that the straight revenue basis will get more accurate results. The difference in intrastate and interstate rates will be taken care of by proper allowance to be made on the final calculations of the entire cost.

2. Maintenance of Equipment.

(*a*) Locomotives. These expenses are divided between yard service, local and through service. On the part of the State the yard locomotive mileage is based on cars, while, on the other hand, complainants urge the revenue basis. In the opinion of the Court the car mile basis, as adopted by the State's accountants, including the allowance of 50 per cent to the yard locomotive mileage and 75 per cent for local locomotive mileage is proper.

(*b*) Freight cars. This is divided between stopping and starting, terminal handling and other expenses. On the part of the State the percentages suggested by Mr. Wellington in his work on Railway Expense Location are adopted, charging for stopping and starting 21.5 per cent, for terminal handling 13.5 per cent and other expenses 65 per cent. The objection to the Wellington figures on the part of the railroads is that they were prepared in 1877 and
6035 since then many changes, which make them inapplicable, have been made, and for that reason, should not be applied to conditions now prevailing. The evidence on that point is conflicting, but after a careful examination of all the testimony, taking into consideration the fact that while the cars now in use are built much stronger than those in use at the time Mr. Wellington wrote his book, the appliance of the air brakes instead of hand brakes, the less care exercised by trainmen by reason of the use of the automatic couplers, which dispenses with the necessity of going between the cars, and other items mentioned in the testimony, the Court is of the opinion that 25 per cent is a proper charge for damage to cars caused by stopping and starting; for terminal handling 13.5 per cent is found by the Court from the evidence as approximately correct.

In making the calculations on these items the accountants for the State assume that while the local trains stop every five miles, each through train stops every twenty miles, and therefore that the local service should be charged with four times as much as the through service in proportion to the car mileage for expenses due to stopping and starting; they also assume that each car in local service receives two terminal handlings to one terminal handling of a car in through service, and for that reason the local service should be charged with two times as much as through service in proportion to car mileage for expenses due to terminal handling. The Court finds from the evidence that while local trains stop every five miles, the through trains stop only every thirty-five miles, and for that reason the local trains stop only every thirty-five miles, and for that reason the local trains are chargeable with seven times as much for that item
6036 as the through trains. In charging the through trains with one terminal handling in the State they include the trans-state freight and charge that with one terminal handling. As the trans-state business of the roads constitutes a very large percentage of the business, over 51 per cent of the entire freight business in the State of Arkansas for the Iron Mountain, and nearly 65 per cent of the Southwestern business, it is a matter of considerable importance to determine what should be properly charged for this item. The

trans-state business, which merely passes through this State, both of the terminals, that of starting and destination, being in other States, it will be seen that there should be a difference in the charge of terminal expense in this State.

A great deal of evidence has been introduced on the part of the State to show when through trains carrying this trans-state freight come into division yards they are broken up and handled in the same manner as the interstate business, and for this reason it was very earnestly argued that it should be charged with one terminal. On the other hand the evidence introduced on behalf of the railroads shows that while there are some yard expenses connected with the trans-state business, it is entirely free from the great expense caused by terminal handlings. It is true the handling of these trans-state cars at terminal points differs very materially from the "crossing of a bridge", a figure of speech indulged in by one of the witnesses for complainants, still the evidence leaves no doubt in the mind of the Court that the work connected with the trans-state cars is not of that nature which should properly be called and charged as a terminal handling at any other place except that of starting and desti-
6037 nation. The switching necessary for delivering and receiving the cars is saved. It is true there is considerable switching at every division point, but as established by the evidence, in making up a through freight train the trans-state cars are placed in such position in each train that all cars intended for a certain territory or for a certain branch road that they can be moved at one time and placed in a solid mass on the track from which they are to be finally moved. Besides, it is admitted that local freight originating at and destined for a point not a terminal, but which must pass an intermediate terminal yard, receives at such yards the same service as trans-state cars do. As the trans-state business is much heavier than either the interstate or local the number of cars in these trains merely passing through the terminals is naturally larger. From the exhibits filed by Mr. Moore, who was night yardmaster at the Little Rock terminal in 1907, the trans-state freight in these trains would average from 60 per cent to 70 per cent; the cars would be moved in one body to tracks on which they were to be transported farther; interstate business intended for that point would have to be taken to the different commercial tracks and from there hauled to the industries to which they were consigned; they are handled by carrying them in small lots of from one to three cars; they would be carried in some instances a distance of several miles, and after having been emptied they would have to be sent for and switched back to the freight yards of the company. If intended for other points in the State they would be handled like trans-state cars, being switched over to the track on which the trains for these localities would be made up. The same expense would be incurred and the same injury to the cars caused in receiving and handling as
6038 local freight passing through these terminals. Mr. Moore filed with his testimony (Exhibit 53) what is called a "consist" of the through freight trains handled during the month of October, 1907, which shows the movement of the cars after they

reached the Little Rock Division yards. He takes for illustration the movement of one train and thus explains it in his own language:

"It is shown by this consist that the cars destined to Texas are in the train beginning from the caboose, including forty-two cars destined for Texas, and ahead of that are the cars for the Valley Division and Little Rock proper and local south on short points beyond Little Rock. The first car mentioned in the consist at the top is the car next to the caboose at the rear of the train. The last car on the list is the car which is next to the engine. Those 42 cars destined to Texas would remain on the train on which they were received, and the 16 cars (there were 58 cars in the train) would be taken off the head of the train and put on such tracks as are designated for that purpose. The 42 cars would remain on the track on which they were received and there would be added to that train more tonnage and forwarded from the track on which we received it; they would not be switched; they would be sent out on the day they came in."

This consist shows that a very large percentage of the cars on all through freight trains and trans-state were moved as testified by Mr. Moore. Mr. Cannon, who in 1907 was Superintendent of the Arkansas Division of the Iron Mountain, testified to the same facts, and also that at the Hoxie Division yards the percentage of through freight is still greater and subject to less switching than at
6039 Little Rock. On the other hand a former yardman of the Iron Mountain testified that as a rule the number of cars intended for trans-state transportation constituted a small percentage and are handled almost as much as those intended for local transportation.

All agree that the injury to freight cars incident to delivering and hauling them back to the yards is not incurred for the trans-state cars. When cars are received from other lines for trans-state transportation there are no terminal expenses except the yard charges and that is so well known that all of the witnesses who testified on that subject, those for the railroads as well as those for the State, agree that when the transportation is over three or more lines, in the division of the earnings, extra allowances are made to the terminal roads, receiving as well as delivering, while a smaller proportion is paid to intermediate carriers for the reason that there are no terminal expenses. Mr. Lincoln, one of the witnesses introduced by the State, who has had a great deal of experience as a railroad man, and although at present not connected with any railroad, occupies the position of manager of the St. Louis Freight Bureau, which necessarily requires that he keep himself fully informed in all matters of this nature, agreed with the witnesses of complainants, on that subject that there should be no expenses charged in Arkansas for the terminal service of trans-state business.

Mr. Parker, a witness introduced by the State, who is the expert engineer for the Texas State Railroad Commission, also testified that while trans-state business would have the same expense as interstate attached to it in the yard service there is none at the terminals.

6040 But there are some items of the interstate business which are only charged with one terminal, which, in the opinion of the Court, should be charged with two. The evidence shows that all the cotton handled in the State is credited to interstate earnings. While 30 per cent of that is transported uncompressed and therefore has only one terminal handling in the State, the other 70 per cent has two terminal handlings in this State. The evidence shows that cotton is brought to the concentrating points either on local trains or on what is called "pick-up" trains, trains which during the cotton season are used exclusively for picking up the cars loaded with cotton along the line, and before it is transported out of the State it is compressed. These cars are taken to the compress, there unloaded, the empty cars hauled to the yards, and after the cotton is compressed empty cars are carried to the compress for reloading. That part of the interstate traffic has two terminal handlings as much as the local business, except that it is carried in trainloads to the compress instead of being hauled in small lots, but that is fully made up by the additional expense caused by first delivering the cotton to the compress and then delivering the empty cars for the purpose of transporting it out of the State after having been compressed. The evidence shows that cotton constitutes about 7 per cent of the interstate business, or about 2.5 per cent of the interstate and intrastate business of the Iron Mountain. It is, therefore, proper that of the 34 per cent of the interstate business 2.5 per cent should be charged with two terminal handlings instead of one for this cotton.

Another item of interstate traffic which receives to a great extent two terminal handlings in the State is lumber and forest prod-
6041 ucts. The evidence shows that a material part of forest materials, especially staves and headings, are brought in the rough to the mills and then, after having been finished as manufactured material, are reshipped on the interstate rate for the entire haul and the earnings credited to interstate traffic. Many of the larger mills have short roads which carry the rough material to the mills; these are called "tap lines". Allowances made to them for these hauls will be considered by the Court and included in determining the difference in rates between inter and intrastate business and for that reason need not be considered in determining this item.

A small proportion of the grain brought in from other States is also handled twice. From all the evidence the conclusion reached by the Court is that 2 per cent of the interstate business should be charged for the transportation of lumber and grain with two terminal handlings in the State.

Another item of interstate business which should be charged with two terminals is the Memphis and Ft. Smith freight for the State of Arkansas. As has been stated hereinbefore, all of the Memphis business for points in Arkansas, and most of the Ft. Smith business destined to points in this State, is treated as interstate business, but the entire expense thereof charged to this State. It is hard to determine from the evidence how much this business amounts

to, but a liberal estimate will make it 2 per cent and this should also be charged with two terminals.

6042 This item of terminal expense should therefore be divided upon the following basis:

| | | | |
|---|---|---|---|
| Trans-state receiving no terminal handling | ..... | 51.16% |
| Interstate receiving one " " | ..... | 34.19% |
| Intrastate receiving two " " | ..... | 6.50% |
| Intrastate receiving two " " | ..... | 8.15% |
| | | 100% |

The balance of expense on this item may properly be divided upon the basis adopted by the State's accountants, except that the ton mileage should be used instead of the car mileage, as the weight of the car adds to the expense, and there is less injury in transporting empty cars than those loaded.

Supervision in general.—The expenses under this head may properly be divided between local and through service on the basis of direct charges for maintenance and equipment after ascertaining the percentages according to the rules stated hereinbefore.

3. Traffic expenses.—The accountants for all parties agree that those expenses should properly be divided on a straight revenue basis.

4. Transportation expenses.

*a*. Station expenses.—These expenses should properly be divided on the basis of the ton mileage of each class of traffic, charging each intrastate ton with six handlings, the interstate with one handling, and the transstate with one-half handling. The intrastate is chargeable with six station expenses to equalize the difference in the length of the haul, taking into consideration only the difference in this State, which on the Iron Mountain is three

6043 times as long for interstate as for local, and therefore for the same distance the local cars would have to have three hauls to one for the interstate. This may do some slight injustice to the interstate business, after having made allowance for two handlings for 6.5 per cent of that business, but it is not sufficient to affect the final result to any appreciable extent.

*b*. Yard and terminal expenses.—These expenses will be apportioned in the same manner as those of road locomotives. This does the interstate business some injustice because every car passing through the terminal yards, whether transstate or interstate, has been included in this expense by the accountants and charged twice, once for being hauled in and again for being hauled out, although they receive but very little handling, as shown heretofore. But in view of the fact that no allowance was made for any handling under the head of terminal handling of cars, charging them with this station expense will equalize the two items.

*c*. Fuel and locomotive expenses and wages of train crews.—In apportioning the expenses these two items will be considered together. The Court finds from the evidence that the cost of fuel and wages

paid per train mile on local trains is 50 mills, while on the through trains it is 34 mills, a difference of 47 per cent. The local trains should therefore, be charged with 47 per cent greater cost for these two items.

*d.* Enginehouse expenses.—The basis adopted by the State's accountants in apportioning this item of expense between local and through trains is approved.

*e.* Other train expenses.—These should be divided between
6044 state and interstate traffic on the basis of the gross earnings of each class of traffic during the six months' period ending December 31, 1907. The difference in the dead weight of the different classes of trains will be considered hereafter.

*f.* Loss and damage to freight.—The basis upon which this division is made by the accountants for the State is upon the claims paid during the six months in controversy, the claims during the month of October having been examined for the purpose of determining which are properly chargeable to local trains and through trains. The figures used by the State's accountants are undisputed and will be adopted by the Court.

*g.* Supervision and general.—These expenses should be divided on the basis of the direct charges to each of the transported classes as found in the foregoing items.

5. General expenses.—The apportionment of these expenses should be made on the basis of the supervision and general expenses under the head of equipment and transportation.

## Method of Dividing that Cost.

The State, in dividing these costs, adopted the movement for the month of October, 1907, as a fair average for the entire period with the result that the interstate freight cars are charged with nearly 75 per cent of the freight carried on local trains. The evidence is practically conclusive that owing to the congestion caused by the heavier freight traffic in 1907, from five to eight hundred tons gross of through freight were added to each local train in order
6045 to relieve the congestion. It is claimed, and there is testimony to support it, that the intrastate freight carried on local trains of the Iron Mountain is about 25 per cent and the intrastate 75 per cent.

To adopt the State's contention would certainly be unfair. When conditions are normal the evidence shows that practically the only through freight carried on local trains is that intended for or coming from points intermediate between division yards. The practice is that through freight trains receive or deliver freight only at division points, and that all interstate freight consigned to intermediate points is taken from the through train at the division yard nearest the place to which it is destined and then hauled to the final destination on the local trains, and if shipped from this State it is carried on local trains to the division yards and then put on the through train. In view of the fact that the largest shipping point in the State, Little Rock, is the principal division point, a great

deal of the freight intended for this State will naturally go there on through trains.

That the intrastate freight on local trains, when conditions are normal, is only 25 per cent, is too low, in the opinion of the Court. The interstate business carried on local trains averages about 40 per cent of the entire freight carried, and the calculations should be made on that basis, but the interstate must be charged with only one terminal. Of the local freight carried on through trains 1 per cent is a proper apportionment and the calculations will be made accordingly.

6046 10. Taxes.—Taxes should be apportioned between freight and passenger and inter and intrastate earnings on the straight revenue basis. A part of the taxes paid by the railroads is for local improvements, such as levees, drainage and roads. The local traffic, by reason of the development of the country and increased acreage of fertile lands, otherwise untillable, is benefited to a much greater extent than the through, especially the trans-state, and should, therefore, bear its full proportion of that expense.

10a. Rental of tracks, etc.—This should be divided on the straight revenue basis as has been done by the accountants for the State.

11. Hire of equipment.—As the cars used on local trains are delayed much more by reason of the slow schedules, great delays in returning cars to consignors and consignees, each being entitled by the laws of the State to retain the car forty-eight hours for loading and unloading; the fact that the local trains are not running at night and the haul shorter, the apportionment of this item on the straight revenue basis adopted by the accountants for the State is approved, but there should be an extra charge of 30 per cent to the local traffic. The Court having determined what the basis of apportionment of expense should be has referred it to the accountants employed by the complainants as well as the defendants, and they have presented to the Court the result of their calculations which are filed with this opinion as Exhibit A. Those calculations show that the percentage of extra cost of the intrastate business over the trans-state and interstate is 201.5 per cent for the Iron Mountain Railway.

6047 Omissions.

The Court finds from the evidence that in preparing their schedules the accountants for the State omitted several items which add materially to the cost of the local as compared with the through traffic and which should be taken into consideration in determining the difference in cost. The evidence shows that the dead weight on local trains exceeds that on the through over 14 per cent, the percentage being on local 75.5 per cent, and through 64.75 per cent; there is considerable loss on the investment in rolling stock from several causes not included in any of the State's schedules. The evidence shows that while the through freight trains are run day and night, the local trains run only during the day; that the local trains do not run on Sundays, while the through trains do; that the

average run a day of the locals is 60 miles and that of the through 240 miles. Local trains are run regularly every day except Sundays as scheduled, whether loaded or not, while through freight trains, there being a number of them daily, are not all sent out unless there is sufficient tonnage to justify it. The expenses of trains thus not sent out, including fuel and wages, is saved. Demurrage on cars received or delivered, as hereinbefore stated, is an item which adds to the loss on the investment. While the difference in the length of the haul in the State has been considered, that in the other states even on the lines of these roads has not been taken into consideration. As all agree that the longer the haul the less the cost per mile, the fact that this haul is in other states cannot in anywise affect the decrease of the cost, as the crossing of imaginary
6048 state lines can neither add to nor decrease it. What this mileage amounts to cannot be ascertained from the evidence, but that it is very considerable, especially for the trans-state traffic, must be apparent. The great bulk of the grain comes from Kansas and Nebraska and is transported through the State to the Gulf ports for export; cotton shipped from the State is transported almost exclusively to the seaports for export or the cotton mills of New England on the Atlantic Coast; most of the lumber shipped from the State goes to the prairie states of the West and to the commercial centers of the East and North; iron, steel, and machinery comes principally from the Pittsburg district in Pennsylvania.

The evidence also shows that the percentage of freight in less than carloads on the local trains exceeds that on the through trains of the Iron Mountain considerably. It is also shown that the loading of less than carloads of freight on through trains is much heavier and less expensive to handle, as it is consigned to large cities which enables the roads to a very great extent to fill cars so that they require only one loading and unloading, while on local trains the less than carload freight is consigned to many small stations in small lots, requiring a number of unloadings with a continual decrease of tonnage.

The reciprocal tonnage, it is shown, is much less on local than on through trains. Other items which it is claimed by complainants have been omitted have either been considered or proper allowance made therefor by the Court in the items of the schedules or are not proper items for additional allowance.

Upon full consideration of the additional cost of these additional items the Court is of opinion that an additional charge of
6049 8.5 per cent will be reasonable and fair, making the total difference in cost between intra and interstate freight 210 per cent in favor of the intrastate.

## Passenger.

The evidence shows that for the year 1907 the actual fares collected for each passenger mile on the Iron Mountain were for the local 1.930 cents and on through 1.865 cents, a difference of 3.48 per cent. The Court does not deem it necessary to have the same item-

ized calculations made to ascertain the difference in cost between the intrastate and interstate passenger traffic as were made on the freight. The evidence does establish the fact that there is some difference in the cost. Some of these items which cause additional cost are that transstate passengers cause no terminal expense and but very little station expense; interstate passengers only use one terminal while local passengers incur two; the average haul of intrastate passengers is 30 miles, that of through 118 miles in this State, leaving out of consideration the length of the haul in other states, which, for the transstate is no small item; the additional expense in the sale of tickets, checking baggage for short trips, the overhead expenses connected therewith, the more frequent cleaning of coaches after every trip; the additional expense for fuel and wages, the slower time, the more frequent stops, the shorter trains, the loss on the investment by reason of less mileage, the greater danger of injury to passengers by the more frequent getting on and off, the greater injury to the equipment by the more frequent stops and starting, are all matters which add to the cost. On the other hand allowance must be made for the local passengers riding
6050 on through trains and interstate passengers on local trains. Giving due weight to all these items and others appearing in the testimony, the Court is of opinion that after deducting the increased revenue the intrastate passenger service should be charged with 10 per cent greater net cost than the through.

*Southwestern Railway Company.*

Freight.

It will serve no useful purpose to make calculations item by item for this road as has been done in the case of the Iron Mountain, as, with few exceptions, the conditions are the same and the exceptions only need be considered. The evidence shows that the freight traffic of that road between transstate, interstate and intrastate is less favorable to the State than that of the Iron Mountain. The percentages on this road are:

| | |
|---|---|
| Transstate | 64.93% |
| Interstate | 32.12% |
| Intrastate | 2.95% |
| | 100 % |

It is also shown that the average length of the haul is greater for the interstate than on the Iron Mountain, the state haul of this road being 40.79 miles and the interstate 222.42 miles. The average haul of all interstate freight over that line, disregarding state lines, is 344.41 miles.

There are some other matters which add some to the increased cost of the local business, but they are so small that it is unnecessary to mention them. Upon the whole the Court is of the opinion that

an additional allowance of 40 per cent above that of the Iron
6051 Mountain for extra expenses of the local traffic, making the difference in cost 250 per cent, will be fair. The State tariff is found to be, as that of the Iron Mountain, 50 per cent higher than the interstate.

*Passenger.*

The Court finds that the extra cost of the intrastate passengers on this road is something less than on the Iron Mountain, although the length of the carriage of interstate passengers as compared with the local is greater than that of the Iron Mountain, the local being 23 miles and through 120 miles.

It also appears that all of its trains do a local passenger business; its so-called through trains stop with few exceptions at almost every station in the State and a great deal of the local traffic is carried on these trains. It also appears that the difference in the fares between local and through passengers is greater than that on the Iron Mountain, the percentage being a little over 10 per cent. The Court is of the opinion that the difference in cost between the two classes of passenger service is no greater than the higher fares which have been collected, and for this reason no extra allowance should be made therefor.

Upon these bases the Court finds the net profits on the entire business of the two roads to be as follows:

IRON MOUNTAIN RAILWAY.

*Intrastate Freight.*

| | |
|---|---|
| Cost on basis of 210 per cent additional cost calculated on ton mile basis for operating expenses and revenue basis for taxes, rentals and hire of equipment.. | $643,679.33 |

6052 *Intrastate Passenger.*

| | |
|---|---|
| Cost on basis of 10 per cent additional cost calculated on revenue basis | $1,044,879.50 |
| Total cost of intrastate | $1,688,558.83 |

*Earnings from Intrastate Traffic.*

| | | |
|---|---|---|
| Freight | $656,717.58 | |
| Passenger | 1,069,861.28 | |
| Total earnings | | $1,726,578.86 |
| Cost deducted | | 1,688,558.83 |
| Net earnings | | $38,020.03 |

The valuation of the investment apportioned to the intrastate business is $5,158,266.56, which makes the net earnings less than three-fourths of one per cent.

SOUTHWESTERN RAILWAY.

*Intrastate Freight.*

| | |
|---|---|
| Cost apportinoed as above on basis of 250 per cent additional cost | $156,171.86 |

*Intrastate Passenger.*

| | |
|---|---|
| Cost on straight revenue basis with no extra allowance. | $273,049.21 |
| Total cost of intrastate | $429,221.07 |

6053 *Earnings From Intrastate Traffic.*

| | | |
|---|---|---|
| Freight | $175,515.42 | |
| Passenger | 290,960.77 | |
| Total earnings | | $466,476.19 |
| Cost deducted | | 429,221.07 |
| Net earnings | | $37,255.12 |

The valuation apportioned to the intrastate business is $1,430,321, which makes the net earnings 2.6 per cent on the investment.

*Net Profits on Investment.*

There is no charge on the part of the State that these roads are not efficiently, economically and honestly managed; nor is it denied that they traverse a fertile agricultural section with natural resources such as timber, coal, stone and minerals sufficient to justify their construction; that they were constructed in pursuance of a public demand and are in every way necessary for present conditions, and that they were not built merely for speculative purposes dependent on the future development of the natural resources so bountifully bestowed on the people of this State by Providence. Nor is there any claim that owing to the topographical conditions the cost of building them or the investment necessary for their construction and operation is greater than the average cost of roads in the southwest. What would under these conditions be a reasonable net return on the investment?

In Wilcox v. Consolidated Gas Co., 212 U. S. 19, 49, Mr.
6054 Justice Peckham, speaking for the Court, said on that subject:

"There is no particular rate of compensation which must, in all cases and in all parts of the country, be regarded as sufficient for capital invested in business enterprises. Such compensation must depend greatly upon circumstances and locality; among other things the amount of risk in the business is a most important factor, as

well as the locality where the business is conducted, and the rate expected and usually realized there upon investments of a somewhat similar nature with regard to the risk attending them. There may be other matters which, in some cases, might also be properly taken into account in determining the rate which an investor might properly expect or hope to receive and which he would be entitled to without legislative interference. The less risk, the less right to any unusual returns upon the investments. One who invests his money in a business of a somewhat hazardous character is very properly held to have the right to a larger return, without legislative interference, than can be obtained from an investment in Government bonds or other perfectly safe security. The man that invested in gas stock in 1823 had a right to look for and obtain, if possible, a much greater rate upon his investment than he who invested in such property in the City of New York years after the risk and danger involved had been almost entirely eliminated.

In an investment in a gas company, such as complainant's, the risk is reduced almost to a minimum. It is a corporation which, in fact, as the Court below remarks, monopolizes the gas service of the largest city in America, and is secure against competition under the circumstances in which it is placed, because it is a proposi-
6055 tion almost unthinkable that the City of New York would, for purposes of making competition, permit the streets of the city to be again torn up in order to allow the mains of another company to be laid all through them to supply gas which the present company can adequately supply. And, so far as it is given us to look into the future, it seems as certain as anything of such a nature can be, that the demand for gas will increase, and, at the reduced price, increase to a considerable extent. An interest in such a business is as near a safe and secure investment as can be imagined with regard to any private manufacturing business, although it is recognized at the same time that there is a possible element of risk, even in such a business. The court below regarded it as the most favorably situated gas business in America, and added that all gas business is inherently subject to many of the vicissitudes of manufacturing. Under the circumstances, the Court held that a rate which would permit a return of 6 per cent would be enough to avoid the charge of confiscation, and for the reason that a return of such an amount was the return ordinarily sought and obtained on investments of that degree of safety in the City of New York."

And the Court concurred with the conclusions of the trial court, that in view of the conditions found in that case 6 per cent upon the value of the property of the Gas Company devoted to public use would be a just compensation.

But it is urged on behalf of complainants that in States like Arkansas, owing to many conditions, including the higher rates of interest for the use of money, they are entitled to a greater compen-
sation than a gas company in a city like New York. It is
6056 urged that a railroad company cannot be as secure against competition as a gas company in a large and populous city. It requires no permits for the tearing up of the streets of a com-

mercial city and thus seriously interfere with its traffic, nor would the experience of the past justify the conclusion that an investment in railroads is "as near a safe and secure investment as can be imagined with regard to any private manufacturing business," for it is claimed that it is a well-known fact that the number of railroads of the United States, especially those west of the Mississippi River which have escaped insolvency proceedings, at all times is very small, if there be any. Whether some allowance should be made for that period which may be called the "developing period" when the earnings are barely sufficient to cover actual operating expenses, followed by that period during which the net profits above the operating expenses are barely sufficient to pay the interest on the bonded indebtedness with no margin of profit to the shareholders, it is unnecessary to determine in these cases as there is no evidence in the record that these complainants have suffered from such conditions. It is true the records of this and other courts show that insolvency proceedings against these roads were had at one time or more than once perhaps and foreclosures had, but there is no such evidence in this record and therefore cannot be considered.

That under the laws of this State competitive roads may at any time be constructed is no doubt true, but the stringent regulations under the national and state laws now in force have made the construction of railroads for the mere speculative purpose of selling bonds and stocks, regardless of a legitimate demand or neces-
6057 sity, too unprofitable for promoters and speculators to indulge in.

The Court therefore concludes that net earnings which will give the owners a return of 6 per cent per annum on the actual value of the property are fair, provided, of course, that the rates necessary to make whatever net profits the Court finds the owners to be entitled to are reasonable and not so high as to be oppressive to those compelled to make use of the roads, for, as stated in the first part of the opinion, "the rights of the carriers and the public are reciprocal. The carrier is entitled to ask a fair return upon the value of its property which it employs for the public convenience, and the public is entitled to demand that no more be exacted from it for the use of the public highways than the services rendered are reasonably worth and not be oppressive." But when such a limitation of profits is adopted as the construction of railroads is beneficial and necessary for the development of a country, and for that reason it would be against the public welfare to discourage them, provision should be made for making this limited profit as nearly permanent and uniform as is possible by providing a surplus for those years when, owing to contingencies likely to arise at any time, the net earnings will not yield a sufficient fund for such earnings. By this the Court does not mean to be understood that the State must be an insurer of profits on railroad investments; but when the profits on investments, based as they are in these cases on the actual value of the property, ascertained by the State itself, and not a speculative value of bonds and stocks issued in many instances regardless of cost or

values, are limited to the current and legal rate of interest
6058 of the State, such investments are entitled to a greater consideration than when there is no such limitation and the investor takes his chance of large profits when times are prosperous and small or no profits during lean years. Besides, rates of carriers cannot and ought not to be changed every year or at short periods to meet conditions as they vary, for not only would the commerce of the country be seriously affected by such changes and consequent uncertainties, but it would necessitate frequent investigations and hearings, expensive and uncertain of results, with strong probabilities that before one investigation is completed and conclusions reached, conditions will again be changed and necessitate another. Earnings which would yield a profit of 6 per cent in a year like 1907, which was the most profitable year in the history of railroads of this country, or which would yield such a profit when crops and financial conditions are normal, all branches of manufacture and trade flourishing, the elements favorable, would soon decrease to an extent which would reduce net profits considerably below 6 per cent if not wipe them out entirely when conditions are reversed. The most learned and advanced political economists have not yet discovered a remedy to prevent the periodical financial crises, although many theorists sincerely believe that they have; the scientists of the Agriculture Department, even with the aid of the learned men of the Weather Bureau, are still unable to prevent drouths or too much railfall, hot winds, destructive storms or other unfavorable conditions which may cause failures of crops and which in an agricultural State, such as this is, will very materially affect the earnings of its railroads. Continued rain storms, which are not so unusual in this section that they should not be taken into consideration,
6059 may cause washouts and damage to the tracks and bridges which to replace will materially reduce the net earnings. Breaks in the levees of the Mississippi or other rivers now protecting these roads and the lands served by them may cause sufficient destruction to wipe out all profits of that year. It frequently happens that many miles of railroad have to be abandoned or reconstructed to an extent to make the cost equal to the construction of a new road for that section; bridges must in time be renewed, and with the continual increase of weight of locomotives and cars must at times be rebuilt. The Interstate Commerce Commission in "In re Investigation of Advance in Rates, Eastern Cases," 20 I. C. C. Rep. 271, said on that subject:

"It may well be said that they should be allowed to accumulate a fund out of its revenues for operation against the time when this piece of railroad must be entirely thrown away. Under our present system of accounting railways are required to make a depreciation charge with respect to the equipment for the purpose of providing against contingencies of this sort; but they make no such charge with respect to way and structures and it seems proper that the accumulation of surplus should be allowed for this, also."

Ought not all these matters be taken into consideration and provision made for emergencies which experience teaches the roads are

at all times subject to and which at any time may occur? To provide for these the Court is of the opinion that in addition to the 6 per cent earned when everything is prosperous and no extraordinary losses by casualties have been sustained, an allowance of 1.5 per cent additional for a surplus fund should be made. As
6060 stated by the Interstate Commerce Commission in "In re Investigation of Advance in Rates, Western Cases," 20 I. C. C. Rep. 307, 336:

"A railroad is justified no doubt in maintaining a surplus which will insure dividends to its stockholders during lean years and it may accumulate through the years funds to meet obsolescence in plant unless this charge is taken care of in maintenance. * * * Such a surplus gives strength and tone to the securities of a carrier. It invigorates and stimulates the management."

In the Eastern Cases of that investigation, 20 I. C. C. 243, 271, 288, the Commission said on that subject:

"Then, too, a railroad must be allowed to accumulate a surplus in good years which will offset bad years, and if its financial position is to be a reasonably strong one, that surplus must be large enough to remove doubt from the mind of the investing public. We think that a railroad in ordinary years should be permitted to show a substantial surplus over and above the payment of a reasonable dividend. * * * If this company is to preserve its financial integrity upon the basis of its present capitalization and maintain its credit it is proper that it should be allowed to earn a sufficient amount to pay its interest, its preferred dividend, a dividend on its common stock, and have remaining a small surplus. The credit of the company cannot be maintained for year after year upon any other basis. We are of the opinion that the sum remaining after payment of fixed charges, including as a fixed charge the dividend upon the preferred stock, should be equivalent to between 7 and 8 per cent upon the common stock. It should have sufficient earnings so that it may pay a dividend of 5 per cent upon its
6061 common stock and carry 2.5 per cent to surplus, or pay 6 per cent on the common stock and carry 1.5 per cent to surplus. This is on the assumption that the capitalization does not exceed its actual value."

In the cases at bar only the actual value is considered regardless of capitalization. That such a surplus may be necessary is shown by the facts appearing in the testimony in these cases. The Iron Mountain for the years 1904, 1905, 1906 and 1907 paid its stockholders 10 per cent annually; for the year 1908 the dividend was reduced to 5 per cent, and for the year 1909 to 4 per cent. The evidence fails to show the reasons for this reduction of dividends, but the Court does not feel justified in assuming that it was owing to an increase in net earnings caused by the granting of the injunction in these cases. The Southwestern has never paid any dividend on its common stock, and only for the last two years a dividend of 2 per cent in 1909 and 5 per cent in 1910 on its preferred stock. It is also proper to state that the calculations made in these cases are all based on earnings for the six months ending

December 31, 1907, which, as appears from the evidence, were approximately 20 per cent greater than under usual conditions.

In the opinion of the Court the rates enjoined at the commencement of these actions are non-compensatory and confiscatory, and for this reason the injunctions will be made permanent. The costs in these cases should be divided, each party paying its own costs for depositions, etc., and the Court costs proper to be paid one-half by the complainants and one-half by the defendants. As conditions
6062 may change which may require a reinvestigation of the question of the reasonableness of these rates the Court will retain jurisdiction of these causes with leave to the parties to move the Court for a reinvestigation. This course was adopted by Justice Brewer in Ames v. Union Pacific Ry. Co., supra, and commends itself to the Court as proper in these cases.

*Conclusion.*

In the absence of separate accounts kept by the railroads the scheme suggested by the State's accountants in these cases commended itself favorably to the Court. The omissions and those bases which in the opinion of the Court were found to be erroneous in these cases may properly be attributed to the fact that such a scheme has never been attempted before this, and the further fact that these gentlemen have not had that experience which can only be obtained by those who have devoted many years to the management and operation of railroads. The testimony of these gentlemen of experience has shown these errors and omissions and the Court has tried to correct them. To do so it was necessary to read carefully all the voluminous testimony in these cases, not only once, but in many instances a number of times. If the expenses were kept separately for the different classes of traffic for the year, or if that is too expensive, if they were kept for the months of March and November of every year they would furnish a very fair average for
6063 the year for this section of the country and would relieve the courts in cases of this nature of a great deal of work. In fact, if such accounts were kept the Court believes that State Railroad Commissions would be guided by them to a great extent in making rates.

In conclusion the Court wishes to acknowledge the assistance it has received from Messrs. Johnson and Hamilton, the accountants for the complainants and the State, in these cases, in making the calculations for its use. The accuarcy with which they performed this work is attested by the fact that the result of their calculations, made under direction of the Court, did not differ one cent. The extended and able arguments of the counsel for both sides were of inestimable assistance to the Court, and the final result reached by the Court, if correct, is in a great measure due to their aid.

EXHIBIT A.

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway.

Result of Operation Obtained on the Formulæ Prescribed by the Court.

*Revenue.*

The miscellaneous revenue has been divided between intrastate and interstate traffic, on the basis of the actual state and in-
6064 terstate revenue, and some additional items have been added to the passenger revenue.
The result of this division is as follows:

| | | Per cent of each class. | Per cent of all revenue. |
|---|---|---|---|
| Freight Revenue. | | | |
| Intrastate | 656,717.58 | 13.41% | 9.81 |
| Interstate | 4,239,555.33 | 86.59% | 63.34 |
| Total | 4,896,272.91 | 100.00 | 73.15 |
| Passenger Revenue. | | | |
| Intrastate | 1,069,861.28 | 59.54 | 15.99 |
| Interstate | 727,026.60 | 40.46 | 10.86 |
| Total | 1,796,887.88 | 100.00 | 26.85 |
| Grand total | 6,693,160.79 | | 100.00 |

*Operating Expenses.*

1.—Maintenance of Way & Structures.

The total expense assigned to the freight business under this head has been divided between intrastate and interstate on the straight revenue basis, and the result is as follows:

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Freight revenue ... | $656,717.58 | $4,239,555.33 | $4,896,272.91 |
| Percentage of each. | 13.41 | 86.59 | 100.00 |
| Expenses divided on above percentages. | $74,210.28 | $479,184.83 | $553,395.11 |

6065 2.—Maintenance of Equipment.

(*a*) Locomotives:

The expenses under this head were divided between yard and local and through road locomotives on the basis adopted by the State in its Exhibit "K," and are as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Yard ..... | $13,453.83 | $55,681.97 | $69,135.80 |
| Road ..... | 43,733.35 | 70,807.25 | 114,540.60 |
| Total ..... | $57,187.18 | $126,489.22 | $183,676.40 |

(*b*) Freight Cars:

This expense is divided between stopping and starting, terminal handling and other expenses on the following basis:

| | Percentages. | Expenses. |
|---|---|---|
| Stopping and Starting..... | 25% | $119,473.91 |
| Terminal Handling ..... | 13½% | 64,515.91 |
| Other Expenses ..... | 61½% | 293,905.82 |
| Total..... | 100 | $477,895.64 |

The expense of "Stopping & Starting" is divided as shown in the State's Exhibit "K," and is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Car Miles ..... | 4,693,400 | 6,532,646 | 11,226,046 |
| Percentage of each..... | 41.81% | 58.19% | 100.00% |
| Expenses divided on above percentages.... | $49,952.04 | $69,521.87 | $119,473.91 |

6066 The expense of "Terminal Handling" divided between trans-state, interstate and intrastate freight on basis of the ton mileage for the month of October, 1907, as shown in Exhibit 26 and subdivided by the Court, is as follows:

| | |
|---|---|
| Trans-state freight (receiving no terminal handling).... | 51.16% |
| Interstate freight (receiving one terminal handling).... | 34.19% |
| Interstate freight (receiving two terminal handlings).... | 6.50% |
| Intrastate freight (receiving two terminal handlings).... | 8.15% |
| | 100.00% |

The total expense is therefore divided on the following percentages:

| | | | Percentages. | Expense. |
|---|---|---|---|---|
| Interstate | 34.19 x 1—34.19 | | 53.85% | $34,741.82 |
| | 6.50 x 2—13.00 | | 20.48% | 13,212.86 |
| Intrastate | 8.15 x 2 | 16.30 | 25.67 | 16,561 23 |
| | | 63.49 | 100.00 | $64,515.91 |

The balance of the expense of freight cars is divided between local and through trains on the basis of the number of car miles as shown in the State's Exhibit "K," and is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Car miles | 1,173,350 | 6,532,646 | 7,705,996 |
| Percentage of each | 15.22% | 84.78% | 100.00% |
| Expense | $44,732.47 | $249,173.35 | $293,905.82 |

6067 The total expense of maintenance of freight cars chargeable to each class of service, under the plans outlined above, is as follows:

| | Stopping and starting. | Terminal handling. | Other expense. | Total. |
|---|---|---|---|---|
| Local | $49,952.04 | ..... | $44,732.47 | $94,684.51 |
| Through | 69,521.87 | ..... | 249,173.35 | 318,695.22 |
| State | ..... | $16,561.23 | ..... | 16,561.23 |
| Interstate | ..... | 47,954.68 | ..... | 47,954.68 |
| Total | $119,473.91 | $64,515.91 | $293,905.82 | $477,895.64 |

(*c*) Supervision & General:

This expense is divided between local and through trains and State and Interstate on the basis of the direct charges for maintenance of equipment, and is as follows:

| | Direct expense. | Percentages. | Amount. |
|---|---|---|---|
| Local | $151,871.69 | 22.96 | $14,202.89 |
| Through | 445,184.44 | 67.29 | 41,625.12 |
| State | 16,561.23 | 2.50 | 1,546.48 |
| Interstate | 47,954.68 | 7.25 | 4,484.80 |
| Total | $661,572.04 | 100.00 | $61,859.29 |

3.—Traffic Expense.

These expenses divided on the straight revenue basis are as follows:

| | Percentages. | Amount. |
|---|---|---|
| Intrastate | 13.41 | $11,899.29 |
| Interstate | 86.59 | 76,835.13 |
| Total | 100.00% | $88,734.42 |

6068 4.—Transportation Expense.

(*a*) Station Expense:

This expense is divided on basis of the proportions of the ton miles for the month of October, 1907, as shown in Exhibit #26, assuming that one-half of the trans-state and all the interstate freight is chargeable with one station handling compared with six station handlings for state freight, for a given number of ton miles, as follows:

| | Ton Mile | Per Cents. | | Expense. |
|---|---|---|---|---|
| Trans-state | 51.16 x ½ | — 25.58 | — 22.21 | — $51,888.54 |
| Interstate | 40.69 x 1 | — 40.69 | — 35.33 | — 82,540.40 |
| Intrastate | 8.15 x 6 | — 48.90 | — 42.46 | — 99,198.00 |
| | 100.00 | 115.17 | 100.00 | $233,626.94 |

(*b*) Yard & Terminal Expense:

This expense is divided between local and through trains on the basis of the number of cars handled at terminals as shown in the State's Exhibit "K" and is as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Cars handled | 32,232 | 133,482 | 165,714 |
| Percentage of each | 19.46% | 80.54% | 100.00% |
| Expenses divided on the above percentages | $57,085.42 | $236,262.07 | $293,347.49 |

(*c*) Fuel & Locomotive Expenses, Road Enginemen & Trainmen:

These expenses are divided between local and through trains on the basis of the number of engine miles of each class, assuming that the local train expense is 47% greater per engine mile than the through train expense.

6069

| | Train Miles. | Percentages. | Percentages. | | Expenses. |
|---|---|---|---|---|---|
| Local.... | 70,583 | 26.42 x 1.47— | 38.83 | 34.54 | $238,060.24 |
| Through. | 196,512 | 73.58 | 73.58 | 65.46 | 451,170.33 |
| Total | 267,095 | 100.00 | 112.41 | 100.00 | $689,230.57 |

(*d*) Engine house expenses:

These expenses are divided on the basis shown in the State's Exhibit "K" and are as follows:

| | Local. | Through. | Total. |
|---|---|---|---|
| Engine miles ..... | 79,053 | 199,981 | 279,034 |
| Percentage of each..... | 28.33% | 71.67% | 100.00% |
| Expenses divided on above percentage..... | $15,194.55 | $38,439.58 | $53,634.13 |

(*e*) Other train expense:

These expenses are divided between state and interstate traffic on the basis of the gross earnings of each class of traffic as follows:

| | Percentages. | Amount. |
|---|---|---|
| Intrastate ..... | 13.41 | $17,743.16 |
| Interstate ..... | 86.59 | 114,569.71 |
| Total ..... | 100.00 | $132,312.87 |

(*f*) Loss and damage to freight:

6070 The division of this expense is shown in State's Exhibit "K" as follows:

| | Amount. |
|---|---|
| Intrastate ..... | $30,972.03 |
| Interstate ..... | 96,537.35 |
| Total ..... | $127,509.38 |

(*g*) Supervision and general:

This expense is divided on the basis of the direct charges to other accounts under transportation and is as follows:

| | Direct Expense. | Percentages. | Amount. |
|---|---|---|---|
| Local ..... | $310,340.21 | 20.28% | $9,410.51 |
| Through ..... | 725,871.98 | 47.46 | 22,022.83 |
| State ..... | 147,913.19 | 9.67 | 4,487.16 |
| Interstate ..... | 345,536.00 | 22.59 | 10,482.42 |
| Total..... | $1,529,661.38 | 100.00 | $46,402.92 |

5.—General Expenses.

This expense is divided on the basis of the supervision and general expense under the head of maintenance of equipment and Transportation, and is as follows:

| | Direct Expense. | Percentages. | Amount. |
|---|---|---|---|
| Local | $23,613.40 | 21.81 | $28,836.80 |
| Through | 63,647.95 | 58.80 | 77,744.33 |
| State | 6,033.64 | 5.57 | 7,364.55 |
| Interstate | 14,967.22 | 13.82 | 18,272.56 |
| Total | $108,262.21 | 100.00 | $132,218.24 |

6071 6.—Total Operating Expenses.

The total operating expenses divided on the various bases outlined above are as follows:

| | Amount. |
|---|---|
| Local | $514,662.10 |
| Through | 1,312,448.70 |
| State | 263,982.18 |
| Interstate | 982,750.42 |
| Total | $3,073,843.40 |

7.—Local Train Expenses.

These expenses are divided between intrastate and interstate on the following percentages:

| | Percentages. | Amount. |
|---|---|---|
| Intrastate | 60 | $308,797.26 |
| Interstate | 40 | 205,864.84 |
| | 100 | $514,662.10 |

8.—Through Train Expenses.

These expenses are divided between intrastate and interstate on the following percentages:

| | Percentages. | Amount. |
|---|---|---|
| Intrastate | 1.00 | $13,124.49 |
| Interstate | 99.00 | 1,299,324.21 |
| | 100.00 | $1,312,448.70 |

9.—Recapitulation—Operating Expenses.

| | Intrastate | Interstate. | Total. |
|---|---|---|---|
| Local train ..... | $308,797.26 | $205,864.84 | $514,662.10 |
| Through train..... | 13,124.49 | 1,299,324.21 | 1,512,448.70 |
| Direct charges..... | 263,982.18 | 982,750.42 | 1,246,732.60 |
| Total ..... | $585,903.93 | $2,487,939.47 | $3,073,845.40 |

6072 10.—Taxes and Rentals.

The taxes and rentals divided on a straight revenue basis, are as follows:

| | Per cent. | Taxes. | Rentals. |
|---|---|---|---|
| Intrastate ..... | 13.41 | $21,851.02 | $2,156.94 |
| Interstate ..... | 86.59 | 141,094.67 | 13,927.62 |
| Total..... | 100.00 | $162,945.69 | $16,084.56 |

11.—Hire of Equipment.

This amount is divided between intrastate and interstate traffic on the revenue basis, with 30% added to cover the additional cost of the state traffic, the result is as follows:

| Intrastate— | | | | |
|---|---|---|---|---|
| Revenue. | Percentage | Percentage. | | Amount. |
| $656,717.58 | 13.41 x 1.3 | —17.43 | 16.76 | $30,032.49 |
| Interstate— | | | | |
| Revenue. | Percentage | Percentage. | | Amount. |
| $4,239,555.33 | 86.59 | 86.59 | 83.24 | $149,158.97 |
| Total— | | | | |
| $4,896,272.91 | 100.00 | 104.02 | 100.00 | $179,191.46 |

6073 12.—Recapitulation—Freight.

| | Intrastate. | Interstate. | Total. |
|---|---|---|---|
| Gross revenue ..... | $656,717.58 | $4,239,555.33 | $4,896,272.91 |
| Operating Expenses, Par. No. 9..... | $585,903.93 | $2,487,939.47 | $3,073,843.40 |
| Taxes, Par. No. 10..... | 21,851.02 | 141,094.67 | 162,945.69 |
| Rentals, Par. No. 10..... | 2,156.94 | 13,927.62 | 16,084.56 |
| Hire of Equipment, Par. No. 11..... | 30,032.49 | 149,158.97 | 179,191.46 |
| Total Expenses... | $639,944.38 | $2,792,120.73 | $3,432,065.11 |
| Net Earnings ..... | 16,773.20 | 1,447,434.60 | 1,464,207.80 |

The bases on which the foregoing figures were compiled were prescribed by the Court.

The results obtained are correct on the bases indicated.

F. P. JOHNSON,
*For the Railroads.*
T. A. HAMILTON,
*For the State.*

6074 *State of Arkansas—Rate Matter.*

St. Louis, Iron Mountain & Southern Railway.

*Taxes and Assessed Value of Property Divided Between the Various Classes of Business on Basis of Gross Revenue.*

| | Taxes. | Assessed Value of Property. |
|---|---|---|
| Intrastate freight | $21,851.02 | $1,961,340.96 |
| Interstate freight | 141,094.67 | 12,663,744.82 |
| Total | $162,945.69 | $14,625,085.78 |
| Intrastate passenger | $35,249.16 | $3,196,925.79 |
| Interstate passenger | 23,953.33 | 2,171,270.43 |
| Total | $59,202.49 | $5,368,196.22 |
| Total freight and passenger | $222,148.18 | $19,993,282.00 |
| Total intrastate business | $57,100.18 | $5,158,266.75 |
| Total interstate business | $165,048.00 | $14,835,015.25 |

Operating expenses per ton per mile:

| | (Mills.) |
|---|---|
| Intrastate | 12.24 |
| Interstate | 4.06 |
| Excess cost of intrastate over interstate | 8.18 |
| Percentage of excess cost | 201.5% |

6075 The bases on which the foregoing figures were compiled were prescribed by the Court.

The results obtained are correct on the bases indicated.

F. P. JOHNSON,
*For the Railroads.*
T. A. HAMILTON,
*For the State.*

6076 Endorsed: Filed May 3rd, 1911. W. P. Feild, Clerk.

167—813

6077 And on June 26, 1911, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM F. MCKNIGHT, Railroad Commissioners of the State of Arkansas.

Come the parties by their respective Solicitors and file stipulation as follows:

It is here agreed and stipulated between Counsel representing all the parties in these causes, that the testimony in the two cases were taken together and that the same was heard and submitted on the combined testimony as one case, and it is further agreed that the transcript of the testimony and the opinion of the Court transmitted by the Clerk of this Court to the Supreme Court of the United States in the case of St. Louis, Iron Mountain & Southern Railway Company vs. Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas, shall be treated and considered in all respects as the transcript and record of the testimony taken in the case of St. Louis Southwestern Railway Company vs. Robert P. Allen, et al., and that said transcript and testimony and opinion of the Court, so transmitted, shall be used, considered and treated as the record in the above cases.

MOORE, SMITH & MOORE,
*Counsel for Plaintiff.*
JOS. M. HILL,
*Counsel for Defendants.*
JACOB TREIBER, *Judge.*

6078 And on the same day the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY, and WILLIAM F. MCKNIGHT, Railroad Commissioners of the State of Arkansas.

Now, on this day the Defendants here applying for an appeal to the Supreme Court of the United States from the final decree in this cause, the Complainant being present by its Solicitor; and the Court purposing to grant said appeal as the Defendants are entitled thereto and desiring to preserve the status quo pending the determination of said appeal in the Supreme Court of the United States,

It is accordingly ordered that the Court Tariff heretofore put in force under the orders of this Court during the pendency of this proceeding be continued in force during the pendency of this appeal.

(Signed) JACOB TREIBER, *Judge.*

And on the same day the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George L. McLean.

In this cause come all parties by their Counsel and it appearing to the Court that Henry Leigh and George L. McLean, De-
6079 fendants have been invited to join in the prayer for appeal herein and have declined to do so, it is by the Court, by consent of Henry Leigh and George L. McLean, and by consent of all parties to this cause, ordered that said Henry Leigh and George L. McLean are severed from the cause and from the appeal prayed.

(Signed) JACOB TREIBER, *Judge.*

And on the same day the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY, and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas.

Now on this day come the Defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas, and file herein their assignment of errors and present a petition for appeal to the Supreme Court of the United States from the final decree herein and also present a bond in the sum of Five Hundred Dollars, ($500.00), conditioned as required by law, with good and approved security.

It is ordered by the Court that the petition for an appeal, assignment of errors and appeal bond be made a part of the record and that the appeal be allowed and bond approved; and it is ordered that a certified transcript of the record and all proceedings
6080 herein be transmitted to the Supreme Court of the United States, and it further being made to appear to the Judge that the Clerk of this Court will be unable, owing to the size of the record, to prepare a transcript within thirty days from the date of the signing of the Citation, it is therefore ordered that the time for filing the transcript with the Clerk of the Supreme Court of the United States, be enlarged until the second day of October, 1911.

Dated this 26th day of June, 1911.

(Signed) JACOB TREIBER, *Judge.*

Which Assignment of Errors is as follows:

6081 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, Plaintiff,

vs.

ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM F. MCKNIGHT, Railroad Commissioners of the State of Arkansas, Defendants.

*Assignment of Errors.*

Now comes Robert P. Allen, George W. Bellamy, William F. McKnight, constituting the Railroad Commission of the State of Arkansas, Defendants in the above entitled cause and aver that in the record and proceedings herein that there has been manifest errors committed in this, to-wit:

1st. The Court erred in not sustaining the motion to dissolve the temporary injunction herein, which motion was filed and considered by the Court prior to taking the testimony herein, on the ground therein set forth that the complainant had filed this bill in equity in the United States Circuit Court, asking relief against freight rates promulgated by the predecessors of the present Railroad Commissioners, without first praying relief from the Commission; which was authorized and required by law to grant relief against unreasonable, unremunerative or confiscatory freight rates.

2nd. The Court erred in not dismissing the bill of Plaintiff on final hearing because the evidence showed that the freight rates embraced in Standard Distance Freight Tariff No. 3, sought to be injoined herein, had been in force with only minor changes made from time to time and those not materially affecting the revenue of the Plaintiff, for a period of six years prior to the filing of the suit herein, and the complainant did not before filing this suit apply to the Railroad Commission for relief against any of said frieght rates as unjust, unreasonable, unremunerative or confiscatory; when the evidence showed that the scheme of freight rates embraced in said tariff were originally put in force in the year 1900, subsequently re-enacted in 1903, and when put in force the Railroad Commission stated and declared to the Plaintiff and other carriers affected thereby that if on fair test of said rates, in whole
6082 or in part, they proved to be unjust, unreasonable, unremunerative or confiscatory that relief would be granted by the Commission upon proper showing of such facts.

3rd. The Court erred in not dismissing the bill on final hearing because the evidence shows that since 1900 the general scheme of freight rates sought to be injoined herein has been in force under order of the Railroad Commission and the whole body of freight rates sought to be injoined, save and except minor changes made from time to time which did not materially affect the revenue of the plaintiff, had been in force since 1903 and the plaintiff and other carriers had acquiesced for said period of time in said scheme of

freight rates, which were embraced in Standard Distance Freight Tariff No. 3, complained of in the bill herein.

4th. The Court erred in finding, as stated in the opinion of the Court, that the evidence showed an increased cost of operation for ten years prior to the filing of this suit, and that rates that had been remunerative ten years prior to its filing would no longer be so on account of increased cost of operation, and on such account that there was no acquies-ence in the plaintiff in submitting to the schedule of freight rates; when the evidence shows that the increased efficiency of locomotives, cars and tracks and other similar causes had rendered the cost of carrying freight less than at the beginning of the ten years' period referred to by the court and less than at any prior period.

5th. The Court erred in holding that the reduction by the Legislature of passenger rates from three cents to two cents per mile was an excuse for the complainant to seek relief in the Federal Court prior to applying to the Railroad Commission for relief therein against the freight rates, because under the law the Railroad Commission is authorized, upon proper showing, to increase the freight rates so as to compensate the plaintiff for its loss in passenger rates, if any loss occurred on account of said legislative reduction of the passenger rates.

6th. The Court erred in its decree in adjudging and decreeing that the freight rates in Standard Distance Tariff No. 3 and passenger rates fixed by the General Assembly of 1907 were confiscatory and would not afford complainant fair and reasonable return upon its property, and erred in decreeing that a compliance with said freight and passenger rates would be taking the property of the complainant without due process of law, because the evidence shows that said freight and passenger rates are reasonable and compensatory and that they do afford the complainant a fair and reasonable return upon the value of its property invested in intrastate tariff.

6083 7th. The Court erred in making perpetual the temporary injunctions heretofore granted in this cause and injoining these defendants from enforcing Standard Distance Freight Tariff No. 3, or any rate or schedule therein, and from enforcing the passenger Rate Act of 1907 and particularly erred in injoining any rates in said Standard Freight Distance Tariff No. 3, as many, if not all, of said rates are reasonable, just and compensatory.

8th. The Court erred in not dismissing plaintiffs' bill because plaintiff failed to establish by clear and decisive evidence that the intrastate freight and passenger rates sought to be injoined were confiscatory and in holding upon the evidence offered by the plaintiff that said rates were confiscatory when said evidence was based wholly on opinion testimony without sufficient data upon which an intelligent opinion could be based and said evidence was not of that decisive and clear character which is required to satisfy a court that rates promulgated by a state were confiscatory.

9th. The Court erred in not dismissing the plaintiff's bill because the plaintiff had not overcome the presumption that the rates established by the State were reasonable and compensatory by a preponderance of the testimony.

10th. The Court erred in not dismissing the bill of plaintiff because the preponderance of the testimony established the fact that the freight and passenger rates sought to be injoined were compensatory and earning the complainant a fair return on its property.

11th. The Court erred in sustaining the plaintiff's bill upon the evidence offered by the plaintiff, when it was shown in the evidence that better testimony than that offered was obtainable by the plaintiff in the form of detailed statements of revenue derived from local and through freight trains, and detailed statements of the expenses of local and through freight trains and the amount of state and interstate traffic carried respectively on the local and through freight trains; that the plaintiff instead of resorting to the best evidence to ascertain the relative cost of state and interstate traffic produced only opinion testimony, which was of insufficient probative force to overcome the presumption of the validity of the rates established by the State, when better and more reliable testimony could have been produced by the plaintiff and was in its possession and control.

12th. The Court erred in holding the passenger rates to be confiscatory when the evidence shows that the complainant voluntarily made passenger rates equal and less than those fixed by the State and the plaintiff carried a large volume of passenger traffic on rates voluntarily made by it and other carriers on rates as low as,
6084 and in many cases, lower than, those fixed by the State herein complained of.

13th. The Court erred in holding the freight rates to be confiscatory when the evidence shows that the complainant voluntarily made freight rates equal and less than those fixed by the State, and the plaintiff carried a large volume of freight traffic on rates voluntarily made by it and other carriers on rates as low as, and in many instances, lower than, those fixed by the State herein complained of.

14th. The Court erred in finding that the period of six months ended December 31st, 1907, fairly represented the earnings and expenses of the plaintiff, and further erred in not holding that the revenue and expense of October, 1907, fairly represents one-sixth of said period.

15th. The Court erred in not charging the plaintiff with a fair annual rental for the use of the Bunch elevator, when the evidence shows that said property had a fair rental value of $20,000 per year and the plaintiff only charged $1.00 to its tenant per year rental therefor.

16th. The Court erred in holding that the division of expense apportioned to Arkansas by the plaintiff for the repairs of tools and machinery was fair.

17th. The Court erred in not deducting from operating expenses the fine of $10,000.00 and costs imposed on the plaintiff for illegally giving free passes to members of the Legislature.

18th. The Court erred in charging the expense of the Memphis Terminals and the portion of plaintiff's road in Tennessee to the expenses incurred in Arkansas.

19th. The Court erred in charging all the expense of the Fort Smith Terminals to the Arkansas expenses.

20th. The Court erred, in sustaining as proper, salaries paid by the

plaintiff to lobbyists, and salaries and fees paid attorneys outside of Arkansas.

21st. The Court erred in charging any part of the expense incurred for the leased line known as the Paragould trackage to intrastate traffic when the evidence shows such expense to be incurred wholly for interstate traffic.

22nd. The Court erred in charging the rental of the Van Buren Bridge to the Arkansas expense, particularly any part thereof to the intrastate expense.

23rd. The Court erred in holding the plaintiff road was efficiently operated.

24th. The Court erred in apportioning the property of the plaintiff in the state between the intrastate and interstate traffic on the revenue basis in order to ascertain the proportion of said property used in intrastate business.

25th. The Court erred in the basis adopted for apportioning expense between intrastate and interstate traffic.

6085 26th. The Court erred in apportioning the miscellaneous expenses on the revenue basis.

27th. The Court erred in declaring in the opinion that the State contended for a division of property and expenses on the "ton mile basis."

28th. The Court erred in finding that the intrastate freight rates were only 50% higher than the interstate rates, when the undisputed evidence showed that the revenue per ton per mile under Standard Distance Freight Tariff No. 3 produced 98% more revenue per ton per mile on the Iron Mountain Railway Company than the interstate traffic produced per ton per mile and on the St. Louis-Southwestern Railway Company, 141% more per ton per mile.

29th. The Court erred in using the revenue basis for dividing any expenses and particularly without allowing for the excess of at least 50% which the Court found the State revenue was higher than the interstate revenue; the evidence shows that by using the revenue as a factor without making allowances for the difference between the two that the state expenses are burdened unduly in proportion to the excess of the State revenue over the interstate revenue.

30th. The Court erred in not adopting as a whole the plan of division of expenses presented by the State, which said basis of division was sustained by preponderance of the testimony as being the best basis for fairly apportioning the expense between intrastate and interstate traffic.

31st. The Court erred in not accepting the results of the statistics obtained from the test months which were put in evidence by the complainant. The evidence shows that October, 1907 was a fairly representative month of the six months period introduced in evidence by the Iron Mountain Railway Company; that October, 1908 was fairly representative month between state and interstate traffic on the St. Louis-Southwestern and further the evidence shows that the plaintiff was estopped from questioning that said months are fairly representative for the purposes used by the State.

32nd. The Court erred in charging to interstate business only 40% of the expense of the local trains when the evidence shows that

on the Iron Mountain it should be about 73% and on the St. Louis Southwestern about 68% of the expense of the local trains is chargeable to interstate freight business and said finding of 40% was not supported by the evidence.

33rd. The Court erred in dividing Maintenance of Way expenses on a revenue basis and particularly in not making allowances for the difference between the intrastate and interstate revenue when using the revenue as a factor in dividing said expense.

34th. The Court erred in its division of expense between
6086 local and through trains in charging 50% extra to yard locomotives as against the local train and 75% additional for local locomotive mileage when the evidence shows much lower percentage should be used to equalize them.

35th. The Court erred in the division of the expense of the Maintenance of Equipment of freight cars in charging 25% extra to the local trains for starting and stopping and 13½% for terminal handling when the evidence shows that much lower percentage should be charged for said causes. The Court also erred in this item in estimating that the through trains stop every thirty five miles as against five miles to the local trains: The Court also erred in this item in not charging transstate and interstate traffic with the cost of starting and stopping freight cars and in making different allowance for interstate and intrastate traffic, when the evidence shows that this is an element of expense from the physical starting and stopping of freight cars unconnected with the class of traffic carried in said cars.

36th. The Court erred in not apportioning general expenses according to the plan adopted by the State:—The Court particularly erred in charging all of these expenses on the basis of the supervision in Maintenance of Equipment and Transportation only, whereas, the evidence shows a proper share of such expenses should be charged to the Maintenance of Way and all of the other expenses.

37th. The Court erred in dividing the item of Hire of Equipment on the revenue basis and erred in charging an additional 30% to local traffic when the evidence shows there is no relation between the revenue and said item of expense and there is no evidence to show that 30% or any other percentage should be added to local traffic for this item of expense.

38th. The Court erred in the basis adopted for apportioning station expenses.

39th. The Court erred in finding various omissions from the expenses apportioned to the State in the State's plan of dividing expenses between intrastate and interstate traffic and particularly erred in finding that the dead weight on local trains exceeded the dead weight on through trains 14%, and particularly in finding that for all such alleged omissions that 8½% should be charged to the local trains, when the evidence fails to show any basis for such alleged omissions or such percentages as found by the Court.

40th. The Court erred in the basis adopted for apportioning fuel and locomotive expenses and in the basis adopted for "other train expenses."

41st. The Court erred in charging the State passenger traffic with

10% greater cost than the interstate passenger traffic, when the preponderance of the testimony shows the interstate traffic is the most expensive.

6087 42nd. The Court erred in holding that the St. Louis-Southwestern freight and passenger traffic was more expensive than the Iron Mountain's freight and passenger traffic.

43rd. The Court erred in finding the extra expense of intrastate traffic over the interstate freight traffic on the Iron Mountain Road was 210% and on the St. Louis-Southwestern 250%, when the evidence shows that at the outside the extra expense of such freight traffic is less than the greater percentage of the revenue per ton per mile of the intrastate over the interstate revenue.

44th. The Court erred in holding that the plaintiff was entitled to earn 6% interest on the value of its property and 1.5% surplus and that a return of less than 7½% on the value of its property devoted to the intrastate traffic was confiscatory.

45th. The Court erred in not holding a return on the plaintiffs' investment equal to the rate of interest prevailing on Railroad securities was compensatory, which rates of interest the evidence shows to have been a little less than 4½% on Railroad securities in Arkansas.

46th. The Court erred in retaining jurisdiction of this cause for any other purpose than to permit these defendants to show a changed situation which might relieve them of the injunction.

Wherefore for the errors aforesaid, and each and every of them and many more apparent on the face of the record, the defendants Robert P. Allen, George W. Bellamy and William McKnight, Railroad Commissioners of the State of Arkansas, pray for a reversal of the decree aforesaid and that the Court be directed to enter a decree dismissing plaintiffs' Bill of Complaint and such other relief as equity and good conscience will show the defendants entitled to receive.

JOS. M. HILL,
JAMES H. HARROD,
*Solicitors for said Defendant Railroad Commission.*

Dated this June 26th, 1911.
Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

Which Prayer for Appeal is as follows:

6088 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, Plaintiff,

vs.

ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM P. MCKNIGHT, Railroad Commissioners of the State of Arkansas, Defendants.

*Prayer for Appeal.*

Now comes Robert P. Allen, George W. Bellamy, William F. McKnight, Railroad Commissioners of the State of Arkansas, defendants in the above entitled cause, conceiving themselves to be aggrieved by the decision herein rendered on the 3rd day of May, 1911, wherein the Court made perpetual the temporary injunction hereinbefore issued and found, adjudged and decreed that the freight rates embraced in Standard Distance Freight Tariff No. 3, and intrastate passenger rates enacted by the Act of the General Assembly of Arkansas of 1907, were confiscatory and the keeping of the same in force was taking the property of the plaintiff without due process of law; and prays an appeal from the said final decree of the Circuit Court of the United States for the reasons specified in the Assignment of Errors, which is filed herewith, and prays that this appeal may be allowed and a transcript of the record, proceedings and papers upon which said decree was made, duly authenticated, be sent to the Supreme Court of the United States.

JOS. M. HILL,
JAMES H. HERROD,
*Attorneys for Defendants.*

Dated this 26th day of June, 1911.

The petition for appeal is hereby granted and the appeal allowed, this 26th day of June, 1911.

(Signed) JACOB TRIEBER,
*District Judge, Presiding in Circuit Court.*

6089 Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

Which bond for appeal is as follows:

6090 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, Plaintiff,

vs.

ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM F. MCKNIGHT, Railroad Commissioners of the State of Arkansas, Defendants.

*Bond for Appeal.*

Know all men by these presents, That we, Robert P. Allen, George W. Bellamy, and William F. McKnight, as principals and John W. Crockett, as sure*ties*, are held and firmly bound unto the St. Louis, Iron Mountain & Southern Railway Company in the sum of Five Hundred ($500.00) Dollars to be paid unto the said St. Louis, Iron Mountain & Southern Railway Company, its successors and assigns; to which said payment well and truly to be made we bind ourselves, our heirs, executors and administrators, jointly and severally by these presents. This obligation is upon this condition:

Whereas, the above named Robert P. Allen, George W. Bellamy and William F. McKnight have prosecuted their appeal to the Supreme Court of the United States to reverse the decree rendered in the above entitled cause by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof; Now if the above named Robert P. Allen, George W. Bellamy, and William F. McKnight shall prosecute their said appeal to effect, and answer all costs if they shall fail to make good their plea, then this obligation to be void, otherwise to remain in full force and virtue.

Given under our hands and seals this 26th day of June, 1911.

R. P. ALLEN.
GEO. W. BELLAMY.
W. F. McKNIGHT.
JNO. W. CROCKETT.

The above bond is hereby approved and ordered to be filed and made part of the record.

(Signed) JACOB TRIEBER, *Judge.*

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

6091 And on the same day the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN AND SOUTHERN RAILWAY COMPANY
vs.
ROBERT P. ALLEN, GEORGE W. BELLAMY AND WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas.

Come the defendants Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas, by Joseph M. Hill and James H. Harrod, Esqs., their solicitors, and file herein their Citation, which is duly signed by the Judge of this Court and service of the same duly accepted by Moore, Smith and Moore, Esqs., solicitors of record for the complainant in this cause.

Which Citation is as follows:

6092 UNITED STATES OF AMERICA, *ss:*

The President of the United States to the St. Louis, Iron Mountain and Southern Railway Company, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States at the City of Washington within thirty days from date of this writ pursuant to an appeal duly allowed by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, and filed in the Clerk's Office of said Court on the 26th day of June, 1911, in a cause wherein Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas are appellants and you are appellees to show cause, if any, why the decree rendered against the appellants as in said appeal mentioned should not be corrected, and why speedy justice should not be done in their behalf.

Witness the Honorable Jacob Trieber, District Judge presiding in the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, this 26th day of June, 1911.

JACOB TRIEBER, *Judge.*

Service of the above Citation this day acknowledged.

MOORE, SMITH & MOORE,
*Solicitors for the St. Louis, Iron Mountain and Southern Railway Company.*

June 26th, 1911.

6093 And on Sept. 27th, 1911, the following proceedings were had, to-wit:

ST. LOUIS, IRON MOUNTAIN AND SOUTHERN RAILWAY COMPANY
vs.
ROBERT P. ALLEN, GEORGE W. BELLAMY AND WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas.

It appearing from the statement of the Clerk of this Court that it will be impossible for him to complete a transcript of the record in this cause in time to file the same with the Clerk of the Supreme Court of the United States on the second day of October, 1911,—the day to which it was made returnable by me, when the appeal was granted and the Citation signed by me—

It is therefore ordered by me that the time for filing the transcript of the record in this cause with the Clerk of the Supreme Court of the United States is hereby extended until the 12th day of October, 1911.

September 27th, 1911.

(Signed) JACOB TRIEBER,
*U. S. District Judge for the Eastern District of Arkansas.*

6094 UNITED STATES OF AMERICA,
*Western Division of the Eastern District of Arkansas:*

I, W. P. Feild, Clerk of the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas, in the Eighth Circuit, hereby certify that the foregoing writings annexed to this certificate are true, correct and compared copies of the originals remaining of record in my office, and constitute a true copy of the record, assignment of errors and of all proceedings in case St. Louis, Iron Mountain & Southern Railway Company v. Robert P. Allen et al., Railroad Commissioners of the State of Arkansas.

In witness whereof, I have hereunto set my hand and the seal of said Court, this 29th day of September, in the year of our Lord, One Thousand Nine Hundred and Eleven, and of the Independence of the United States of America, the One Hundred and thirty-sixth.

[The Seal of the Circuit Court, Western Division of East. Dist. Ark., U. S. A.]

W. P. FEILD, *Clerk.*

Attest:

——— ———.

6095 UNITED STATES OF AMERICA, *ss:*

The President of the United States to the St. Louis, Iron Mountain & Southern Railway Company; Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States at the City of Washnigton

within thirty days from date of this writ, pursuant to an appeal duly allowed by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, and filed in the Clerk's office of said Court on the 26th day of June, 1911, in a cause wherein Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas are appellants and you are appellee, to show cause, if any, why the decree rendered against the appellants as in said appeal mentioned, should not be corrected, and why speedy justice should not be done in their behalf.

Witness the Honorable Jacob Trieber, District Judge presiding in the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, this 26th day of June, 1911.

JACOB TRIEBER, *Judge.*

Service of the above citation this day acknowledged.

MOORE, SMITH & MOORE,
*Solicitors for the St. Louis Iron Mountain & Southern Railway Company.*

June 26th, 1911.

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

6096 In the Supreme Court of the United States.

No. 813.

ROBERT P. ALLEN et al., Railroad Commissioners, Appellants,
v.
THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, Appellees.

*Stipulation.*

It is stipulated by counsel that the following parts of the record in the above entitled cause be not printed:

1. Standard Freight Distance Tariff No. 3, which appears as Exhibit A to complaint and found at pages 36-92 inclusive, and also found as Exhibit N-1, pages 5900-5956 inclusive. "Court Tariff," which is Exhibit A to the order modifying the injunction and is to be found at pages 490-520 inclusive. Western Classification No. 47, and its supplements, which constitute Exhibit No. 49, which is to be found at pages 5417-5678 inclusive.

It is stipulated that either party may cause twenty-five copies of any of the publications above referred to, to be filed with the printed record and treated as a part thereof.

2. The following diagrams and maps in colors, graphic charts and maps, to-wit: Exhibit 1, Map of the Missouri-Pacific System, including the St. Louis, Iron Mountain & Southern Railway, found

at pages 5235-5236. Exhibit 9, Map of St. Louis Southwestern Railway lines, found at pages 5287-5288. Exhibit 24, Map of the United States, found at pages 5333-5334. Exhibit 30, graphic chart to the testimony of McPherson, found at pages 5358-5359. Exhibits 38, 39, 40, 41, 42 and 43, which are maps illustrating the "zone rates" and found at pages 5380-5391 inclusive. C-1 found at page 5853, D-1 found at page 5855, and L-1, including nine graphic charts found at pages 5886-5896 inclusive. M-1, a graphic chart illustrating the proportion of the rates to the St. Louis, Iron
6097 Mountain & Southern Railway in Arkansas, of the first class rate to sundry Texas common points, found at pages 5897-5898. J-1, being a blue print showing the main tracks of the St. Louis, Iron Mountain & Southern Railway, within the city limits of Fort Smith, Arkansas, found at page 5881.

This stipulation is intended to cover all graphic charts, diagrams and maps in the record. Should any other diagram or map be in the record not herein enumerated, the same shall not be printed. It is further stipulated that either party may cause twenty-five copies of any of the above maps, charts, or diagrams, to be made and treated as a part of the record, and any of the same may be used in briefs by either side.

3. The following exhibits are not to be printed, to-wit: Exhibit 7, page 5272, as Exhibit 7-A takes its place. Exhibit 11, page 5292, as Exhibit 11-A or 11-Revised, takes its place. Exhibit 25, pages 5335-5349, same being an employés' time table. Exhibit 53, detailed statement of train movements, found at pages 5690-5721 inclusive. Exhibit A-1, pages 5848-5850, the same being blank form of freight conductors' wheel report. B-1, pages 5351-5352, being form of way bill. None of Exhibit I-1, being the affidavit of E. K. Voorhees, after paragraph in the middle of page 4 of said affidavit. K-1, page 5885, General Instructions on General Classification of Bridges.

4. The affidavits presented to Judge Van Devanter for preliminary injunction, shall be omitted with the right reserved to either party to hereafter publish any part of the same that may be desired by such party, and either party may use any part of said affidavits in their brief with the same effect as if it were printed, said affidavit being found at pages 133-451 of the record.

6098 5. Any part of the record omitted from being printed under this stipulation, may by either party be hereafter printed or otherwise treated as a part of the record.

6. If either party shall file any of the exhibits or use any part of the affidavits presented to Judge Van Devanter or any other matter herein referred to, in their brief in said case, they shall notify opposing counsel thereof at least twenty days prior to the date the case is set for submission.

Given under our hands this 24th day of October, A. D. 1911.

J. M. HILL,
*Attorney for Appellants.*
J. M. MOORE,
*Attorney for Appellees.*

6099 [Endorsed:] File No. 22,889. Supreme Court U. S., October Term, 1911. Term No. 813. Robert P. Allen et al., Commissioners etc., Appellants, vs. The St. Louis, Iron Mountain & Southern Railway Company. Stipulation as to printing record. Filed October 31, 1911.

Endorsed on cover: File No. 22,889. E. Arkansas C. C. U. S. Term No. 813. Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas, appellants, vs. The St. Louis. Iron Mountain & Southern Railway Company. Filed October 6th, 1911. File No. 22,889.

[End of Volume III.]

(22,890.)

# SUPREME COURT OF THE UNITED STATES.

**OCTOBER TERM, 1911.**

## No. 814.

---

ROBERT P. ALLEN, GEORGE W. BELLAMY, AND WILLIAM F. McKNIGHT, RAILROAD COMMISSIONERS OF THE STATE OF ARKANSAS, APPELLANTS,

**vs.**

THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.

---

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE EASTERN DISTRICT OF ARKANSAS.

---

INDEX.


| | Original. | Print |
|---|---|---|
| Caption to transcript | 1 | 1 |
| Bill of complaint | 1 | 1 |
| Exhibit "A"—Railroad commission tariff No. 3, June 15, 1908 (omitted in printing) | 42 | — |
| Order filing defendants' answer | 100 | 21 |
| Answer of defendants | 101 | 22 |
| Order continuing hearing of application for temporary injunction | 129 | 36 |
| Order for temporary injunction | 129 | 36 |
| Memorandum opinion of court on motion for temporary injunction | 133 | 38 |
| Complainant's affidavits on motion for temporary injunction | 138 | 41 |
| Affidavit of R. E. Kimbell (omitted in printing) | 139 | — |
| Exhibits A to G—Statements ( " " ) | 144 | — |
| Affidavit of J. D. Watson ( " " ) | 154 | — |
| Edwin Stewart ( " " ) | 158 | — |
| E. W. La Beaume ( " " ) | 161 | — |
| J. W. Maxwell ( " " ) | 166 | — |
| R. E. Kimbell ( " " ) | 171 | |


JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C., NOVEMBER 7, 1911.

| | Original. | Print |
|---|---|---|
| Defendants' affidavits on motion for temporary injunction (omitted in printing) | 176 | — |
| Affidavit of G. W. Swaim and exhibits. (omitted in printing) | 177 | — |
| F. Bache ( " " ) | 237 | — |
| J. T. Jarrell ( " " ) | 241 | — |
| W. R. Duley ( " " ) | 245 | — |
| F. W. Boltz and exhibits ( " " ) | 247 | — |
| T. F. Wharton ( " " ) | 265 | — |
| J. E. Hampton and exhibits ( " " ) | 294 | — |
| Geo. R. Brown ( " " ) | 317 | — |
| C. F. Edrington ( " " ) | 321 | — |
| W. W. Dickinson ( " " ) | 324 | — |
| A. V. Alexander ( " " ) | 326 | — |
| S. P. Scott ( " " ) | 328 | — |
| T. B. Jacobs ( " " ) | 330 | — |
| T. J. Gay ( " " ) | 333 | — |
| Jas. L. Jones ( " " ) | 335 | — |
| Fred F. La Grave ( " " ) | 337 | — |
| A. R. Bragg ( " " ) | 341 | — |
| J. B. Allen ( " " ) | 346 | — |
| A. D. Allen ( " " ) | 348 | — |
| R. T. Brook ( " " ) | 350 | — |
| S. P. Scott ( " " ) | 353 | — |
| J. J. Mandelbaum and exhibits (omitted in printing) | 355 | — |
| T. F. Wharton and exhibit. (omitted in printing) | 363 | — |
| Order filing injunction bond | 370 | 41 |
| Injunction bond | 371 | 41 |
| Order filing stipulation of counsel extending time for filing replication | 373 | 43 |
| Stipulation extending time to file replication | 374 | 43 |
| Order granting petition of counsel to withdraw from case | 375 | 44 |
| Petition of counsel to withdraw | 376 | 44 |
| Order filing motion of defendants to modify injunction | 376 | 45 |
| Motion of defendants to modify injunction | 377 | 45 |
| Order modifying injunction | 390 | 52 |
| Exhibit "A"—Court tariff. (omitted in printing) | 391 | — |
| Opinion of court on motion to modify injunction | 422 | 53 |
| Order filing replication | 456 | 74 |
| Replication to answer | 456 | 75 |
| Order requiring additional bond | 457 | 75 |
| Order requiring complainant to allow examination of books, records, &c | 458 | 76 |
| Order appointing P. C. Dooley special master, &c | 460 | 77 |
| Order filing additional bond | 461 | 77 |
| Bond | 461 | 78 |
| Order making allowance to master | 465 | 79 |
| Order as to taking testimony in rebuttal | 466 | 80 |
| Order appointing Chas. M. Rice special examiner | 466 | 80 |
| Order filing oath of Chas. M. Rice as special examiner, &c | 467 | 80 |
| Order filing defendants' motion to modify injunction | 468 | 81 |
| Motion of defendants to modify injunction | 468 | 81 |
| Order filing response of complainant to motion to modify injunction | 472 | 84 |
| Response of complainant to motion to modify injunction | 472 | 84 |

| | Original. | Print |
|---|---|---|
| Order continuing final hearing | 475 | 85 |
| Order as to final hearing, January 3, 1911 | 476 | 86 |
| Order as to final hearing, January 4, 1911 | 476 | 86 |
| Order as to final hearing, January 5, 1911 | 477 | 86 |
| Order as to final hearing, January 6, 1911 | 477 | 86 |
| Order making allowance to special examiner | 478 | 87 |
| Order as to final hearing, January 7, 1911 | 479 | 88 |
| Order as to final hearing, January 9, 1911 | 479 | 88 |
| Order substituting parties defendant | 480 | 88 |
| Order as to final hearing, January 16, 1911 | 481 | 89 |
| Order as to final hearing, January 17, 1911 | 481 | 89 |
| Order as to final hearing, January 18, 1911 | 482 | 89 |
| Order as to final hearing, January 19, 1911 | 482 | 90 |
| Order as to final hearing, January 20, 1911 | 483 | 90 |
| Order as to final hearing and submission of cause, January 21, 1911. | 483 | 90 |
| Testimony of complainant and defendants (not set out) | 484 | 90 |
| Final decree, May 11, 1911 | 485 | 91 |
| Opinion of court (not set out) | 487 | 92 |
| Order filing stipulation of counsel | 488 | 92 |
| Order maintaning *status quo* pending appeal | 489 | 93 |
| Order severing Lee and McLean as parties defendants | 489 | 93 |
| Order filing assignment of errors, prayer for appeal, and appeal bond. | 490 | 94 |
| Assignment of errors | 491 | 94 |
| Prayer for appeal | 498 | 100 |
| Appeal bond | 500 | 101 |
| Order filing citation, &c | 502 | 102 |
| Citation (copy) | 503 | 103 |
| Order extending time for filing record in Supreme Court of the United States | 503½ | 103 |
| Clerk's certificate to transcript | 504 | 104 |
| Original citation | 505 | 104 |
| Stipulation as to printing record | 506 | 105 |

1 In the United States Circuit Court for the Western Division of the Eastern District of Arkansas.

In Chancery.

Be it remembered, That on the 18th day of July, A. D., 1908, come into the office of the Clerk of the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas, the St. Louis, Southwestern Railway Company, by Moore, Smith & Moore, Esqs., its Solicitors, and filed thereon on the Chancery side of said Court, its Bill of Complaint against Robert P. Allen, John W. Crockett and John E. Hampton, Railroad Commissioners of the State of Arkansas, Henry Leigh and George L. McLean, which Bill of Complaint is as follows:

In the United States Circuit Court for the Western Division of the Eastern District of Arkansas.

In Chancery. No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Plaintiff,

v.

ROBERT P. ALLEN, JOHN W. CROCKETT, and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas; Henry Leigh and George L. McLean, Defendants.

2 To the Honorable Judges of the Circuit Court of the United States for said District:

Your orator, St. Louis, Southwestern Railway Company brings this, its Bill of Complaint against Robert P. Allen, John W. Crockett and John E. Hampton, as members of and constituting the Railroad Commission of the State of Arkansas and Henry Leigh and George L. McLean.

First. Your orator is a corporation organized under the laws of the State of Missouri, with its domicile at the City of St. Louis, in said State.

Second. The said Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, are citizens and residents of the State of Arkansas, and constitute the Railroad Commission of said State. Said John W. Crockett and John E. Hampton reside in said District, and Robert P. Allen resides at Van Buren, in Crawford County, in the Western Judicial District of said State.

The Act of the Legislature of said State under which said Commission was created, fixes and establishes the domicile of the Commission at the City of Little Rock, in the County of Pulaski, in said State and in the Western Division of the Eastern Judicial District thereof. The Defendants, Henry Leigh and George L. McLean are citizens of the State of Arkansas, and reside at the city of Little Rock, in said District.

Third. Your orator further avers that the act creating said Railroad Commission heretofore referred to, approved March 11, 1899, entitled, "An Act to provide for the regulation of Railroad, freight and passenger tariffs, in this State, to prevent unjust discrimination by extortion in the rates charged for transportation of passengers and freights, and to prohibit railroad companies, corporations and lessees in this State from charging other than just and reasonable rates, and to punish the same, and to prescribe the mode of procedure and rules of evidence in relation thereto, and to appoint Commissioners and to prescribe rules for their government and define their powers and duties in relation to the same", and acts supplemental to and amendatory thereof, invest in said Railroad Commission the power and impose upon it the duty to make and put in effect reasonable and just rates of freight, express and passenger tariffs, to be observed by all persons and corporations operating any railroad or engaged in transporting persons or property in said State, and to make just and reasonable rates of freight, express and passenger traffic on connecting railroads operated by different and independent companies or corporations between stations within said State, to be observed by all persons, companies or corporations operating connecting railroads within the State, and if two or more connecting lines of railroad in said State shall fail to agree upon the division of charges arising from transportation of freights, passengers or cars over their lines, said Commission is authorized to make the division and fix the pro rata of such charges to be received by each of said connecting lines. Said Act further provided that in case any person or corporation engaged in operating a railroad in the State shall not do, or permit to be done, any act, matter or thing in said act required to be done, or shall be guilty of the violation of any of the provisions of the Act, such person or corporation shall be held to pay to the person, firm or corporation thereby injured double the amount of the damage by him sustained, and all costs to be recovered by such person, firm or corporation; and in all actions between private parties and railroad companies, brought under said Act, the rates, charges, orders, rules, regulations and classifications prescribed by said Commission prior to the institution of such action shall be held to be reasonable, fair and just and shall not be controverted therein. It is also provided by said Act that if any person or corporation operating a railroad in said State or any lessee of such person or corporation shall violate any of the provisions of the Act, or aid or abet therein, or shall violate any tariff of charges as fixed by said Commission, or any rules, regarding railroads or express companies as made by said Commission, such person corporation or lessee shall be liable to a penalty of not less than $500.00 nor more than $3000.00 for each violation of said Act, in an action brought in the name of the State, and in the County in which such violation shall occur, and the said Commission shall institute such actions as may be necessary for the recovery of the penalties prescribed therein through the prosecuting attorney of the proper district, or through Counsel specially employed by said Commission.

And your orator avers that the effect of the aforesaid provisions

of said Act is to deny your orator and all persons and corporations operating railroads in said State of the right to a judicial investigation of the validity and reasonableness of the rates, rules,
5 regulations and classifications prescribed by said Commission, and to deprive your orator and all others in like condition of the due process of law, contrary to the provisions of Section 1 of the Fourteenth Amendment to the Constitution of the United States.

Fourth. Your orator further alleges that on the 15th day of July, 1904, the predecessors of Defendants, the then acting Railroad Commissioners of said State, assuming to act under the authority of the aforesaid provisions of the Statutes of said State, promulgated Standard Freight Distance Tariff No. 2, prescribing freight rates and charges applicable to classes and commodities between all stations in said State, on all railroads operated therein subject to western classifications as adjusted to traffic in said State. The rates therein prescribed were continued in force, with certain amendments thereof made and promulgated by said Commission from time to time, until June 4, 1908, when said Defendants, acting in their official capacity, adopted Standard Freight Distance Tariff No. 3, applying on classes and commodities between all railroad stations in said State, subject to western classifications as adjusted to traffic therein, cancelling Standard Freight Distance Tariff No. 2 aforesaid, and ordered that the same take effect on June 15, 1908. Said tariff contains many of the rates and regulations that were contained in Standard Freight Distance Tariff No. 2, as aforesaid, and the changes and amendments made therein by said Commission since said Tariff No. 2 was promulgated, and other changes in rates on classes and
6 commodities made in the order of said Commission adopted on June 4, 1908. A copy of said Standard Freight Distance Tariff No. 3 is herewith filed as Exhibit "A" and made a part hereof.

Fifth. Your orator avers that each and all of the charges and rates prescribed in said Tariff No. 3 aforesaid, as well as the preceding Tariff No. 2, applying on classes and commodities as aforesaid, are unreasonable, unjust, oppressive, discriminative, confiscatory and void, both in respect to said order as a whole and in respect to each and every rate, charge, tariff, schedule, classification, rule and regulation separately:

(1) The railroad equipment, property and franchises owned and used by your orator in operating its said road in said State represents an investment of $16,023,090.00, according to the last assessment of said property for taxation by the State of Arkansas through the State Board of Railroad Assessors, which assessment is now in force. Orator has exercised as great a degree of economy in the use and operation of said property as was compatible with the interest of the public with safe and efficient service to the public, only employing such officers, agents and employees, and expending such amounts in the maintenance and repair of its road bed, tracks and stations and new equipment of engines, cars and other appliances necessary to the operation of its road and the maintenance of said property, as was necessary and essential to the due and proper oper-

ation of its trains, and to the maintenance of said property with due regard to its preservation and the safety of the public.
7 That no unreasonable salaries or wages have been, or are now being, paid to any of its officers or employees. But notwithstanding that orator has practiced all reasonable and proper economy in operation and maintenance as aforesaid, it has been unable and will be unable to operate said road at a profit at the rates prescribed in said tariff. On the contrary, said rates do not and will not yield a just and reasonable return upon the value of orator's property used in said service, either in respect to the money invested in said property or the service rendered. And in that behalf your orator alleges that the total earnings from its interstate business in the transportation of freights in the State of Arkansas, during the year ending June 30th, 1908, did not exceed the sum of $351,735.60; that the expense of operation solely incident to said business, and the fixed charges solely incident and chargeable to intrastate transportation of freights was $346,245.47. That the total earnings of said property from the transportation of freight, wholly within the State of Arkansas is not and will not be sufficient under the rates on classes and commodities prescribed as aforesaid as a whole, after paying operating expenses, charges for maintenance, taxes and other necessary fixed charges appertaining to said business, to yield any return by way of compensation for the service rendered by your orator, and the effect of such rates is and will be to prevent your orator from receiving any return or profit for the service rendered by it to the public, and will deprive orator of its property without due process of law and will deny to it the
8 equal protection of the laws.

(2) Your orator represents that among the principal commodities transported on the lines of railroad in the State of Arkansas are coal and coal slack; that the principal, in fact, the only, coal fields now or heretofore operated in said State, are situated in the Counties of Johnson, Franklin, Sebastian and Logan; that the coal mined in said counties is shipped from the following stations: That in Johnson County from Spadra, Coal Hill, Clarksville, Cabin Creek; That in Franklin County from Denning; that in Sebastian County from Jenny Lind, Huntington, Burma, Montreal, Hackett, Jensen, Bonanza, Dallas, Dennison, Excelsior, Greenwood, Gunther, Harp, Hartford, Hoffman, Hoye, Fidelity, Midland, Patterson and Prairie Creek; and that in Logan County from Knoxville, Piney and Paris.

That under the commodity rates prescribed in the aforesaid tariff the rate on coal for a distance of 110 to 120 miles is $1.00 per ton; 120 to 140 miles, $1.05 per ton; 140 to 160 miles, $1.10 per ton; 160 to 170 miles, $1.25 per ton; 170 to 180 miles $1.30 per ton; 180 to 190 miles, $1.30 per ton; 190 to 200 miles, $1.40 per ton; 200 to 210 miles, $1.45 per ton; 210 to 220 miles, $1.50 per ton. That the principal market in said State for coal and coal slack is the city of Little Rock and points north, south and east of said city; that the City of Little Rock is 114 miles from Coal Hill, from 141 to 156 miles from the aforesaid coal stations situated in Sebastian County

and 165 miles from the station of Paris, in Logan County, by
9 the lines of road connecting said points with said City, and over which the product of the said coal mines is shipped to said markets. All coal shipped to said markets and each of them is routed through the city of Little Rock, and the same difference in the length of haul from the stations at which said shipments of coal originate exists as to all of them. That the coal shipped to points north, south and east of said city is there transferred to different lines of road, and in most cases is subject to the joint through rates prescribed by said Commission. That the coal mines situated in Sebastian County are on the line of the St. Louis & San Francisco Railroad and the Midland Valley Railroad, and the St. Louis, Iron Mountain & Southern Railroad. All of said lines of road connect with your orator's road at the City of Little Rock, either directly, or through intermediate connecting lines.

That under the regulations adopted by said Commission in regard to rates on commodities Coal Hill rates apply from all points in Logan, Franklin and Sebastian Counties, and all points in Johnson County west of Coal Hill to the City of Little Rock and points north, south and east of said City, thus fixing the maximum rate from any of said points to the City of Little Rock at $1.00 per ton. That said rate does not pay the cost, including the terminal service, of handling said product, and is unreasonable, unjust and confiscatory. That all the coal shipped from Mansfield, Hartford and Paris has to be transported over connecting lines of railroad, and the rate prescribed as aforesaid applies whether said commodities are shipped
10 over one or more than one railroad, under the regulations adopted by the said Commission as aforesaid in connection with joint rates on commodities established by said Board. That the distance by rail from the aforesaid stations to Little Rock is from 143 to 165 miles; that the rate from said stations to the city of Little Rock, as prescribed by said Commission on the several connecting roads is $1.60 per ton, and yet your orator and its connecting lines are compelled under the aforesaid regulations to transport said products, from said stations to all stations on your orator's road, on a basis of $1.00 per ton, and it avers that the aforesaid rates are not only confiscatory, but they are discriminative, and do not afford to the said lines, or either of them, a fair, reasonable, or just compensation for the service rendered in transporting said products.

(3) Your orator alleges that a large proportion of the entire tonnage transported over its lines of railroad originating in Arkansas, consists of timber and timber products; that at least 90 per cent of said tonnage is shipped from points in said State to points in other States and is interstate commerce. Under the universal practice prevailing among shippers and railroad companies in said State, where the timber is situated at a distance from the mills, it is transported by rail and concentrated at milling points for the purpose of being converted into lumber and other products, and takes the prevailing rate under interstate shipments from the point at which the shipment of the rough material originated in said State to the

destination of the mill product in other States; that said
11 milling privilege in transit does not affect the interstate character of said shipments, but is an incident only in the interstate movement. The practice of all the railroads in the State engaged in the transportation of that commodity was, prior to April 1, 1907, to collect from the shipper the local rate from the place at which the shipment originated to the milling or concentration point. After the product had been milled and shipped to market the regular interstate rate from the point of origin to the point of destination was applied, allowing the shipper the difference between the local and through rate between the stations at which the rough material was received and the point of concentration. All shipments of rough material and the several products thereof, viz., lumber, staves, bolts, spokes, handles, hooks, hubs, boat oars, furniture, etc. took that course. On April 1, 1907, said Commission recognizing the aforesaid practice, and for the purpose of regulating the same, made an order that the following rates should apply on the shipment of rough lumber, staves, flitches, bolts and logs, in car loads, between all points in Arkansas, viz: For a distance of from—

1 to 50 miles, inclusive, 2 cents per cwt.
51 to 100 miles, inclusive, 2½ cents per cwt.
101 to 150 miles, inclusive, 3½ cents per cwt.
151 to 250 miles, inclusive, 5 cents per cwt.
250 miles and over, 8 cents per cwt.

Said rates are made upon condition expressed in said order that the manufactured product shall be reshipped over the same line bringing in the rough material.

12 Said order further provided that carriers would be allowed to require consignee- desiring to avail themselves of the benefit of said rate to enter into contracts with reference to the reshipment of the finished product under the rules prescribed by said Commission, and your orator avers that said order of the Commission was made with the direct intent and purpose of establishing, regulating and fixing interstate rates on such material and commodities, by the device of establishing rates applicable between the point of origin of the rough material and the point of concentration for milling purposes, and intending and requiring that such rates should be applied to all shipments of such material from the point of origin in said State to the point of destination in other States; and orator avers that such order is a direct interference with interstate commerce over which said Board has no jurisdiction, and is, for that reason, unlawful and void. Orator further avers that the aforesaid rates are unreasonable and oppressive, because they do not afford to carriers any compensation whatever for the service rendered in connection with the transportation of said commodities and are therefore confiscatory, and take the property of orator and other carriers in said State, without compensation, and are in violation of Section 1 of the Fourteenth Amendment of the Constitution of the United States, prohibiting the taking of property without due process of law and

without compensation, and guaranteeing to all persons the equal protection of the laws.

(4) Your orator alleges that cotton is the principal agri-
13 cultural product of the State of Arkansas; that practically the entire crop raised in the State each year is shipped to markets in other States and foreign markets. That on account of economy in transporting said product it has come to be a universal practice to compress the same in small bales or packages, whereby a large number of bales can be loaded on a car; that it is impracticable to establish and operate plants and machinery for the purpose of compressing cotton, except at a few central points in the State, and for that reason all cotton destined to markets outside of said State are shipped in the original bales or packages as prepared at the local ginneries throughout the country and concentrated at points on the lines of railroad, where compresses are operated for compression. Under the universal practice and the rulings of the Interstate Commerce Commission of the United States, all cotton raised in said State and shipped to points in other States and foreign markets is subjected to a process of compression for the purpose aforesaid, the shipper being required in the first instance to pay the local rate to the point of concentration; but upon reshipment to points of destination the through, or interstate rate, is applied to the entire shipment from the point of origin (that is to say, the station from which the same was consigned to the point of concentration), to the point of ultimate destination, the difference in the local rate between the point of origin and the place of concentration being allowed the shipper and adjusted in the charge applied to the interstate shipment. Said privilege of compression in transit does
14 not affect the interstate character of said shipment, but is an incident only in the interstate movement. On September 16, 1907, said Commission made and promulgated an order, prescribing the following rates on uncompressed cotton in bales between all stations in said State on the following lines of railroad, viz:—Chicago, Rock Island and Pacific Railway and branches, Kansas City Southern Railway, Louisana & Arkansas Railroad, St. Louis Southwestern Railway and branches, St. Louis, Iron Mountain & Southern Railway, Leased, Independent and Operated Lines—For a distance of thirty miles and under, 10 cents per cwt.

For a distance of forty-five miles and over thirty miles, 11 cents per cwt.

For a distance of fifty miles and over forty-five miles, 12 cents per cwt.

For a distance of seventy-five miles and over fifty miles, 14 cents per cwt.

For a distance of one hundred miles and over seventy-five miles, 15 cents per cwt.

For a distance of one hundred and twenty-five miles and over one hundred miles, 20 cents per cwt.

For a distance of one hundred and fifty miles and over one hundred and twenty-five miles, 30 cents per cwt.

For a distance of over one hundred and fifty miles, 40 cents per cwt.

Said order provides further that—

"In so far as the jurisdiction of the Commission is involved, the railroad companies operating in this State may continue in effect the present rates, rules and regulations in respect to the
15 concentration of cotton at compress points, or the railroad companies may make such reasonable modifications of same as they may desire, provided, that before any such change or modification desired to be made by any railroad company shall become operative, the same shall be first submitted to and approved by the Commission.

"All rates, rules and regulations in effect in this respect with reference to the shipment of cotton, which is not expressly disturbed or affected by the provisions of this order, shall remain in effect to the same extent as if this order had not been issued." Referring therein to the practice hereinbefore alleged in regard to the concentration and shipment of cotton from said State into other States and to markets in foreign countries.

Orator avers that the movement of cotton as aforesaid, and each and all of the parts thereof, as hereinbefore alleged, have been treated and recognized by the public and by the Interstate Commerce Commission of the United States as interstate commerce, and the direct intent and effect of the aforesaid rules, rates and orders made and promulgated by the Railroad Commission of the State of Arkansas, in regard to the transportation of cotton is a direct and intentional interference with interstate commerce, both as regards the rates and regulations in reference to the transportation thereof. Wherefore it avers that the same is unlawful and void. And orator further avers that said rates are so unreasonable, unjust and oppressive as not to afford any profit to the carriers handling the
16 same, and are confiscatory and in violation of the aforesaid provision of the Fourteenth Amendment to the Constitution of the United States.

(5) Your orator alleges that its main line of Railroad extends from St. Louis, in the State of Missouri, to Texarkana, in the State of Arkansas, and is 564 miles in length, that it likewise owns and operates the following branch lines, viz: Stuttgart Branch from Stuttgart to Gillett, 35.1 miles; Little Rock Branch, Altheimer to Little Rock, 44.8 miles. That all of said lines, owned and controlled by your orator as aforesaid are operated as a unit; that a very large amount of interstate traffic passes over them and each of them between the States in and through which the same are operated and into and through other States with which said lines form connections at their several termini. That the local rates in the several states into and through which said lines pass enter to a very large extent, and have a controlling influence on the through rates charged on interstate shipments, which are made on a combination, or percentage of the combination, of the intermediate local rates, by adding the local rates within the several states into and through which such shipments pass. Said through rates are thus constructed, and from necessity and under the rulings of the Interstate Commerce Commission of the United States, and the orders of said Commission

of the State of Arkansas, affects and controll*s* rates on interstate shipments passing from, into or through said State, by its effect in reducing interstate rates to the sum of the combination or
17 percentage of the combination of the local rates on such shipments. Orator avers that many of the rates established by said Defendants were made with reference to the local rates in adjoining States, and for the purpose of compelling the reduction of through rates on the basis of local rates in the States into and through which shipments pass.

And so your orator avers that many of the rates established by the said Railroad Commission of the State of Arkansas, as aforesaid, were made with the intention and for the purpose, and each and all of said rates so established as aforesaid, will have the effect of regulating and fixing interstate rates on all such classes and commodities, and is therefore an attempt to regulate interstate rates and affect interstate commerce, and is in violation of the Constitution and laws of the United States, and an invasion by the Defendants of the powers, rights and duties vested exclusively by the Act of Congress, in officials of the United States.

(6) Your orator further alleges that it is provided by an Act of the Legislature of said State, approved April 8th, 1903, that all persons, companies or corporations operating any railroad in said State that forms part of a continuous line of railway communication, between points in the State, shall issue through passenger tickets and check baggage through, to and from all points on such continuous line of communication at through rates and fares; that all freight and traffic carried wholly within this State to and from stations on lines of continuous carriage shall be way-billed through at
18 through rates and tolls from points of departure to the point of arrival, without being rebilled at junction points; and in the case of carload freights the forwarding carrier shall receive and forward the same in the car or cars in which the freight is tendered and without breaking bulk of packages; that in all cases where there is by physical connection of railroads, a continuous line of railway communication between stations within this State, whether such stations be on railroads operated by one and the same company or corporation, or on railroads operated by different and independent companies or corporations, it shall be the duty of said Commission to make just and reasonable rates of freight, express, and passenger traffic to and from such stations, to be observed by all persons, companies or corporations operating any railroad or engaged in transporting persons or property as express or freight in this State. That if any two or more connecting lines of railroad shall fail to agree upon a fair and just division of the charges arising from the transportation of freights, passengers or cars over such lines, the Commission shall make the division and shall fix the pro rata part of such charges to be received by each of said connecting lines.

That said Commission, assuming to act under and by virtue of the authority of the provisions of the aforesaid statute, by the order adopted by it on June 4, 1908, as aforesaid, attempted to make and put in force through joint rates for the transportation of shipments

of merchandise by classes and commodities over two or more lines of railroad, which are not under the same manage-
19 ment and control, by adding to the rates prescribed in the schedules prescribed by said Commission for single line or continuous mileage, certain differentials, and by fixing a maximum of through joint rates on classes and commodities to be charged by all railroads on shipments between stations in this State. The differential prescribed on merchandise by classes is as follows:

Less than car loads—

| | |
|---|---|
| First Class | 10c |
| Second Class | 8c |
| Third Class | 7c |
| Fourth Class | 6c |
| Fifth Class | 5c |

Car load—

| | |
|---|---|
| Class A | 5c |
| Classes B and C | 4c |
| Classes D and E | 3c |

Provided, that when the sum of the rates prescribed for local application is less than the through joint rate ascertained as aforesaid, such sum of rates shall be used as a joint rate, and further, that the through joint rate shall not, in any case, exceed the following figures:

Less than car load—

| | |
|---|---|
| First Class | 82c |
| Second Class | 79c |
| Third Class | 65c |
| Fourth Class | 74c |
| Fifth Class | 37c |

Car loads—

20

| | |
|---|---|
| Class A | 41c |
| Class B | 31c |
| Class C | 27c |
| Class D | 23c |
| Class E | 21c |

The joint rates on commodities on two lines of Railroad are determined in the same manner, with the proviso that the total through joint rate shall not exceed that charged for a single line haul on such commodities.

The through joint rates for the transportation of shipments of merchandise by classes over three or more lines of railroad are determined by adding the charges on the several railroads, or parts of railroads, as prescribed, for the respective distances such class merchandise is carried over each line, and deducting from the sum ten per cent, provided that the through joint rate shall in no case exceed the following:

Less than car load—

| | |
|---|---|
| First Class | 92c |
| Second Class | 84c |
| Third Class | 72c |
| Fourth Class | 53c |
| Fifth Class | 42c |

Car Loads—

| | |
|---|---|
| Class A | 46c |
| Class B | 35c |
| Class C | 31c |
| Class D | 26c |
| Class E | 24c |

21 The joint through rates for the transportation of commodities over three or more lines of Railroad, are determined in the same manner as in the case of merchandise by classes provided that said rates shall not exceed the commodity rates for three hundred miles plus the differential applied to through commodity rates for two lines of railroad, and shall not be less than the rates applying for seventy-five miles. Orator here refers to sheets, 19, 20 and 21 of Exhibit "A" hereto, for a full statement in detail of the through joint rates attempted to be established by and through the aforesaid order of said Commissioners. Your orator avers that neither the State of Arkansas nor the Defendants, acting as the State Railroad Commission of said State, has the power or authority to make contracts for joint through rates, or joint through routing, or to compel separate and independent lines of railroad to enter into contracts for joint rating or routing of freight over separate lines of railroad, or to accomplish the same result by prescribing arbitrary rules for the creation and division of through joint rates on separate lines of railroad; or to make and enforce joint rates between your orator and other connecting lines of railway in said State; that the effect of the aforesaid order is to create and establish traffic arrangements between separate and independent lines of railroad in relation to the transportation of merchandise between points on lines of each of said roads, and to compel said railway companies to enter into contract relations with each other without their consent, although the same may
22 be hurtful to their interests. Orator further alleges that the joint through rates prescribed in said order are insufficient to afford any return whatever for the service rendered by the several railroads engaged in the transportation of through freights; that said order is unjust, oppressive, confiscatory, and its effect is to deprive your orator and all other railroad companies operating in said State of their property without due process of law, and will deprive them of the equal protection of the laws in violation of the provision of the Fourteenth Amendment of the Constitution of the United States.

Sixth. Your orator further represents that by an Act of the legislature of the State of Arkansas, approved the 9th day of February, 1907, entitled, "An Act To Amend Section 6611, of Kirby's Digest of the Statutes of the State of Arkansas, by Fixing Passenger Rates

in this State and For Other Purposes," it is provided that the maximum sum which any corporation or person operating a line of railroad in this State shall be authorized to charge for carrying each first class passenger over such line within the State shall be fixed at five cents per mile on lines of railroad fifteen miles or less in length, three cents per mile on lines of railroad over fifteen and less than eighty five miles in length, and two cents per mile on all lines of railroad, over eighty-five miles in length; and for carrying children between the ages of five and twelve years, in charge of adults, one half the rates above named, and for such children as are under the
23 age of five years, that no charge whatever shall be made beyond what is collected from the adults having them in charge. It was further provided that said Act should take effect and be in force sixty days after its passage. Said Act was passed for the purpose of amending and is an amendment to Section 6611 of Kirby's Digest of the Statutes of said State.

Section 6620 of said Digest provides that if any person or corporation mentioned in section 6611 aforesaid shall charge, demand, take or receive from any person or corporation any greater compensation for transportation of passengers than is therein prescribed, such person or corporation shall forfeit and pay for every such offense a sum not less than $50.00 nor more than $300.00 and costs of suit, including a reasonable attorney's fee to be taxed by the Court, to be recovered in a suit at law in any Court of competent jurisdiction. That any officer, agent, or employee of any such person or corporation, who shall knowingly and willfully violate the provision of the Statute, by charging a greater rate than is therein prescribed shall be liable to the same penalty to be recovered in the same manner.

That on May 15, 1907, the Defendants, acting as Railroad Commissioners for said State, made and promulgated an order providing that—

"The maximum sum which any corporation, person or association of persons operating a line of railroad in this State shall be authorized to charge and collect for carrying each passenger over such line within the State is fixed at the following rates:
24 "On lines of Railroad fifteen miles or less in length, 5c. per mile.

"On lines of railroad fifteen miles in length and not over eighty-five miles in length 3c. per mile.

"On lines over eighty-five miles in length, 2c. per mile.

"And for carrying children in charge of an adult there may be charged and collected one half the above named rate for such of said children as may be under the age of twelve years and over the age of five years, and for such of said children as may be under the age of five years, no charge whatever shall be made beyond what is collected for the adults who shall have them in charge."

Prior to the passage of the aforesaid Statute and promulgation of the aforesaid order by the Defendants, your orator and all other railroads in said State operating lines over seventy-five miles in length, charged three cents per mile for the transportation of adults between all stations on its and their lines of railroad. That notwithstanding it at all times operated its trains in said State with as great a degree

of economy as was compatible with the comfort of passengers, safe and efficient service to the public and the maintenance and preservation of its property, as hereinbefore alleged, the gross receipts from carrying passengers within the limits of said State at the rate of three cents a mile aforesaid, after deducting therefrom the cost of conducting such business in the State, including operating expenses and maintenance and fixed charges properly appertaining to said business, were not sufficient to leave any adequate and reasonable profit or return upon the value of the property used in and about said business or for the service rendered the public.

Orator alleges that the rates fixed and established by the late Act of the Lesislature and by the order of said Commission as now in force in said State has caused a large reduction in the rates theretofore prevailing on the transportation of passengers and excess baggage. That it felt constrained, on account of the large number of actions, for double damages to which it would become subject under the provisions of the Statutes of said State and the provisions of said Statutes making the rates, charges, orders, rules, regulations and classifications, prescribed by said Commission in actions between private parties and railroad companies conclusive, and denying such companies the right to question or investigate the fairness, reasonableness and legality of such rates, charges, orders, rules, regulations and classifications in such action as well as of the harsh and severe penalties prescribed for the failure and refusal to put in force tariffs of charges and rules, regulating railroads prescribed and put in force by said Commissioners, as well as by the penalties specially prescribed for the failure to comply with the provisions of the Act of the Legislature, reducing passenger rates as aforesaid, to reduce its rates, in compliance with the provisions of said Statute and the aforesaid order; that said rates have been in force on its lines of railway in said State since the aforesaid statute and order took effect, and orator avers that all its earnings from intrastate transportation of freight and passengers in said State during said period have not been sufficient to pay operating expenses and the cost of maintenance and fixed charges properly chargeable to said business, and it has been compelled to operate its passenger and freight trains at a loss of revenue. Your orator alleges that the total earnings from the transportation of passengers between stations in the State of Arkansas during the year ending June 30, 1908, did not exceed $440,355.13; that the total expense of operation solely incident to said business, including all fixed charges, except interest charges, was $469,823.10 for the same time.

Seventh. Your orator alleges that the State of Arkansas contains no large cities and very few commercial centers; that a great deal of the jobbing and wholesale trade of said State is interstate business; that the population is sparse and very small as compared with the mileage of railroads operated in said State; that both freight and passenger business of your orator and of all other railroads operated in said State is light; that the rate of two cents per mile for the carriage of passengers and the freight rates prescribed in the aforesaid orders of the Railroad Commission of said State are unreasonably

low, and neither your orator, nor, it is informed, any other line of railroad operating in said State is able to earn a reasonable compensation for the services rendered either in the carriage of passengers or freight within said State, after paying the necessary
27 expenses of operating and other expenses necessary and incident to the intrastate business of said State. That while the rates of passenger fare, as well as freight rates have been reduced by the Acts of the Legislature of said State, as well as by the order promulgated by said Commission, the expense of operating and maintaining the railroads, and properties used in connection therewith, in said State, has been materially increased by reason of the legislation of said State, and the rules, regulations and orders of said Commission. That during the session of the Legislature of 1907, at which the Statute requiring the reduction of one third in the passenger rates was enacted, many statutes imposing burdens and increasing the expense of operating and maintaining railroads were passed. Among such enactments was a law requiring railroads exceeding fifty miles in length to employ three brakemen on freight trains consisting of more than twenty five cars, whereas previous to that time two brakemen had been employed and were sufficient for the efficient management of freight trains; requiring railroads to drain roadbeds, to construct foot walks to passenger depots, to equip all locomotives with electric headlights, limiting the hours of service of employés, making railroads liable for injuries caused by fellow-servants and absolutely liable for damages caused by fire, and numerous special acts affecting and increasing the expense of operating passenger trains and maintaining depots and station houses. That many of the requirements contained in said Act were not necessary to the safe and efficient operation of trains. That a large amount of expense has been incurred and will be neces-
28 sary in making and maintaining the changes provided for in said legislation, without any increase in the revenues by reason thereof. The result of all of which legislation has been greatly to increase the cost of conducting the business of your orator and other persons and corporations engaged in like business in said State. And orator alleges that all the earnings of all its lines of railroad within said State on the business transacted by it in the State are not sufficient to pay the expense of operating properly applicable to said business and afford any adequate or reasonable returns on the money invested in said property.

Eighth. Your orator alleges that the lines of road operated by it were constructed under grants of the State of Arkansas, which confer the right to collect reasonable rates of toll and fare for the transportation of freight and passengers over and upon said railroad, and such as would enable your orator to operate said road profitably. That there grew out of said grants and was necessarily implied therefrom an agreement or contract on the part of the State that your orator should have the right to impose reasonable charges and tolls for the transportation of persons and property

That the General Assembly of the State of Arkansas, by an Act approved July 23, 1868, passed a general law for the creation and

organization of railroad corporations, for the purpose of owning, maintaining and operating railroads in said State, under which Act your orator was incorporated. That said Act among other things provided that—

29 "The Legislature may, when any such railroad (meaning any railroad organized under the provisions of said Act) shall be open for use from time to time, alter or reduce rates of toll, fare, freights, or other profits upon such road; but the same shall not, without the consent of the corporation be so reduced as to produce with said profits less than 15 per cent per annum on the capital actually paid in, nor unless on an examination of the amounts received and expended to be made by the Secretary of State, he shall ascertain that the net income derived by the Company from all sources for the year then last passed shall have exceeded an annual income of 15 per cent upon the capital of the corporation actually paid in."

Said provision of the Statute is now in force, never having been repealed, and is contained in Kirby's Digest of the Statutes of Arkansas, as Section 6590.

Said lines were constructed by your orator and those from whom it acquired and under whom it holds the same, on the faith that the State would, in good faith, carry out and perform its aforesaid agreement in regard to rates to be charged by railroads in said State as aforesaid, as well as with reference to the annual profits, and that it would not, by direct legislation, or through any agency created by it, impose on the persons and corporations owning and operating said railroads, such rules, regulations and tariffs as would deprive them of the right to establish and charge such rates as should

30 be reasonable, just and fair and as will enable it to earn a profit of fifteen per centum per annum on the capital actually paid in. Your orator alleges that while it has voluntarily reduced its rates from time to time as the development of the business upon its lines and the condition of the country would warrant, it has never consented to such reduction of its rates by the State as would reduce its profits annually below the rates provided for in the aforesaid Statute.

Your orator avers that, disregarding its contract and obligation in the premises, the State of Arkansas, by and through the aforesaid Act of the Legislature of said State approved the 9th day of February, 1907, aforesaid, and the orders of the State Railroad Commission, established rates of passenger fare and freight charges which do not enable your orator to earn fifteen per centum per annum on the capital actually paid in, or in fact sufficient to pay the expense of operating, maintaining and keeping down the fixed charges pertaining to the business of carrying passengers and freight in said State, or on its entire lines of railroad and business conducted therein. That the action of said State in fixing said unreasonable and confiscatory rates, and in depriving your orator by the aforesaid legislation and Acts and orders of said Railroad Commission, of the power to earn a profit of not less than fifteen per cent per annum on its capital actually paid in, impairs the obligation of the

contract of the State contained in said Statute, as herinbefore set out, in violation of the provisions of Section 10, of Article 1
31 of the Constitution of the United States, prohibiting the State from passing any law impairing the obligation of its contract.

Ninth. Your orator represents that by the provisions of the aforesaid Acts of the Legislature of the State of Arkansas, any railroad failing or refusing to put in force any tariff ordered by said Board of Railroad Commissioners, or any of the rules and regulations prescribed by said Commission, is not only liable to a penalty of not less than $500.00 nor more than $3000.00 for each violation, but is also made liable to pay to any person, firm or corporation injured by such violation double the amount of damages sustained by him and all costs, and as a cumulative penalty, any railroad that shall charge, take or receive any greater compensation for the transportation of passengers than the rate prescribed by law shall forfeit and pay for every such offense not less than fifty dollars nor more than three hundred dollars and the cost of suit, including a reasonable attorney's fee, to be taxed by the Court; and it is further provided that any officer, agent or employee of any railroad, who shall knowingly and willfully demand, take or receive a greater compensation for the transportation of passengers than the amount allowed by law, shall likewise forfeit not less than fifty dollars nor more than three hundred dollars and cost of suit, including attorney's fee, to be taxed by the Court, for each offense. Orator alleges that the penalties and liability imposed by the aforesaid provision of the Statutes are so severe as to constrain persons and corporations subject to the provisions of said legislation to submit thereto, however illegal, rather than take the risk of in-
32 curring such enormous liability and penalties, the effect of which would be to utterly bankrupt and detroy them, and cause the persons whose money is invested in such property to forfeit their entire investment. That no prudent officer, agent or employee of any such railroad could afford to take the risk of the penalties and forfeitures imposed on him personally by said Statute. Wherefore, your orator and all other persons and corporations operating railroads in said State and subject to the provisions of the aforesaid Statutes, have been coerced into compliance with the aforesaid illegal and confiscatory legislation by said State, and orders made and promulgated by said Railroad Commission, rather than to subject said property, and the officers, agents and employees employed in and about the operation of the same, to the great multitude of suits and prosecutions that would have followed the failure or refusal to put said rates in force. But your orator avers that said rates, both as to freight and passengers, can not be continued in effect without irreparable loss to it, and serious and irreparable injury to and destruction of the property, rights and interest of your orator and of all persons interested in said property as creditors or stockholders of your orator.

Tenth. Your orator further alleges that the penalties prescribed by the Statutes of the State of Arkansas for a violation of the Rules

and Regulations of said Commission, and the rates of freight and passenger fare, put in force by said Commission are unreasonable and excessive in amount. That the penalties that would
33 accrue against your orator each day for the violation of the rates prescribed by the aforesaid orders of said Commission for the carriage of freight between stations in said State, on the basis of the minimum fine prescribed by law, would amount to $200,500.00 and for the violation of the rates prescribed as aforesaid for carrying passengers within said State on the basis of the minimum fine imposed by the aforesaid Statutes would amount to $118,000.00. That said penalties are immoderate and out of proportion of the acts designed to be punished; they are absurd and unreasonable in that they apply without discrimination to a great variety of acts and omissions that are wholly unlike and dissimilar, both in regard to the nature of the Act done or omitted and its effect upon the rights of the public and of individuals, and said provisions are manifestly designed to operate as a menace to compel unquestioning obedience on the part of railroad companies, their officers, agents and employees to all orders, rules and regulations promulgated by said Commission without regard to their lawfulness, by exposing said companies to such ruinous fines and penalties, and the officers, agents and employees of said companies likewise to such severe and ruinous penalties as to deter the said companies and the officers, agents and employees thereof, from resisting on any ground, however harsh or unreasonable, the action of said Commission may be or seem, and by deterring all said parties from resorting to the Courts for the purpose of contesting the legality of such rules, regulations and rates, for fear of being harassed and oppressed by a multitude of prosecutions and suits, during the pendency
34 of such proceeding, and of the consequences to them in case they should fail to maintain the ground of contest, notwithstanding that the same may have been instituted in the utmost good faith and for the purpose of testing and judicially determining the validity and legality of such order, rule or regulation. Wherefore, your orator avers that said provisions are discriminative and deprive your orator and all others in like condition of their property without due process of law and of the equal protection of the law, and are, therefore, in violation of Section 1 of the Fourteenth Amendment of the Constitution of the United States.

Said provisions are likewise in violation of Section 9 of Article 2 of the Constitution of the State of Arkansas, which provides that no person shall be subject to excessive fines, and that no unusual punishment shall be inflicted.

Eleventh. Your orator further alleges that the Defendants are shippers on your orator's lines of railroad and make frequent shipments of freight between stations situated wholly within said State. Said defendants are also in the habit of travelling on your orator's passenger trains between stations in said State, and alleges and shows that many thousand other citizens and residents of said State are engaged in business in said State and are large shippers of freight over your orator's lines of railroad between stations in said State,

and that large numbers of persons residing in said State are in the habit of traveling on your orator's passenger trains between
35 stations in said State. Orator further alleges that if it shall disregard, violate, or refuse to put or keep in force the aforesaid rates prescribed by said Commission for the transportation of freight and passengers, or any or either of said rates, or shall violate or fail to carry into effect any of the rates, charges, orders, rules, regulations and classifications prescribed by said Commission, on the ground that the same is unjust, unfair, unreasonable, confiscatory, and in violation of the Constitution and laws of the United States, as hereinbefore alleged, said Commission will cause penalty suits to be instituted against it, as authorized by the provisions of the aforesaid Statute, through the prosecuting attorneys of the various judicial districts in said State, through which your orator's lines of railroad extend; that a great number of suits at law for the recovery of penalties for the violation of the numerous rates contained in the schedule known as the Commission's Standard Freight Distance Tariff No. 3 will be brought; that said suits will be brought against your orator for the violation of each of the rates for the transportation of passengers as well as freight between the many stations on its lines of railroad; that a large number of suits for penalties and double damages will be brought against your orator by the aforesaid defendants who are shippers and patrons of your orator and others of the same class, involving a very large number of suits in many counties in said State; that your orator will be required to produce its books and papers in the defense of each
36 of the numerous cases brought by and under the direction of said Commission, and by private shippers and patrons for the purpose of showing that the rates established by said Commission are unreasonable, and would be greatly harassed by being compelled to defend such a multitude of suits.

Orator further alleges that the expense involved in the defense of such suits as will be instituted against it in case it refuses to comply with the illegal, unjust and confiscatory rates, rules and regulations of said Commission would be very great, and would involve great and serious loss to your orator, without regard to the result of such litigation; that under the provisions of the Statutes hereinbefore referred to, your orator would be precluded from pleading or proving the unreasonableness of said rates in proceedings instituted by private shippers, and judgment would doubtless be recovered in many of said actions, and orator would be compelled, in order to protect its property from levy and sale thereunder, to file numerous supersedeas bonds, by which it would be put to considerable expense and inconvenience; that the question as to whether the rates prescribed by the Commissioners as aforesaid are unreasonable or not could not be properly determined in suits of that character, and that the loss which would be sustained by your orator in an attempt to defend such suits would be so serious as to be irreparable. Wherefore, your orator prays leave to sue the aforesaid Defendants, as representatives of all said classes of persons, whether as shippers of freight or as passengers.

Twelfth. Your orator alleges that this cause arises under
37 the Constitution and laws of the United States and that the matter in dispute and controversy exceeds, exclusive of interest and costs, the sum and value of Two Thousand Dollars.

Premises considered, for as much as your orator is remediless at law and *and* can only obtain relief in a Court of equity, where matters of this kind are cognizable, your orator prays:

(1) That the orders of the Railroad Commission of the State of Arkansas, fixing rates and charges for freight transported by your orator within said State and fixing and establishing joint through freight tariffs on different and independent lines of railroad, and all rules and regulations affecting and concerning the same and each and every part thereof, and each schedule in said orders contained, be set aside and held for naught: that the order of said Commission made on June 4, 1908, to take effect June 15, 1908, fixing and establishing tariffs and charges on freights transported over your orator's line of railroad between stations situated within said State on classes and commodities, and fixing and establishing joint through rates on independent connecting lines of railroad, and all rules and regulations affecting and concerning the same, and contained in said order of June 4, 1908, be set aside and held for naught.

(2) That said Act of the Legislature of the State of Arkansas, approved the 9th day of February, 1907, and the orders of the Railroad Commission of said State, establishing and fixing a rate of two cents per mile for the transportation of passengers between
38 stations in said State on your orator's railroad and over lines leased and operated by it in said State, be set aside and held for naught, and that so much of the order made by said Commissioners on June 4, 1908, to take effect June 15, 1908, as relates to the aforesaid passenger rates, and fixes and establishes the same on the basis of two cents per mile, be set aside and held for naught.

(3) That the Defendants, as Railroad Commissioners of the State of Arkansas, be restrained and enjoined from putting into force or taking any step or action whatsoever, looking to the putting into force and effect the aforesaid tariff of charges for the transportation of freight and passengers on your orator's railroad, within the State of Arkansas, adopted by it on June 4, 1908, as aforesaid, and that said Tariffs and all rules, regulations and orders made and promulgated by said Defendants for the purpose of putting the same into effect be set aside and held for naught.

(4) That the provisions of the aforesaid Statute of the State of Arkansas, prescribing penalties against your orator and others in like condition for the failure or refusal to put into force any tariff ordered by the Railroad Commission of said State, or any of the rules and regulations prescribed by said Commission or for charging, taking, or receiving any greater compensation for the transportation of passengers than the rate prescribed by law, be declared void and of no force or effect whatsoever, and that said Commissioners and each and every one of them, their successors in office, agents,

servants and employees be temporarily and permanently
39 restrained from enforcing or attempting to enforce the rates, charges, rules and regulations fixed by the orders of said Commission aforesaid, respecting the carriage of freight and passengers within the State of Arkansas, or from enforcing or attempting to enforce through any agency provided in the Statutes of the State of Arkansas, or otherwise, any of the penalties prescribed by the Statutes of said State for failure on the part of your orator to observe any of the aforesaid orders made by said Commission; and that said Commissioners be temporarily and perpetually enjoined and restrained from prosecuting any suit or action, or causing the same to be prosecuted, by any officer or agent of said Commission, or by any officer of the State of Arkansas, or any other person, for the failure to put or keep in effect and to observe the rates of freight and passenger fare and the rules and regulations of said Commission, so fixed and established as aforesaid, or from taking any action with the intent and for the purpose of enforcing the provisions of the order made by said Board on May 15, 1907, fixing rates for the carriage of passengers and freight as aforesaid, or from doing or attempting to do any act or thing, or to require your orator to do any act or thing, by way of compliance with, or for the purpose of carrying out said order, rules and regulations or any part thereof.

(5) That the Defendants, Henry Leigh and George L. McLean, and all other persons belonging to the same class, including all patrons of your orator's railroad, either in the shipments of freights between stations on your orator's lines of railroad in said
40 State, or as passengers on said lines between stations in said State, be enjoined and restrained during the pendency of this proceeding from instituting any suit or suits, action or actions, against your orator for the recovery of any penalties under and by virtue of the provisions of any of the aforesaid acts of the legislature of the State of Arkansas, or for the recovery of double damages under and by virtue of the provisions of any of the aforesaid Acts of the Legislature of said S[illegible] and upon the final hearing herein that said Defendants, and all other persons belonging to the classes aforesaid, and who are engaged or may be engaged in intrastate shipments of freight on or over your orator's lines of railroad, or may become intrastate passengers thereon, be perpetually enjoined and restrained from instituting any such suits or actions against your orator.

And your orator prays for such other and further relief as may seem meet, and as it may be entitled to.

And may it please Your Honor to grant unto your orator a writ of subpœna of the United States of America issuing out of and under the seal of this Honorable Court, directed to the said Robert P. Allen, John W. Crockett and John E. Hampton, constituting the Railroad Commission of the State of Arkansas, and the said Henry Leigh and George L. McLean, thereby commanding them and each of them on a day certain therein to be named, under certain penalty, to be and appear before this Honorable Court, and then and there full, true, direct and perfect answer to make to all and singular the

premises, but not under oath—answer under oath being ex-
41–99 pressly waived—and to perform and abide by such order, direction and decree as may be made in the premises. And your orator will ever pray.

MOORE, SMITH & MOORE,
*Solicitors for Complainant.*

STATE OF MISSOURI,
*City of St. Louis, ss:*

S. C. Johnson, being duly sworn, says:
He is General Auditor of St. Louis Southwestern Railway Co., he has read the foregoing bill of complaint and knows the contents thereof. He further states that all facts alleged in said bill on his personal knowledge are true, and such as are stated upon information he believes to be true.

(Signed) S. C. JOHNSON.

Subscribed and sworn to before me this the 16th day of July, 1908.

ALROY S. PHILLIPS,
[SEAL.] *Notary Public, City of St. Louis, Mo.*

My commission Expires the 3rd day of January, 1910.

Endorsed on back: Filed and writ issued July 18, 1908. W. P. Feild, Clerk.

Which Exhibit "A" to Complainant's Bill of Complaint is as follows:

(Omitted in printing per stipulation.)

100 UNITED STATES OF AMERICA,
*Western Division of the Eastern District of Arkansas.*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 6th day of April, Anno Domini, One Thousand Nine Hundred and Eight, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber Judge presiding and holding said Court, the following proceedings were had, to-wit: On July 25th, 1908.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Come Robert P. Allen, John W. Crockett and John E. Hampton, as Railroad Commissioners of the State of Arkansas, by Morris M. Cohn, Esq., their Solicitor, and file herein their answer.
Which Answer of the Defendants is as follows:

101 In the United States Circuit Court for the Western Division of the Eastern District of Arkansas.

In Chancery.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al.

To the Honorable Judges of the Circuit Court of the United States for said District:

The Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, as members of and constituting the Railroad Commission of Arkansas, saving and reserving to themselves all manner of objection and exception which they may be entitled to save to the many imperfections and insufficiencies in the Bill of Complaint, for answer thereto say:

(1) The Defendants Robert P. Allen, John W. Crockett and John E. Hampton, admit that they are members of and constitute the Railroad Commission of the State of Arkansas.

Answering the first paragraph of the Bill of Complaint, they say that it is true that the Complainant is a corporation, organized under the laws of the State of Missouri, and that its domicile is at the city of St. Louis, in that State, but they also say that as a condition to be permitted to do business as a railroad company in the State
102 of Arkansas it filed a copy of its Articles of Association in the office of the Secretary of State of said State of Arkansas, as provided by Art. 34, p. 34, and following of the Acts of the General Assembly of the State of Arkansas, being Act approved March 13, 1899, and that said Complainant as such corporation operates lines of railroad between different points in the said State of Arkansas, including the cities of Little Rock, Pine Bluff, Texarkana and many other cities and towns in said State.

(2) Answering the 2d paragraph of the Bill of Complaint, they say that it is true that they reside in the districts therein mentioned and that the Legislature of the State of Arkansas has fixed and established the domicile of said Railroad Commission at the City of Little Rock, in the County of Pulaski in said State; and the Defendants, Henry Leigh and George McLean, therein mentioned, are citizens of the State of Arkansas, and reside in the city of Little Rock in said District.

(3) Answering the 3d paragraph of the Complaint, the Defendants say that it is true that the said Railroad Commission was created by the Act of March 11, 1899, as set forth in said paragraph, but that said paragraph has omitted to state that suits for damages and costs sustained by any person, firm or corporation under the

provisions of the Act referred to had to be instituted within a year from the accrual of the right, or same became barred.

But the Defendants deny that the effect of the provisions
103 of said Act of March 11, 1899 was to deny to the Complainant and to all other persons and corporations operating railroads in said State, the right to a judicial investigation of the validity and reasonableness of the rates, rules, regulations and classifications prescribed by said Commission, or, that it deprived Complainant and all others in like condition of due process of law, contrary to the provisions of Section 1 of the Fourteenth Amendment to the Constitution of the United States. For they say that by the terms of Sections 6813 and 6814 of Kirby's Digest of the laws of the State of Arkansas, as construed by the Supreme Court of Arkansas, the rates, rules, regulations and classifications referred to have only prima facie effect, and they aver that this did not amount to a deprivation of due process of law within the meaning of Section 1 of the Fourteenth Amendment to the Constitution of the United States.

(4) Answering the 4th paragraph of the Complaint, Defendants say that it is true that Standard Freight Distance Tariff No. 3 was adopted in lieu of all preceding tariffs on June 15, 1908, but they aver that said Standard Freight Distance Tariff No. 3 was substantially similar to Standard Freight Distance Tariff No. 2, adopted by said Railroad Commission on the 15th day of July, 1904; and they also aver that the Standard Freight Distance Tariff No. 2 was a repetition in substance of the first Standard Freight Distance Tariff adopted by the said Railroad Commission on April 10, 1900. Defendants say at different times during the history of said Railroad Commission, technical questions were raised as to whether certain items
104 were faithfully adjusted, and it was necessary to dispose of such matters by rulings or constructions. This being found unsatisfactory, when Standard Freight Distance Tariff No. 3 was issued, the said Railroad Commission gave notice that it would take up, at the meeting of June 4, 1908, the question of adopting it as a whole. It was formally adopted and thus disposed of any inadvertent discrepancies which had crept into the compilation previously. And the Defendants aver that there is no substantial difference between the freight rates adopted by the said Standard Freight Distance Tariff No. 3 and those first put into effect on April 10, 1900.

(5) Defendants, answering the 5th paragraph of the Bill of Complaint, deny that the charges and rates prescribed in the said Standard Freight Distance Tariff No. 3, as well as the preceding Tariff No. 2, applying on commodities and classes, or otherwise, were, or are, in any respect, unreasonable, unjust, oppressive, discriminatory, confiscatory or void, either in respect to said order as a whole or in respect to each and every rate, charge, tariff, schedule, classification, rule or regulation separately considered. And they say they do not know how much the railroad equipment, property and franchises, owned and used by complainant in operating its said road in said State, represents, but they deny that the sum of $16,023,090.00 correctly represents the said investment. They deny that Complainant has exercised as great a degree of economy in the use and operation

of said property as was compatible with the interests of the public and with safe and efficient service to the public, or, that it
105 only employed such officers, agents or employés, or expended only such amounts in the maintenance and repair of its roadbed, tracks and stations, or for new equipment of engines, cars or other appliances necessary to the operation of its road and the maintenance of said property, as was necessary and essential to a due and proper operation of its trains or to the maintenance of said property with due regard to its preservation and the safety of the public.

They deny that no unreasonable salaries or wages have been or are now being paid to any of its officers, agents or employees. They deny that Complainant has practiced all reasonable and proper economy in the operation and maintenance of its railroad, and they deny that the operation of said road, if properly and economically conducted, would not yield a profit exceeding fifteen per cent at the rates prescribed in said tariff. They deny that said rates do not and will not yield a just and reasonable return upon the value of Complainant's property used in said service, whether in respect to the money invested in said property or the service rendered. They deny that the total earnings of the Complainant from its intrastate business in the transportation of freight in the State of Arkansas, during the year 1907 did not exceed the sum of $351,735.80. They aver that the condition of affairs in the United States in the year 1907, financially and commercially, should form no criterion for other years, because they say that conditions were very much depressed in the concluding and busy months of said year, by reason
106 of a panic which stopped a great many industries and curtailed business of all kinds, including transportation by railroad. They deny that the expense of operation solely incident to intrastate business, and the fixed charges solely incident and chargeable to the intrastate transportation of freight, was $246,245.47. They deny that the total earnings of the Complainant's property from the transportation of freight, wholly within the State of Arkansas is not and will not be sufficient, under the rates on classes and commodities prescribed in the said tariff, — pay operating expenses, charges for maintenance, taxes and other necessary fixed charges, appertaining to said business, and yield any returns by way of compensation for the services rendered by Complainant. And they deny that the effect of such rates is and will be to prevent Complainant from receiving any returns or profits for the service rendered by it to the public, or will deprive it of its property without due process of law, or will deny it the equal protection of the law.

(6) Defendants, answering the second part of the 5th paragraph of the Complaint, admit that coal fields are situated as stated therein, and that coal mined in said counties is shipped from the stations mentioned therein, and that commodity rates on coal are as stated therein, but they deny that the said rates, either as a whole or otherwise, do not pay the cost of service, including the terminal service, or, are in any respect unreasonable, unjust or confiscatory. They admit that some of the coal shipped from the aforesaid stations,

is transported over connecting lines of railroad, but they
107 deny that a large part of it is. They say on information and belief that a very small part of said coal was transported over connecting lines of railroad. And, they further aver that if the rates prescribed applied, whether said commodity was shipped over one or more than one railroad under the regulations adopted by them, there was nothing unusual or unjust about it; that such rates were fair and remunerative, and that Complainant never heretofore complained to the Commission by any specific method of complaint wherein it set forth that the rates were confiscatory, or asked the said Railroad Commission to increase said rates whether applicable to hauls that required the service of more than one carrier, or otherwise. They deny the allegations in said part of said Complaint that any one of said rates was discriminatory or did not afford to the said lines or either of them a fair, reasonable or just compensation for the services rendered in transporting said products.

(7) Answering the part numbered 3 of the 5th paragraph, Defendants say that they do not know how large a proportion of the entire tonnage transported over Complainant's lines of railway originating in Arkansas consists of timber and timber products, but they deny that at least 90 per cent of said tonnage was shipped from points in said State to points in other States, or was interstate commerce. They are advised that it is not material for them to reply to that part of the said Complaint which states the custom prevailing between shippers and the railroad companies in said State of concentrating rough lumber at milling points. But they deny that on
April 1, 1907, or at any other time, they recognized the
108 said practice and for the purpose of regulating the same made an order that the rates mentioned in said part of the complaint should apply on the shipment of rough lumber, staves, fitches, bolts and logs in car loads between all points in Arkansas set forth in said Complaint. They admit that said rates were made upon the condition expressed in the order that the manufactured products should be reshipped over the same line bringing in the rough material. But they deny that such shipment contemplated an interstate shipment or a shipment beyond the limits of the state, or that it was an attempt in any manner to control shipments beyond the State. They deny that at any time any rate established by them was published or had the effect of operating as a rate applicable to interstate commerce. And they deny that any order made by them in relation to the rate of transportation for lumber in the rough or otherwise was made with the intent and purpose of establishing, regulating or fixing interstate rates on such material or commodities by any device, though they admit that the rates established from the point of origin of rough material to the point of concentration for milling purposes was based upon the custom of railroad companies to recognize the somewhat cheaper rates from the point of origin to the place of concentration, in consideration of their obtaining the whole haul. But the Defendants deny that there is any universal practice prevailing among shippers and railroad companies in said State where the timber is situated at a dis-

tance from the mills, to have it transported by rail and concentrated at milling points for the purpose of being converted into lumber and other products, and take the prevailing rate under in-
109 terstate shipments from the point at which the shipment of rough material originated in said State to the destination of the milled product in other States. They deny that there is any milling in transit privilege recognized or countenanced by them, which is an incident of interstate commerce, or affects the interstate character of shipments of lumber. They deny that the aforesaid rates are unreasonable or oppressive, or that they do not afford the carrier any compensation whatever for the service rendered in connection with the transportation of said commodities, or are confiscatory, or take the property of complainant or other carriers in said State without compensation, or are in violation of Section 1 of the Fourteenth Amendment to the Constitution of the United States, prohibiting the taking of property without due process of law and without compensation, or denying to any person the equal protection of the law.

(8) Answering the part numbered 4 of the 5th paragraph of the complaint, defendants say that the rates set out therein are correctly stated, but that the rates are flat or local rates, and have no reference to any interstate shipments whatever; that the said Defendants, as such Railroad Commission, have not at any time adopted any custom of concentrating cotton at compression points for the purpose of having the same compressed and transported outside of the State of Arkansas; that they have not made any regulations in reference to any such custom, but have confined themselves to making flat rates for delivery of cotton at points in the said State of Arkansas.

They are advised that it is not for them to answer that part
110 of said complaint that describes the manner in which cotton is concentrated at compression points, and they deny that the order, copied by the Complainant in said part of its Complaint, in any way attempts to regulate interstate commerce; that no attempt was made by the said Railroad Commission, by anything recited in the said order, nor has it ever taken any action which could be construed as intending to affect the transportation of cotton from a point in the State of Arkansas to a point without the State of Arkansas, which, during the transportation, was unloaded at a Compress and put into compressed form instead of an uncompressed form. And they deny that the flat rates so made in any manner conflict with the jurisdiction of the Interstate Commerce Commission of the United States, or with the movement of cotton, or any part thereof, which has been treated and recognized by the Interstate Commerce Commission as interstate commerce. They deny that there was any direct or intentional interference with interstate commerce, either as regards the rates or regulations in reference to the transportation of said cotton. They deny, therefore, that the said rates were unlawful and void, and they also deny that they are unreasonable, unjust or oppressive, or did not afford any profit to the carriers handling the same or are confiscatory, or are

in violation of the aforesaid provisions of the Fourteenth Amendment to the Constitution of the United States.

(9) Answering that part of the 5th paragraph, which is numbered 5, Defendants admit that the Complainant owns and controls
111 the lines of railroad mentioned in said part of its complaint, but they deny that the said roads are operated as a unit. They admit that a very large amount of interstate traffic passes over the said roads and each of them. They deny that the local rates in the several states in which and through which said lines pass enter to a very large extent and have a controlling influence on the through rates charged on interstate commerce. They aver that all local rates established by the said Railroad Commission are within the province of the said Commission, and have reference solely to intrastate commerce; that the said Railroad Commission of the said State of Arkansas has had nothing to do with through rates applying to interstate commerce on the lines of the said Complainant or any other railroad company. They deny that the matters alleged in said part of said complaint, as far as they seek to show that the local rates made by Defendants enter into through rates made by the Complainant in interstate traffic, are material. They deny that, by reason of any of the matters set forth in said part of said complaint, the rates established by said Railroad Commission were made with the intention and for the purpose, or that each and all of said rates so established will have the effect of regulating and fixing interstate rates on all such classes and commodities or that the same amount to an attempt to regulate interstate rates or affect interstate commerce, or are in violation of the Constitution of the United States, or are an invasion by the Defendants of the powers, rights or duties vested exclusively by the acts of Congress in
112 officials of the United States.

(10) Answering that part of paragraph 5th which is numbered 6, Defendants say that the Act of April 8th, 1903, passed by the General Assembly of the State of Arkansas, the said Railroad Commission was invested with the power to establish joint rates and to provide for continuous carriage; that they do not know whether the terms of the said Act are correctly copied in the said part of said complaint or not. They admit that they have assumed to act under the terms of the said Act and that they have put in force joint rates, and that the rates are correctly stated in said part of said Complaint. They aver that prior to the enactment of the said Act of the Legislature, the said Commission did not have the power to deal with continuous transportation and joint rates, and that the said Act was passed for the purpose of enabling the said Commission to deal with the matter, which was necessary to the protection of the shippers of the State of Arkansas; that prior to the enactment of the said act, there were great evils growing out of the practice of the railroad companies in said State, including that of the Complainant, whereby a haul that was really continuous was split up into fragments over the different lines which were formally described as independent lines, though all under one management, and different local rates over each of the lines was applied to the great damage of numer-

ous shippers in the said State; that it was deemed to be just and proper by the Legislature of the State of Arkansas to correct this practice by passing and to provide a method of joint rates
113 and joint routes that should be just to the railroads of said State as well as to the shippers. So, the said Act was passed by the Legislature of Arkansas at the time stated. That the rates so established by Defendants were established after careful inquiry and proper hearing of the railroad companies and other parties concerned; that the said Complainant has never filed any petition before the said Railroad Commission, complaining of the said joint rates so established, or any other orders relating to joint traffic, established by the said Railroad Commission. They say, as they are advised, that the said law was within the proper province of the Legislature of the said State of Arkansas, and they deny that the said joint rates are insufficient to afford any return whatever for the service rendered by the several railroads engaged in the transportation of through freight, or that said order is unjust, oppressive or confiscatory, or that its effect would be to deprive Complainant or any other railroad company operating in said State of their property without due process of law, or will deprive them of the equal protection of the law, in violation of any provision of the Fourteenth Amendment to the Constitution of the United States.

(11) Answering paragraph marked 6th, Defendants admit the passage of the Act of February 9, 1907, referred to in said paragraph, and admit the provisions of Section 6620 of Kirby's Digest of the laws of the State of Arkansas. They admit that the said Railroad Commission on May 15, 1907, made the order mentioned in the said paragraph, but they deny that there was any necessity
114 for the order, or that it worked any damage or detriment to the said Complainant. They say, upon information and belief, that the railroad companies were in the habit of charging three cents a mile on lines seventy five miles in length prior to the enactment of said law, but they deny that the said three cents per mile, after deducting therefrom the cost of conducting said business in said State, the actual operating expenses and maintenance and fixed charges principally appertaining to the said business, were not sufficient to yield adequate and reasonable profits or returns upon the value of the property used in and about said business, or for the service rendered the public.

They aver that the traffic in the said State of Arkansas, as they are informed and believe, by reason of the reduction in the rate from three to two cents has increased to such an extent that the said Complainant was not in any manner injured thereby, and that it yielded a large enough revenue to leave a considerable profit to the said Complainant, unless it was unreasonable and extravagant in the management and operation of its road, or demanded profits upon fictitious values. Defendants deny that the Complainant felt constrained to abide by the provisions of the Statutes of said State of Arkansas, by reason of any of the matters alleged by it in said part of its complaint. They deny that any statutes of said State made any rates, charges, orders, rules, regulations or classifications

prescribed by said Commission in actions between private parties and railroad companies conclusive. They deny that such companies were denied the right by any Statute of the State of Arkan-
115 sas to question or investigate the fairness or reasonableness or legality of any rates, charges, orders, rules, regulations or classifications. They deny that there were any harsh or severe penalties prescribed for the failure or refusal to put in force tariffs or charges or rules, regulating railroads prescribed and put in force by said Commission. They deny that there was anything unusual about the penalties prescribed for the failure to comply with the provisions of the Act reducing passenger fares. They admit that said two cent rate has been in force on Complainant's lines of railroad in said State since the aforesaid Statute and order took effect, and they say that the said Complainant never heretofore made any complaint on account thereof. And they deny that the earnings from intrastate transportation of freight and passengers in said State during any period have not been sufficient to pay operating expenses and the cost of maintenance and fixed charges properly chargeable to said business, or that it has been compelled to operate its freight and passenger trains at a loss of revenue. They deny that the total earnings from the transportation of passengers between stations in the State of Arkansas, during the last half of the year 1907, did not exceed $440,355.13, or that the total expense of operation solely incident to said business, including all fixed charges, except interest charges, was $469,823.10 for the same period, or that said period represents the average earnings through the entire year. They aver that during the latter part of the year 1907 a monetary and commercial panic prostrated all industries in the United States,
116 including the State of Arkansas, and that by reason of this fact the business of transporting passengers and freight was very much reduced on all the lines of railroad throughout the United States and in the State of Arkansas, and that by reason of this fact the earnings from that source in the said part of the year 1907 could not be taken as a criterion.

(12) Answering the 7th paragraph of the complaint said defendants say that they are unable to understand what is meant by the allegation that the State of Arkansas contains no large cities and very few commercial centers. They admit that a great deal of the jobbing and wholesale trade of said State is interstate business, and they say that the interstate feature of the business is for the most part confined to shipments from the Eastern Seaboard, from the north and from the south, to the wholesale jobbers of the State. They deny that the population is sparse and very small as compared with the mileage of railroads operating in said State, or that either the freight or passenger business of Complainant and of all other railroads operating in said State is light, or that the rate of two cents per mile for the carriage of passengers and the freight rates prescribed in any orders of the Railroad Commission of said State are unreasonably low. They deny that neither Complainant nor any other line of railroad operated in said State is able to earn a reasonable compensation for the service rendered in the carriage of

passengers or freight within said State, after paying the necessary expenses of operating and other expenses necessary and incident to the intrastate business in said State.

117 They deny that the expense of operating and maintaining the railroads and properties of the Complainant in said State has been materially increased by reason of the legislation of said State, or the rules, regulations or orders of said Railroad Commission. They deny that during the session of the legislature at which the Statute requiring the reduction of one third in the passenger rates was enacted, many Statutes imposing burdens and increasing the expense of operating and maintaining the railroads were passed, and they say that whatever laws were passed were rendered necessary by evils and necessities which grew up with the increasing population in the said State, and the indifference of the Complainant and other railroad companies for the lives of brakemen. They deny that many of the requirements contained in the said Acts were not necessary to the safe and efficient operation of trains, or that a large amount of expense had been incurred or will be necessary in making and maintaining the changes provided for in such legislation without any increase in the revenue by reason thereof. They deny that the said legislation as construed by the Supreme Court of the said State, will greatly increase the cost of conducting the business of complainant or other persons or corporations engaged in like business in said State. They deny that all the earnings of all its lines of Railroad within said State on the business transacted by it in the State are not sufficient to pay the expense of operating principally applicable to said business, or that they do not afford any

118 adequate or reasonable returns on the money invested in said property.

(13) Answering the 8th paragraph of the Complaint, Defendants admit that the lines of railroad operated by Complainant were constructed under grants of the State of Arkansas, but deny that the said Complainant had any other right to collect tolls than was implied in the organization of said railroad company. They admit that the said Complainant was entitled to a return upon the fair value of its investment over and above the expense of operating and maintaining it, but they deny that the Complainant can include in the yearly expense of operation and maintenance expenditures made for permanent improvements or those matters that are in the nature of permanent improvements. They deny that there grew out of said grants and was necessarily implied therefrom any other agreement or contract than has just been stated. They admit that the General Assembly of the State of Arkansas on July 23, 1868, passed a general law for the creation and organization of railroad corporations, and that the section which is still written in Kirby's Digest of the Statutes of Arkansas, and known as Section 6590 was contained therein. But they allege that at the time the said Act was passed, there was a provision in the then existing Constitution of the State of Arkansas, Art. V. Sec. 48, Constitution of 1868 of said State, which provided:

"That the General Assembly shall pass no special Acts conferring

corporate powers. Corporations may be formed under general laws; but all such laws may, from time to time, be altered
119 or repealed," said Section applying to railroad corporations, but subsequently to-wit: on the 30th day of October 1874, a new Constitution was adopted, by Art. XII, Sec. 6., of which it was provided:

"That corporations may be formed under general laws, which laws may, from time to time, be altered or repealed. The general assembly shall have the power to alter, revoke or annual any charter of incorporation now existing and revokable at the adoption of this Constitution, or any that may hereafter be created, whenever, in their opinion, it may be injurious to the citizens of this State, in such manner, however, that no injustice shall be done to the incorporators."

That whatever rights accrued to any railroad company organized under either of said Acts were taken subject to the right of the General Assembly of the State of Arkansas to alter or repeal the same; and that subsequently, by the provisions of the Act of March 11, 1899, and Acts supplementary thereto, of the General Assembly of the State of Arkansas, the Railroad Commission was invested with power to fix the reasonable rate for all railroad companies and that it adopted the rates which have been heretofore mentioned, pursuant to the authority vested in said Commission by the Acts of the General Assembly aforesaid. And these Defendants deny that the said Section 6590, of Kirby's Digest is in force and effect. They deny that the Complainant's lines of railroad, or any of those which it acquired and under whom it holds were constructed on the faith that the State would in good faith carry out and perform any
120 agreement in regard to rates to be charged by railroads in said State, either with reference to annual profits or otherwise. They deny that upon the pretended faith of said provision of Kirby's Digest, or any other provision of the laws of the State of Arkansas, the General Assembly agreed with the Complainant, or otherwise, that it would not by direct legislation or through any agency created by it, impose on the persons and corporations owning and operating said railroads, rules, regulations or tariffs as would deprive them of a profit of fifteen per cent per annum on the capital actually paid in. They aver, however, as they are informed and believe*d*, that the said Complainant is earning a profit of fifteen per cent per annum, if not more, on the capital actually paid in. They deny that Complainant has voluntarily reduced its rates from time to time as the developement of the business of the lines and the conditions of the country would warrant and demand; they say that when the rates were made which it now complains of, it made no complaint thereof to the Railroad Commission of Arkansas, in order to have the matter inquired and corrected, if any complaint is had, which they deny. They deny that the Complainant is not able to earn fifteen per cent per annum on the capital actually paid in by reason of the Act of February 9, 1907, or any orders of the Railroad Commission of said State. They deny that the action of said State in fixing said rates was unreasonable and confiscatory, or that

it deprived complainant by any legislation or acts or orders of said Railroad Commission, of the power to earn a profit of not less
121 than fifteen per cent per annum on capital paid in. They deny that there was any impairment of any obligation of any contract which the State entered into with said Complainant in conflict with any provision of the Constitution of the United States.

(14) For answer to the paragraph marked 9th of the Complaint, said Defendants say that no penalty imposed by any provision of any legislation of the Legislature of the State of Arkansas applies except where the act of wrong doing is done by the Complainant. And they aver that the occasion on which the provisions of said Statutes of the State of Arkansas were disregarded by the said Complainant and the occasions when its action was oppressive and harmful to shippers and other persons in the said State of Arkansas, were so numerous and repeated and became so intolerable and unbearable, that the General Assembly found it necessary to attach penalties of greater or less size to enactments and requirements of the laws of said State in order to obtain an observance thereof by the said Complainant and other railroad companies in said State of Arkansas; and that if the said Complainant and other railroad companies had shown a disposition to act fairly with the shippers and other persons in the said State of Arkansas, such enactments would not have been passed; that there is no way that they may know nor of which they have been advised, by which a railroad company can be induced to carry out its obligations, except by the infliction of penalties, and that if sometimes these penalties are severe, it is because, in the wisdom of the Legislature of
122 the State, a smaller penalty would be disregarded. They deny that the penalties and liabilities imposed by any provisions of any Statute are so severe as to constrain persons and corporations subject to the provisions of said legislation to submit thereto, however illegal, rather than take the risk of incurring such pretended enormous liabilities and penalties. They deny that the effect of these would be to utterly bankrupt and destroy said Complainant or any other railroad company, or cause the person whose money is invested in such property to forfeit their entire investment. They say that the Complainant has not hesitated to disregard the law whenever it saw fit to do so and contest its rights before the Courts of the State of Arkansas, and whenever it was in the right the Courts of Arkansas have protected it, as disclosed by decisions under the Statutes enacted by the last General Assembly of the State of Arkansas. They deny that no private officer, agent or employee of any such railroad could afford to take the risk of the penalties and forfeitures imposed upon him personally by said Statutes. They deny that the Complainant and all other persons and corporations operating railroads in said State, subject to the provisions of the aforesaid Statutes have been coerced into compliance with any illegal or confiscatory legislation by said State or orders made or promulgated by said Railroad Commission, rather than to subject said property, or the officers, agents or employees employed in and

about the operation of the same to a great multitude of
123 suits or prosecutions that would have followed the failure or refusal to put such rates in force, and they deny that the said rates, both as to freight and passenger, can not be continued in effect without irreparable loss to the Complainant or serious or irreparable injury to and destruction of the property, rights and interests of the Complainant, and of all persons interested in said property as creditors or stockholders.

(15) And for answer to the paragraph marked 10th of the complaint, said Defendants say that it is not true that the penalties prescribed by the Statutes of the State of Arkansas for the violation of the rules and regulations of said Commission, and the rates of freight and passenger fares put in force by said Commission are unreasonable and excessive in amount. They aver that they have been advised that it is not a ground of complaint against the laws of the State of Arkansas that a party has been a frequent and persistent offender, and because of this fact the penalties that he may have incurred may aggregate a considerable sum. And they have been advised and aver that if accumulated penalties are incurred on any account by an offender of the said laws, it is due to a disposition of the person to frequently offend. And they have also been advised and aver that it is not an excuse to an offender that he has a constitutional disposition to disregard the law and commit offenses prohibited by the laws of the State under which he exists and does business. They deny that the said penalties were immoderate or out of proportion of the acts designed to be punished. They deny that they are absurd or unreasonable in that they apply
124 without discrimination to a great variety of acts that are wholly unlike and dissimilar, both in regard to the nature of the act done or omitted, and in the effect thereof upon the right of the public and individuals. They deny that any provisions of the Statutes are designed to operate as a menace to compel unquestioning obedience on the part of the railroad companies, their officers, agents and employees, to all orders, rules and regulations promulgated by said Commission without regard to their lawfulness, by exposing said companies to such ruinous fines and penalties, and the officers, agents and employees of said companies likewise to such severe and ruinous penalties, as to deter said companies and the officers, agents and employees thereof, from resisting on any ground, however harsh or unreasonable, the action of said Commission may be or seem, or for the purpose of deterring any parties from resorting to the Courts for the purpose of testing the validity of any rules, regulations and rates for fear of being harassed and oppressed by a multitude of prosecutions and suits during the pendency of such proceeding, or because of the consequences to them in case they should fail to maintain the ground of contest. And they deny that any of said provisions were discriminative, or deprived complainant, and all others in like condition, of their property without due process of law or the equal protection of the law, or imposed unreasonable fines or unusual punishment, within the meaning of the Constitution of the United States or of the State of Arkansas.

(16) And for answer to the said paragraph- marked 9th
125 and 10th of the complaint, and also some of the preceding paragraphs of the said complaint, in which an effort is made to maintain a bill in equity for the purpose of testing the constitutionality of the laws of the State of Arkansas applicable to railroads and railroad rates, without reference to any existing and actual cause of complaint, these defendants aver, as they are advised, that such matters are not within the jurisdiction of a Court of Equity and do not present a case for equitable relief.

(17) For answer to paragraph marked 11th of the said complaint, said defendants say that they do not know and are not advised whether Henry Leigh or George McLean, their co-defendants, are in the habit of traveling on Complainant's trains or not, nor whether they are large shippers of freight on the lines of railroad of the Complainant, but they admit that a large number of persons residing in the said State are in the habit of travelling on Complainant's passenger trains between stations in said State. They deny that if the Complainant shall disregard, violate or refuse to put into force the aforesaid rates prescribed by said Commission for the transportation of freight and passengers, or any or either of said roads, or shall violate or fail to carry into effect any of the rates, charges, orders, rules, regulations or classifications prescribed by said Commission, on the ground that the same are unjust or unfair or unreasonable or confiscatory, or in violation of the Constitution or laws of the United States, that the said Commission will cause penalty suits to be instituted against it as authorized by the provisions
126 of the aforesaid Statutes, through the prosecuting attorneys of the various judicial districts in the State. They deny that at present a great number of suits at law for the recovery of penalties for any prospective violation of rates contained in the schedules known as Standard Freight Distance Tariff No. 3 are in contemplation. They deny that any suits will be brought against complainant for the violation of each of the rates for the transportation of passengers as well as freight between the many stations on its lines of railroad, or that any large number of suits for penalties or double damages will be brought against Complainant by these defendants or by any defendants who are shippers and patrons of Complainant and others of the same class involving a large number of suits in many counties in said State. But they admit that if suits are brought it may be that the said Complainant will be ordered to produce its books and papers in the defense of such cases, but no more so than other persons whose defense depends upon books of account. They deny that the said Complainant has been afflicted with suits for acts of wrong-doing done by it to shippers and other residents within the said State of Arkansas, but aver on the contrary that the disposition of the people of said State and of the said Railroad Commission has been to overlook most of the acts of wrong, if not nearly all the acts of wrong, done by said Complainant, except in instances where the wrongdoing of the said Complainant was of so aggravating a character and involving such gross discrimination in favor of its coal mines as to justify action upon the part of the said Railroad Com-

mission. And they said that if the said Commission ever had
127 to institute suits, they were finally decided in favor of the contention of the said Railroad Commission. And they further say that in all cases where the General Assembly of the State of Arkansas came up for consideration, relating to the duties of common carriers by rail, the acts have been so construed as to give the said common carriers the benefit for any reasonable excuse they had for not complying with said provisions of the Statutes. They deny that any improper expense would be entailed by the said Complainant by reason of the enforcement of any of the said rates, rules or regulations of said Commission, or that it would be in any manner great or involve any great or serious loss to Complainant. And they say that if the complainant is correct in saying that it would be precluded from pleading or proving the unreasonableness of said rates and proceedings instituted by private shippers, it could correct the same by testing the reasonableness thereof in a direct proceeding had for that purpose. But they say, as they have heretofore said, that by the provisions of the Statutes of Arkansas, the rates fixed by said Railroad Commission are not conclusive; that it can be shown in defense thereto that they are unjust, and the only effect they have is that they are taken to be prima facie binding until they are shown to be unreasonable and for that reason unenforceable. They deny that the question as to whether the rates prescribed by the Commission are reasonable or not could not properly be determined in a suit of that character, or that the loss sustained by Complainant in an attempt to defend such suits would be serious or would be irreparable.

128 And, having answered, these defendants ask that the complaint be dismissed, and that they be permitted to go hence with their costs.

W. F. KIRBY, *Attorney General;*
ROSE, HEMINGWAY, CANTRELL & LOUGHBOROUGH,
MORRIS M. COHN,
*Sol's for said Def'ts.*

STATE OF ARKANSAS,
*County of Pulaski, ss:*

John E. Hampton, one of the Defendants herein, being duly sworn, says that the matters and things set out in the foregoing answer as being based on personal knowledge are true, and that the matters and things set out as being upon information, he believes to be true.

(Signed) J. E. HAMPTON.

Subscribed and sworn to before me this 25 day of July, 1908.

NOEL LOEB,
[SEAL.] *Notary Public.*

My Commission Expires Jan. 6, 1910.

Endorsed on back thereof: Filed Jul- 25, 1908. W. P. Feild, Clerk.

129 And on July 31, 1908, the following proceedings were had to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Now on this day comes the Complainant by its solicitors, and come the Defendants by their solicitors, and thereupon the hearing of Complainant's application for temporary injunction is continued and said application is set for further hearing on August 31, 1908, before the undersigned Circuit Judge at Chambers at St. Paul, Minn.; and it is thereupon ordered that the Complainant serve the Solicitors of the Defendants with copies of affidavits and exhibits to be used by the Complainant at said hearing, on or before August 8th, 1908; that the Defendants serve the Complainant's Solicitors with all affidavits and exhibits to be used by them at said hearing on or before August 24, 1908; and that Complainants serve Defendant's Solicitors with any rebutting affidavits and exhibits that they intend to use at said hearing on or before August 29, 1908.

Done at St. Paul, Minn., July 28, 1908.

(Signed) WILLIS VAN DEVANTER,
*Circuit Judge.*

And on September 3, 1908, the following proceedings were had to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
130 ROBERT P. ALLEN, JOHN W. CROCKETT, and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George L. McLean.

*Injunction.*

This cause came on to be heard on the motion of the Complainant for a temporary restraining order, and after submission of the proofs was argued by Counsel; and now upon consideration thereof, it is ordered as follows:

That as to the Complainant, all the rates prescribed by the Defendants, the Railroad Commissioners of the State of Arkansas, for transporting and carrying intrastate freights in said State in Standard Freight Distance Tariff No. 3, which was issued by the order of said Commissioners, which took effect on June 15, 1908, and all amendments and supplements thereto, be and are hereby suspended and the enforcement of each and all thereof be and the same is hereby restrained and enjoined until the further order of the Court.

It is further ordered that the enforcement of the two cent per mile rate, prescribed in an act of the Legislature of the State of Arkansas, approved February 9, 1907, entitled, "An Act to Amend Section 6611, of Kirby's Digest of the Statutes of Arkansas, by fixing passenger rates in this State, and for other purposes," and also prescribed in the order made by the Defendants, the Railroad Commissioners of the State of Arkansas, on May 15th, 1907, putting in force the rates prescribed by the aforesaid Statute, be and the same is hereby suspended and restrained as to the Complainant herein, until the further order of the Court.

It is further ordered that no suit or suits, action or actions,
131 shall, at any time, be instituted or maintained against the Complainant, its officers, agents or employés, by any of the Defendants for or on account of its failure to continue or keep in force any of the aforesaid inhibited rates, during the time that this order shall continue in force, and that the Defendants, the Railroad Commissioners of the State of Arkansas be and they are hereby enjoined from at any time instituting or prosecuting any suit or action as aforesaid, or causing the same to be instituted or prosecuted by any officer, agent or attorney, of said Commission, or by any officer of the State of Arkansas, or any other person for a failure to keep in effect and observe the aforesaid inhibited rates; that the Defendants, Henry Leigh and George L. McLean, and all other persons and each of them from and after the time that they shall have knowledge of this order be enjoined from at any time instituting any such suit or action for or on account of any failure of the Complainant to keep in effect and observe said inhibited rates or for the recovery of damages by reason of such failure during the time that this order shall continue in effect.

It is further ordered that Complainant execute a bond to the United States of America in the penal sum of two hundred thousand dollars, conditioned that said Complainant shall keep a correct account showing as respects every carriage of passengers and freight, the difference between the tariff actually charged and that which would have been charged had the rates inhibited hereby been applied, showing the particular carriage in question, and the stations between which the same occurred, the name of the person affected,
so far as may be practicable, which record shall be made and
132 kept subject to the further order of this Court, and further conditioned that if it should eventually be decided that so much of this order as inhibits the enforcement of existing rates should not have been granted, that said complainant shall, within a reasonable time to be fixed by the Court refund in every instance to the party entitled thereto the excess of charge over what would have been charged had the inhibited rate been applied, together with lawful interest and damages.

It is further ordered that this order suspending the aforesaid inhibited rates and restraining the said defendants take effect upon the filing of the aforesaid bond and the approval thereof by the Clerk of this Court, but not within less than ten days hereof. Nothing recited in this order shall operate to prevent the said Railroad

Commissioners of the State of Arkansas from establishing and enforcing any reasonably compensatory and lawful rates in place of those whose enforcement is hereby inhibited.

Dated September 3rd, 1908.

(Signed) WILLIS VAN DEVANTER,
*Circuit Judge.*

And on the same day the following Memorandum Opinion of Court was filed:

133 In the Circuit Court of the United States for the Eastern District of Arkansas, Western Division.

In re ARKANSAS RAILROAD RATES.

Mr. John M. Moore, for Complainants.
Mr. William F. Kirby, Attorney General, Mr. George B. Rose, and Mr. Morris M. Cohn, for Defendants.

*Memorandum Opinion.*

VAN DEVANTER, *Circuit Judge:*

The matter now under consideration is an application in each of four suits against the railroad commissioners of the State of Arkansas and others for a temporary injunction restraining the enforcement of the prescribed rates for the transportation of freight and passengers in intrastate commerce in that State, it being contended on the part of the complainants that these rates are unreasonable, non-compensatory and, therefore, confiscatory. The matter was first brought on for hearing on July 28th last, when, at the request of the defendants, the hearing was postponed until August 31st that they might be better prepared to meet the contentions of the complainants. On the latter date the parties appeared, and three days were consumed in the presentation of proofs and in the arguments of counsel. Each of the four railroad companies is engaged in the transportation of freight and passengers, both intra-state and inters-state, in the State of Arkansas, and each has made a practical and extended application or test of the rates in question. The freight rates were
134 prescribed by the railroad commissioners while acting under the state statutes, and the passenger rate, which is two cents per mile, was prescribed by statute. The proofs disclose the revenues actually derived by each railroad, upon the application of these rates, from its business in the State, the revenues from each class of traffic being stated so as to show separately the earnings from intra-state freight, inter-state freight, intra-state passenger and inter-state passengers; and also disclose the value of the property employed by each road in the traffic within the state, the taxes paid thereon, the actual cost of conducting the freight traffic and the actual cost of conducting the passenger traffic. The first question for consideration is, How shall this cost be apportioned between the intra-state and inter-

state traffic? The proofs make it quite plain that the production of a given amount of revenue is attended with greater cost in intra-state business than in inter-state business; and that this is a generally recognized fact is attested by the decisions in other cases where the reasons which make it so are fully stated. Chicago, etc., Co. vs. Thompkins, 176 U. S. 167, 178; Minneapolis, etc., Co. vs. Minnesota, 186, U. S. 257, 262; Northern Pacific Ry. Co. vs. Keyes, 91 Fed. 51, 53. Here the additional cost is shown to be at least 100 per cent in freight traffic and at least 15 per cent in passenger traffic, and this is not more than what has been shown in other cases. Undoubtedly these difference- furnish a standard by which to apportion the total cost between the traffic which is intra-state and that which is inter-state. Other standards are suggested, but the proofs in the case that none of them are as satisfactory or accurate as is the difference in costs in its relation to the revenue. That standard must therefore be applied, and this may be done in this way, taking the freight and passenger traffic separately; Increase the intra-state earnings by
135 the ascertained percentage representing the difference in cost, thereby ascertaining what would have been earned by the same actual expenditure in conducting the intra-state traffic, had it been attended with the same relative cost as the inter-state traffic; then add the intra-state earnings as so increased, to the inter-state earnings, thereby ascertaining what would have been earned by the actual expenditure in conducting both the intra-state and the inter-state traffic, had they been attended with the same relative cost; then ascertain what proportion of this total represents the intra-state earnings, as so increased, and then ascertain the corresponding proportion of the total cost of the intra-state and the interstate traffic. When this mode of apportionment is applied in these cases, the result shows that the earnings of each road from its intra-state freight traffic is much less than the proportion of the operating expenses and taxes properly attributable to it, and that the earning- of two of them from intra-state passenger traffic is a little less than the proportion of the operating expenses and taxes properly attributable to it. As to the other two roads the earnings from the traffic last named are somewhat in excess of the proper proportion of the operating expenses and taxes, but not enough so to yield a return of one per centum per annum upon that proportion of the value of the property rightly attributable to such traffic. So the conclusion necessarily follows that the rates in question, both freight and passenger, are non-compensatory and unreasonable, and that their enforcement, although not so intended, is nothing other than a using or taking of property of these railroad companies without due compensation, which is confiscation. This the Constitution of the United States does not permit, for it was said in Smyth vs. Ames, 169 U. S. 466, 526:

"1. A railroad corporation is a person within the meaning
136 of the Fourteenth Amendment declaring that no State shall deprive any person of property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws.

"2. A state enactment, or regulation made under the authority

of a state enactment, establishing rates for the transportation of persons or property by railroad that will not admit of the carrier earning such compensation as under all the circumstances is just to it and to the public, would deprive such carrier of its property without due process of law and deny to it the equal protection of the laws, and would therefore be repugnant to the Fourteenth Amendment of the Constitution of the United States.

"3. While rates for the transportation of persons and property within the limits of the State are primarily for its determination, the question whether they are so unreasonably low as to deprive the carrier of its property without such compensation as the Constitution secures, and therefore without due process of law, cannot be so conclusively determined by the legislature of the State or by regulations adopted under its authority, that the matter may not become the subject of judicial inquiry."

It is pertinent in this connection to observe that in that case it was also said, p. 541:

"So far as rates of transportation are concerned, domestic business should not be made to bear the loss on inter-state business, nor the latter the losses on domestic business. It is only rates for the transportation of persons and property between points within the State that the State can prescribe; and when it undertakes to prescribe rates not to be exceeded by the carrier, it must do so with reference exclusively to what is just and reasonable, as between the carrier and the public, in respect to domestic business. The argument that a railroad line is an entirety; that its incomes goes into, and its expenses are provided for, out of a common fund; and that its capitalization is on its entire line, within and without the State, can have no application where the State is without authority over rates on the entire line, and can only deal with local rates and make such regulations as are necessary to give just compensation on local business."

But it is urged that a temporary injunction ought not to be granted because these railroads have heretofore applied and given effect to the rates in question, the contention being that a temporary injunction may be employed to preserve the status quo pending the suit but not to change it. It may be conceded that such an injunction is generally employed as stated, and that the Courts are generally reluctant to employ it otherwise, but this does not mean that they may not or ought not to employ it otherwise, when the exigencies of the case justly require it; for as has been often held,

courts of equity are not thus limited in their powers, but may
137 by a temporary injunction effect a change in the status quo,
if it be necessary to do so, as here, to avoid irreparable injury

from what is plainly a continuing wrong. In re Lennon, 166 U. S. 548, 566; Chicago, etc., Co. vs. Winnett —— C. C. A. ——, 162 Fed. 242, 249; Prokegama Co. vs. Klamath Co. 86 Fed. 528, 533, 535. It would hardly do to say to a railroad company that by resorting to the very best method of testing the adequacy of a prescribed rate, that is, by putting it into actual practice for a reasonable period, all right to a temporary injunction, which might otherwise

exist, will be lost; and yet that would be the result if the narrow view of the use of such an injunction here contended for were to prevail. True, some of the rates in question have been in force substantially in their present form for a considerable time, but enough of influence is accorded to this fact when it is made a reason for requiring stronger and more persuasive proof of inadequacy than otherwise would be required; and that influence has been accorded to it here. A temporary injunction will be granted as prayed for, but it will be required, for the protection of shippers and passengers, that a proper bond be executed in the sum of Two Hundred Thousand Dollars conditioned that the railroad company shall keep a correct account showing, as respects every carriage of freight or passangers, the difference between the tariff actually charged, and what would have been charged had the restrained rates been applied, and showing the particular carriage in question, the stations between which it occurred, and the name of the person affected, such record to be made and kept subject to the further order of the court; and also conditioned that the excess charged, with lawful interest and damages, shall be returned in each instance to the party entitled thereto within a reasonable date to be fixed by the Court, if it should eventually be determined that the temporary injunction ought not to have been granted.

138-369 Endorsed: Filed September 3rd, 1908. W. P. Feild, Clerk.

The following affidavits, on behalf of the complainant, were introduced and read at the hearing on the motion for a temporary restraining order:

(Omitted in printing per stipulation.)

370 And on September 12th, 1908, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
vs.
ROBERT P. ALLEN et al.

Comes the complainant, by S. H. West, Esq., its solicitor, and files herein its injunction bond in the sum of Two Hundred Thousand Dollars ($200,000.00), with the United States Fidelity and Guaranty Company as surety, which bond is approved by the Clerk of this Court.

371 Which Injunction Bond is as follows:

In the Circuit Court of the United States within and for the Western Division of the Eastern District of Arkansas.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Complainant,

v.

ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas; Henry Leigh and George L. McLean, Defendants.

*Injunction Bond.*

Know all men by these presents, that the above Complainant, as principal, and The United States Fidelity & Guaranty Company, a corporation organized and existing under and by virtue of the laws of the State of Maryland, as surety, are held and firmly bound unto the United States of America in the penal sum of Two Hundred Thousand Dollars, ($200,000.00), well and truly to be paid in lawful money of the United States, for the payment of which they bind themselves, their successors and assigns firmly by these presents.

Signed with our hands and sealed with our seals, and dated this 11th day of September, A. D. 1908.

This bond is made upon the following conditions, to-wit:—

372 Whereas, the Court in the above entitled cause, made an order on the 3rd day of September, A. D. 1908, granting a restraining order and providing among other things as follows, to-wit:

It is further ordered, that Complainant execute a bond to the United States of America in the penal sum of Two Hundred Thousand Dollars, conditioned that said Complainant shall keep a correct account showing, as respects every carriage of passengers and freight, the difference between the tariff actually charged and that which would have been charged had the rates inhibited hereby been applied, showing the particular carriage in question and the stations between which the same occurred, and the name of the person affected as far as may be practicable, which record shall be made and kept subject to the further order of this Court, and further conditioned that if it should eventually be decided that so much of this order as inhibits the enforcement of the existing rates should not have been made, that said Complainant shall, within a reasonable time to be fixed by the Court, refund in every instance to the party entitled thereto, the excess of charge over what would have been charged, had the inhibited rate been applied, together with lawful interest and damages."

Now, if the above named Complainant, St. Louis Southwestern Railway Company, shall well and truly keep and perform all and singular the conditions of said restraining order, as above set forth, then this obligation shall be null and void; otherwise to be

373 and remain in full force and effect.

In testimony whereof, the above bounden principal has

caused its corporate name to be hereunto subscribed by its Vice-President, and its corporate seal to be hereunto affixed and duly attested, and said Surety has caused its corporate name to be hereunto subscribed and its corporate seal to be hereunto affixed by C. P. Perrie and D. H. Cantrell, its duly authorized attorney in fact for this purpose, the 11th day of September, A. D., 1908.

[SEAL.] ST. LOUIS SOUTHWESTERN RAILWAY COMPANY,
By F. H. BRITTON, *Vice-President.*.

Attest:
G. H. WARNER,
*Assistant Secretary.*

[SEAL.] UNITED STATES FIDELITY & GUARANTY COMPANY,
By C. P. PERRIE,
D. H. CANTRELL,
*Attorneys in Fact.*

Attest:

——— ———.

Approved as sufficient, Sept. 12, 1908.
W. P. FEILD, *Clerk.*

Endorsed on back thereof: Filed September 12, 1908. W. P. Feild, Clerk.

And on October 5, 1908, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Come the parties by their respective Solicitors and file herein their stipulation extending time in which to file replication to No-
374 vember rule day.

Which stipulation of Counsel is as follows:

It is agreed that the time for filing replications in the cases of Carle V. Chicago, Rock Island & Pacific Railway Company, Boyle v. St. Louis San Francisco Railway Company, ——— ——— v. Kansas City Southern Railway Company, St. Louis, Southwestern Railway Company v. Allen, et al., and St. Louis, Iron Mountain & Southern Railway Company v. Allen et al., may be extended until December 1, 1908.

MORRIS M. COHN, *For Def'ts.*

Endorsed on back thereof: Filed Nov. 5, 1908. W. P. Feild, Clerk.

375 UNITED STATES OF AMERICA.
*Western Division of the*
*Eastern District of Arkansas*:

Be it remembered, that at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 20th day of October, Anno Domini, One Thousand Nine Hundred and Eight, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber Judge presiding and holding said Court, the following proceedings were had, to-wit: February 4th, 1909.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Come Morris M. Cohn and Rose, Hemingway, Cantrell & Loughborough, Esqs., and file herein their petition asking leave of the Court to withdraw their further appearance as Counsel for said Defendants herein, and the Court being sufficiently advised in the premises doth grant said petition, and said Solicitors are permitted to withdraw from this cause.

376 Which petition of Counsel is as follows:

In the United States Circuit Court for the Eastern District of Arkansas, Western Division.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
V.
ROBERT P. ALLEN et al.

Come the undersigned and withdraw their further appearance for the Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, as Railroad Commissioners of the State of Arkansas; they no longer being connected with said causes as attorneys for said Defendants.

MORRIS M. COHN,
ROSE, HEMINGWAY,
CANTRELL & LOUGHBOROUGH.

Feb'y 4, '09.

Endorsed on back thereof: Filed Feb'y 4, 1909. W. P. Feild, Clerk.

And on February 18th, 1909, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Come the defendants, the Railroad Commissioners of the State of Arkansas, by Hal L. Norwood, Joseph M. Hill, William F. Kirby and James H. Harrod, Esqs., their Solicitors, and file herein their motion to dissolve the injunction heretofore granted herein.

Which motion to dissolve the injunction is as follows:—

377 In the United States Circuit Court for the Western Division of the Eastern District of Arkansas.

No. 1636. In Chancery.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Complainant,
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al., Defendants.

*Motion to Dissolve Injunction.*

Come the Defendants herein Robert P. Allen, John W. Crockett and John E. Hampton, constituting the Railroad Commission of the State of Arkansas, and move the Court that the temporary injunction herein granted by His Honor Willis Van Devanter, Circuit Judge, be not continued until the final hearing, or until the further order of the Court and that the same be dissolved, or, if in the judgment of the Court the injunction should be continued, that it be so modified as to give the Defendants and those they represent the equitable relief to which they are entitled. That the Defendants allege the following grounds for discontinuance of said injunction, to-wit:—

I.

That said injunction was improvidently granted, for these reasons, to-wit:—

(*a*) That the evidence of the Plaintiff, which sought to
378 sustain the allegations of the bill that the freight and passenger rates were confiscatory, was based upon statistics of six months' business of the Plaintiff Railroad Company and during almost half of said period there was a financial and business panic, when the industries and traffic all over the country, and particularly the State of Arkansas, were partially paralyzed and there was a scarcity of money to move the crops and products, and a lack of demand for coal, timber and manufacturing products. And since the granting of said injunction the Supreme Court of the United

States has, on January 4th, 1909, said, in regard to a similar situation:

"We think it was error to confine the investigation to, and base the judgment upon, that year alone. The precise subject of the inquiry was, what would be the effect of the ordinance (referring to an ordinance fixing rates in the future. The operations of the preceding fiscal year, or of any other fiscal year, were valueless if the year was abnormal, and were only of significance so far as they foretold the future. If, as in this case, sufficient time has passed, so that certainty instead of prophecy can be obtained, the certainty would be preferable to the prophecy."

Had that Court made this utterance prior to the preliminary hearing herein, it is confidently asserted that His Honor, Judge Van Deventer, would not have granted the temporary injunction upon the evidence adduced based upon statistics of the operation of the Plaintiff's road during half of an abnormal year.

(*b*) The injunction was improvidently granted for the
379 further reason that it changed the status quo of the freight and passenger rates, which had long been in force, particularly the freight rates, and it is contrary to the principles of equity jurisprudence that a status quo be changed by a preliminary injunction. The facts in regard thereto are these, to-wit: The freight rates established by the Commission, which were enjoined, with the exception of a few changes made from time to time, which did not materially diminish the aggregate of the Plaintiff's income, had been in force on single lines since April 10th, 1900, and on two or more lines since July, 1903. And the reports made to the Commission by the Plaintiff, which it was required by law to make, showed that it made more money on its Arkansas business in the years 1906, 1907 and 1908, than it did prior to the promulgation of said tariff in April, 1900. That in said last three years the percentage of income to operating expense was steadily increasing. That the passenger rates had been put in effect by an Act of the General Assembly and the railroads had operated under same for a period of about sixteen months prior to the injunction herein, and said reduced passenger rates did not cause any material loss, if loss at all to the Plaintiff railroad company, as the increased travel without a corresponding increase in expense compensated for the reduced passenger fare.

Wherefore, said injunction, having been issued contrary to the established principles of equity jurisprudence, should not be continued, but should be dissolved.

II.

380 These Defendants assert that the filing of the bill in equity herein, seeking a temporary and permanent injunction, bound said Plaintiff to do equity, and, when said temporary injunction was granted restraining the enforcement of the passenger and freight rates upon the ground that said rates were unreasonable and confiscatory, the said Plaintiff was bound by the principles of equity jurisprudence, to put in force, if it exercised its power, only

reasonable rates, and it was not at liberty to avail itself of the injunction against the rates established under the law and put in force unreasonable rates. In violation of this settled principle of equity jurisprudence, the Plaintiff has, since the rates established by the Commission and the General Assembly were temporarily enjoined, established freight and passenger rates of all intrastate shipments and said freight and passenger rates are unreasonable and exorbitant and are destroying many of the industries of the State. And said Plaintiff is maintaining interstate rates so low that the same amount to a discrimination against the business and industries of the State of Arkansas. That it discriminates in favor of longer hauls of interstate shipments, under similar and like circumstances, against shorter hauls of intrastate shipments to the great detriment of the shippers and consumers of the State of Arkansas.

The tariff put in by the railroads since said injunction upon the leading articles of commerce in the State is an unreasonable increase. On grain there is an increase of 50% over the Commission rate; on cotton 140% over the Commission rate; on packing house products 100%, on coal, 35%, on brick, stone and sand, 75%, on lumber 107%, and on the various lines of merchandise about 75%.

381 There is an average increase on the principal commodities of the State of 77% over the Commission rate, which these Defendants aver is unreasonable, extortionate and oppressive to the shippers of the State.

The Commission avers that its freight tariff as a whole is fair, compensatory and reasonable and this these Defendants expect to maintain by satisfactory evidence at the final hearing of this suit. And said Commission has, since the injunction by Judge Van Devanter, by proper action, after notice to the Plaintiff and all other railroads, putting in such unreasonable and exorbitant rates, after a hearing, declared said freight rates so established by the Plaintiff and the other railroads to be unreasonable. And these Defendants now submit with this petition many affidavits to sustain the action of said Commission in declaring the rates unreasonable, and to sustain the allegation herein that said rates are unreasonable, extortionate and discriminatory against the State of Arkansas and destructive and detrimental to the shippers of the State.

These Defendants allege that it is a principle of equity that detriment to the public is a consideration proper to be considered by a Chancellor when considering an application for a discontinuance of an injunction. That the Plaintiff has taken advantage of its injunction against the Commission and put in force unreasonable, extortionate and oppressive rates. Wherefore, having violated the spirit of the injunction obtained by it, the Plaintiff is not entitled to a continuance thereof, but, under the settled principles of equity, the same should be dissolved.

382 The Defendants further allege that in many instances the unreasonably high rates established by the railroads since the temporary injunction herein has diminished the volume of traffic, and the Plaintiff itself is suffering a material loss of business from its destruction of the industries of the State, and, in

many instances, the injunction is injuring it as well as the shippers and consumers and industries of the State.

The Defendants allege that, after the injunction was granted temporarily restraining the two cent passenger rate put in force by the Act of the General Assembly, that the Plaintiff has increased the passenger rate to three cents per mile and has not afforded any better service while so doing. And the Defendants further allege that the *Defendant* is transporting all persons who buy 2000 mile tickets at two cents per mile, while requiring travelers who do not buy such mileage books to pay three cents a mile, and is thereby materially decreasing the amount of travel. The Defendants aver that the increase in travel at the rate of two cents a mile, except in abnormal years and in times of panic, will not cause any loss to Plaintiff or any other trunk line in the State of Arkansas, as the increased travel on account of the reduced rate will compensate for the loss in rate, and if the Plaintiff gives said two cent passenger rate a fair test, as it has not done, the same will prove to be true. The Defendants further allege that neither the Plaintiff nor these Defendants are able to state the exact effect of the two cent passenger rate, and there has been no fair test of it under the principles established by the Supreme Court of the United States, as it is a matter of prophecy
383 and not of fact as to the effect of same, and, according to the decisions of that Honorable Court, in such a case the Plaintiff is not entitled to a temporary or permanent injunction until it has fairly tested said rate and found the same confiscatory so long a length of time that the future can be foretold by its past operation.

## III.

If in the better judgment of the Court, it is found that Plaintiff's violation of the spirit of the injunction, does not entitle the Defendants to its dissolution, then the Defendants allege that those they represent are entitled to have the injunction continued only upon terms which would be equitable to the Plaintiff and to the interests represented by the Commission, said terms being that the Plaintiff be enjoined from enforcing its existing rates, where shown to be exorbitant and unreasonable, and that it be enjoined to put into force fair and reasonable rates pending the determination of this litigation over the rates enjoined by it.

## IV.

The- Defendants allege that the Plaintiff has a plain and adequate remedy against any rate established by the Commission which is not reasonable and compensatory and should not be entitled to seek a remedy in a Court of Equity until it has exhausted its efforts to obtain a reasonable and compensatory tariff under the existing law, which affords it ample and complete redress against any injustice in the freight rates established by the Commission. That it is made the duty of the Commission—

"to hear all complaints made by any person, firm or corpora-
384 tion against any such tariff or charges so approved (by it); to hear the parties to the controversy in person or by attor-

ney, or both, and may take testimony orally and in writing, and regulate the argument thereon and conduct the investigation of such complaints in such manner as to the Commisison may seem best to arrive at the truth, and when any changes are made in the tariff notice thereof shall be given to the person or corporation to be affected thereby."

And it is further made the duty of the Commission in changing or fixing the rates, to take into consideration the character or nature of the service to be performed, the entire earnings of the railroad, the expense of operating same and the expense and value thereof. And the Defendants assert the facts to be that when the first tariff was established by the Commission, in 1900, that it assured the Plaintiff and all other railroads affected by it that, if said tariff did not produce a fair profit, the Commission, upon a showing so made, would readjust it so as to produce, if possible, for the Plaintiff, a fair profit upon its investment. And such has been the attitude of the Commission from then until the present time, and is still the attitude of the Commission. That several small line railroads have applied to the Commisison for relief against the existing rates, and, where the showing has been made of the justice of the application, the Commission has granted the same. That the Plaintiff has not presented any complaint to the Commission, alleging that any rate, or the tariff as a whole, established by it was not compensatory and asking for an increase of any rate or of the tariff as a whole.

385 That the Commission recognizes now, as it has always done, no tariff, whether promulgated by a railroad or a Commission, as perfect, and that all tariffs should be changed from time to time to meet changed conditions in order to do justice to the railroads or shipper, as the case may be, and this the Commission has at all times been ready to do whenever satisfactory evidence should be offered to it showing the justice of and necessity for same.

The Defendants assert that the temporary injunction should not be continued until the Plaintiff has availed itself of its legal right to obtain redress of its alleged grievance, in so far as the freight rates are concerned, before the Commission, and alleges it is contrary to the principles of equity to entertain a suit where full and adequate remedy at law is open to the Plaintiff; that it is contrary to the comity which federal courts extend to state tribunals to grant relief in said federal courts against state regulations promulgated under state laws, until the Plaintiff has sought its constitutional right in the tribunals where the alleged unconstitutional regulation is attempted to be enforced.

The Defendants allege that they are called upon to defend in this court the rates of their predecessors and maintained by themselves, with a few changes as called for from time to time, without having had an opportunity to hear the complaint of the Plaintiff and pass upon its justice.

Wherefore, the Defendants pray that the injunction be discontinued or its operation suspended until the Plaintiff applies for redress before the Commission and gives it an opportunity to pass upon the matters which are alleged in Plaintiff's complaint.

386

V.

The Defendants allege that the Plaintiff's case is predicated upon the relative cost of intrastate over interstate traffic, and that the method of computing intrastate traffic is one upon which railroad accountants differ. The General Auditor of the Plaintiff, in his affidavit filed in this case, has testified:

"There is a diversity of opinion among railroad officials and the accountants who deal with the accounts of railroad corporations as to how expenses should be divided between the two classes of service, intrastate and interstate. For operating purposes the train mile, car mile and ton mile are often used as units to determine the division of freight service and freight cost."

Said Auditor asserts that the revenue basis is the proper one, but competent and equally skilled accountants assert that it is not the true basis but the ton mile basis should control. This difference of opinion is one of the issues to be determined in this suit, and if the ton basis is established to be the proper basis, then, under the evidence submitted by the Plaintiff as to its gross earnings, operating expenses and value of its property, the Commission's tariff is providing it a large revenue and affording a fair compensation upon its investment. That it is contrary to the principles of equity that a temporary injunction should change the status quo where the matter to be litigated is gravely doubtful and upon such gravely doubtful contention the Plaintiff's whole case is predicated. When an injunction is granted against a rate fixed by law as vio-

387 lative of constitutional right, the invalidating facts must be proved to the satisfaction of the Court and not merely rest upon a difference of opinion among expert accountants.

VI.

If the injunction in whole, or modified so as to require the Plaintiff to do equity while this litigation is pending by establishing reasonable rates, is continued, then the Defendants pray that it be further modified so as to afford the interests they represent adequate relief, in the event that the Defendants are ultimately successful, in the following particulars:

(*a*) The bond required of the Plaintiff is wholly inadequate to cover the losses to the interests represented by this Commission, to-wit: The shippers and passengers of the State. And the Defendants allege the facts to be, taking the increased rate of 33⅓% on passenger traffic, established by the railroads, and applying said increase to the passenger traffic of the six months for which the Plaintiff furnished statistics, the increased revenue to the Plaintiff on the passenger business would amount to $557,694.80 per annum. From this gross sum should be deducted the amount of travel that the Plaintiff still permits to be had at two cents a mile, the exact amount of which is not known to these Defendants. Taking the statistics for the six months freight business furnished by the Plaintiff and applying to it the increase of 75% (which is really less than the true increase) an increased revenue of $960,375.24 is produced. From this should

be deducted the loss of business to the Plaintiff from its destruction of the various industries that are not now, under its high
388 tariff, shipping the commodities, which they would otherwise have shipped. The Defendants allege that these calculations, based upon the statistics of the Plaintiff, show that a bond of $200,000.00 is wholly inadequate to protect the people who are paying the extortionate and unreasonable rates, in the event that the Plaintiff does not finally prevail in this case, and that such bond should be required as will protect such interests.

(*b*) That the injunction herein requires the Plaintiff shall keep a correct account showing, as respects every carriage of passengers and freight, the difference between the tariffs actually charged and that which would have been charged had the rates inhibited been applied, showing the particular carriage in question and the stations between which the same occurred and the name of the person affected, so far as may be practicable, and that Plaintiff keep a record of the same subject to the order of the Court, and conditioned to refund the excess should the injunction not be finally sustained. These defendants allege that said requirement is not ample to secure the shippers and passengers, and pray that, should the injunction be continued, the plaintiff be required to furnish to each passenger and to each shipper a certificate or coupon showing the excess payment over the rates enjoined, so that said passenger or shipper would have prima facie evidence of the amount due him from the plaintiff should the Plaintiff not ultimately succeed herein.

And these Defendants further assert, upon information and belief, that the Plaintiff is not keeping such an account as is required by the injunction, and pray that it be required to file an account
389 showing the excess of freight and passenger fares collected by it over the rates enjoined, and from whom such freight and passenger fares have been collected, to the end that the rights of all parties interested may be protected.

And these Defendants pray for all further relief which the Court may find in equity and good conscience they and those they represent are entitled to receive.

____ ____,
*Attorney General;*
____ ____,
____ ____,
*Counsel for State.*

We, Robert P. Allen, John W. Crockett and John E. Hampton, state on oath that we verily believe the matters set forth in the foregoing petition are true.

____ ____.
____ ____.
____ ____.

Sworn to and subscribed before me this 17th day of February, 1909.

____ ____.

Endorsed on back thereof: Filed Feb'y 18, 1909. W. P. Feild, Clerk.

390 UNITED STATES OF AMERICA,
*Western Division of the*
*Eastern District of Arkansas:*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 5th day of April, Anno Domini, One Thousand Nine Hundred and Nine, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber Judge presiding and holding said Court, the following proceedings were had, to-wit: June 1st, 1909:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

The Court being now sufficiently advised as to what disposition to make of the motion to modify the temporary injunction heretofore granted in this case, and which was submitted at a previous day of this term.

It is ordered, adjudged and decreed that, in addition to the conditions upon which the temporary injunction was granted herein, the following conditions be and they are hereby prescribed by the Court:

That from the affidavits and evidence submitted, the Court finds that the tariff of freight charges put into effect by the said Railway Company since the granting of the temporary injunction is unreasonable, and, therefore:

It is ordered that the freight rates pending this action, to be charged by the said railway company shall be so arranged as to produce a net increase of thirty three and one third per cent (33⅓%) of the revenue produced by Standard Freight Distance Tariff (No. 3) Number Three, put into effect by the Defendants, State Railroad Commissioners, and in force at the time the temporary injunction was granted; and that the same be put into effect not
391-421 later than June Seventh (7th) 1909, and continue in force until the further order of the Court with leave to either party to apply to the Court for a modification of said tariff, if it shall be found that it does not conform to the order of the Court in respect to the aforesaid increase in the revenue of the said Railway Company.

And thereupon come the Plaintiffs and file a tariff of freight rates which both parties believe conform to the order of the Court, and said tariff is ordered to be filed marked Exhibit "A" to the decree modifying the temporary injunction and made a part of the record in this cause.

It is further ordered that the security given by the said Railway Company upon the granting of the preliminary injunction herein shall in no wise be affected by this order, but shall remain liable in the same manner for the rates charged under the tariff promulgated under this order of Court as if this order had been embodied in the order granting the preliminary injunction; and a failure to comply

with the schedule herein filed shall be cause for dissolution of the temporary injunction.

(Signed) JACOB TREIBER, *Judge.*

Which Exhibit "A" is as follows:
(Omitted in printing per stipulation.)

422 And on the same day the following opinion of Court was filed:

In the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas.

In re ARKANSAS RAILROAD RATES.

John M. Moore, Buzbee & Hicks, Reid & McDonough and B. R. Davidson, for Complainants.

Hal L. Norwood, Attorney General, Joseph M. Hill, James H. Harrod and William F. Kirby, for Defendants.

On Motion for Modification of Preliminary Injunctions.

TREIBER, *D. J.:*

Upon application for a temporary injunction made by the railroads of this State, and heard by Judge Van Deventer, one of the Circuit Judges of this Circuit, preliminary injunctions were granted restraining the enforcement of the intrastate rates then prescribed by the Railroad Commission of the State of Arkansas, for the transportation of freight and the two cents a mile passenger Act of the General Assembly of the State of Arkansas, approved February 9, 1907, the contention on the part of Complainants being that they were unreasonable, non-compensatory and confiscatory. At that hearing the learned Judge found from the evidence submitted that the additional cost of intrastate traffic exceeds that of the interstate of the complaining roads one hundred per cent on freight, and fifteen per cent on passenger traffic, and applying this rule to the earnings of the roads and their values decided that, "the rates
423 in question are non-compensatory and unreasonable, and that their enforcement, although not so intended, is nothing other than a taking of the property of the railroad companies without due compensation, which is confiscation." The opinion on that hearing will be found in 163 Fed. 141.

The State Railroad Commission now applies for a modification of these temporary injunctions, alleging, that, "Since the granting of the preliminary injunction the railroad companies have established freight and passenger rates on all intrastate business, which are unreasonable and exorbitant and are destroying many of the industries of the State." It is charged that the passenger rate has been raised to three cents a mile, and the freight tariffs put into effect, increased those prescribed by the Commission and in force

at the time the temporary injunctions were granted, as follows: 50% on grain; on cotton 140%; on packing house products 100%; on coal 35%; on brick, stone and sand 75%; on lumber 107%, and other various lines of merchandise, about 75%; that the average increase on the principal commodities of the State on a revenue producing basis is over 77%, which rates it is claimed are unreasonable, extortionate and oppressive to the shippers and consumers of the State. It is, therefore, asked that the preliminary injunction be modified so as to prevent this injustice.

That a preliminary injunction may be modified at any time whenever the ends of justice require it is beyond question. Not only may it be done by the trial court, but upon appeal by the appellate tribunal. Denver and Rio Grande R. Co., vs. United States, 124
424 Fed. 156, 59 C. C. A. 579. Judge Sanborn, who delivered the opinion of the Court in that case said that, "a preliminary injunction may be modified when by such modification the injury or inconvenience of one or more of the litigants may be decreased without increasing the danger of loss to their opponents." And, accordingly, he modified the temporary injunction which had been granted by the lower Court. There can be no doubt that a temporary injunction can not be claimed as an absolute right, but is within the sound discretion of the Court, that discretion of course, to be controlled by the established principles of equity jurisprudence. Shubert vs. Woodward, 167 Fed. 47, — C. C. A. —. In the head note of that case, prepared by the Court, it is said, "the specific performance of contracts and the issuance of injunction are not matters of right; they rest not in the arbitrary or whimsical will, but in the judicial discretion of the Court, informed and guided by the established principles, rules and practice in equity, which are advisory rather than mandatory;" see also New York City vs. Pine 185 U. S. 93, 22 Sup. Ct. 592, 46 L. Ed. 820. Kansas vs. Colorado 206 U. S. 46, 27 Sup. Ct. 655, 51 L. Ed. 956.

Granting or refusing a preliminary injunction proper regard must be had for the comparative injury which will be sustained by the defendant if the injunction were granted, and by complainant if it were refused, and in order to prevent great injury to the Defendant when the complainant is prima facie entitled to a temporary injunction, the Court, in the exercise of its discretion, frequently resorts to the expediency of imposing terms and conditions upon the parties at whose instance it proposes to act. Russell vs. Farley, 105 U.
425 U. 433, 438, 442, 26 L. Ed. 1060; Myers vs. Block, 120 U. S. 206, 214, 7 S. Ct. 529, 30 L. Ed. 644; Ewing vs. Filley, 43 Pa. St. 384, 387; Denver & Rio Grande R. Co. vs. United States 142 Fed. 625, 73 C. C. A. 621; Vogel vs. Warsing, 146 Fed. 449, 77 C. C. A. 109; McElroy vs. Kansas City, 21 Fed. 257, 264, 263 (C. C.); McCaul vs. Braham, 16 Fed. 37, 42 (C. C.); Spring Valley Water Co. vs. San Francisco, 165 Fed. 667 (C. C.); Macon R. R. Co. vs. Gibson, 85 Ga. 1, 11 S. E. 442; Careton vs. Rugg 149 Mass. 550; Kerr on Injunction (2nd Am. Ed. 30); Spelling or Injunction, p. 1031-1033. The authorities cited by Counsel for Complainants

all refer to permanent, and not preliminary injunctions and for this reason are not applicable to this proceeding.

In Denver & Rio Grande R. Co. vs. United States, supra, it was said that, "The purpose of a preliminary injunction is to protect and preserve the rights of all the litigants with the least injury to each until the controversy between them can be tried and finally decided."

In Spring Valley Water Co. vs. San Francisco, supra, the question before the Court was the terms upon which a preliminary injunction should be granted against the enforcement of an ordinance fixing water rates to be charged by Complainant. Judge Farrington, in a very exhaustive and learned opinion held that,

"This Court can not control the discretion of the supervisors; it can not substitute its judgment for theirs. The power and duty of fixing water rates is cast by the Constitution on that board and not on this Court. The law no where provides an appeal to this Court from an ordinance adopted by the Board of Supervisors, nor does it clothe this tribunal with any authority to review, revise, cor-
426 rect or send back to that body for reconsideration an ordinance establishing the compensation to be collected for water. * * * It would seem, therefore, that the Court is limited to the determination of a single question, namely, is the ordinance confiscatory?"

And coming to the question of a preliminary injunction the learned Judge says: "It is an abuse of judicial discretion to issue an injunction which will permit one party to obtain any advantage by acting, when the hands of the adverse party are tied by the writ."

From these authorities it may be stated that a Court, when called upon to grant a preliminary injunction, may impose such terms, on granting it, as will protect the rights of the defendant as well as those of the complaining party, and if, after the temporary injunction has been granted, and before a final hearing while it is in force, it is shown to the Court that great injustice is being done by reason thereof, that the acts of the plaintiff are unjust, oppressive and unmindful of the rights of the defendant, the Court may modify it by imposing terms which will prevent such injustice.

This leaves for determination another very important matter. Can the Court, for the purpose of requiring the complainant, who obtained the preliminary injunction, to do equity and preventing the imposition of extortionate rates for the carriage of freight and passengers, fix maximum rates beyond which complainants must not go during the pendency of the litigation, and make a compliance with these rates a condition upon which the temporary injunction will be continued? That the making of carrier's rates is a
427 legislative act and not judicial is frankly conceded by Counsel for the Defendant, and for this reason Courts are powerless to make them. Upon final hearing the Court must, if it is shown that the Commission rates are compensatory, within the meaning of the law, dissolve the preliminary injunction or make it perpetual if they are found to be non-compensatory, and therefore confiscatory.

The authorities are not only numerous but harmonious on this subject. A few of the leading and late cases is all that is necessary to cite on the subject. Reagan vs. Farmer's Loan & Trust Co. 154 U. S. 362, 400, 14 S. Ct. 1054, 38 L. Ed. 1014; Interstate Commerce Commission vs. Ry. Co. 167 U. S. 479, 499, 505, 17 S. Ct. 896, 42 L. Ed. 242; Prentiss vs. Atlantic Coast Line, 211 U. S. 210, 226. But when the application is for a temporary injunction the rule is different. As was said in Spring Valley Water Co. vs. San Francisco, supra:

"While it appears that the ordinance in question is probably confiscatory and therefore invalid, the fact that complainant will suffer irreparable injury unless an injunction issues is not decisive. The Court owes equal consideration to both parties; it must not issue an injunction which will do more harm to one party than good to the other; it should so preserve the matters in dispute as to protect each party as far as possible from harm. We have no means of knowing the plans of the company, whether it will raise the rates for the remainder of the fiscal year to the full amount of what is alleged to be reasonable—that is, so as to realize an income of more than $3,000.00 net—or whether it will be content with something less. If the ordinance is finally adjudged valid, any collections made in excess of the rates specified therein must
428 be repaid. Such repayment can be secured by a proper bond; but if the ordinance is adjudged confiscatory and therefore invalid, there is no practicable remedy for the consumer, who, under the necessity of agreeing to the terms offered by the company or foregoing the use of water, contracts to pay and does pay more than is just. His injury is irreparable. It is not sufficient to say that Courts will enjoin the unreasonable charges, or that this Court will promptly dissolve the injunction, if, pending the suit, complainant abuses the process of the Court. Whether the rates so fixed by the company are reasonable or unreasonable is a question of fact which no court would presume to decide without a hearing, and such a hearing may be long and expensive. Most consumers will consider water of any quality or price cheaper than litigation. Neither conception of the status quo is satisfactory. Neither, if maintained, will afford adequate protection but to one party. If the ordinance is confiscatory, complainant is entitled to an additional sum which will make its compensation just and reasonable. This sum will be lost to complainant if the injunction is denied. On the other hand, if the ordinance is confiscatory and the injunction is granted as prayed for, if complainant exacts a compensation in excess of what is just, the excess will be lost to San Francisco and its inhabitants. Equity, however, has no peculiar concern for the status quo, except that its preservation usually, if not always, accomplishes that which is the object of a preliminary injunction; that object is to preserve the fund, the property, the right or other thing in dispute, from waste, destruction or disturbance until the rights and equities of the contending parties can be finally considered and determined. Notwithstanding
429 the fact that the ordinance is probably confiscatory, and that its enforcement should be restrained pending suit in order

to save complainant from irreparable injury, and interlocutory injunction, the effect of which is to give complainant the authority, practically without limit, to fix prices at which it will sell water, must be denied for the following reasons." He then proceeds to state the reasons which it is unnecessary to repeat here.

The effect of the preliminary injunctions is to leave the State without any regulating freight rates (it is otherwise as to the passenger rates as the statute in force at the time of the enactment of the Act of 1907 limiting them to three cents a mile is undoubtedly effective if the later Act is void. Railway Co. vs. State, 86 Ark. 363) and leaves the railroads without any limitation, so far as the laws of the State of Arkansas are concerned, to make them what they deem proper until the final determination of these causes. Assuming from the figures presented by the Complainants, and as found by Judge Van Devanter, that the rates enjoined are confiscatory or at least not sufficiently remunerative, the injunction, if the evidence at the final hearing is the same, would have to be made perpetual. In that event the rates collected during the pendency of these actions, no matter how excessive and unreasonable, and until the Commission can make new rates, rates sufficient to enable the roads to earn a reasonable compensation, will be wholly lost to the shippers. It is true, the preliminary injunction specially provided that, "Nothing recited in this order shall operate to prevent the said Railroad Commission of the State of Arkansas from establishing and enforcing any reasonable, compensatory and lawful rates, in place of those whose enforcement is hereby in-
430 hibited." But it is not very probable, nay almost certain that any rates which may be proposed by the Commission, if less than those rates put in effect by the Complainants, which they claim are as low as they can make them, will cause further litigation, as supplementary bills would be filed to enjoin them as confiscatory. Of course, the Court could refuse to grant the injunction if the rates were not shown to be confiscatory, but in order to do that the Court would necessarily have to determine what rates were compensatory and just, and in all likelihood from evidence identical with that submitted at this hearing. As the Railroad Commission contends, and no doubt every member thereof believes, that the rates now enjoined were compensatory or if not that a very slight increase would make them so, the probabilities are that a number of suits would have to be filed by each of the railroads until a tariff would be prepared which would justify the Court, acting upon the basis of apportionment of expense made in this case, and which will not be disturbed before there is a final hearing, if then, to refuse a preliminary injunction. In the meantime the rates, although they may be unjust and oppressive, would be collected.

Therefore, to prevent not only a multiplicity of suits, but to require complainants who seek equity do equity, this Court is justified in prescribing such maximum rates as may be just to the railroad as well as the public. In Spring Valley Water Company vs.

San Francisco, supra, Judge Farrington found that complainant would probably be entitled to a gross income of $266,675.60 in excess of that afforded by the rates fixed by the supervisors, and thereupon he held that complainant was entitled to so much relief
431 but no more and granted the preliminary injunction upon that condition.

It is true that in the San Francisco Water Company case there were only a few rates to be fixed while in these cases hundreds of different rates must be determined. This may necessitate a great deal more labor and may require the assistance of a special master, if the parties are unable to reach an agreement under the directions and instructions of the Court, if the Court finds that the rates put in force by the railroad companies since the granting of the preliminary injunctions are so exorbitant as to be unjust and oppressive. But this ought not to prevent the Court from doing justice and preventing a wrong. The difference is only one of degree and not of principle. If it appears from the evidence that the rates now in force are unreasonable, enabling Complainants to increase their earnings on intrastate rates to a much greater extent than is necessary to enable them to make a reasonable return on their investment, great damage will necessarily be sustained by the public who pay these rates, for some of which there can be no redress, even if the injunction should be dissolved. For the Court to refuse to act in such a case would be an injustice which no Court of equity should ever be guilty of. The bond executed by the railroad companies and the provisions made by the orders granting the preliminary injunctions, providing for an ascertainment of the damages, will only become effective if, upon final hearing, the injunctions are dissolved, but if it should appear upon that hearing that the rates while compensatory to some extent are still not sufficient to enable complainants to earn as much as in the opinion of the Court they are lawfully entitled to, the injunction would have to
432 be made perpetual, although a small increase of the rates from five to ten per cent would be sufficient to have made the rates compensatory within the meaning of the law. In such a case no recovery could be had by the Defendants, even if it should appear that the increase in the rates during the pendency of the temporary injunction exceeded one hundred per cent. And even if the injunction should upon final hearing be dissolved, the only damages which the law would permit to be recovered would be the difference between the rates paid under the increased tariff schedules and what would have been paid under the rates enjoined. In the meantime industries may have been prostrated and wholesale houses driven from the State, because, owing to the high rates in force during the pendency of these proceedings, they are unable to maintain their trade in competition with others located outside of the State and enjoying the benefits of lower interstate rates.

At the hearing of this application a great deal of testimony was introducced tending to show not only the extent of the increase of rates since the preliminary injunctions have been granted, but it was also shown that interstate rates from points outside of this

State on business competitive with that of the business men of this State have not been increased. It appears from these affidavits that some branches of business have been practically suspended so far as intrastate business is concerned by reason of the fact that the lower rates given to competitors doing business in other states prevented them from being able to deliver to retail dealers in parts of this State their articles of manufacture at the same prices. It is true the railroads claim, and no doubt justly, that although the new intrastate rates have been in force for over five months, and no
433 changes in interstate tariffs have yet been made, they will soon put them in effect and they will be as high as those now in force on intrastate business; they claim that the changing of these tariffs requires a great deal of time; that the last few months have been the busiest of the year, and that under the interstate commerce law, before new interstate rates can become effective, they must be filed with the Interstate Commerce Commission thirty days. The Court has no doubt that these statements are true, and that these complainants do not intend to discriminate against the people of this State whose welfare is necessary to their own existence; still the injury has been, and is still, being inflicted. While these facts would not be sufficient to justify this Court in declaring the rates exorbitant and unjust, they are circumstances which would be taken into consideration, not so much for the purpose of determining whether their present tariff is exorbitant as for the purpose of determining the propriety of the Court, sitting as a Court of equity, to exercise its power to prevent injustice to and oppression of the people of the State if the proofs show that it is being done.

This hearing was had on ex parte affidavits, testimony which can never be said to be conducive to obtaining exact facts, still as the most important testimony is based upon documentary evidence, the tariffs in force at the different times, and the income and expenditures of the roads, it is comparatively easy to ascertain the effect of these new rates.

On the part of the Railroad Commission comparative statements of the freight rates in force when the bill was filed and those
434 put in since the granting of the preliminary injunctions, and which are conceded to be correct, were introduced. These indicate that some rates have been raised over 200 per cent, and the average increase in the freight rates on a revenue basis, it is claimed, exceeds 77 per cent. On the other hand it is claimed by the railroad companies that some of the rates of the Commission were absurdly low, and that the increase of the new rates, as shown by the earnings for the month of November, 1908, the first month the new rates went into effect (for one of the roads it is based on the earnings for the months of November and December, 1907) the increase is as follows:

St. L. I. M. & S. Ry. Co., 41.80%.
St. L. & S. W. Ry. Co., 41.59%.
C. R. I. & P. Ry. Co., 24.95%.
St. L. & S. F. Ry. Co., 17.77%.
K. C. Southern Ry., 38.31%.

or an average of the five roads of 36.75%. These calculations are based on the actual sums collected, compared with what would have been collected upon the basis of the rates enjoined. No doubt this is the most satisfactory, if not the only correct basis, for ascertaining, on a revenue basis, the actual increase of the rates, especially as these actions are based solely upon the ground that the Commission rates were so low as not to earn anything on the investment of complainants. But, can it be said that the business of one, or even two months, especially the first, after the new increased rates went into effect, is a proper criterion for the ascertainment of these facts. It is urged that during the winter months the rates which were raised the highest, fruit and vegetables, on which the average raise is from one hundred to two hundred per cent; grapes nearly three
435 hundred per cent; seeds from one hundred fifty to two hundred per cent; lumber, the largest tonnage commodity of the State, over one hundred per cecnt, do not move extensively during the months of November or December; and in addition thereto it is claimed, and so shown by the affidavits of a number of merchants, that immediately after notice had been given of the new rates, and for the several weeks before they went into effect, a great many merchants purchased all their goods on which the increase of rates was material, and had them shipped to their places of business, so as to obtain the benefit of the lower rates. These statements seem reasonable and fair; but, in any event, it is hardly reasonable, in view of the large variety of products in this State to take the business of any one or two months for the proper standard for the year's business. That is fully shown by the fact that the revenue increase on a percentage basis of the different roads varies greatly; while the St. L. I. M. & S. R. R. Co., and the St. Louis Southwestern Ry. Co., report an increase of nearly 42%, the St. L. & S. F. Ry. Co., shows an increase of only 17.77%, and the Rock Island Railway an increase of less than 25%. No doubt the fact that the industries, as well as the products, mineral, forest and agricultural, along the line of the latter roads are different from those of the other roads, accounts for this difference. The fact that 40% of the entire tonnage of the intrastate business of the State is that of lumber and forest materials, for which the tariff has been raised over 100%, is of itself sufficient to show that the business for the months of November and December would hardly be proper tests for the business of the railroads of the State for the year, for there are hardly any
436 months during the year in which there is less building material used than during those months. In addition to this, it must not be overlooked that the rates are not raised horizontally, but run from 3% to over 200%. Defendants have submitted some calculations based on a large number of freight bills, paid during the five months the rates have been in force. These show an average increase on a revenue basis of over 77%. But they can not be accepted as a proper test for several reasons. It has been shown that these bills constitute but a little over 1% of the freight earnings during that time, and there is nothing to show that these bills cover those rates which have been but slightly raised, say from 3% to 20%,

as well as those which were increased greatly. The probabilities are that shippers would pay but little attention to small increases and furnish only such bills as indicated what they considered excessive rates. Taking the two tariff sheets, those in force at the time the injunction was granted, and those now in operation, with the percentages of increases as figured out by the experts of Complainants, and admitted by defendants to be correct, it is reasonable to say that the increase will exceed on a revenue basis considerably over 50%.

On behalf of the complainants it is also claimed that these large increases are based on the Commission rates which were much lower than the rates in force before the Commission was created, and the tariff then in force is offered in evidence to show that the present rates are but slightly, if any, in excess of those then in force. The tariff sheet offered is that of the St. Louis, Iron Mountain & Southern Railway Co. 1508-A, but it is shown that that tariff was only
437 nominally in effect; that the real tariff was Number 3315, called the "Jobber's Tariff" on which most of the freight traffic was carried, and in addition to this, there were special rates for almost every commodity in the State and that only a few of the small shippers who were ignorant of the tariff schedules were charged rates under 1508-A; that the Commission tariffs were but slightly lower than tariff Number 3315, and higher than many of the special tariffs in force at that time.

As to the special tariffs, the Court is satisfied from the evidence that they were made very low, in many instances below the cost of carriage, for the purpose of aiding in the establishment of new industries along the lines of railroads, and by these means build up the country, and thus, indirectly, increase the business and earnings of the trade. Such rates, which were not illegal at the time, can not be considered as a fair test for the purpose of determining what would be compensatory rates. That the Commission did make material reductions, even from the "Jobber's Tariff," No. 3315, has been fully established, but it is doubtful whether they amounted to as much as twenty per cent, although the Commission in its first report, claimed credit for having made reductions exceeding thirty per cent. But in considering this claim of the Commission, the Court is satisfied that in making it they were influenced by the fact that many of the large shippers who had theretofore enjoyed special rates, and which were lost by the acts of the Commission, which prohibited discriminations, had attacked the acts of the Commission and were urging the repeal of the statute creating it. A twenty per cent reduction is a liberal estimate for the tariff of the Commission.

On the part of the Defendants it is also urged that these
438 rates had been in force for eight years without any complaint on the part of the railroads, or any effort to restrain them, and for this reason it is claimed a strong presumption arises that they were not only not confiscatory, but were just and fair. It is true that in the absence of any proof, such acts of the railroads would raise a strong presumption that the rates were compensatory, a presumption as strong as that rates made by legislative authority are

fair and reasonable; still, it is only a presumption and may be rebutted. For that purpose it has been shown that the Commission rates were only submitted to under vigorous and continuous protests, and after it had been fully established by fair trial that these rates were confiscatory did the railroad companies feel justified in invoking the aid of the Courts to prevent what they consider a great injustice to them. In addition to that, it has been shown that since then there has been a continual increase in the operating expenses of the railroads in this State. The taxes have been more than doubled since the Commission first established its tariff; the cost of materials necessary for the operation of the trains and maintenance of the tracks, has increased largely; wages of all employés have been raised very materially; the legislation of the State, while no doubt prompted by the best motives, for the purpose of protecting the lives and property of its citizens, has greatly increased the operating expenses of all railroads in this State. The fellow servant rule of the common law has been abolished; railroads are made liable for all losses sustained by fires caused by sparks from locomotives, regardless of any question of diligence or negligence; the hours of labor of some of their employés have been shortened by statute; additional
439 brakemen are required for freight trains; every locomotive is required to be provided with powerful electric headlights; many new stations have been established; in some of the cities through which the roads run, they have been required to erect viaducts over some of the streets to prevent injury to persons using these streets; heavy penalties have been prescribed to secure prompt payment of wages of employés; and many other matters deemed necessary for the protection of property and the lives and comfort of the public are now prescribed by statute which were not required eight years ago. All of these add very much to the financial burden of these companies. These facts must, of course, be taken into consideration for the purposes of determining what rates are compensatory. As stated by this Court in Kansas City Southern Railway Company vs. Board of Railroad Commissioners, 106 Fed. 353, 358 (affirmed in 187 U. S. 617), in speaking of such additional expenses necessarily incurred by reason of the enactment of such laws by the different states and perhaps in consideration of these additional burdens imposed on railroads, it (the State) may allow a greater charge for the transportation of passengers as well as freight through its territory than neighboring states in which no such burdens are imposed."

That the large increase in their business caused by the development of the natural resources of the State, as well as the rapid growth of its population; the use of improved machinery and rolling stock; the improved condition of the road beds after they are used for a number of years, enable the companies to carry freight, as well as passengers at a lower rate than formerly can not be doubted, but proofs now before the Court would hardly justify a finding that there has not been some increase in the cost of the operation
440 of trains in this State within the last few years, since the Commission rates went into effect, increases which were gradual but continuous.

Giving due weight to these facts, the next inquiry to be made is

what rates would enable them to earn reasonable returns on their investments? So far as the passenger rates are concerned, it is, of course, easy to ascertain the increase, as the rate was raised from two cents to three cents a mile, an increase of fifty per cent; but, it is claimed that in view of the reduced rates received from the sale of mileage books, and the reductions usually offered to the public as excursion rates, when it is sought to attract large crowds for certain occasions, usually of a public nature, and reduced rates furnished to ministers of the Gospel, the actual increase in the gross receipts on passenger rates is only about thirty-five per cent.

A three cent a mile rate in view of the fact that, comparatively speaking, this State is but sparsely settled and that there are no large cities in it, is not so unreasonable that the Court would feel justified upon the showing made by the roads, indicating a considerable loss on its intrastate passenger traffic, while the two cents a mile rate was in force, to disturb it while these proceedings are pending. Besides it is well settled that for the purpose of determining whether rates are confiscatory or not, all sources of revenue must be considered. Minnesota & St. Louis R. R. Co. vs. Minnesota, 186 U. S. 257, 22 S. Ct. 900, 46 L. Ed. 1151; Seaboard Air Line Co. vs. Florida, 203 U. S. 261, 27 S. Ct. 109, 51 L. Ed. 175; Atlantic Coast Line R. R. Co. vs. North Carolina Corporation Commission, 206 U. S. 1, 27 S. Ct. 585, 51 L. Ed. 933.

441 The increased earnings from one class of traffic will, therefore, justify a corresponding decrease in another class, if the net earnings from all sources are compensatory. For this reason, if the net earnings on passenger traffic are larger, that fact would be considered in determining whether the freight tariffs fixed by the complainants are too high, and also aid in determining what they should be. It is true that lower passenger rates are felt more generally, and for this reason are more fully appreciated by the large majority of the public than lower freight rates, which are not felt so readily by the consumer, the same as the collection of direct and indirect taxes. But, so far as the interests of the public at large are concerned, it is of much more importance to them to enjoy the benefit of the lower freight rates than passenger rates, provided the latter are not excessive or unreasonable. High freight tariffs not only directly affect the prices of commodities to the consumer, but may seriously cripple, if not totally destroy, manufacturing industries, and the business of wholesale dealers, if higher than those charged from competitive points outside of the State, as it is the price at the place of delivery which will control the trade. As the injunction against the enforcement of the two cents a mile passenger rate as being confiscatory and therefore violative of the provisions of the national constitution, leaves the three cents a mile statute, St. L. I. M. & S. Ry. Co. v. State, 86 Ark., 343 (Sec. 6611, Kirby's Digest of the Statutes of Arkansas) in full force, and this rate has been put in operation by the railroads since the granting of the tem-
442 porary injunction, this change, therefore, adds to the net earnings of the complainants at least thirty-five per cent without any corresponding increase of expenditures. Whether, the

railroad companies should not be charged with a fifty per cent increase in these rates, in view of the fact that the reduction below three cents a mile is voluntary on their part, and not in pursuance of any act of the legislature or the Commission, need not be determined at this time, although in view of the decisions of the Supreme Court, it is very doubtful whether the railroads, if they exercise this power, can be heard to complain if by reason thereof their earnings are not compensatory. In Lake Shore, etc. R. R. Co. vs. Smith, 173 U. S. 684, 696, 19 S. Ct. 565, 43 L. Ed. 858, it was held that the State had not the power to enact such legislation without violating the national constitution, and in Knoxville vs. Knoxville Water Co., 212 U. S. 1, 29 S. Ct. 148, it was expressly held that if the company sees proper to make reductions in special cases when not required to do so by law, the decrease, by reason of such reduction can not be considered by the Courts in determining the reasonableness of the rates fixed by law. The Court there said:

"The Company, it is true, might, if it chooses, allow such a discount (a discount of 5% for prompt payments) from the ordinance rates, but the ordinance required no discount from the rate established by it, and the company, therefore, was bound to offer none. If it stood upon the letter of the ordinance, as it had the right to do, and exacted from the consumers the full charge prescribed by the ordinance, the amount which would have been realized would
443 have been over four thousand dollars more than that found by the master."

But, as this case is not now before the Court for final determination and in view of the fact that the public is the beneficiary of these reduced, special rates, they being general and uniform, and the further fact that in this motion to modify the injunction the Court is asked to require a reduction of passenger rates, it is unnecessary at this time, to determine that question, but for the purpose of ascertaining the earnings of complainants, the Court will charge them with an increase of thirty five per cent.

As to what constitutes a reasonable rate must depend upon the facts of each case, and can not be determined without reference to the interests of the public. Covington & Lexington Turnpike Co. vs. Sandford, 164 U. S. 378, 17 S. Ct. 198, 41 L. Ed. 560; Smyth vs. Ames, 169 U. S. 545, 18 S. Ct. 418, 42 L. Ed. 819; Reagan vs. Farmer's Loan & Trust Co., supra; San Diego Land Co., vs. National City, 174 U. S. 739, 755, 19 S. Ct. 804, 43 L. Ed. 1154; Chicago & Northwestern R. R. Co. vs. Dey 35 Fed. 866, 878.

In Covington, etc. Turnpike Co. vs. Sandford, the Court said:

"It can not be said that a corporation is entitled of right, and without reference to the interests of the public, to realize a given per cent upon its capital stock."

This was quoted with approval in Smyth vs. Ames, and the Court there added:

"It can not, therefore, be admitted that a railroad corporation maintaining a highway under authority of the state, may fix its rates with a view solely to its own interests and ignore the
444 rights of the public. But the rights of the public would be ignored if rates of transportation of persons or property on a

railroad are exacted without reference to the fair value of the property used for the public or the fair value of the services rendered, but in order simply that the corporation may meet operating expenses, pay interest on its obligations, and declare a dividend to its stockholders."

Another matter which is entitled to consideration is the fact which has been brought out at this hearing, that the St. Louis, Iron Mountain & Southern Railway Co. and the Chicago, Rock Island & Pacific Ry. Co., have, within the last few years, and since the establishment of the Commission rates, constructed extensive branch lines through new and unsettled sections of the State; that these lines were constructed at great expense, owing to the fact that the greater part of these branches runs through a swampy country, some of it subject to overflows, which necessitated high embankments; that these roads were built principally to serve as feeders for the main line, and at the same time enable these roads to obtain shorter lines for that part of its interstate traffic, which merely passed through the State. These are matters which must be taken into consideration in determining what would be proper net earnings on the investments. It would hardly be proper for the Courts to say that such roads are entitled to as great a compensation, on their investments, from intrastate business as the ordinary roads built for the accommodation of the intrastate as well as the interstate business. As is well known some of the Pacific Roads traverse the desert for hundreds of miles through a strip of territory where there is practically no intrastate business, either freight or passenger.
445 Would it be proper, in such cases, to hold that the road should have the right to charge for its intrastate traffic in that section tariff rates high enough to enable it to earn a certain, fixed percentage on its investment? Would not in such a case, the rates have to be so high as to be confiscatory of the property of the residents of that State? Must the public guaranty the railroads a certain income on their investment, regardless of the condition of the country traversed, or whether bad judgment was exercised in the selection of the route? We do not think so. New lines or branches to increase the business of the trunk line, or the exercise of bad judgment in the building of a railroad are matters to be considered in determining what rates would be fair and just to the corporation as well as the public. That the railroads are entitled to reasonable profits on their investments, and the public to reasonable rates, or, to express it differently, that the rights of the public and railroad companies are reciprocal, is the correct rule of law.

In Reagan vs. Farmer's Loan & Trust Co., supra, Mr. Justice Brewer, speaking for the Court, in the concluding part of the opinion, said:

"It is unnecessary to decide, and we do not wish to be understood as laying down as an absolute rule, that in every case a failure to produce some profit to those who have invested their money in the building of a road is conclusive that the tariff is unjust and unreasonable. And yet justice demands that every one should receive some compensation for the use of his money or property, if

it be possible without prejudice to the rights of others. There
446 may be circumstances which would justify such a tariff; there may have been extravagance and a needless expenditure of money; there may be waste in the management of the road; enormous salaries, unjust discrimination as between individual shippers, resulting in general loss. The construction may have been at a time when material and labor were at the highest price, so that the actual cost far exceeds the present value; the road may have been unwisely built, in localities where there is not sufficient business to sustain a road. Doubtless too, there are many other matters affecting the rights of the community in which the road is built as well as the rights of those who have built the road." 154 U. S. 412.

In San Diego, etc. Co. vs. Jasper, 189 U. S. 439, 446, 23 S. Ct. 571, 47 L. Ed. 892, it was held,

"If a plant is built, as probably this was, for a larger area than it finds itself able to supply, or, apart from that, if it does not, as yet, have the customers contemplated, neither justice or the Constitution requires that, say, two-thirds of the contemplated number should pay a full return."

Nor is it required that the particular rate of compensation must in all cases and in all parts of the Country be the same. Wilcox vs. Consolidated Gas Co., 212 U. S. 19, 29 S. Ct. 192.

Guided by these principles, the Court is of the opinion
447 that rates which will enable the complainant to earn six per cent on their investment, if fairly entitled thereto by prevailing conditions, would be reasonable, especially in view of the fact that a large part of the money used in the construction of these roads was obtained from loans secured by mortgages, and these loans only bear from four to five per cent interest per annum, thus leaving a larger return for the stock holder, who, of course, is secured, and in case of insolvency of the company would be postponed until the mortgage bond holders are paid in full. For these reasons, the risk of the investment of the stockholder being greater than that of the bondholders, he is entitled to a higher rate of interest on his investment. In determining what rates would be just and reasonable, the Court is relieved of passing upon conflicting evidence for the purpose of determining the value of the investment. Complainants in their bills, only ask for compensatory rates on the value of the roads, as determined by the State Board of Railroad Assessors for the purpose of taxation. The assessments in this State are conceded to be upon the basis of fifty per cent of the actual value of the property and they therefore ask to be permitted to earn fair dividends on double the amount their roads are assessed for taxes. (This does not apply to the branch line of the Rock Island, lately constructed, and which is assessed at a nominal value.) For the purpose of determining how much of that amount should be taken into consideration for the intrastate traffic calculations were made by expert accountants under the direction of Judge Van Deventer and the calculations adopted by him for the purpose of passing
448 upon the motions for preliminary injunctions are now adopted.

While the revenues of the roads, and especially the increased earnings since the new rates, pending this litigation, have been put into effect, vary somewhat, it is impossible to make different rates for each road. The fact that in most of the larger cities of the State two or more of the roads compete for business, and therefore must carry freight at the same rates would prevent making different rates, and the tariffs prepared by the roads themselves are practically uniform.

The values of the roads for the intrastate traffic, as ascertained by the accountants and adopted by Judge Van Deventer, are as follows:—

| | |
|---|---|
| St. L. I. M. & S. Ry. Co..... | $12,880,982.44 |
| St. L. & S. W. Ry. Co..... | 4,774,880.82 |
| C. R. I. & P. Ry. Co..... | 5,200,422.39 |
| St. L. & S. F. Ry. Co..... | 3,519,791.41 |

The earnings of these roads for the last six months of the year 1907, calculated on a revenue basis, allowing for the greater cost of intrastate business, one hundred per cent on freight, and fifteen per cent on passenger traffic more than for interstate business, as determined by Judge Van Deventer in these cases, are as follows:

449

| Name of road. | Gross frt. e'rn'gs. | Frt. exp. | Gross pass. e'r'gs. | Pass. expenses. | Net loss. |
|---|---|---|---|---|---|
| St. L. I. M. & S. Ry. Co. ..... | $640,248.17 | $800,041.29 | $836,542.20 | $865,423.66 | $188,674.58 |
| St. L. & S. W. Ry. Co..... | ..... | ..... | ..... | ..... | 43,319.22 |
| C. R. I. & P. Ry. Co. ..... | 210,813.57 | 372,913.48 | 253,395.52 | 220,750.00 | 129,454.39 |
| St. L. & S. F. Ry. Co. ..... | 139,002.89 | 218,917.65 | 187,173.87 | 176,493.67 | 69,234.57 |

NOTE.—The returns of the St. L. & S. F. Ry. Co., were only for four months and in order to make them uniform with the others this table shows the earnings and expenditures for six months. 50% has been added and is included in the above. The returns of the St. L. & S. W. Ry. Co. include the earnings for the entire year ending June 30, 1908.

450 In addition to these earnings each of the roads also showed the receipt of considerable sums from what is called "Miscellaneous Earnings," which are not included in the above tables. These earnings come principally from mail and express, but there is nothing in the evidence to show whether these items caused a net profit or not, as the auditors testified that it is impossible to divide them between intra- and interstate business. These earnings were as follows, and constitute the percentages of the entire business of the roads as shown by the figures on the following table:

451 *Miscellaneous Earnings.*

| Name of road. | Gross frt. e'rn'gs. | Percentage. | Gross pass. e'r'gs. | Percentage. | Total gross earnings. |
|---|---|---|---|---|---|
| St. L. I. M. & S. Ry. Co. ..... | $122,814.41 | 2.51% | $373,785.47 | 21.01% | $496,599.88 |
| C. R. I. & P. Ry. Co. ..... | 19,033.43 | 1.48% | 78,940.50 | 11.29% | 97,940.50 |
| St. L. & S. W. Ry. Co. ..... ..... | 46,228.88 | 1.43% | 154,285.75 | 17.14% | 200,514.63 |

NOTE.—The St. L. & S. F. Ry. Co. did not include this item in its statement, but it would probably average the same proportion to the entire business as that of the other roads.

452 For the purpose of these proceedings, the Court is of the opinion that an increase of 33⅓% on the tariff of freight rates in force at the time these injunctions were granted, the increase to be calculated upon a revenue basis, will enable complainants to earn a reasonable compensation when added to the increased passenger rates, and at the same time prevent the exaction of unjust and unreasonable rates from the public. Calculating the increase of revenue upon that basis, the net earnings for a year, assuming that the business will be the same as it has been, will be as follows:

| Road. | Incrs. in frt. e'r'gs. | Incrs. in pass. e'r'gs. | Total. | Net income. |
|---|---|---|---|---|
| St. L. I. M. & S. Ry. Co. ..... | $426,833.12 | $585,579.40 | $1,012,412.52 | $635,063.36 |
| St. L. & S. W. Ry. Co. ..... ..... | 116,112.53 | 154,158.42 | 270,270.95 | 226,951.73 |
| C. R. I. & P. Ry. Co. ..... | 140,542.38 | 177,376,85 | 317,919.23 | 59,010.45 |
| St. L. & S. F. Ry. Co. ..... | 92,668.59 | 131,021.45 | 223,690.04 | 85,220.90 |

PAGE BOUND VERTICAL IN BOOK

The net income will allow the companies a profit on their respective investments, as follows:

| | |
|---|---|
| St. L. I. M. & S. Ry. Co | over 5% |
| St. L. & S. W. Ry. Co | " 4.8% |
| C. R. I. & P. Ry. Co., a little less than | 1½% |
| St. L. & S. F. Ry. Co. about | 2½% |

These figures indicate that some of the roads would earn but a very small dividend on their investment so far as the intrastate traffic is concerned, but it is impossible, for the reasons hereinbefore stated, to provide the same earnings for roads whose conditions differ so widely as these do. The St. Louis, Iron Mountain & Southern Co., which does the largest proportionate intrastate business, will earn over five per cent on its investment. In view of the fact that it has built two very extensive branches lately through a country
453 having but few inhabitants and no industries, lines intended primarily for its through interstate business, so as to enable it to have a short line from the west to the Gulf of Mexico, this is a very reasonable and fair compensation. The St. Louis South Western Ry. Co., which does the much largest proportionate intrastate business, will earn nearly 5% on the basis of its earnings for the year ending June 30, 1908, which included the first six months of the year 1908, when confessedly traffic was the smallest. Lumber which is its largest tonnage, was practically not moving at all during that time. At the final hearing, the evidence will, no doubt, show what should be considered as earnings for ordinary times. The St. Louis & San Francisco Ry. Co., although it has a large mileage in the State, does but a comparatively small intrastate business, as shown by its statement hereinbefore set out. Its gross earnings on both passenger and freight traffic being only about nine per cent of its valuation. The earnings of the Chicago, Rock Island & Pacific Ry. Co., seem to be the smallest in proportion to its investment, but a new branch line of 147 miles is included at a valuation of $3,000,000.00, although assessed at less than $300,000.00, by reason of the fact that it was but recently built through a swampy section of the State, has been but a short time in operation and was intended principally for its through interstate business. A computation of the earnings of each of the roads from its intrastate business, as compared with its valuation, as shown by their statements, will
454 show practically the same differences:

| Road. | Net loss for year. | Percentage of loss on capital invested in intrastate traffic. |
|---|---|---|
| St. L. I. M. & S. Ry. Co. | $377,349.16 | About 2.9% |
| St. L. S. W. Ry. Co. | 43,319.22 | " .9% |
| C. R. I. & P. Ry. Co. | 258,908.78 | " 5% |
| St. L. & S. F. Ry. Co. | 138,469.14 | " 3.9% |

As the country traversed by these roads is being rapidly settled, and new industries and manufacturing plants are springing up along these lines, the intrastate business will, in all likelihood, increase rapidly. In any event, unless different rates should be made for each road, according to its location, cost of building, judgment in selection of the line, it is impossible to fix any rates which will enable each of the roads to earn the same dividend. The tariffs which they have put in effect are the same for all of the roads, and for the reasons hereinbefore stated, it would be impracticable to do otherwise.

As these suits will necessarily require considerable time before the final decrees can be rendered, either party may at any time apply to the Court for a modification of this order, if, after a fair trial, it is found that the rates are unjust to either party. The Railroad Commission, the Court is informed, has prepared a freight tariff, which, in its opinion, would increase the net revenue of these roads from freight traffic thirty three and one third per cent. Copies of these schedules should be furnished immediately to the complainants, and the Court has no doubt that if these tariff sheets are found
455 to be inaccurate and will not produce such an increase in revenue, the parties can agree among themselves to make such changes as will bring about that result. Should they be unable to do so, the Court will refer the matter to a Special Master for the purpose of preparing such tariff rates.

A decree modifying the injunctions now in force, in conformity with the views herein expressed may be prepared by the parties and submitted to the Court.

Endorsed on back thereof: Filed June 1, 1909. W. P. Feild, Clerk.

456 And on June 2, 1909, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and files herein its replication to answer:

Which replication to answer is as follows:

United States Circuit Court, Western Division of the Eastern District of Arkansas.

In Chancery.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Complainant,
versus
ROBERT P. ALLEN et al., Defendants.

This replicant, St. Louis Southwestern Railway Company, saving and reserving to *himself* all and all manner of advantages of exception which may be had and taken to the manifold errors, uncertainties and insufficiencies of the answer of the Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, for replication thereunto saith that *he* doth and will aver, maintain and prove *his* said bill to be true, certain and sufficient in the law to be answered unto by the said Defendant-, and that the answer of the said Defendant- is very uncertain, evasive, and insufficient in law to be replied unto by this replicant; without that, that any
457 other matter or thing in the said answer contained, material or effectual in the law to be replied unto, confessed or avoided, traversed or denied, is true; all of which matters and things this replicant is ready to aver, maintain and prove as this Honorable Court shall direct and humbly prays as in and by *his* said bill *he* hath already prayed.

MOORE, SMITH & MOORE,
*Solicitors for Complainant.*

Endorsed on back thereof: Filed June 2, 1909. W. P. Feild, Clerk.

And on June 23, 1909, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

On this day come the parties to the said case, and it is thereupon ordered that Complainant execute a bond to the United States of America in the penal sum of Three Hundred Thousand Dollars, without additional sureties, conditioned that it shall, on and after July 1st, 1909, issue to each person purchasing a ticket or paying cash fare upon the train, from one point in the State of Arkansas to another point in the same State, and confined exclusively to intrastate travel, a certificate or coupon showing the amount paid by such passenger for such ticket, and the date thereof; and to every shipper

or consignee when paying freight on any commodity shipped from one part of the State of Arkansas to another part, and
458 which is wholly the subject of intrastate traffic, a receipt or freight bill showing the amount charged for the carriage of such freight, and also endorsed on the same bill the amount or rate which would have been charged had the inhibited rate continued in force; which receipt or coupon or freight bill shall be prima facie evidence of the amount paid and the date of payment.

The Complainant shall keep a correct account, showing as respects the carriage of freight and passengers the difference between the amount actually charged and that which would have been charged had the inhibited rates been applied, and further conditioned that if it should eventually be decided that so much of this order as inhibits the enforcement of the rates prescribed by the Railroad Commission of Arkansas in Distance Tariff No. 3, and the two cents per mile passenger rate prescribed by the Statutes of 1907, should not have been made, that the Complainant shall refund to the owners and holders of the certificates issue- by it the excess charges as shown by the same, provided, however, that such certificate as to the amounts and dates shall only be prima facie evidence of these facts.

Such bond shall be in addition to the bond heretofore executed and not in lieu of it.

(Signed) JACOB TREIBER, *Judge.*

And on June 30th, 1909, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
459 ROBERT P. ALLEN et al.

The Complainant Railway Company shall submit to the examination and inspection of the Railroad Commission, and its counsels and its experts and accountants, all its books records, accounts, vouchers, reports, payrolls, receipts, contracts and any other documents or writings relating to its intrastate business in the State of Arkansas, kept either in its general office, or in any station upon reasonable notice to the General Auditor of the Complainant, or the person in charge of the Auditor's office, and at such examination the Complainant may be present by its employees.

The information obtained by the Defendant Commission under this order shall not be divulged for any other purpose than the defense of these suits.

It is further ordered that should any employee of the Commission or any person obtaining information by reason of these proceedings, divulge information obtained hereunder otherwise than herein provided, or conduct himself in an improper or obnoxious manner, the Special Master shall report the same to the Court, in order that the Court may inflict punishment on him as for contempt, and

also disbar him from further employment in the examination or investigation herein provided.

That if for the purpose of ascertaining any facts relevant to the issues involved in this action, it is necessary to examine books, reports or other papers in which interstate business, as well as intrastate matters are kept, Defendant Commission, their agents and employees shall have access to such books, reports and papers
460 in the same manner as is provided herein for those relating to intrastate business alone.

That in all matters referred to the Master in Chancery herein, in which the parties are unable to agree, the Master is authorized to determine the matters in dispute.

(Signed) JACOB TREIBER, *Judge.*

And on July 2, 1909, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

On this day come the parties hereto, the cause being at issue and ask the appointment of a Commissioner to take testimony herein, it being agreed that same may be taken upon oral interrogatories, and that the testimony taken in this case and also of that in the St. Louis, Iron Mountain & Southern Railway Company vs. Robert P. Allen, et al., pending herein may be used in each of these cases as though same were consolidated and heard together as far as applicable.

And the Court being advised that the testimony can not be produced in the usual time, it is therefore considered and ordered that P. C. Dooley, Standing Master of this Court, be and he is directed to take said testimony with full power to compel the attendance of all witnesses and require the examination of all books, papers, writing, accounts, vouchers and other documents necessary;
461 And that the Plaintiff shall have sixty days, if necessary, in which to produce its testimony before said Master, beginning October 1st, 1909; that the Defendants shall produce their testimony in Sixty days, beginning at the end of said sixty days allowed Plaintiff, or when the Plaintiff's testimony is finished, if it shall conclude before the expiration of said sixty days; and that each party shall have thirty days after the finishing of the taking of testimony in chief for the production of evidence in reply or rebuttal, and this order having been made on June —, 1909, but not entered, it is ordered by the Court that it be entered now for then.

(Signed) JACOB TREIBER, *Judge.*

And on July 5, 1909, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant, by John M. Moore, Esq., its Solicitor and files herein its additional bond for Three Hundred Thousand Dollars ($300,000.00), as required by order of Court, dated June 23, 1909, and said bond having been examined by the Judge of this Court, the same is approved.

Which Bond is as follows:

Know all men by these presents, That St. Louis South-
462 western Railway Company is held and firmly bound unto the United States of America in the penal sum of Three Hundred Thousand Dollars ($300,000.00), for the payment of which it hereby binds itself, its successors and assigns.

The conditions of this obligation are such that:

Whereas, in a suit of the above bounden, (a corporation), against Robert P. Allen, John W. Crockett and John E. Hampton, Railroad Commission of the State of Arkansas, and Henry Leigh and George McLean, an order of temporary injunction was issued enjoining and restraining the Defendant Railroad Commissioners of the State of Arkansas, from enforcing certain freight and passenger rates in said State; and,

Whereas, it was subsequently ordered in said proceeding,

"That Complainant execute a bond to the United States of America in the penal sum of Three Hundred Thousand Dollars $300,000.00) signed by itself without additional sureties, conditioned that it shall, on and after July 1, 1909, issue to each person purchasing a ticket, or paying cash fare upon the train from one point in the State of Arkansas, to another point in the same State, and confined exclusively to intrastate travel, a certificate or coupon showing the amount paid by such passenger for such ticket and the date thereof; and to every shipper or consignee when paying freight on any commodity shipped from one part of the State of Arkansas
463 to another part, and which is wholly the subject of intrastate traffic, a receipt or freight bill, showing the amount charged for the carriage of such freight, and also endorsed on the same bill the amount or rate which would have been charged had the inhibited rate continued in force; which receipt or coupon or freight bill shall be prima facie evidence of the amount paid and the date of payment. The Complainant shall keep a correct account, showing as respects the carriage of freight and passengers, the difference between the amount actually charged and that which would have been charged had the inhibited rates been applied, and further conditioned that if it should eventually be decided that so much of this order as inhibits enforcement of the rates prescribed by the Railroad Commission of the State of Arkansas in Distance Tariff No. 3, and the two cent per mile passenger rate prescribed by the Statute of 1907, should not have been made, that the Complainant shall refund

to the owners and holders of the certificates issued by it the excess charges as shown by the same, provided, however, that such certificate as to the amounts and dates shall only be prima facie evidence of these facts," *and,*

Now, Therefore, if the said St. Louis Southwestern Railway Company shall comply with and perform each and all of the terms, conditions and provisions above set forth, and shall issue the certificates or coupons to passengers, receipts or freight bills to shippers and consignees, and keep the accounts as required by said order to be kept, and make the payments or refunds as therein provided
464 to be made, if it should be eventually decided that so much of said order of injunction as inhibits the enforcement of said inhibited rates should not have been made, then this obligation shall be null and void, otherwise to remain in full force and effect.

In witness whereof, the said St. Louis Southwestern Railway Company has caused these presents to be executed this the 1st day of July, 1909.

ST. LOUIS SOUTHWESTERN
RAILWAY COMPANY,
By F. H. BRITTON, *Vice-President.*

Endorsed on back thereof: Filed July 5, 1909, W. P. Feild, Clerk. By W. Presley Feild, D. C.

465 UNITED STATES OF AMERICA,
*Western Division of the*
*Eastern District of Arkansas:*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 4th day of April, Anno Domini, One Thousand Nine Hundred and Ten, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber Judge presiding and holding said Court, the following proceedings were had, to-wit: June 10th, 1910.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Now on this day comes the Complainant, St. Louis Southwestern Railway Company, by its Solicitor, John M. Moore, Esq., and the Defendants Robert P. Allen, and others, by their Solicitors, William F. Kirby, Esq., and the application of P. C. Dooley, Master herein, for the payment to him of the sum of Four Hundred and Sixty Nine Dollars and Ten Cents ($469.10) for money disbursed by him as necessary expense of the Master to date in relation to the hearing herein and that he be allowed and paid the sum of Two Thousand Dollars, ($2000.00), as a partial payment on account of services as Master, coming on for hearing and upon consideration thereof,

It is considered, ordered and adjudged that the Master be and he is allowed the sum of Four Hundred and Sixty Nine Dollars and Ten Cents, ($469.10) for his expenses to date; and the sum of Two Thousand Dollars ($2000.00) as partial compensation on account of his services as Master,

That the Complainants, St. Louis, Iron Mountain & South-
466 ern Railway Company and St. Louis Southwestern Railway Company pay one half of said sum—$1234.55—and that the Defendants, Robert P. Allen, et al., pay one half thereof—$1234.-55—which said sums shall be taxed by the Clerk of this court as costs in this case.

(Signed) JACOB TREIBER, *Judge.*

And on July 5th, 1910, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Now on this day come the parties to said cause by their respective Solicitors, and it is ordered that the taking of testimony in rebuttal on the part of the Plaintiff be postponed until the 26th day of September, 1910.

And on September 29, 1910, the following proceedings were had to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al., Railroad Commissioners, &c.

P. C. Dooley, the Standing Master in Chancery who was directed to take the proofs in these causes having died, and there still being some evidence to be taken herein, it is ordered by the Court that Charles M. Rice, Esq., be and is hereby appointed Special Examiner to take the proofs offered in the above entitled causes, with all
467 the powers of and subject to the directions given by the Court to the said P. C. Dooley, Esq., in these causes.

(Signed) JACOB TREIBER, *Judge.*

And on October 1, 1910, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al., Railroad Commissioners, &c.

Comes Charles M. Rice, Esq., heretofore appointed Special Examiner to take the proofs offered in the above entitled causes, and files herein his oath as such Special Examiner, which is as follows:

UNITED STATES OF AMERICA,
*Eastern District of Missouri:*

I, Charles M. Rice, do solemnly swear, that I will support the Constitution and laws of the United States and that I will faithfully discharge the duties of Special Examiner, in the causes of St. Louis, Iron Mountain & Southern Railway Company vs. Robert P. Allen, et al., State Board of Railroad Commissioners of Arkansas, No. 1637, and St. Louis Southwestern Railway Company against same Defendants, No. 1636, pending in the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas, to which position I have been appointed by the said Court.

(Signed) CHARLES M. RICE.

468 Subscribed and sworn to before me this 30th day of September, A. D., 1910.

[SEAL OF SAID COURT.]

JAMES R. GRAY,
*Clerk of the Circuit Court of the Eastern District of Missouri.*

Which said oath is on file in this office.

And on October 12, 1910, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Defendant Railroad Commission of Arkansas, by Joseph M. Hill, William F. Kirby and James H. Harrod, Esqs., its Solicitors, and files herein its motion to modify the order heretofore entered herein permitting the Complainant to charge three cents a mile on passenger traffic, and to restrain it from charging more than two cents per mile on intrastate passenger traffic.

Which motion to modify the Injunction is as follows:

In the United States Circuit Court for the Eastern District of Arkansas.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Plaintiff,
v.
ROBERT P. ALLEN et al.

Comes W. A. Falconer, Chairman, Robert P. Allen, and
469 John W. Crockett, Commissioners, constituting the Railroad Commission of the State of Arkansas, Defendants herein, and under leave of Court heretofore granted and move this Honorable Court for a change in the rates in force by the Plaintiff Railroad pending this litigation, say:

That at the hearing heretofore had this Honorable Court found the freight rates promulgated by the Plaintiff Railroad to be unreasonable, and pursuant to a suggestion made by the Court the Traffic Officials of various Railroads, including the Plaintiff Railroad and the Railroad Commissioners conferred over the construction of a tariff, which would yield to Plaintiff Railroad approximately thirty three and one third per cent more revenue than Distance Tariff No. 3, the enforcement of which had been enjoined by Honorable Willis Van Devanter, United States Circuit Judge. That a tariff was agreed upon and put in force on June 1, 1909, known as the "Court Tariff." Under the operation of said tariff, Plaintiff Railroad has increased its State freight revenue — per cent, so these Defendants are informed and believe.

That at the hearing aforesaid this Honorable Court declined to interfere with the three cent passenger rate which had been put in force by the Plaintiff Railroad, and the Plaintiff Railroad has charged three cents per mile passenger rate from that time until the present time, and is still charging the same.

That in sustaining its case the theory upon which the Plaintiff seeks to prove that freight and passenger rates in force were confis-
catory is known as the "Revenue Theory," and by a vast
470 preponderance of the testimony already taken in the case it is established that whatever value that theory may have elsewhere, so far as applied to the conditions in Arkansas its application as a factor to divide the intrastate and interstate expenses is without relation to the subject, owing to the rate conditions prevailing in the State of Arkansas.

The State rates and interstate rates are such that it is impossible to measure the expenses by the revenue received from the traffic with even a remote approximation to accuracy. That the State has carefully examined the expenses of the Plaintiff Railroad in the State of Arkansas, and has localized, so far as possible, all expenses between State and interstate traffic, and where it is possible to localize those expenses, has used the most appropriate factor to approximate the same, taking the factor in each instance most nearly

representing actual conditions. In this way the State has been able to demonstrate that the contentions of the Plaintiff made in ex parte affidavits submitted to Judge Van Devanter that the State passenger traffic cost fifteen to fifty per cent more than interstate passenger traffic, in proportion to revenue, was wholly without foundation in fact. On the contrary, the facts are that for the six months ended December 31, 1907, when the two cent passenger fare was in force, the Plaintiff Railroad was making a return upon its property devoted to intrastate passenger business (dividing such property according to the railroad's formula of so dividing it) of 5.79%; and suffering a loss on the interstate passenger business of .66%. That during said period the revenue per passenger mile on State traffic was $.01993; and the revenue per passenger
471 mile in interstate traffic was $.01719.

It was further shown that on the total State business Plaintiff Railroad was earning 9.16% return upon its property (dividing its property according to the Railroad's formula of dividing same).

That owing to the increased freight earnings under the Court Tariff over Standard Distance Tariff No. 3, and owing to the increase in the passenger earnings over said period of from two to three cents, the rates, passenger and freight, now being earned by the Plaintiff Railroad are unreasonable, unlawful and burdensome to the people of the State.

Reference is made to a petition filed in these cases, in the case of J. J. Carle vs. Chicago, Rock Island & Pacific Railway, and to the case of Wilbur F. Boyle vs. the St. Louis & San Francisco Railroad, wherein it is shown that said Railroads have been operating for the past fifteen months under a two and one half cents passenger rate, and are seeking now to impose a three cent passenger rate in the State of Arkansas, on all intrastate passengers. That for the reasons set forth in the petition of the Railroad Commission in said cases, said Commission conceives it is its duty to oppose the three cent passenger rate being put in force by said roads, and in view of the fact that said roads are making less return upon their property devoted to said State traffic, it would be inequitable and unjust to prevent them charging three cents while the Plaintiff Railroad is charging three cents.

In view of the facts developed in said hearing, as hereinbefore set forth, the Railroad Commission prays this Honorable
472 Court to modify the order heretofore made, permitting the Plaintiff Railroad to charge three cents per mile on passenger traffic and restrain it from charging more than two cents per mile on interstate passenger traffic.

JOSEPH M. HILL,
WILLIAM F. KIRBY,
JAMES H. HARROD,
*Attorneys for the Railroad Commission.*

Endorsed on back: Filed Oct. 12, 1910. W. P. Feild, Clerk.

And on October 13, 1910, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and filed herein its Response to the motion filed herein, on October 11, 1910.

Which response to motion is as follows:

In the United States Circuit Court for the Eastern District of Arkansas.

No. 1636. In Chancery.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Plaintiff,
v.
ROBERT P. ALLEN et al., Defendants.

473 *Response by Complainant to Defendant's Motion to Modify the Injunctions in said Cause.*

Complainant in response to Defendant's aforesaid application denies that it has earned or is earning a greater amount of revenue from its passenger traffic, or a sufficient amount to enable it to realize a net revenue of six per cent per annum on said business, or to amount to reasonable or adequate compensation for the service performed by it conducting said traffic.

It further denies that it is earning a net revenue equal to six per cent per annum or reasonable and adequate compensation on its freight business under the Court Tariff.

It denies that under the operation of said tariff it has increased its State Freight revenue more than above that allowed by the Arkansas Commission.

For further response Complainant represents that all of the testimony in chief on the part of the Complainant in support of its views as to the relative expense of conducting state and interstate traffic, and the manner in which same should be divided between said classes of traffic, upon which the Honorable Willis Van Devanter, Circuit Judge, acted in granting the preliminary injunction in said proceeding and all the testimony in chief on the part of the Defendants, contesting the aforesaid views and methods of apportionment of expense as between state and interstate traffic, and in support of other views and methods entertained by them, has also taken and Complainant is now engaged in taking its testimony in rebuttal, and it believes will complete same before the end of the current month.

That the effect of said motion as entertained by the Court
474 would be to arrest the taking of testimony during the hearing thereof and require the Court to hear the present application on ex parte statements, or to investigate and hear argument on the effect of the testimony that has been taken as aforesaid, notwithstanding the fact that the Complainant is in the midst of taking its testimony in rebuttal and expects to take additional testimony that will be relevant and material in support of its contention and in opposition to the contentions of the Defendants, and that this cause will be ready for submission in a few weeks and would then have to be re-argued and re-heard by the Court, which Complainant verily believes and alleges would operate as a great hardship upon it and as a great burden upon the Court and Counsel and would not conduce to the end of justice.

Wherefore Complainant prays that Defendants' motion to reopen the question upon which the temporary injunction was granted and to modify said injunction on an interlocutory hearing at this stage of the case and on a part only of the testimony material to its determination be denied.

MOORE, SMITH & MOORE,
*Attorneys for Respondent.*

Endorsed on back thereof. Filed Oct. 13, 1910. W. P. Feild, Clerk.

475 UNITED STATES OF AMERICA,
*Western Division of the*
*Eastern District of Arkansas:*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 17th day of October, Anno Domini, One Thousand Nine Hundred and Ten, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber Judge presiding and holding said Court, the following proceedings were had, to-wit: January 2nd, 1911:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes the Complainant, by John M. Moore, Esq., its Solicitor, and come the Defendants, by James H. Harrod, Esq., their Solicitor and this cause having been set down for final hearing on this date and it appearing to the Court that Senior Counsel for the Defendants is unavoidably detained and can not reach the hearing, it is ordered by the Court, by agreement of parties, that the hearing herein be continued until tomorrow morning.

And on January 3, 1911, the following proceedings were had, to-wit:

476 No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, Henry Leigh & George L. McLean.

Comes the Complainant, by John M. Moore, Esq., its Solicitor, and come the Defendants by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors; and this cause now coming on for final hearing upon the bill, exhibits thereto, answer, replication and all pleadings and proof in the case together with all depositions and exhibits thereto taken before the Master or otherwise, thereupon the Court proceeds to hear the evidence and argument of Counsel as well on the part of Defendants as of the Complainant, and the hearing hereof not being concluded the same is continued until tomorrow morning.

And on January 4, 1911, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed, and the
477 hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 5, 1911, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed, and the hearing

hereof not being concluded, the same is continued until tomorrow morning at half past nine o'clock.

And on January 6th, 1911, the following proceedings were had to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas.

Comes the Complainant, by Moore, Smith & Moore, its Solicitors, and come the Defendants, by Joseph M. Hill and James H.
478 Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed; and the trial hereof not being concluded, the same is continued until to-morrow morning at half past nine o'clock.

And on the same day the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Comes Charles M. Rice, Esq., Special Examiner herein, and asks the Court for an allowance for his services and expenses in these causes, and come the parties by their respective Solicitors, and the Court being well and sufficiently advised in the premises,

It is considered, ordered and adjudged by the Court that Charles M. Rice, be and he is hereby allowed the sum of Five Hundred Dollars ($500.00) as his compensation for his services as Special Examiner, and the further sum of Forty Three Dollars and Twenty Five Cents ($43.25) for expenses incurred by him in the performance of his duties as such Special Examiner, and that the Complainants, St. Louis Southwestern Railway Company, and St. Louis, Iron Mountain & Southern Railway Company pay one half of said sum ($271.63) and that the Defendants Robert P. Allen, et al., pay one half thereof, ($271.62) which said sum shall be taxed by the Clerk of this Court as costs in these causes when finally determined.

479 And on January 7th, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS, SOUTHWESTERN RAILWAY COMPANY,
v.
ROBERT P. ALLEN, JOHN W. CROCKETT AND JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas.

Comes the Complainant by Moore, Smith & Moore, Esqs., their Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed; and the hearing hereof not being concluded the same is continued until Monday afternoon at half past one o'clock.

And on January 9th, 1911, the following proceedings were had, to-wit:—

No. 1635

ST. LOUIS, SOUTHWESTERN RAILWAY COMPANY,
v.
ROBERT P. ALLEN, JOHN W. CROCKETT AND JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on Saturday, the same is now resumed; and the hearing hereof not being concluded, the same is continued until Mon-
480 day morning, January 16th, 1911, at half past nine o'clock.

And on the same day, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS, SOUTHWESTERN RAILWAY COMPANY,
v.
ROBERT P. ALLEN, JOHN W. CROCKETT AND JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and it being made to appear to the Court that the term of office of John W. Crockett and John E. Hampton, Railroad Commissioners of the State of Arkansas, Defendants herein has expired and that under the laws of the State of Arkansas, William F. McKnight and George W. Bellamy have been elected to succeed said John W. Crockett and John E. Hampton, as Railroad Commissioners of the State of Arkansas, and have qualified and are now acting as such.

It is now ordered by the Court by consent of the parties hereto, that the names of William F. McKnight and George W. Bellamy be

substituted for that of John W. Crockett and John E. Hampton and that this cause abate as to said Hampton and Crockett and progress in the names of William F. McKnight and George W. Bellamy, substituted as Defendants aforesaid.

481 And on January 16, 1911, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, WILLIAM F. MCKNIGHT, and GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on January 9th, 1911, is now resumed; and the hearing hereof not being concluded, the same is continued until tomorrow morning at half past nine o'clock.

And on January 17th, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS, SOUTHWESTERN RAILWAY COMPANY.

v.

ROBERT P. ALLEN, WILLIAM F. MCKNIGHT, and GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed; and the hearing hereof not being concluded, the same is continued until
482 tomorrow morning at half past nine o'clock.

And on January 18, 1911, the following proceedings were had, to-wit:—

No. 1636

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, WILLIAM F. MCKNIGHT AND GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed; and the hearing

hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 19, 1911, the following proceedings were had, to-wit:—

No. 1633.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.
v.
ROBERT P. ALLEN, WILLIAM F. MCKNIGHT AND GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the trial hereof not being
483 concluded on yesterday the same is now resumed; and the hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 20, 1911, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY,
v.
ROBERT P. ALLEN, WILLIAM F. MCKNIGHT AND GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed; and the hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 21st, 1911, the following proceedings were hed, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY,
v.
ROBERT P. ALLEN, WILLIAM F. MCKNIGHT AND GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs.,
484 Solicitors, and come the Defendants, by Joseph M. Hlil and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed; and the Court having heard the evidence and argument of Counsel and not being well and sufficiently advised as to what judgment to render herein takes time to consider of its judgment.

At the final hearing the following testimony was introduced by both Complainant and Defendants.

For testimony see folio — of record on appeal to U. S. Sup. Ct. case St. Louis, Iron Mt. & So. Ry. Co. v. Robert P. Allen et al., &c., which is by stipulation of consent and order of Court to be used in this cause.

485 UNITED STATES OF AMERICA,
*Western Division of the*
*Eastern District of Arkansas:*

Be it remembered, that at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the Third day of April, Anno Domini, One Thousand Nine Hundred and Eleven, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber, Judge presiding and holding said Court, the following proceedings were had, to-wit: May 11, 1911:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George McLean.

Now on this day comes the Complainant by its Solicitors, Moore, Smith & Moore, Esqs., and also come the Defendants, by their Solicitors, Joseph M. Hill and James H. Harrod, Esqs., and thereupon said cause having been argued and submitted upon the evidence, and stipulations on file and of record in said cause, and having been taken under advisement at a former term of this Court and the Court being well and sufficiently advised in the premises

It is accordingly ordered and decreed that the Defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, as Railroad Commissioners of the State of Arkansas, and Henry Leigh and George McLean and each of them, their agents, employees and successors as well as all other persons, patrons of Complainant, either in the shipment of freight or as passengers, or as passengers be-
486 tween stations on Complainant's road in the State of Arkansas, are hereby perpetually enjoined from enforcing or attempting directly or indirectly, by any suit, or in any manner whatsoever, to enforce against the Complainant, its officers, agents, employees or servants any of the provisions of Standard Freight Distance Tariff No. 3 and amendments thereto adopted prior to the institution of this action, prescribing the rate or rates for the transportation of classes and commodities or any provision in said tariff whereby any of said rates shall be continued in force, or from enforcing or attempting, directly or indirectly, by suit or in any other manner whatsoever, to enforce against Complainant, its officers, agents or

servants, any of the provisions of an Act of the General Assembly of the State of Arkansas, entitled, "An Act to Amend Section 6611 of Kirby's Digest of the Statutes of the State of Arkansas, By Fixing Passenger Rates in this State, and For Other Purposes," approved February 9, 1907, or to enforce the provisions of any other Act or Acts of the Legislature of said State, providing penalties for non-compliance by Complainant with the provisions and requirements of said Standard Freight Distance Tariff No. 3, and amendments thereto as aforesaid, or the Act of the Legislature of the State of Arkansas, fixing passenger rates in said State.

It is further ordered that the costs incurred by Complainant and Defendants, respectively, in procuring the attendance of witnesses before the Master and in payment of the fees of stenographers in the recording of said testimony, be borne by the Complainant and the Defendants, Robert P. Allen, George W. Bellamy and Wil-
487 liam F. McKnight, and that neither party recover from the other therefor; that all remaining costs including Master's fees, the Complainant pay one-fourth and the Defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners aforesaid, pay one-half, the other one-fourth to be paid by Complainant in case No. 1637, the payment of said costs to be recovered by execution to be issued by the Clerk of this Court upon application of any party in interest.

It is further ordered that the Bond for injunction filed by the Complainant herein be released and the Sureties thereon discharged from liability.

And the Court hereby retains and reserves unto itself jurisdiction of the subject matter of this suit and of all parties hereto, to the end that such other and further orders and decrees may be made herein as may become necessary by reason of any changed conditions as to the facts, equities or rights that may hereafter take place or arise.

(Signed) JACOB TREIBER, *Judge.*

And on the same day the following opinion of Court was filed:

By stipulation of counsel and order of Court, the opinion of Court here referred to is found at page 5957, in record on appeal from this Court to the Supreme Court of the United States in case of St. Louis, Iron Mountain and Southern Railway Co. vs. Robert P. Allen et al., &c., No. 1637.

488 And on June 26, 1911, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George McLean.

Come the parties by their respective Solicitors and file stipulations as follows:—

"It is here agreed and stipulated between Counsel representing all the parties in these causes, that the testimony in the two cases were taken together and that the same was heard and submitted on the combined testimony as one case; and it is further agreed that the transcript of the testimony and opinion of the Court transmitted by the Clerk of this Court to the Supreme Court of the United tSates in the case of St. Louis, Iron Mountain & Southern Railway Company vs. Robert P. Allen, George W. Bellamy, and William F. McKnight, Railroad Commissioners of the State of Arkansas, shall be treated and considered in all respects as the transcript and record of the testimony taken in the case of St. Louis Southwestern Railway Company vs. Robert P. Allen et al., and that said transcript and testimony and opinion of the Court so transmitted shall be used, considered and treated as the record in the above cases.

(Signed) MOORE, SMITH & MOORE.
*Counsel for Plaintiff.*

489 JOSEPH M. HILL,
*Counsel for Defendants.*"

It is accordingly ordered that the Clerk in making up the transcript of the record in these causes, make it up in conformity with the above stipulation.

(Signed) JACOB TREIBER, *Judge.*

And on the same day the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas.

Now on this day the Defendants here applying for an appeal to the Supreme Court of the United States from the final decree in this cause, the Complainant being present by its Solicitor and the Court purposing to grant said appeal, as the Defendants are entitled thereto, and desiring to preserve the status quo pending the determination of said appeal in the Supreme Court of the United States,

It is accordingly ordered that the Court Tariff heretofore put in

force under the orders of this Court during the pendency of this proceeding be continued and in force during the pendency of this appeal.

(Signed) JACOB TREIBER, *Judge.*

And on the same day the following proceedings were had to-wit:—

490 No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George L. McLean.

In this cause come all parties by their Counsel and it appearing to the Court that Henry Leigh and George L. McLean, Defendants, have been invited to join in the prayer for appeal herein and have declined to do so, it is by the Court by consent of the said Henry Leigh and George L. McLean, and by consent of all parties to this cause ordered that said Henry Leigh and George L. McLean are severed from this cause and from the appeal prayed herein.

(Signed) JACOB TREIBER, *Judge.*

And on the same day the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas.

Now on this day come the Defendants Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas, and file herein their assignment of errors, and present a petition for an appeal to the Supreme Court
491 of the United States from the final decree herein, and also present a bond in the sum of Five Hundred Dollars ($500.00) conditioned as required by law with good and approved security.

It is ordered by the Court that the petition for an appeal, assignment of errors and appeal bond be made a part of the record, and that the appeal be allowed and bond approved; and it is ordered that a certified transcript of the record and all proceedings herein be transmitted to the Supreme Court of the United States; and it further being made to appear to the Judge that the Clerk of this Court will be unable owing to the size of the record, to prepare a transcript within thirty days from the date of signing the citation; it is therefore ordered that the time for filing the transcript with the

Clerk of the Supreme Court of the United States be enlarged until the Second day of October, 1911.

Dated this 26th day of June, 1911.

(Signed) JACOB TREIBER, *Judge.*

Which assignment of errors is as follows:—

492 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Plaintiff,

vs.

ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas, Defendants.

*Assignment of Errors.*

Now comes Robert P. Allen, George W. Bellamy, William F. McKnight, constituting the Railroad Commission of the State of Arkansas, Defendants in the above entitled cause and aver that in the record and proceedings herein that there has been manifest errors committed in this, to-wit:

1st. The Court erred in not sustaining the motion to dissolve the temporary injunction herein, which motion was filed and considered by the Court prior to taking the testimony herein, on the ground therein set forth that the complainant had filed this bill in equity in the United States Circuit Court, asking relief against freight rates promulgated by the predecessors of the present Railroad Commissioners, without first praying relief from the Commission, which was authorized and required by law to grant relief against unreasonable, unremunerative or confiscatory freight rates.

2nd. The Court erred in not dismissing the bill of Plaintiff on final hearing because the evidence showed that the freight rates embraced in Standard Distance Freight Tariff No. 3, sought to be injoined herein, had been in force with only minor changes made from time to time and those not materially affecting the revenue of the Plaintiff, for a period of six years prior to the filing of the suit herein, and the complainant did not before filing this suit apply to the Railroad Commission for relief against any of said freight rates as unjust, unreasonable, unremunerative or confiscatory; when the evidence showed that the scheme of freight rates embraced in said tariff were originally put in force in the year 1900, subsequently re-enacted in 1903, and when put in force the Railroad Commission stated and declared to the Plaintiff and other carriers affected thereby that if on fair test of said rates, in whole or in part, they proved to be unjust, unreasonable, unremunerative
493 or confiscatory, that relief would be granted by the Commission upon proper showing of such facts.

3rd. The Court erred in not dismissing the bill on final hearing because the evidence shows that since 1900 the general scheme of

freight rates sought to be injoined herein has been in force under order of the Railroad Commission and the whole body of freight rates sought to be injoined, save and except minor changes made from time to time which did not materially affect the revenue of the plaintiff, had been in force since 1903 and the plaintiff and other carriers had acquiesced for said period of time in said scheme of freight rates, which were embraced in Standard Distance Freight Tariff No. 3, complained of in the bill herein.

4th. The Court erred in finding, as stated in the opinion of the Court, that the evidence showed an increased cost of operation for ten years prior to the filing of this suit, and that rates that had been remunerative ten years prior to its filing would no longer be so on account of increased cost of operation, and on such account that there was no acquiescence in the plaintiff in submitting to the schedule of freight rates; when the evidence shows that the increased efficiency of locomotives, cars and tracks and other similar causes had rendered the cost of carrying freight less than at the beginning of the ten years period referred to by the court and less than at any prior period.

5th. The Court erred in holding that the reduction by the Legislature of passenger rates from three cents to two cents per mile was an excuse for the complainant to seek relief in the Federal Court prior to applying to the Railroad Commission for relief therein against the freight rates, because under the law the Railroad Commission is authorized, upon proper showing, to increase the freight rates so as to compensate the plaintiff for its loss in passenger rates, if any loss occurred on account of said Legislative reduction of the passenger rates.

6th. The Court erred in its decree in adjudging and decreeing that the freight rates in Standard Distance Tariff No. 3 and passenger rates fixed by the General Assembly of 1907 were confiscatory and would not afford complainant fair and reasonable return upon its property, and erred in decreeing that a compliance with said freight and passenger rates would be taking the property of the complainant without due process of law, because the evidence shows that said freight and passenger rates are reasonable and compensatory and that they do afford the complainant a fair and reasonable return upon the value of its property invested in intrastate traffic.

494 7th. The Court erred in making perpetual the temporary injunctions heretofore granted in this casue and injoining these defendants from enforcing Standard Distance Freight Tariff No. 3, or any rate or schedule therein, and from enforcing the passenger Rate Act of 1907 and particularly erred in injoining any rates in said Standard Freight Distance Tariff No. 3, as many, if not all, of said rates are reasonable, just and compensatory.

8th. The Court erred in not dismissing plaintiffs' bill because plaintiff failed to establish by clear and decisive evidence that the intrastate freight and passenger rates sought to be injoined were confiscatory and in holding upon the evidence offered by the plaintiff that said rates were confiscatory when said evidence was based wholly on opinion testimony without sufficient data upon which an intelli-

gent opinion could be based and said evidence was not of that decisive and clear character which is required to satisfy a court that rates promulgated by a state were confiscatory.

9th. The Court erred in not dismissing the plaintiffs' bill because the plaintiff had not overcome the presumption that the rates established by the State were reasonable and compensatory by a preponderance of the testimony.

10th. The Court erred in not dismissing the bill of plaintiff because the preponderance of the testimony established the fact that the freight and passenger rates sought to be injoined were compensatory and earning the complainant a fair return on its property.

11th. The Court erred in sustaining the plaintiffs' bill upon the evidence offered by the plaintiff, when it was shown in the evidence that better testimony than that offered was obtainable by the plaintiff in the form of detailed statements of revenue derived from local and through freight trains, and detailed statements of the expenses of local and through freight trains and the amount of state and interstate traffic carried respectively on the local and through freight trains; That the plaintiff instead of resorting to the best evidence to ascertain the relative cost of state and interstate traffic produced only opinion testimony, which was of insufficient probative force to overcome the presumption of the validity of the rates established by the State when better and more reliable testimony could have been produced by the plaintiff and was in its possession and control.

12th. The Court erred in holding the passenger rates to be confiscatory when the evidence shows that the complainant voluntarily made passenger rates equal and less than those fixed by the State and the plaintiff carried a large volume of passenger traffic on rates voluntarily made by it and other carriers on rates as low
495 as, and in many cases, lower than, those fixed by the State herein complained of.

13th. The Court erred in holding the freight rates to be confiscatory when the evidence shows that the complainant voluntarily made freight rates equal and less than those fixed by the State, and the plaintiff carried a large volume of freight traffic on rates voluntarily made by it and other carries on rates as low as, and in many instances, lower than, those fixed by the State herein complained of.

14th. The Court erred in finding that the period of six months ended December 31st, 1907, fairly represented the earnings and expenses of the plaintiff, and further erred in not holding that the revenue and expense of October, 1907, fairly represents one-sixth of said period.

15th. The Court erred in not charging the plaintiff with a fair annual rental for the use of the Bunch elevator, when the evidence shows that said property had a fair rental value of $20,000 per year and the plaintiff only charged $1.00 to its tenant per year rental therefor.

16th. The Court erred in holding that the division of expense

apportioned to Arkansas by the plaintiff for the repairs of tools and machinery was fair.

17th. The Court erred in not deducting from operating expenses the fine of $10,000.00 and costs imposed on the plaintiff for illegally giving free passes to members of the Legislature.

18th. The Court erred in charging the expense of the Memphis Terminals and the portion of plaintiff's road in Tennessee to the expenses incurred in Arkansas.

19th. The Court erred in charging all the expense of the Fort Smith Terminals to the Arkansas expenses.

20th. The Court erred, in sustaining as proper, salaries paid by the plaintiff to lobbyists, and salaries and fees paid attorneys outside of Arkansas.

21st. The Court erred in charging any part of the expense incurred for the leased line known as the Paragould trackage to intrastate traffic when the evidence shows such expense to be incurred wholly for interstate traffic.

22nd. The Court erred in charging the rental of the Van Buren Bridge to the Arkansas expense, particularly any part thereof to the intrastate expense.

23rd. The Court erred in holding the plaintiff road was efficicently operated.

24th. The Court erred in apportioning the property of the plaintiff in the state between the intrastate and interstate traffic on the revenue basis in order to ascertain the proportion of said property used in intrastate business.

25th. The Court erred in the bases adopted for apportioning expense between intrastate and interstate traffic.

496 26th. The Court erred in apportioning the miscellaneous expenses on the revenue basis.

27th. The Court erred in declaring in the opinion that the State contended for a division of property and expenses on the "ton mile basis".

28th. The Court erred in finding that the intrastate freight rates were only 50% higher than the interstate rates, when the undisputed evidence showed that the revenue per ton per mile under Standard Distance Freight Tariff No. 3 produced 98% more revenue per ton per mile on the Iron Mountain Railway Company than the interstate traffic produced per ton per mile and on the St. Louis-Southwestern Railway Company, 141% more per ton per mile.

29th. The Court erred in using the revenue basis for dividing any expenses and particularly without allowing for the excess of at least 50% which the Court found the State revenue was higher than the interstate revenue; the evidence shows that by using the revenue as a factor without making allowances for the difference between the two that the state expenses are burdened unduly in proportion to the excess of the State revenue over the interstate revenue.

30th. The Court erred in not adopting as a whole the plan of division of expense presented by the State, which said basis of division was sustained by preponderance of the testimony as being

the best basis for fairly apportioning the expense between intrastate and interstate traffic.

31st. The Court erred in not accepting the results of the statistics obtained from the test months which were put in evidence by the complainant. The evidence shows that October, 1907 was a fairly representative month of the six months period introduced in evidence by the Iron Mountain Railway Company; that October, 1908 was fairly representative month between state and interstate traffic on the St. Louis-Southwestern and further the evidence shows that the plaintiff was estopped from questioning that said months are fairly representative for the purposes used by the State.

32nd. The Court erred in charging to interstate business only 40% of the expense of the local trains when the evidence shows that on the Iron Mountain it should be about 73% and on the St. Louis-Southwestern about 68% of the expense of the local trains is chargeable to interstate freight business and said finding of 40% was not supported by the evidence.

33rd. The Court erred in dividing Maintenance of way expenses on a revenue basis and particularly in not making allowances for the difference between the intrastate and interstate revenue when using the revenue as a factor in dividing said expense.

34th. The Court erred in its division of expense between
497 local and through trains in charging 50% extra to yard locomotives as against the local train and 75% additional for local locomotive mileage when the evidence shows much lower percentage should be used to equalize them.

35th. The Court erred in the division of the expense of the Maintenance of Equipment of freight cars in charging 25% extra to the local trains for starting and stopping and 13½% for terminals handling when the evidence shows that much lower percentage should be charged for said causes. The Court also erred in this item in estimating that the through trains stop every thirty five miles as against five miles to the local trains: The Court also erred in this item in not charging transstate and interstate traffic with the cost of starting and stopping freight cars and in making different allowance for interstate and intrastate traffic, when the evidence shows that this is an element of expense from the physical starting and stopping of freight cars unconnected with the class of traffic carried in said cars.

36th. The Court erred in not apportioning general expenses according to the plan adopted by the State:—The Court particularly erred in charging all of these expenses on the basis of the supervision in Maintenance of Equipment and Transportation only, whereas, the evidence shows a proper share of such expenses should be charged to the Maintenance of Way and all of the other expenses.

37th. The Court erred in dividing the item of Hire of Equipment on the revenue basis and erred in charging an additional 30% to local traffic when the evidence shows there is no relation between the revenue and said item of expense and there is no evidence to show that 30% or any other percentage should be added to local traffic for this item of expense.

38th. The Court erred in the basis adopted for apportioning station expenses.

39th. The Court erred in finding various omissions from the expenses apportioned to the State in the State's plan of dividing expenses between intrastate and interstate traffic and particularly erred in finding that the dead weight on local trains exceeded the dead weight on through trains 14%, and particularly in finding that for all such alleged omission that 8½% should be charged to the local trains, when the evidence fails to show any basis for such alleged omissions or such percentages as found by the Court.

40th. The Court erred in the basis adopted for apportioning fuel and locomotive expenses and in the basis adopted for "other train expenses".

41st. The Court erred in charging the State passenger traffic with 10% greater than the interstate passenger traffic, when the preponderance of the testimony shows interstate traffic is the most expensive.

498 42nd. The Court erred in holding that the St. Louis-Southwestern freight and passenger traffic was more expensive than the Iron Mountain's freight and passenger traffic.

43rd. The Court erred in finding the extra expense of intrastate traffic over the interstate freight traffic on the Iron Mountain Road was 210% and on the St. Louis-Southwestern 250%, when the evidence shows that at the outside the extra expense of such freight traffic is less than the greater percentage of the revenue per ton per mile of the intrastate over the interstate revenue.

44th. The Court erred in holding that the plaintiff was entitled to earn 6% interest on the value of its property and 1.5% surplus and that a return of less than 7½% on the value of its property devoted to the intrastate traffic was confiscatory.

45th. The Court erred in not holding a return on the plaintiffs' investment equal to the rate of interest prevailing on Railroad securities was compensatory, which rates of interest the evidence shows to have been a little less than 4½% on Railroad securities in Arkansas.

46th. The Court erred in retaining jurisdiction of this cause for any other purpose than to permit these defendants to show a changed situation which might relieve them of the injunction.

Wherefore for the errors aforesaid, and each and every of them and many more apparent in the face of the record, the defendants Robert P. Allen, George W. Bellamy and William McKnight, Railroad Commissioners of the State of Arkansas, pray for a reversal of the decree aforesaid and that the Court be directed to enter a decree dismissing plaintiffs' Bill of Complaint and such other relief as equity and good conscience will show the defendants entitled to receive.

JOS. M. HILL.
JAMES H. HARROD,
*Solicitors for Said Defendant Railroad Commissioners.*

Dated this June 26th, 1911.

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

Which Prayer for Appeal is as follows:

499 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Plaintiff,
vs.
ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM P. MCKNIGHT, Railroad Commisisoners of the State of Arkansas, Defendants.

*Prayer for Appeal.*

Now comes Robert P. Allen, George W. Bellamy, William F. McKnight, Railroad Commissioners of the State of Arkansas, defendants in the above entitled cause, conceiving themselves to be aggrieved by the decision herein rendered on the 3rd day of May, 1911, wherein the Court made perpetual the temporary injunction hereinbefore issued and found, adjudged and decreed that the freight rates embraced in Standard Distance Freight Tariff No. 3, and intrastate passenger rates enacted by the Act of the General Assembly of Arkansas of 1907, were confiscatory and the keeping of the same in force was taking the property of the plaintiff without due process of law; and prays an appeal from the said final decree of the Circuit Court of the United States for the reasons specified in the Assignment of Errors, which is filed herewith, and prays that this appeal may be allowed and a transcript of the record, proceedings and papers upon which said decree was made, duly authenticated, be sent to the Supreme Court of the United States.

JOS. M. HILL,
JAMES H. HARROD,
*Attorneys for Defendants.*

Dated this 26th day of June, 1911.

The petition for appeal is hereby granted and the appeal allowed, this 26th day of June, 1911.

JACOB TRIEBER,
*District Judge, Presiding in Circuit Court.*

500 Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

Which Bond for Appeal is as follows:

501 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS-SOUTHWESTERN RAILWAY COMPANY, Plaintiff,
vs.
ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM P. MCKNIGHT, Railroad Commisisoners of the State of Arkansas, Defendants.

*Bond for Appeal.*

Know all men by these presents:

That we, Robert P. Allen, George W. Bellamy, and William F. McKnight, as principals, and John W. Crockett as sureties, are held and firmly bound unto the St. Louis Southwestern Railway Company in the sum of Five Hundred ($500.00.) Dollars to be paid unto the said St. Louis Southwestern Railway Company, its successors and assigns; to which said payment well and truly to be made we bind ourselves, our heirs, executors and administrators, jointly and severally by these presents; this obligation is upon this condition:

Whereas, the above named Robert P. Allen, George W. Bellamy, and William F. McKnight have prosecuted their appeal to the Supreme Court of the United States to reverse the decree rendered in the above entitled cause by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof; Now if the above named Robert P. Allen, George W. Bellamy, and William F. McKnight shall prosecute their said appeal to effect, and answer all costs if they shall fail to make good their plea, then this obligation to be void, otherwise to remain in full force and virtue.

Given under our hands and seals this 26th day of June, 1911.

R. P. ALLEN.
GEO. W. BELLAMY.
W. F. McKNIGHT.
JNO. W. CROCKETT.

The above bond is hereby approved and ordered to be filed and made part of the record.

(Signed) JACOB TRIEBER, *Judge.*

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

502 And on the same day the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN, GEORGE W. BELLAMY, and WILLIAM F. MCKNIGHT, Railroad Commissioners of the State of Arkansas.

Come the Defendants Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Ar-

kansas, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and file their citation which is duly signed by the Judge of this Court and service of the same duly accepted by Moore, Smith & Moore, Esqs., Solicitors of Record for the Complainant in this cause.

Which citation is as follows:

503 UNITED STATES OF AMERICA, *ss:*

The President of the United States to the St. Louis Southwestern Railway Company, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States at the City of Washington within thirty days from date of this writ pursuant to an appeal duly allowed by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, and filed in the Clerk's Office of said Court on the 26th day of June, 1911, in a cause wherein Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas are appellants and you are appellees to show cause, if any, why the decree rendered against the appellants as in said appeal mentioned, should not be corrected, and why speedy justice should not be done in their behalf.

Witness the Honorable Jacob Trieber, District Judge presiding in the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, this 26th day of June, 1911.

JACOB TRIEBER, *Judge.*

Service of the above Citation this day acknowledged.

MOORE, SMITH & MOORE,
*Solicitors for the St. Louis Southwestern Railway Company.*

June 26th, 1911.

Endorsed: Filed June 26, 1911. W. P. Feild, Clerk.

503½ And on Sept. 27th, 1911, the following proceedings were had, to-wit:

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
vs.
ROBERT P. ALLEN, GEORGE W. BELLAMY, and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas.

It appearing from the statement of the Clerk of this Court that it will be impossible for him to complete a transcript of the record in this cause in time to file the same with the Clerk of the Supreme Court of the United States on the second day of October, 1911,—the day to which it was made returnable by me, when the appeal was granted and the Citation signed by me—

It is therefore ordered by me that the time for filing the transcript of the record in this cause with the Clerk of the Supreme Court of

the United States is hereby extended until the 12th day of October, 1911.

(Signed) JACOB TRIEBER,
*U. S. District Judge for the Eastern District of Arkansas.*

September 27th, 1911.

504 UNITED STATES OF AMERICA,
*Western Division of the Eastern District of Arkansas:*

I, W. P. Feild, Clerk of the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas, in the Eighth Circuit, hereby certify that the foregoing writings annexed to this certificate are true, correct and compared copies of the originals remaining of record in my office, and constitute a true copy of the record, assignment of errors, and of all proceedings in case of St. Louis Southwestern Railway Company vs. Robert P. Allen, et al., Railroad Commissioners of the State of Arkansas.

In witness whereof, I have hereunto set my hand and the seal of said Court, this 27th day of September, in the year of our Lord, One Thousand Nine Hundred and Eleven, and of the Independence of the United States of America, the One Hundred and thirty-sixth.

Attest:

[The Seal of the Circuit Court, Western Division of East. Dist. Ark., U. S. A.]

W. P. FEILD, *Clerk.*

505 UNITED STATES OF AMERICA, *ss:*

The President of the United States to the St. Louis Southwestern Railway Company, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States at the City of Washington within thirty days from date of this writ, pursuant to an appeal duly allowed by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, and filed in the Clerk's office of said Court on the 26th day of June, 1911, in a cause wherein Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas are appellants and you are appellee, to show cause, if any, why the decree rendered against the appellants as in said appeal mentioned, should not be corrected, and why speedy justice should not be done in their behalf.

Witness the Honorable Jacob Trieber, District Judge presiding in the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, this 26th day of June, 1911.

JACOB TRIEBER, *Judge.*

Service of the above citation this day acknowledged.

MOORE, SMITH & MOORE,
*Solicitors for St. Louis Southwestern Railway Company.*

June 26th, 1911.

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

506 In the Supreme Court of the United States.

No. 814.

ROBERT P. ALLEN et al., Railroad Commissioners, Appellants,
v.
THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Appellees.

*Stipulation.*

It is stipulated by counsel that the following parts of the record in the above entitled cause be not printed:

1. Exhibit A to the complaint, being Standard Freight Distance Tariff No. 3, found at pages 43-99 of the record.

It is further stipulated that either party may cause twenty-five copies of this exhibit to be filed with the printed record and treated as a part thereof.

2. Exhibit A to the decree herein, being "Court Tariff" found at pages 372-421.

It is further stipulated that either party may cause twenty-five copies of this exhibit to be filed with the printed record and treated as a part thereof.

3. The affidavits presented to Judge Van Devanter for preliminary injunction shall be omitted, with the right to either party to hereafter publish any part of the same that may be desired by such party and either party may use any part of said affidavit in their brief with the same effect as if it were printed, said affidavits being found at pages 138-369.

4. Any part of the record omitted from being printed under this stipulation may, by either party be hereafter printed or otherwise treated as a part of the record.

5. If either party shall file any of the exhibits or use any
507 part of the affidavits presented to Judge Van Devanter or any other matter herein referred to, in their brief in said case, they shall notify opposing counsel thereof at least twenty days prior to the date the case is set for submission.

Given under our hands this 24th day of October, A. D. 1911.

J. M. HILL,
*Attorneys for Appellants.*
J. M. MOORE,
*Attorney for Appellees.*

508 [Endorsed:] File No. 22,890. Supreme Court U. S., October Term, 1911. Term No. 814. Robert P. Allen et al., Commissioners etc., Appellants, vs. The St. Louis Southwestern Railway Company. Stipulation as to printing record. Filed October 31, 1911.

Endorsed on cover: File No. 22,890. E. Arkansas C. C. U. S. Term No. 814. Robert P. Allen, George W. Bellamy, and William F. McKnight, Railroad Commissioners of the State of Arkansas, appellants, vs. The St. Louis Southwestern Railway Company. Filed October 6th, 1911. File No. 22,890.

75191

Office Supreme Court, U. S.
FILED.
OCT 17 1911
JAMES H. McKENNEY,
CLERK.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1911.

No. ~~[illegible]~~ 440.

ROBERT P. ALLEN ET AL., COMMISSIONERS, ETC., APPELLANTS,

*vs.*

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

No. ~~[illegible]~~ 441.

ROBERT P. ALLEN ET AL., COMMISSIONERS, ETC., APPELLANTS,

*vs.*

THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.

**MOTION TO ADVANCE.**

JOSEPH M. HILL,
*Counsel for the Appellants.*

**(22,889 and 22,890.)**

JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C.

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1911.

---

**No. 813.**

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

*vs.*

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, APPELLEE.

---

**No. 814.**

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

*vs.*

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, APPELLEE.

---

**NOTICE.**

To MR. JOHN M. MOORE,
*Solicitor of Record for the*
*Above-named Appellees:*

You are hereby notified that the appellants in the above-entitled causes will present to the Su-

preme Court of the United States on Monday, October 23, a motion to advance these causes and set them for submission on the second Monday in January, 1912. A copy of said motion is herewith handed you and attached to this notice.

Given under my hand this the 7th day of October, 1911.

JOS. M. HILL,
*Special Counsel for the State.*

Copy of above notice, with the attached motion, received. Service waived.

J. M. MOORE,
*Solicitor for Appellees.*

IN THE

# SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1911.

---

**No. 813.**

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

*vs.*

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, APPELLEE.

---

**No. 814.**

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

*vs.*

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, APPELLEE.

---

## MOTION.

---

Come now Robert P. Allen, George W. Bellamy, and William F. McKnight, Railroad Commissioners of the State of Arkansas, appellants herein,

by Joseph M. Hill, special counsel for the State, employed under acts of the General Assembly of the State of Arkansas directing the Railroad Commission to defend these and similar suits, and move this honorable court to advance these causes upon its docket and set them down for hearing on the second Monday of January, 1912, or as soon after that day as suits the convenience of the court, and for cause thereof say:

## I.

On September 3, 1908, five trunk-line railroads operating within the State of Arkansas applied to the Honorable Willis Van Devanter, then one of the circuit judges of the Eighth Judicial Circuit, for preliminary injunctions against the Railroad Commission of the State of Arkansas and other parties named therein, seeking to enjoin the enforcement of the act of the General Assembly of Arkansas, approved February 7, 1907, providing a maximum passenger rate of 2 cents per mile for railroads over eighty-five miles in length, and from the enforcement by the Railroad Commission of Standard Freight Distance Tariff No. 3, a tariff fixing freight rates on all intrastate shipments moving in Arkansas.

Judge Van Devanter, after hearing, granted the preliminary injunctions. His opinion is reported at 163 Federal Reporter, 141.

Judge Trieber, sitting for the Circuit Court of

the Eastern District of Arkansas, subsequently granted similar preliminary injunctions in suits of all other railroads operating within the State of Arkansas, with the possible exception of a few small lines. The Railroad Commission of Arkansas, created under an amendment to the Constitution authorizing its being, and pursuant to statutes passed executing said amendment, is authorized and empowered to fix and regulate freight rates on all intrastate freight traffic.

Pursuant to said authority, the Railroad Commission of Arkansas, in the year 1900, put in force a general system of freight rates. An injunction was granted against those rates operating on two or more lines, the legislative authority seeming to have conferred upon the Commission only power to fix rates upon single lines. This defect in the creating law was amended in 1903, and immediately thereafter the Railroad Commission reenacted the system of rates promulgated in 1900. These rates, with a few minor changes, were in force from 1903, and upon single lines from 1900, until the injunctions against them in 1908. They were reissued in form known as "Standard Distance Freight Tariff No. 3." No application was made to the Railroad Commission prior to the application to Judge Van Devanter for a reduction of any of the rates in said Standard Distance Freight Tariff No. 3.

The General Assembly of Arkansas convened in January, following the injunctions issued in Sep-

tember, 1908, and an act was passed by it, which was approved January 28, 1909, empowering and directing the Railroad Commission to make defense to the aforesaid suits and appropriating money for the employment of counsel and accountants and defraying the expense of such defense and authorizing the Governor and Attorney General to select special counsel, who should, in conjunction with the Attorney General, be entrustetd with the defense of said suits brought against the Railroad Commission.

After the injunctions were granted by Judges Van Devanter and Trieber the railroad companies operating in the State of Arkansas put in force a schedule of freight and passenger rates in place of those enjoined. Shortly after the defense of said suits was authorized and directed by the General Assembly the Railroad Commission filed a motion in the circuit court to dissolve or modify the injunctions on the ground, *inter alia,* that the rates promulgated by the railroads were unreasonable and discriminatory, and that it was inequitable for the railroads to maintain unreasonable and discriminatory rates while the State-made rates were under injunctions.

The court found that the freight rates promulgated by the railroads were unreasonable and ordered the injunctions dissolved unless the railroads within a short time should promulgate reasonable rates and determined that rates producing revenue exceeding 33 1-3 per cent over the rev-

enue produced by the Standard Freight Distance Tariff No. 3 would be unreasonable.

The outcome of this decision was the "Court Tariff," which materially reduced freight rates put in force by the railroads and materially increased the freight rates promulgated in said Standard Distance Tariff No. 3. This "Court Tariff" was made effective for all intrastate traffic on all railroads which had secured injunctions, which, as stated, were all the railroads in the State of Arkansas with the possible exception of a few insignificant lines.

The decision on this motion is reported in 168 Federal Reporter, 720.

This decision left in force the injunctions against the legislatively-fixed passenger rates and the Commission-fixed freight rates, and substituted in lieu of the Commission-fixed freight rates the "Court Tariff." Subsequently all these cases were put at issue, but only two were tried. By stipulation of counsel and orders of court, testimony taken in these cases may be used in the other cases so far as applicable, and the other cases were continued pending final decision in these cases. On the 3d day of May, 1911, Judge Trieber, sitting in the circuit court, made perpetual the injunctions granted by Judge Van Devanter in these cases, and orders of court were made continuing the other cases, continuing the injunctions therein, and continuing in force the "Court Tariff" until the final decision in these cases.

On the 30th of June, 1911, the General Assembly of Arkansas appropriated money for the appeal of these cases to this honorable court, and on the 6th day of October, 1911, transcripts of the record in each of these cases were filed in this court, and the transcripts are now in the process of being printed.

The said perpetual injunctions restrained the Railroad Commission from enforcing any rate in Standard Distance Tariff No. 3, and restrained said Commission and all other parties, including the railroads themselves, from enforcing the act of the General Assembly of 1907, fixing passenger rates at 2 cents per mile. The act of the General Assembly regulating passenger rates and the acts of the Railroad Commission under constitutional and statutory provisions regulating freight rates are by said injunctions held inoperative and unconstitutional. This decision reaches all the freight and passenger rates in force in the State of Arkansas under authority of said State, and renders inoperative and void all State regulation of passenger and freight rates pending the hearing of these appeals. These appeals do not serve as a supersedeas and none of the laws of the State of Arkansas regulating passenger and freight rates are now enforceable.

The early hearing and determination of these cases by this honorable court is therefore a matter of vital interest and importance to the State of Arkansas, its officers and citizens, and all persons

who move freight within said State or who travel upon the railroads therein.

## II.

The laws of the State of Arkansas provide for the assessment of railroad properties according to their true value, and provide for an equal and uniform assessment of all property. The amount of revenue received from the railroads through their freight and passenger rates is one of the elements of value to be considered in assessing railroad property for taxation. Owing to the injunctions herein restraining freight and passenger rates fixed by the State and the substitution of other rates in place of those fixed by the State, it is very difficult for the assessing authorities of the State of Arkansas to determine and fix the true value of the railroad properties within the State. The injunction bonds given at the time of the temporary injunctions provided for refunding to shippers and passengers the excess charge over the State-made rates in case the injunctions should be finally dissolved. This revenue, which will run into millions of dollars annually, is held in abeyance until it is finally decided whether it belongs to the railroads or to the shippers and passengers, and leaves uncertain and indeterminable the real amount of revenue received by the railroad companies pending the final decision of these cases, and leaves their proper taxation uncertain.

## III.

Cases from Missouri, Minnesota, and other States involving in many respects questions involved in these cases are now pending on the docket of this honorable court, and the questions which are to be decided herein are not vital to the State of Arkansas alone, but to many other States of the Union.

Wherefore, the premises considered, the appellants move the court to advance these cases and set them down for hearing on the second Monday of January, 1912, or as soon thereafter as the convenience of the court will permit.

JOS. M. HILL,
*Special Counsel for the State of Arkansas.*

Service of this motion by delivering a copy thereof is acknowledged, and service of notice of the filing and presentation of this motion on October 23 is acknowledged. Time of service of copy of motion and of notice of presentation are waived and consent given to the presentation of the motion on October 23.

Given under my hand this 12th day of October, 1911.

J. M. MOORE,
*Solicitor for the Appellees.*

Appellees concur in the request to advance these causes and in so much of the statements contained

in the foregoing application as relate to the character of the subject-matter of the litigation, the importance of the issue involved, and the need for the speedy termination thereof.

J. M. MOORE,
*Solicitor for Appellees.*
MARTIN L. CLARDY,
*Solicitor for St. Louis, Iron Mountain & Southern Railway Co.*
SAM'L H. WEST,
*Solicitor for St. Louis Southwestern Railway Co.*

[Endorsed:] File Nos. 22,889 and 22,890. Supreme Court U. S. October Term, 1911. Term Nos. 813 and 814. Robert P. Allen *et al.*, Commissioners, etc., appellants, *vs.* The St. Louis, Iron Mountain & Southern Railway Company. Robert P. Allen *et al.*, Commissioners, etc., appellants, *vs.* The St. Louis Southwestern Railway Company. Motion to advance, notice, and proof of service. Filed October 17, 1911.

IN THE

# Supreme Court of the United States

---

ROBERT P. ALLEN *et al.*, RAILROAD COMMISSIONERS ..... *Appellants*

v. No. 813.

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY..... *Appellee,*

AND

ROBERT P. ALLEN *et al.*, RAILROAD COMMISSIONERS ..... *Appellants*

v. No. 814.

THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY..... *Appellee.*

---

## ABSTRACT AND BRIEF FOR APPELLANTS.

---

### A CONCISE STATEMENT OF THE CASE.

NOTE.—All references in this abstract and brief are to the top pages of the printed record, unless specific reference is made to the indented pages which refer to the original record. All references are to the record in Case No. 813, Robert P. Allen *et al.* v. St. Louis, Iron Mountain & Southern Railroad, as that case contains all the evidence. Where the record in No. 814, Robert P. Allen v. St. Louis Southwestern Railway Company is referred to, it will be specifically mentioned as page in Record No. 814.

## THE PLEADINGS.

*The Complaint.*

On the 18th of July, 1908, the St. Louis, Iron Mountain & Southern Railroad and the St. Louis Southwestern Railroad Company and several other railroads (not parties to this appeal), operating in Arkansas, filed bills of complaint in equity in the United States Circuit Court for the Eastern District of Arkansas, against Robert P. Allen and other members of the Arkansas Railroad Commission, and several individual citizens of the State, who have passed out of the cases. These complaints allege the creation, under constitutional amendment and statute, of the Railroad Commission, and the investiture of it with power to regulate passenger and freight rates on all intrastate traffic; and the provisions of the statutes providing various penalties to attach for failure to comply with the orders of the Railroad Commission.

The Bills aver that in 1904 the Railroad Commission put in force Freight Distance Tariff No. 2, prescribing freight rates and charges applicable to all classes and commodities between all stations in said State, on all railroads operated therein, subject to the Western Classification as adjusted to the traffic in said State by the Commission. That the rates therein promulgated, and certain amendments from time to time, continued in force until June 4, 1908, when Standard Freight Distance Tariff No. 3 was made effective. This tariff cancelled Tariff No. 2, and said Tariff No. 3 contained many of the rates and regulations contained in No. 2, and the changes and amendments since No. 2 was issued, and other changes and rates on classes and commodities, and was adopted in June, 1908. The Bills allege that all of the charges and rates prescribed in said Tariff No. 3, as well as in the preceding Tariff No. 2 aforesaid, were unreasonable, unjust, oppressive, discriminative, confiscatory and void, both in respect to said order as a whole and in respect to each and every rate, charge, tariff, schedule, classification, rule and regulation separately (R. pp. 2-6). The Iron Mountain Company alleges that its railroad equipment, property and franchises in use in Arkansas represented an investment of $40,906,572.00 (R. p. 5). The St. Louis Southwestern alleges that its investment represented $16,023,090.00 (R. p. 3, R. p. 814). The Bills allege that each plaintiff has exercised as great degree of economy in the use and operation of its railroad as was compatible with the interest of the public and with safe and efficient service to the public, and it only employed such officers, agents and employees, and expended such amounts in the maintenance and repair of its roadbed, tracks and stations and for new equipment of engines, cars and other appliances as were necessary to the operation of its road and the maintenance of said property, with due regard to its preservation and with safety to the public. That no unreasonable salaries or wages have been, or are now being, paid to any of its officers or employees (R. p. 2). The Bills allege in detail that various

specific freight rates are unreasonable and confiscatory (R. p. 4-8). Then the Bills allege that the roads are engaged in interstate commerce, and that the local rates of the several States through which they pass enter to a very large extent and have a controlling influence on the through rates charged on interstate shipments. The Bills allege that the State rates interfere with interstate rates; on a theory that interstate rates are made up of the sum, or a percentage of the sum, of the various intermediate local rates of each State through which the road passes (R. p. 8). As these allegations are unsustained, further attention to them will not be paid. The Bills also make an attack on the joint rates promulgated by the Commission (R. pp. 9, 10), but there is no evidence to sustain it and further reference thereto is omitted. The Bills then allege that on February 9, 1907, the General Assembly of Arkansas passed an act fixing the maximum rate of two cents per mile on all roads over 85 miles in length, and then allege that the Railroad Commission had adopted and promulgated the passenger rates as prescribed by the General Assembly, and charges that the revenue produced from such passenger rates was less than the expenses of the operation of the passenger service (R. pp. 11-13). The Bills allege that while freight and passenger rates have been reduced, the expenses of maintaining and operating each road have been increased, and many new burdens placed upon them by law, and that the earnings are insufficient to pay operating expenses and an adequate return on the property invested in the intrastate traffic (R. pp. 13, 14). There are other allegations in the Bills (R. pp. 14-21); some of matters not afterwards pressed, and others in amplification of those just mentioned.

*The Answer.*

The Railroad Commission on the 25th of July, 1908, filed its answer. The answer admits what may be termed the historical allegations of the complaint, and denies specifically the force and effect of the rates of which the plaintiffs complain; and denies that there are any unreasonable, unjust, oppressive, discriminatory or confiscatory rates, and denies that as a whole the system of rates is confiscatory; it denies the effect of various provisions of the statute complained of, wherein it was alleged the plaintiffs were denied due process of law in the promulgation of freight and passenger rates.

It admits the issuance of Standard Freight Distance Tariff but avers that said Tariff No. 3 was substantially similar to No. 2, adopted in 1904, and that No. 2 was a repetition in substance of the first Standard Freight Distance Tariff which was adopted on the 10th of April, 1900. It alleges that at different times during the history of the Commission technical questions were raised as to whether certain items were properly adjusted and it was necessary to dispose of such matters by rulings or construction. This being unsatisfactory, when Standard Freight Distance Tariff No. 3 was issued the Commission gave notice to all interested roads that it

would, at a meeting to be held on June 4, 1908, take up the question of adopting this tariff as a whole, and it was so adopted, thus disposing of many inadvertent discrepancies which had crept into the compilations previously issued; but the Commission states that there was no substantial difference between the freight rates promulgated in Standard Distance Tariff No. 3 and those in effect since April 10, 1900. The defendants deny that any of their rates are unreasonable, and deny that the plaintiff roads exercised economy in the use and operation of their property. The defendants deny that the plaintiffs practiced reasonable economy in the operation and maintenance of their roads, and allege that if the roads were properly and economically conducted that the revenue received from the rates promulgated by the Commission would yield a profit of 15 per cent on the property invested. The defendant Commission alleges that the condition of the commercial affairs of the country in 1907 was such as to furnish no criterion for other years; that if it is true that the earnings and expenses of the roads were the amounts alleged in the Bills for the year 1907, that such sums should not be taken as a criterion of the expenses and revenues of the roads in normal times, and set forth with some particularity the well-known panic of 1907, which caused such a serious stagnation and loss to railroad business. The defendants deny the allegations in regard to local rates affecting or interfering with interstate commerce, and deny specifically the various allegations as to the different rates, rulings or orders of the Commission being unreasonable or confiscatory. Defendants deny that the Act fixing the passenger rate at two cents worked any detriment to the plaintiff railroads; they aver that the traffic has so increased since the passage of said Act that the plaintiff railroads were not in any manner injured thereby, and that said rate produced sufficient revenue from the passenger traffic to leave considerable profit unless the plaintiff roads were unreasonable and extravagant in their management and operation and demanded profit on fictitious values. Defendants deny that the freight and passenger revenue will not produce sufficient to pay all of the expenses of passenger traffic and leave an adequate return on the property invested in it. All the other material allegations of the Bills are specifically denied (R. pp. 22-37 and in R. 814, 22-35).

*The Temporary Injunction.*

On the 3d of September, 1908, Hon. Willis VanDeventer, one of the Circuit Judges of the Eighth Judicial Circuit, granted a temporary injunction against all the rates in Standard Distance Freight Tariff No. 3, and against the passenger rates rates prescribed in the Act of the General Assembly (R. pp. 38, 39). Judge VanDeventer's opinion is found beginning at page 38 of record No. 814 and at page 40 in record 813. Judge VanDeventer stated that the proof disclosed the revenues actually derived by each railroad upon the application of these rates from its business in the State, and the revenues from

each class of traffic are so stated as to show separately the earnings from intrastate freight, interstate freight, intrastate passenger and interstate passenger traffic, and also disclosed the value of the property employed by the road in the traffic within the State, the taxes paid thereon, and the actual cost of conducting the freight traffic and the actual cost of conducting the passenger traffic. He stated that the first question for consideration was "How shall this cost be apportioned between the intrastate and the interstate traffic?" He further stated that the proof made it quite plain that the production of a given amount of revenue was attended with greater cost for intrastate business than for interstate business. In this case he found that the additional cost was at least 100 per cent on freight traffic, and 15 per cent on passenger traffic. Then he says (R. p. 41): "Undoubtedly these differences furnish a standard by which to apportion the total cost between the traffic which is intrastate and that which is interstate. Other standards are suggested, but the proofs indicate that none of them are as satisfactory or accurate as is the difference in cost in its relation to the revenue. That standard must therefore be applied, and this may be done in this way, taking the freight and passenger traffic separately: Increase the intrastate earnings by the ascertained percentage representing the difference in cost, threby ascertaining what would have been earned by the same actual expenditure in conducting the intrastate traffic, had it been attended with the same relative cost as the interstate traffic; then add the intrastate earnings as so increased, to the interstate earnings, thereby ascertaining what would have been earned by the actual expenditure in conducting both the intrastate and the interstate traffic, had they been attended with the same relative cost; then ascertain what proportion of this total represents the intrastate earnings, as so increased, and then ascertain the corresponding proportion of the total cost of the intrastate and the interstate traffic."

*Motion to Dissolve.*

On February 18, 1909, the defendants, the Railroad Commission, filed a motion to dissolve or modify the injunction, and alleged, among other matters, the following (R. pp. 56, 57): "These defendant assert that the filing of the bill in equity herein, seeking a temporary and permanent injunction, bound said plaintiff to do equity, as it was seeking relief in a court of equity, and, when said temporary injunction was granted restraining the enforcement of the passenger and freight rates upon the ground that said rates were unreasonable and confiscatory, the said plaintiff was bound by the principles of equity jurisprudence, to put in force, if it exercised its power, only reasonable rates, and it was not at liberty to avail itself of the injunction against the rates established under the law and put in force unreasonable rates. In violation of this settled principle of equity jurisprudence, the plaintiff has, since the rates established by the Commission and the General Assembly were temporarily enjoined, estab-

lished freight and passenger rates of all intrastate shipments, and said freight and passenger rates are unreasonable and exorbitant, and are destroying many of the industries of the State. And said plaintiff is maintaining interstate rates so low that the same amounts to a discrimination against the business and industries of the State of Arkansas. That it discriminates in favor of longer hauls of interstate shipments, under similar and like circumstances, against shorter hauls of intrastate shipment to the great detriment of the shippers and consumers of the State of Arkansas.

The tariff put in by the railroads since that injunction upon the leading articles of commerce in the State is an unreasonable increase. On grain there is an increase of 50 per cent over the Commission rates; on cotton 140 per cent over the Commission rates; on packing house products, 100 per cent; on coal, 35 per cent, on brick, stone and sand, 75 per cent; on lumber, 107 per cent; and on the various lines of merchandise, about 75 per cent. There is an average increase on the principal commodities of the State of 77 per cent over the Commission rate, which these defendants aver is unreasonable, extortionate and oppressive to the shippers of the State."

Defendants also allege that after the injunction was granted restraining the two-cent passenger rate, the plaintiff roads increased their passenger rates to three cents a mile and did not afford any better service while so doing, and alleged further that the plaintiff roads transport all persons who buy 2,000-mile tickets at two cents a mile while occasional travelers who do not buy such mileage books are charged three cents a mile, thereby materially decreasing the amount of travel.

The court found that the tariff put in by the railroads after the injunctions were obtained was unreasonable, and ordered that the freight rates, pending the hearing of these cases, to be charged by the railroads should not produce more than 33 1/3 per cent increase in revenue over that produced by Standard Distance Freight Tariff No. 3, and ordered that a tariff so formed be put into effect not later than June 7, 1909, on penalty of the dissolution of the temporary injunction (R. p. 65).

The defendant Commission set forth in said motion this:

IV.

*Premature Suit.*

"The defendants allege that the plaintiff has a plain and adequate remedy against any rate established by the Commission which is not reasonable and compensatory and should not be entitled to seek a remedy in a court of equity until it has exhausted its efforts to obtain a reasonable and compensatory tariff under the existing law, which affords it ample and complete redress against any injustice in the freight rates established by the Commission. That it is made the duty of the Commission—

"to hear all complaints made by any person, firm or corporation against any such tarii or charges so approved (by it); to hear the parties to the controversy in person or by attorney, or both, and may take testimony orally and in writing, and regulate the argument thereon and conduct the investigation of such complaints in such manner as to the Commission may seem best to arrive at the truth, and when any changes are made in the tariff notice thereof shall be given to the person or corporation to be affected thereby."

And it is further made the duty of the Commission in changing or fixing the rates, to take into consideration the character or nature of the service to be performed, the entire earnings of the railroad, the expense of operating same and the expense and value thereof. And the defendants assert the facts to be that when the first tariff was established by the Commission, in 1900, that it assured the plaintiff and all other railroads affected by it that, if said tariff did not produce a fair profit, the Commission, upon a showing so made, would readjust it so as to produce, if possible, for the plaintiff, a fair profit upon its investment. And such has been the attitude of the Commission from then until the present time, and is still the attitude of the Commission. That several small line railroads have applied to the Commission for relief against the existing rates, and, where the showing has been made of the justice of the application, the Commission has granted the same. That the plaintiff has not presented any complaint to the Commission, alleging that any rate, or the tariff as a whole, established by it was not compensatory and asking for an increase of any rate or of the tariff as a whole. That the Commission recognizes now, as it has always done, that no tariff, whether promulgated by a railroad or a Commission, is perfect, and that all tariffs should be changed from time to time to meet changed conditions in order to do justice to the railroads or shipper, as the case may be, and this the Commission has at all times been ready to do whenever satisfactory evidence should be offered to it showing the justice of and necessity for same.

The defendants assert that the temporary injunction should not be continued until the plaintiff has availed itself of its legal right to obtain redress of its alleged grievance, in so far as the freight rates are concerned, before the Commission, and alleges it is contrary to the principles of equity to entertain a suit where full and adequate remedy at law is open to the plaintiff; that it is contrary to the comity which Federal Courts extend to State tribunals to grant relief in said Federal Courts against State regulations promulgated under State laws, until the plaintiff has sought its constitutional right in the tribunals where the alleged unconstitutional regulation is attempted to be enforced.

The defendants allege that they are called upon to defend in this court the rates of their predecessors and maintained by themselves,

with a few changes as called for from time to time, without having had an opportunity to hear the complaint of the plaintiff and pass upon its justice.

Wherefore, the defendants pray that the injunction be discontinued or its operation suspended until the plaintiff applies for redress before the Commission and gives it an opportunity to pass upon the matters which are alleged in plaintiff's complaint."

The court held said paragraph to be insufficient and struck it out and (R. p. 62) subsequently on the hearing on the merits the same matter was renewed and again overruled by the court, and the first three assignments of error are predicated thereupon.

Judge Trieber's opinion on the motion to dissolve is found beginning on page 66 of the record.

## A STATEMENT OF THE EVIDENCE.

It is difficult to give a concise statement of the evidence because the testimony is so voluminous and so many questions are discussed by so many witnesses from so many angles that a brief statement of it is practically impossible. A statement of the character and purport of the testimony on the various issues may be of some service to the court.

The defendants present many matters in defense of the suit, which will be discussed later and in different connections. Your attention will now be directed solely to the central controversy of the case, which was the division of the property between State and interstate traffic, and the apportionment of the expense between State and interstate and miscellaneous traffic.

*Plaintiff's Evidence on the Revenue Theory.*

The plaintiffs contended that the revenue from each of its three sources of income, freight, passenger and miscellaneous, should be separately ascertained (and this was done), then subdivide the freight revenue into intrastate and interstate, and subdivide the passenger revenue into intrastate and interstate (and all this was done). They contended that miscellaneous, principally mail and express expense, is incapable of division. Having the revenues thus separated, the proportion of each to the whole is used as a factor to divide expenses and property with this exception: The common expenses between freight and passenger are divided on the train mileage basis, the inaccuracy and injustice of which will be hereafter discussed. A proportion of expenses and property is set aside, representing the percentage of miscellaneous revenue to the whole property and expenses. When the results are thus obtained then the plaintiffs contend that there must be added to the intrastate expenses, passenger and freight, a given percentage representing the increased cost of intrastate passenger and freight traffic over interstate. Thus, Judge

VanDeventer found 15 per cent should be added as representing the extra cost of intrastate passenger, and 100 per cent as representing the cost of intrastate freight traffic. The result thus obtained is the revenue basis contended for by the plaintiff in these cases. The evidence to support that revenue theory was opinion evidence of three classes.

The witnesses for the railroads thus reason: (a) That the revenue from State and interstate traffic is ascertainable, and in this case for a given time was ascertained, and the expenses were ascertainable, and for a given time were ascertained; but, unlike the revenue, the expenses were not susceptible of division between intrastate and interstate. Therefore, to separate them, some arbitrary basis must of necessity be adopted, and that the basis most nearly correct, that which contains less fault than any other basis suggested should be adopted; and this they believe to be the revenue theory. They say that various bases have been suggested and found inadequate, the principal other one being the ton-mile and passenger-mile basis. Many reasons were given by the plaintiffs' witnesses why these bases were uncertain, unreliable and unfair; and the revenue basis was advocated as affording the best solution of the difficulty and was supported as reaching an approximately true result. It is passing strange that the revenue basis, which the plaintiffs' witnesses extol, is not used in the division between passenger and freight of common expenses. In lieu of it at that point is the train mileage basis. The large sums which this change of base burden the State will be hereafter shown.

(b) Many witnesses, chiefly operating officials of different railroads, testified that there was an extra cost incurred in earning a given amount of revenue in intrastate traffic over earning the given amount of revenue in interstate traffic. Various opinions as to the extent of this extra cost, both as to passenger and freight traffic, were given. They ranged from 25 per cent to 50 per cent on passenger traffic, and from 100 to 800 per cent on freight traffic. The principal reasons assigned were two: (1) That all intrastate traffic has two terminal expenses within the State, while the interstate traffic has but one, and much of it, the transtate traffic, has none; (2) that the local trains, both freight and passenger, were much more expensive to operate than through trains, and that the local trains, particularly local freight trains, were principally engaged in hauling intrastate traffic.

*Extra Cost.*

(c) Much opinion evidence was adduced to the effect that there was a relation between intrastate and interstate rates, both freight and passenger, and that the freight rates were largely based on the cost of the service and that there was a relation existing between State rates and interstate rates, which relation was based on classification;

*Relation of Rates.*

and there was a corresponding relation of one interstate rate to another intrastate rate on the same class or commodity.

## THE STATE'S SIDE OF THESE CONTENTIONS.

*State's Evidence on Revenue Theory.*

(a) That the revenue derived from each class of traffic was not a proper factor with which to divide either property or expenses; that it was contrary to all accounting principles to use the gross income as a factor to ascertain expenses or the value of property; and, furthermore, that the revenue received from intrastate and interstate rates did not represent, in any way, the expense of either traffic; and that a division of the property on such lines would not afford any criterion of the property devoted to such respective uses. It was furthermore contended that as the revenue from intrastate traffic was so much more per ton per mile than interstate traffic that this theory assigned to the State a larger proportion of property and expenses than the facts justified, and the higher the State rate was made the more property and more expenses would be assigned to the State, which is an unreal and fictitious method of ascertaining the property devoted to intrastate traffic and the expenses incurred therein.

*Extra Cost.*

(b) The State's witnesses admit that there was some extra cost in intrastate freight traffic, but express opinions that it costs more to earn a given amount of revenue in interstate passenger traffic than to earn the same amount of revenue in the intrastate passenger traffic. The reason that intrastate freight traffic was more expensive than interstate traffic was because the intrastate traffic represented the short haul, while the interstate represented the long haul. More of the short haul freight was carried upon local trains than upon through trains, and local trains are the more expensive kind of trains; but it was contended that the greater revenue received for the short haul more than compensated for the greater expense incurred in it. The statistics filed by the railroads show that the intrastate revenue per ton per mile was 98 per cent more than the interstate revenue per ton per mile on the Iron Mountain, and 141 per cent more on the St. Louis Southwestern, and it was contended that this more than counterbalanced the increased cost of intrastate freight traffic. In regard to the terminal handling within the State; it was admitted that as a general proposition it is true that for intrastate freight there are two handlings in the State and for interstate one, and frequently as to much of the interstate, the transstate, none; that these conditions did not exist in Arkansas. Cotton, cottonseed, grain and lumber constitute much over a majority of the freight traffic of Arkansas, and all cotton traffic was interstate and every bale of cotton has three terminal handlings within the State. Practically all grain was interstate,

and it was a very large movement, and most of it, except the transstate grain, had three terminal handlings within the State. Lumber, the largest single commodity moving on the roads in Arkansas, being about 35 per cent of the tonnage of the Iron Mountain road, was mostly handled three times within the State, and it was largely interstate traffic. Much of the transstate freight, like grain and the large movement to Texas, had handling at every division point in Arkansas, which were about 100 miles apart, and there would usually be two or three divisional handlings within the State, the cost of which would be almost, if not quite, as much as a terminal handling. Memphis, Tennessee, is the eastern terminus of the Iron Mountain road, and it has about one mile and a half track therein in addition to trackage rights over the bridge. All the expenses of the road in Tennessee were charged as if Memphis was situated in Arkansas, on the theory that these terminals served Arkansas.

On the opposite side of the State, on the Oklahoma line, is the city of Fort Smith, a jobbing and manufacturing point of 25,000 population.

The tracks of the Iron Mountain road follow a bend of the Arkansas River in entering the city of Fort Smith, and thereby go through a few miles of Oklahoma. This makes all the Fort Smith traffic, as well as all the Memphis traffic, interstate, and all of it has at least two terminal handlings in Arkansas so far as expenses go, and all transstate traffic passing through either of these gateways have one handling in the State in addition to the divisional handlings every 100 miles. Therefore, it was contended that the general proposition as to two terminals for intrastate, as against one or none for interstate, did not apply to this State. As to the local train, it was shown from statistics furnished by the Iron Mountain Railroad Company for October, 1907, and on the St. Louis Southwestern for October, 1908, which were put in evidence by the railroads as fairly representing the business of those roads as between intrastate and interstate traffic, that the load of the local train was largely made up of short hauls of interstate freight. On the Iron Mountain the load of the local trains was 71 per cent interstate as against 29 per cent intrastate, and on the St. Louis Southwestern it was 68 per cent interstate, as against 32 per cent intrastate. Therefore, it was contended that the expense of the local train should be apportioned in proportion to the respective load it carried, interstate and intrastate, and that the opinions of the witnesses on behalf of the plaintiffs who have testified that the great expense on intrastate freight traffic was due to the fact that the local trains principally handled intrastate freight, was based on conditions not existing in Arkansas, and therefore was unreliable and should be given no weight in the face of existing conditions.

(c) The evidence on behalf of the State as to the rates being

based on the cost of the service and the relation between the State and interstate rates may be classified as of two kinds: (1) *Opinion and* (2) *Demonstrative Evidence.*

*Relation of Rates.*

(1) The plaintiffs and the State each introduced much testimony of rate experts as to the effect given to cost of the service in the making of rates, particularly in the making of interstate rates, and the relation of one rate to another. Unquestionably the great preponderance of this evidence tended to show that the rates on interstate traffic prevailing in Arkansas were not based on cost of service, but were based largely, if not entirely, upon competitive and commercial conditions, and that the revenues received from the rates so made did not represent the cost of the service. Much of this was obtained by admission of plaintiffs' witnesses and much more by the State's witnesses. It was shown that the principal commodities in Arkansas were moved on interstate rates made on other considerations than the cost of service. As to the relation of State and interstate rates, much evidence was given that there was absolutely no such thing, if a cost of service relation was considered; that the only relation that existed between interstate and intrastate rates was a trade, or commercial relation, which more or less obtained in all systems of rates to preserve a parity or equipoise between one trade center and another. This was a relation based on commercial and competitive conditions, and not based on any relation of one rate to another, so far as the cost of hauling any given commodity was concerned. It was also in testimony from numerous witnesses that the classification made by classification committees did not preserve a relation between rates, as each State and each interstate tariff usually contained many exceptions to the Western Classification, and the great volume of commodity rates carried the given commodity out of the classification; and, hence, it was impossible for the classification to have preserved any relation between rates. Furthermore, it was shown that the classification did not preserve any parity of the class rates, and was in itself inconsistent and in many instances absurd. The Arkansas Commission Tariff under which the intrastate revenue was produced was a graduated distance tariff. It was claimed by the witnesses for the railroad to be not scientific and out of harmony with itself and did not preserve the ratio between rates which should be preserved.

(2) The State went deeper into this question than the production of rate experts, and put in evidence the system of rates upon all of the great commodities moved through, into and out of the State, thereby showing the rates upon which the great bulk of the interstate revenue was earned. Many of these leading rates, like lumber, cotton, cottonseed and its products, grain, coal and others were shown to be zone rates. For instance, there was a lumber rate from a zone composing all the territory south of the Arkansas River extending to the Gulf of Mexico, to St. Louis, for 18 cents a hundred pounds; a car of

lumber shipped from Little Rock to St. Louis would move on an 18-cent rate with a similar car from Lake Charles, Louisiana, 400 miles south of it, on the same rate. Grain moving into Arkansas, and through Arkansas to the seaport, was shown to move under tariffs which had zones extending from points several hundred miles apart, upon which the same rates were charged to Arkansas and points beyond. Cotton moved in zones both at the beginning and end of the movement. Some of the zones were 100 miles apart in Arkansas and Louisiana and several hundred miles apart in the east, thus the element of distance being disregarded at each end of the haul. There are zones in class rates, which are more stable than any other rates, and such rates represent large traffic. For instance, there is a zone rate on classes from Pittsburg, Pa., territory to Texas common points, the tonnage passing through Arkansas on each of the plaintiffs' roads. This Pittsburg territory extends as far north as Toronto, Canada, and the Texas common points are 2,600 in number and 600 miles apart. For instance, a shipment from Toronto to the farthest Texas common point would be hauled at least 1,000 miles further than a shipment from Pittsburg to the nearest Texas point, and yet the revenue is the same, and that revenue divided according to its mileage in Arkansas with the whole mileage of the haul on the road, and then used as a factor to divide the expenses.

Many of these rates are illustrated by maps attached as exhibits 38 to 43.

In addition to showing that the great commodities of the State moved upon interstate rates which did not represent the cost of the service, the State went deeper still and showed that even these rates were again unequal through the divisions with other roads. The division sheets with other roads affect the revenue received on the same haul. For instance, the shipments of lumber from Little Rock and Lake Charles, Louisiana, to St. Louis. For each the shipper would pay 18 cents per hundred, although one was hauled 400 miles further than the other, but the difference in revenue was even more marked when a shipment was received from another road. Say that the car hauled from Lake Charles was carried to Alexandria, Louisiana, over another road, which would be given, say, 6 cents of the 18-cent rate; then the Iron Mountain would take it from Alexandria to St. Louis for 12 cents and at Little Rock, after hauling it two or three hundred miles, would pick up a similar car and haul it into St. Louis and get 18 cents for it, and the revenue from these two cars are used as proper factors to divide the expense between State and interstate traffic.

Again, lumber received at a point where there are tap lines and a similar shipment from the same place by an individual bear different revenue for identically the same service, the tap line getting from two to seven cents, according to its favor, out of the 18-cent rate, while the car received at the same place from a sawmill with no tap

line attachment would produce 18 cents revenue for the haul. On the other hand, with a few exceptions, all of the intrastate traffic was moved upon a graduated scale, which represented, more or less accurately, an increasing rate for increasing distances. In regard to the classification, it was shown that the Western Classification, which governed part of the traffic moving into Arkansas, was full of exceptions made by every State which promulgated rates, and exceptions were found in every interstate tariff that was issued, and the great mass of commodity rates, upon which the greater volume of traffic moved, were not affected by the classification at all, which only applied to the ten rates known as the Class Rates. Furthermore, it was shown that the classifications were largely affected by commercial and competitive conditions, and in many instances were absurd, and not reflective of any relation of one class with another. The purport of the great mass of testimony along these lines was to prove that there was absolutely no relation between State and interstate rates based upon the cost of service, or based upon anything else, and that there was no relation between rates themselves in different tariffs or any definite or fixed relation of one rate to another, and that revenue produced from these rates was not reflective, in any degree whatsoever, of either the cost of the service or the relation of State traffic to interstate traffic, or the expense of either, nor did it remotely touch the use of the property devoted to either class of traffic.

## THE STATE'S PLAN OF SEPARATING EXPENSES.

In addition to endeavoring to meet the plaintiffs' case on each proposition, the State undertook to prove that the expenses of the intrastate and interstate traffic could be apportioned, with a fair degree of accuracy, between intrastate and interstate traffic by using factors common in railroad accounting, and the result would be a fair approximation of the actual expense incurred in each class of traffic. In order to limit the controversial ground, the State accepted without approval, the plaintiffs' use of the train mileage basis for division of maintenance-of-way and other common expenses between freight and passenger; and likewise accepted, without approval, the plaintiffs' use of the revenue basis for division of property and taxes, and also its use to divide some minor expense accounts difficult of allocation.

The fundamental claim of the plaintiffs is the extra cost of intrastate over interstate traffic, and it was to ascertain all elements of extra cost and allocate them that caused the State to attempt a plan of separating expenses between State and interstate traffic. The State endeavored, in order to accomplish this, to put the maximum allowance in each instance in favor of the interstate as against the intrastate traffic, so that when the maximum allowances were made upon every

item of extra expense which was ascribed by the witnesses for the railroads as attaching to intrastate traffic, it could be ascertained accurately whether the extra revenue per ton per mile of State over interstate compensated for the maximum allowance of extra cost in intrastate freight traffic. In dividing interstate and intrastate passenger traffic, the same plan was adopted. When the State worked out its division of expense for two purposes; one, to demonstrate that it was unnecessary to resort to an arbitrary basis to divide these expenses when a practical basis, closely approximating actual results could be obtained; and, secondly, to show that after making maximum allowances against the intrastate, still the extra cost of the said business was less than the extra revenue derived from it; almost, if not every, witness introduced by the State who testified as to the allowances made by the State, was positive that too much had been allowed in favor of the interstate over intrastate traffic. In making this apportionment factors in common use by the railroads were principally employed; the car mile; the train mile; the engine mile and the ton mile were the principal bases used, each in its proper place. Only one factor was used which was not common in railroad use, and that should be common in railroad accounting because it is common in all other large business enterprises, and that is the proper manner of distributing general or overhead expenses. These were, pursuant to a sound and generally accepted accounting principle, distributed over each class of expense in proportion that each bore to the whole. Thus, the president's salary would be distributed over Maintenance of Way, Maintenance of Equipment, Transportation, Traffic, etc., in the proportion that each of those classes of expenses bore to the whole. This principle is so common, and so thoroughly sound, that it finds use in every line of business except railroad business, and it is as applicable there as it is elsewhere. With this exception, in the distribution of expenses, there is no adoption of any factor other than those in every day use in railroad accounting and railroad operation. In order to make this division of expenses, it was necessary to locate the items of extra expense of the intrastate over the interstate. As heretofore stated, the principal items were the extra terminal handlings, and the fact that most of the intrastate traffic was carried in local trains. During the Missouri Rate litigation, there was prepared for use in that case, and also in this case, complete statistics of operation on the St. Louis Southwestern Railway for the month of October, 1908. Its officers testified that the test was fairly made; that the statistics were fairly gathered and were carefully compiled, and the result of the operations of that month would be fairly representative of the business of that road for several years, and would be fairly representative of the intrastate and interstate traffic at any time, as interstate and intrastate traffic moved hand in hand during the year, and any one month would fairly represent the relations of one class of

the traffic to the other for a series of years. It was further testified that it was a normal month of a normal year. The expenses of this month were worked out in great detail, and the State's accountants accepted them without addition or change, and used them as a basis for dividing the expense on that road. The Iron Mountain officials, in anticipation of a request from the State in this case for similar statistics, prepared and gave to the State the result, generally, of operations for the month of October, 1907, and they testified that that month fairly represented the intrastate and interstate traffic on that road. The Iron Mountain had not made a statement of the expenses of local and through trains, as had the St. Louis Southwestern, and it became necessary for the State to do so, and prepare the statistics in detail for this month, as had been done by the other road for the month of October, 1908. The State's accountants did much work in supplementing the statistics of the Iron Mountain for October, 1907. The result of the statistics of those two months were such that they were able to separate the expenses of the local and through freight trains.

*Freight Division.*

The work of separation of expenses between intrastate and interstate freight traffic must begin with separating the expenses of the local and through trains. When this is obtained for a given period, then it was possible to work out, with a fair degree of accuracy, the actual expenses between the two classes of traffic for said period. To illustrate: Maintenance of way, the first item of expense, was divided on a basis of car miles and engine miles for each local and through train run during the said month. Engine mileage was reduced to car mileage on a basis of two and a half times for an engine mile for one freight car mile, which was the maximum amount which the testimony indicated was the injury to the way by the engine over the car. In Maintenance of Equipment, the locomotives were divided between yard locomotives and road locomotives. Maximum allowance was made for yard switching for yard locomotives to provide for the extra maintenance resulting from the character of the service, as compared with the service rendered by the road locomotive in pulling trains between stations, and maximum allowance was also made against local locomotives on account of extra switching done by each at stations where no yard locomotive was maintained. In apportioning the expenses between freight cars, a maximum allowance was made for the injuries resulting from stopping and starting and terminal handling which were incident to local trains over through trains; and thus on through the various items making up these expenses an allowance was made wherever the evidence showed it should be.

Owing to the method in which the books of the company were kept, it was impossible to definitely locate Traffic Expenses between State and interstate, and the basis adopted by the railroads, the

revenue basis, was used for this item, although it unduly burdened the State. The station expenses were divided between train service and those which were not train service, and those which were not train service were divided between intrastate and interstate on the basis of the number of tons of each class of traffic handled. The State assumed that each intrastate ton was handled twice and each interstate once. Yard expenses which were incurred in assembling and distributing cars were apportioned on the basis of the number of cars hauled in and out of the terminals. These expenses are usually identical, irrespective of the class of service. Wherever it was not identical allowance was made for it. For instance, with the St. Louis Southwestern, Little Rock is the terminal exclusively for local trains, it was so treated. Fuel and locomotive expense were capable of actual ascertainment, and the actual figures were used. Wages of train crews were capable of actual ascertainment, and actual wages of the crews on the local and through trains were definitely located and properly charged to each. Other train expenses which were incurred by the train, such as stock killed on the right-of-way, watching crossings, signaling, etc., were divided between local trains and through trains on the train mile basis. Losses and damages were actually ascertained between intrastate and interstate, and divided directly according to actual expenditure. After the train cost was actually ascertained and the proper allowances made for the cost of each train, that is, local and through, and the local train charged with all of the extra cost which could be definitely located, and it is believed that all of it, and more, was located, then the expense of each is divided in the proportion of the traffic each carried, intrastate and interstate. In other words, the expense of the local train is ascertained. It is found to contain, for illustration, 70 per cent interstate and 30 per cent intrastate, and the expense of that train was divided in that proportion. The through train, is found to contain 95 per cent interstate and 5 per cent intrastate, and its expense was divided in that proportion; on the basis of the ton mile carried by each train of each class of traffic.

*Passenger Division.*

On the passenger division of expenses the same principles were applied, and with these differences in the facts: On the St. Louis Southwestern road it was testified by its officers, and shown by time-cards by them put in evidence, that that road carried no through passenger train in Arkansas. All of the trains in the State were local. On the St. Louis, Iron Mountain & Southern Railroad, as shown by the testimony of its officials in exhibit 46 in this case, there were eight through trains, one of which was a fast mail and carried practically no passengers, and 48 local trains. It was undisputed that the seven through trains largely carried interstate passengers, and carried some intrastate passengers, and the 48 local trains were made up indiscriminately of intrastate and interstate passengers. It was further

shown that the records of the auditor's office would not show whether a passenger during any given period in the past had ridden in a local train or in one of the seven or eight through trains, therefore it was impossible on that road to make a separation of the local and through trains, and as there was no such division of trains on the St. Louis Southwestern road, it was of course impossible to separate the passenger traffic between the local and the through trains. Therefore, the separation in the passenger side of the case is between the classes of cars; that is, passenger cars, Pullman cars, baggage, mail and express. This is definitely worked out on the same principles which have been used in working out the freight problems. The result of this plan of working out the expense was to show that on the St. Louis Southwestern, applying the earnings to its property used in that traffic, according to its own division of property, that there was a return on the intrastate freight of 13.99 per cent; on the intrastate passenger of 5.79 per cent, or a total on intrastate freight and passenger of 9.16 per cent on property invested in intrastate freight and passenger business, and a total return on all property, including intrastate, interstate and miscellaneous, of 12.83 per cent. (Exhibit V.) On the St. Louis, Iron Mountain & Southern (Exhibit Q) is shown intrastate freight, 10.33 per cent; intrastate passenger, 5.31 per cent; total intrastate freight and passenger, 7.69 per cent return upon the property invested in intrastate freight and passenger business. This shows a total return of 7½ per cent on all property on all business, including intrastate, interstate and miscellaneous.

In these calculations the State did not attempt any other basis for dividing the property than that used by the plaintiffs, the revenue basis. Hereinafter we seek to show that the revenue basis unjustly burdens the State in using it as a factor with which to divide the property, but the exhibits merely use the plaintiffs' apportionment of the property to State purposes to show that upon it a compensatory return is being earned. The same is true of the use of the train mile as the factor with which to divide common expenses between passenger and freight traffic. The railroads so divided them and the State used the sums so divided to work out the problem it was attempting to solve.

## THE PLAINTIFFS' CASE IN REBUTTAL.

Plaintiffs contested some of the details of the accountants' work on the October, 1907, statistics, contending that the subtraction of the local train expense from the total train expense was unreliable in that one was made up from the books of the company and the other was from the wheel reports. The difference would be what is termed the lapovers. The plaintiffs contend that the lapovers from September into October would not, necessarily, offset the lapovers from October into November, while the defendants contended that

one would offset the other, and that the difference was a neglible quantity. The plaintiffs contend that the statistics of one month was not a fair test of the six months period, and particularly that October was not. In this the plaintiffs' witnesses in rebuttal were in direct conflict with the plaintiffs' witnesses in chief, who had testified that one month was a fair test of the relative business between State and interstate, and they had also testified that the two different months of which statistics had been put in by the railroads were fairly representative months. There is much testimony on this point, principally of the plaintiffs' in rebuttal against the plaintiffs' in chief. It was also contended by the railroads that there was a congestion in October, 1907, rendering statistics of that month unreliable, and thus it was also in conflict with its previous testimony on this subject; all of this will be pointed out in detail when this matter is considered in another connection. Meeting the issues presented by the plaintiffs' plan of separating the State and interstate business, broadly, the plaintiffs took the position that no solution of the problem had been worked out by the State in the plan presented by it. This was chiefly testimony of operating officials of different railroads who contended that the bases adopted by the State were unreliable when used for the purposes used by the State, and that the results attained through the use of these bases afforded no approximation of the true result sought to be obtained. Then the detail of the State's plan was attacked. Almost every basis used was criticised. The various allowances which were called arbitraries, representing the extra expense of the local trains, were criticised, and their sufficiency, in many instances, denied. More often the attack was made upon the ground that there was not sufficient data upon which to base the allowances for such extra items of expense. In the criticism of the State's bases for separating expenses, the critical opinions of the railroad officials were carried back to the railroads' own bases used in separating passenger and freight expenses, and in separating the expenses of Arkansas from other parts of the Iron Mountain system where the expenses were pooled. This attack was made upon the train mile basis, which is the basis used by the railroads in their original case when separating the expenses of the passenger and freight traffic as the beginning point in which to separate their expenses on the revenue basis in order to apply the respective revenues to each class, and also upon the car mile basis for separating expenses of maintenance-of-equipment between Arkansas and other States forming the Missouri Pacific system.

Repairs of cars, one of the largest items of expense, of all the cars in the Missouri Pacific system, including the Iron Mountain, were pooled; and a proportion assigned to Arkansas by taking the car miles of the cars in Arkansas as representing the proportion of the total expense incurred in Arkansas. The State's accountants accepted the amount thus assigned to Arkansas, and subdi-

vided it between the local and through trains on the freight side of the problems on the car mile basis, and on the passenger side of the problem divided it between coach, baggage and mail cars on the car mile basis. Consequently, we have the anomalous position of the rear guard attacking the advance. If the attack of the plaintiffs in rebuttal against the State's use of the car mile and train mile for the purposes above indicated is sound, necessarily the attack reaches back and destroys the whole computation made by the railroads on the revenue basis, as these factors were used before the revenue basis was applied, and the revenue basis when applied was bottomed on a division of expenses by the car mile and train mile. The plaintiffs also contended in their testimony in rebuttal that several of the bases used by the State were improperly used for that particular purpose, and that other bases should be used in lieu thereof; for instance, the distribution of expenses for maintenance-of-way was made over the whole system according to the overhead plan adopted by the State accountants for distributing general expenses. In this way they treated the maintenance-of-way expense as a general expense. The accountants on both sides made an error in regard to the expenses of passengers carried in Pullmans. The railroad accountants, in attempting to correct an error made by the State's accountants, fell into an error themselves on this subject. Both errors were carefully and conscientiously corrected by the accountants on each side. This called for a revision of the statistics on each side, but the error thus made affects the return on the property only a fraction of one per cent, and is hardly worth considering, but it called for a reapportionment of the expense on the passenger side between the passenger coaches, the Pullman coaches, the baggage, mail and express cars, and including the cafe and observation cars and the baggage cars used by the Pullman passengers, rendering the detail of the distribution somewhat more complicated, while not changing the principle, or the result materially, but, in fact, emphasizing the correctness of the principle employed, as it enabled the accountants on each side to agree as to how each of the errors could be corrected in redistribution of the expenses on broader lines and in more detail. Much of the testimony in rebuttal and surrebuttal was devoted to operating questions. The State's accountants had used a table prepared by Wellington in his work on "Railway Location," in which he had worked out the causes for injuries to freight cars, giving the percentage for each cause. The plaintiffs, in rebuttal, admitted the authority of Wellington's work at the time it was first written, but contended that the table prepared, while continued in later editions, had been prepared for the first edition which was issued at the time that freight cars were equipped with handbrakes and link and pin couplers, and that under modern equipment the percentages should be much higher. On the other hand, the State, in surrebuttal, introduced much expert testimony to show that

the change in equipment would have the opposite tendency, and that the percentages given by Wellington were much too high under modern equipment. It was also contended by the witnesses for the plaintiffs in rebuttal that the allowance for switching made by the local trains was insufficient, and that there was no data upon which such allowances could be accurately based. In surrebuttal of this the State produced numerous trainmen, familiar with operation, who testified that the allowances gave the locals too much, and were too high, and that the basis for the extra mileage incurred was readily ascertainable. It was also contended that the allowance made for the locomotives, as causing two and one-half times more injury to the way than freight cars, was insufficient, and that the basis was unreliable; while the State, in surrebuttal, produced experts who testified that the allowances made in the original exhibits were too high. Various other matters of similar character were gone into in rebuttal and surrebuttal. The result of the plaintiffs' case in rebuttal was summarized in the Iron Mountain exhibit No. 56, which exhibit follows, along general lines, the State's plan of separating the expenses between intrastate and interstate, but changed the bases in many instances, and changed the allowances made by the State to conform to the testimony introduced by the plaintiffs, and produced a return upon the property very much less than that produced in the State's exhibit. In the trial in the lower court this exhibit was termed a caricature of the State's plan of dividing expenses, and when the evidence is considered, it is believed that this is an apt characterization of it, unless a "distortion" of the State's plan would be found to be a more appropriate term.

## THE DEFENDANTS' CASE IN SURREBUTTAL.

The general nature of the testimony of the State in surrebuttal has already been given in stating the nature of the plaintiffs' case in rebuttal, and it would be a repetition to summarize it further. Generally speaking, it may be said that the State's case in surrebuttal showed this: That the original exhibits filed by the State were made upon maximum allowances against the intrastate traffic, and each allowance was justified as an extreme one against the intrastate traffic; and tended to justify the basis used in each case. In fact, the physical side of the case was much more thoroughly gone into in surrebuttal than in the case in chief. As heretofore explained, the State's plan of dividing expenses was worked out for the purpose of showing that the expense could be divided on fair bases, and, therefore resort to an arbitrary method was not necessary; and, secondly, to demonstrate that the extra cost of intrastate over interstate traffic could be properly located and accounted for, instead of being left to opinion evidence, which varied so greatly as to be a strong indication of itself of its own unreliability. When the plaintiffs in rebuttal of this

attacked the soundness of the bases and the correctness of the allowances made, and the plan adopted in working out the various allowances, the State then developed full justification for all that had been done in the original case, and showed by a decided preponderance of the testimony that the allowances made in the original exhibits were excessive in favor of the interstate traffic, and that on an accounting between the two they should be materially reduced in order to arrive at a fairly accurate division of the expenses between these classes of traffic. This testimony will be gone into more in detail in another connection.

## OPINION OF THE TRIAL COURT ON THE BASES ADOPTED.

The court said:

> "The straight revenue theory, as advanced by the learned counsel and accountants of the railroads, is clearly wrong, as none of them takes into consideration the increased rates charged for the intrastate traffic. No further proof of the fallacy of this theory is required than the examples and calculations of the accountants for the railroad in the exhibits filed with their testimony."

The Court quotes Mr. Nay's statement, which was similar to Mr. Kimball's hereafter set out (187 Fed. 321-322). The Court says:

> "But to ascertain the cost of the different items of expense it is impossible to adopt either theory to the exclusion of the others in all matters. For some items the revenue theory will necessarily have to be adopted, while in others the ton mileage, car mileage or train mileage are the only bases which will enable the Court to determine from the evidence in these cases how the different items of expenditures should be apportioned. (187 Fed. 324.)
>
> * * * * * * * * *
>
> "On the other hand, the accountants for the State offered in evidence schedules which they claim are based on facts as they appeared from the records of the railroads when such were obtainable, and on the experience of men long in the railroad service when factors had to be adopted arbitrarily. The scheme for obtaining these facts is new, never having been used by any accountants in any of the numerous rate suits which have heretofore been before the courts. It was devised by Mr. Wharton, a member of the firm of Haskins & Sells, expert accountants of national reputation (p. 331).
>
> * * * * * * * * *
>
> "But, in the opinion of the Court, the scheme itself furnishes the best method of solving this problem that has been called to the attention of the Court, depending, of course, upon the cor-

rectness of the numerous factors necessary to obtain accurate results (p. 332). To determine these important issues under consideration, the Court intends to adopt their schemes and ascertain in that manner, in connection with all the other testimony in these cases, the difference of the cost of the intrastate as compared with the through business, and it is of the opinion that in this way it will reach conclusions as nearly accurate as from the evidence is possible."

Hereafter we think we will be able to demonstrate that the Court made palpable errors which caused him to reach the conclusion he did, but he was evidently following the right path, in part at least, in the plan adopted by him to reach the conclusions. This subject is mentioned here only to complete the statement of the case under the rules, in order that the assignments of error which follows may be the better understood.

## ASSIGNMENT OF ERRORS.

Now comes Robert P. Allen, George W. Bellamy, William F. McKnight, constituting the Railroad Commission of the State of Arkansas, defendants in the above entitled cause, and aver that in the record and proceedings herein that there has been manifest errors committed in this, towit:

1st. The Court erred in not sustaining the motion to dissolve the temporary injunction herein, which motion was filed and considered by the Court prior to taking the testimony herein, on the ground therein set forth that the complainant had filed this bill in equity in the United States Circuit Court, asking relief against freight rates promulgated by the predecessors of the present Railroad Commissioners, without first praying relief from the Commission, which was authorized and required by law to grant relief against unreasonable, unremunerative or confiscatory freight rates.

2d. The Court erred in not dismissing the bill of plaintiff on final hearing because the evidence showed that the freight rates embraced in Standard Distance Freight Tariff No. 3, sought to be enjoined herein, had been in force with only minor changes made from time to time and those not materially affecting the revenue of the plaintiff, for a period of six years prior to the filing of the suit herein, and the complainant did not before filing this suit apply to the Railroad Commission for relief against any of said freight rates as unjust, unreasonable, unremunerative or confiscatory; when the evidence showed that the scheme of freight rates embraced in said tariff were originally put in force in the year 1900, subsequently re-enacted in 1903, and when put in force the Railroad Commission stated and declared to the plaintiff and other carriers affected thereby that if on fair test of said rates, in whole or in part, they proved to be unjust, unreasonable, unremunerative or confiscatory, that relief would be granted by the Commission upon proper showing of such facts.

3d. The Court erred in not dismissing the bill on final hearing because the evidence shows that since 1900 the general scheme of freight rates sought to be enjoined herein has been in force under order of the Railroad Commission and the whole body of freight rates sought to be enjoined, save and except minor changes made from time to time which did not materially affect the revenue of the plaintiff, had been in force since 1903 and the plaintiff and other carriers had acquiesced for said period of time in said scheme of freight rates, which were embraced in Standard Distance Freight Tariff No. 3, complained of in the bill herein.

4th. The Court erred in finding, as stated in the opinion of the Court, that the evidence showed an increased cost of operation for ten years prior to the filing of this suit, and that rates that had been remunerative ten years prior to its filing would no longer be so on account of increased cost of operation, and on such account that there was no acquiescence in the plaintiff in submitting to the schedule of freight rates; when the evidence shows that the increased efficiency of locomotives, cars and tracks and other similar causes had rendered the cost of carrying freight less than at the beginning of the ten years' period referred to by the Court and less than at any prior period.

5th. The Court erred in holding that the reduction by the Legislature of passenger rates from three cents to two cents per mile was an excuse for the complainant to seek relief in the Federal Court prior to applying to the Railroad Commission for relief therein against the freight rates, because under the law the Railroad Commission is authorized, upon proper showing, to increase the freight rates so as to compensate the plaintiff for its loss in passenger rates, if any loss occurred on account of said legislative reduction of the passenger rates.

6th. The Court erred in its decree in adjudging and decreeing that the freight rates in Standard Distance Tariff No. 3 and passenger rates fixed by the General Assembly of 1907 were confiscatory and would not afford complainant fair and reasonable return upon its property, and erred in decreeing that a compliance with said freight and passenger rates would be taking the property of the complainant without due process of law, because the evidence shows that said freight and passenger rates are reasonable and compensatory and that they do afford the complainant a fair and reasonable return upon the value of its property invested in intrastate traffic.

7th. The Court erred in making perpetual the temporary injunctions heretofore granted in this cause and enjoining these defendants from enforcing Standard Distance Freight Tariff No. 3, or any rate or schedule therein, and from enforcing the Passenger Rate Act of 1907, and particularly erred in enjoining any rates in said Standard Freight Distance Tariff No. 3, as many, if not all, of said rates are reasonable, just and compensatory.

8th. The Court erred in not dismissing plaintiff's bill because plaintiff failed to establish by clear and decisive evidence that the intrastate freight and passenger rates sought to be enjoined were confiscatory and in holding upon the evidence offered by the plaintiff that said rates were confiscatory when said evidence was based wholly on opinion testimony without sufficient data upon which an intelligent opinion could be based and said evidence was not of that decisive and clear character which is required to satisfy a court that rates promulgated by a State were confiscatory.

9th. The Court erred in not dismissing the plaintiff's bill because the plaintiff had not overcome the presumption that the rates established by the State were reasonable and compensatory by a preponderance of the testimony.

10th. The Court erred in not dismissing the bill of plaintiff because the preponderance of the testimony established the fact that the freight and passenger rates sought to be enjoined were compensatory and earning the complainant a fair return on its property.

11th. The Court erred in sustaining the plaintiff's bill upon the evidence offered by the plaintiff, when it was shown in the evidence that better testimony than that offered was obtainable by the plaintiff in the form of detailed statements of revenue derived from local and through freight trains, and detailed statements of the expenses of local and through freight trains and the amount of State and interstate traffic carried respectively on the local and through freight trains; that the plaintiff instead of resorting to the best evidence to ascertain the relative cost of State and interstate traffic produced only opinion testimony, which was of insufficient probative force to overcome the presumption of the validity of the rates established by the State when better and more reliable testimony could have been produced by the plaintiff and was in its possession and control.

12th. The Court erred in holding the passenger rates to be confiscatory when the evidence shows that the complainant voluntarily made passenger rates equal and less than those fixed by the State and the plaintiff carried a large volume of passenger traffic on rates voluntarily made by it and other carriers on rates as low as, and in many cases, lower than, those fixed by the State herein complained of.

13th. The Court erred in holding the freight rates to be confiscatory when the evidence shows that the complainant voluntarily made freight rates equal and less than those fixed by the State, and the plaintiff carried a large volume of freight traffic on rates voluntarily made by it and other carriers on rates as low as, and in many instances, lower than, those fixed by the State herein complained of.

14th. The Court erred in finding that the period of six months ended December 31, 1907, fairly represented the earnings and expenses of the plaintiff, and further erred in not holding that the revenue and expense of October, 1907, fairly represents one-sixth of said period.

15th. The Court erred in not charging the plaintiff with a fair annual rental for the use of the Bunch elevator, when the evidence shows that said property had a fair rental value of $20,000 per year and the plaintiff only charged $1.00 to its tenant per year rental therefor.

16th. The Court erred in holding that the division of expense apportioned to Arkansas by the plaintiff for the repairs of tools and machinery was fair.

17th. The Court erred in not deducting from operating expenses the fine of $10,000.00 and costs imposed on the plaintiff for illegally giving free passes to members of the Legislature.

18th. The Court erred in charging the expense of the Memphis terminals and the portion of plaintiff's road in Tennessee to the expenses incurred in Arkansas.

19th. The Court erred in charging all the expense of the Fort Smith terminals to the Arkansas expenses.

20th. The Court erred, in sustaining as proper, salaries paid by the plaintiff to lobbyists, and salaries and fees paid attorneys outside of Arkansas.

21st. The Court erred in charging any part of the expense incurred for the leased line known as the Paragould trackage to intrastate traffic when the evidence shows such expense to be incurred wholly for interstate traffic.

22d. The Court erred in charging the rental of the Van Buren bridge to the Arkansas expense, particularly any part thereof to the intrastate expense.

23d. The Court erred in holding the plaintiff road was efficiently operated.

24th. The Court erred in apportioning the property of the plaintiff in the State between the intrastate and interstate traffic on the revenue basis in order to ascertain the proportion of said property used in intrastate business.

25th. The Court erred in the bases adopted for apportioning expense between intrastate and interstate traffic.

26th. The Court erred in apportioning the miscellaneous expenses on the revenue basis.

27th. The Court erred in declaring in the opinion that the State contended for a division of property and expenses on the "ton mile basis."

28th. The Court erred in finding that the intrastate freight rates were only 50 per cent higher than the interstate rates, when the undisputed evidence showed that the revenue per ton mile under Standard Distance Freight Tariff No. 3 produced 98 per cent more revenue per ton per mile on the Iron Mountain Railway Company than the interstate traffic produced per ton per mile and on the St. Louis Southwestern Railway Company, 141 per cent more per ton per mile.

29th. The Court erred in using the revenue basis for dividing any expenses and particularly without allowing for the excess of at least 50 per cent which the Court found the State revenue was higher than the interstate revenue; the evidence shows that by using the revenue as a factor without making allowances for the difference between the two that the State expenses are burdened unduly in proportion to the excess of the State revenue over the interstate revenue.

30th. The Court erred in not adopting as a whole the plan of division of expense presented by the State, which said basis of division was sustained by preponderance of the testimony as being the best basis for fairly apportioning the expense between intrastate and interstate traffic.

31st. The Court erred in not accepting the results of the statistics obtained from the test months which were put in evidence by the complainant. The evidence shows that October, 1907, was a fairly representative month of the six months' period introduced in evidence by the Iron Mountain Railway Company; that October, 1908, was a fairly representative month between State and interstate traffic on the St. Louis Southwestern and further the evidence shows that the plaintiff was estopped from questioning that said months are fairly representative for the purposes used by the State.

32d. The Court erred in charging to interstate business only 40 per cent of the expense of the local trains when the evidence shows that on the Iron Mountain it should be about 72 per cent and on the St. Louis Southwestern about 68 per cent of the expense of the local trains is chargeable to interstate freight business and said finding of 40 per cent was not supported by the evidence.

33d. The Court erred in dividing maintenance of way expenses on the revenue basis and particularly in not making allowances for the difference between the intrastate and interstate revenue when using the revenue as a factor in dividing said expense.

34th. The Court erred in its division of expense between local and through trains in charging 50 per cent extra to yard locomotives as against the local train and 75 per cent additional for local locomotive mileage when the evidence shows much lower percentage should be used to equalize them.

35th. The Court erred in the division of the expense of the maintenance of equipment of freight cars in charging 25 per cent extra to the local trains for starting and stopping and 13½ per cent for terminals handling when the evidence shows that much lower percentage should be charged for said causes. The Court also erred in this item in estimating that the through trains stop every 35 miles as against five miles to the local trains. The Court also erred in this item in not charging transstate and interstate traffic with the cost of starting and stopping freight cars and in making different allowance for interstate and intrastate traffic, when the evidence

shows that this is an element of expense from the physical starting and stopping of freight cars unconnected with the class of traffic carried in said cars.

36th. The Court erred in not apportioning general expenses according to the plan adopted by the State:—The Court particularly erred in charging all of these expenses on the basis of the supervision in maintenance of equipment and transportation only, whereas, the evidence shows a proper share of such expenses should be charged to the maintenance of way and all of the other expenses.

37th. The Court erred in dividing the item of hire of equipment on the revenue basis and erred in charging an additional 30 per cent to local traffic when the evidence shows there is no relation between the revenue and said item of expense, and there is no evidence to show that 30 per cent or any other percentage should be added to local traffic for this item of expense.

38th. The Court erred in the basis adopted for apportioning station expenses.

39th. The Court erred in finding various omissions from the expenses apportioned to the State in the State's plan of dividing expenses between intrastate and interstate traffic and particularly erred in finding that the dead weight on local trains exceeded the dead weight on through trains 14 per cent, and particularly in finding that for all such alleged omission that 8½ per cent should be charged to the local trains, when the evidence fails to show any basis for such alleged omissions or such percentages as found by the Court.

40th. The Court erred in the basis adopted for apportioning fuel and locomotive expenses and in the basis adopted for "other train expenses."

41st. The Court erred in charging the State passenger traffic with 10 per cent greater than the interstate passenger traffic, when the preponderance of the testimony shows interstate traffic is the most expensive.

42d. The Court erred in holding that the St. Louis Southwestern freight and passenger traffic was more expensive than the Iron Mountain's freight and passenger traffic.

43d. The Court erred in finding the extra expense of intrastate traffic over the interstate freight traffic on the Iron Mountain Road was 210 per cent, and on the St. Louis Southwestern 250 per cent, when the evidence shows that, at the outside, the extra expense of such freight traffic is less than the greater percentage of the revenue per ton per mile of the intrastate over the interstate revenue.

44th. The Court erred in holding that the plaintiff was entitled to earn 6 per cent interest on the value of its property and 1.5 per cent surplus and that a return of less than 7½ per cent on the value of its property devoted to the intrastate traffic was confiscatory.

45th. The Court erred in not holding a return on the plaintiff's investment equal to the rate of interest prevailing on railroad securi-

ties was compensatory, which rates of interest the evidence shows to have been a little less than 4½ per cent on railroad securities in Arkansas.

46th. The Court erred in retaining jurisdiction of this cause for any other purpose than to permit these defendants to show a changed situation which might relieve them of the injunction.

Wherefore for the errors aforesaid, and each and every of them and many more apparent in the face of the record, the defendants, Robert P. Allen, George W. Bellamy and William McKnight, Railroad Commissioners of the State of Arkansas, pray for a reversal of the decree aforesaid and that the Court be directed to enter a decree dismissing plaintiff's bill of complaint and such other relief as equity and good conscience will show the defendants entitled to receive.

## ARGUMENT.

The argument of the case will necessarily be principally of facts. There was no reference to a master in this case. The Circuit Court, heard the cast directly, without the intervention of a master. In the case of Knoxville v. Knoxville Water Co., 212 U. S. 1, on page 8, Mr. Justice Moody, speaking for the court, said:

"There can be at this day no doubt, on the one hand, that the courts on constitutional grounds, may exercise the power of refusing to enforce legislation, nor, on the other hand, that that power ought to be exercised only in the clearest cases. The constitutional invalidity should be manifest, and where that invalidity rests upon disputed questions of fact, the invalidating facts must be proved to the satisfaction of the court. In view of the character of the judicial power invoked in such cases it is not tolerable that its exercise should rest securely upon the findings of a master, even though they be confirmed by the trial court. The power is best safeguarded against abuse by preserving to this court complete freedom in dealing with the facts of each case. Nothing less than this is demanded by the respect due from the judicial to the legislative authority. It must not be understood that the findings of a master, confirmed by the trial court, are without weight, or that they will not as a practical question, sometimes be regarded as conclusive. All that is intended to be said is that in a case of this character this court will not fetter its discretion or judgment by any artificial rules as to the weight of the master's findings, however useful and well settled these rules may be in ordinary litigation."

In view of the duty now devolved upon this Court, we can but serve it by trying to bring some order out of the chaos of a voluminous record.

Instead of presenting what each witness has testified, we will attempt to present the subjects discussed and present the opposing

testimony upon each subject. Many witnesses testified upon many subjects, but the subjects can and should be grouped in order.

Before proceedings with the facts on the lines indicated, there are some questions of law and of law and fact, which should be discussed.

## INTERFERENCE WITH INTERSTATE COMMERCE.

Confronting Arkansas and the other States is the theory that as a matter of fact—not of law—a system of rates, freight and passenger, promulgated by the State, and effective only on intrastate freight and passenger traffic, may be void as an interference with interstate commerce.

This theory was presented unsuccessfully before Judge Brewer in Ames against Union Pacific Railway Company, 64 Fed. 165, afterwards reported in this court as Smyth against Ames, 169 U. S. 466. Judge Brewer said:

> "Neither can I understand how the reduction of local rates, as a matter of law, interferes with interstate rates. It is true the companies may, for their own convenience, to secure business, or for any other reason, rearrange their interstate rates, and make them conform to the local rates prescribed by the statute; but surely there is no legal compulsion. The statute of the State does not work a change in interstate rates, any more than an act of Congress prescribing interstate rates will legally work a change in local rates. Railroad companies can not plead their own convenience, or the effects of competition between themselves and other companies, in restraint of the otherwise undeniable power of the State."

So far as our investigation has led us, the theory mentioned found no judicial approval until Judge Sanborn's decision of the Minnesota Rate Case. The opinion of so eminent a jurist, his premier position in the judiciary of the Eighth Circuit, and the strength with which his conclusion is stated, requires more than passing notice to the subject.

The question is purely academic so far as the present record is concerned, for if the touch-stone used by Judge Sanborn be applied to the facts in this case, the system of rates promulgated by the Arkansas Commission will not be found, as a matter of fact, to be an interference with interstate commerce. The State in this case could safely lay the facts in this record before Judge Sanborn and expect a favorable decision, but the subject is not academic to the future conduct of the State of Arkansas and its agency, the Railroad Commission. The action of each will necessarily be controlled by what this court says on this subject in this case.

Judge Trieber, in his decision in this case, held that facts found by Judge Sanborn in the Minnesota case were not to be found in this case, and his conclusion was not applicable to the facts here. The same decision was reached in Louisville & Nashville Railroad Com-

pany v. Siler (186 Fed. 176). Notwithstanding the favorable decision, as to the facts in this record, it is felt that the underlying proposition in Judge Sanborn's opinion should be carefully scrutinized.

This, as we understand the opinion, is the predicate for the conclusion which he reached:

> "The State may regulate its intrastate commerce so far only as the exercise of its power does not substantially burden or regulate or discriminate against interstate commerce, but no farther." Shepard v. Northern Pacific Ry. Co., 184 Fed., pp. 769-795.

Can the converse of this be true? May Congress regulate interstate commerce so far only as the exercise of its power does not substantially burden or regulate or discriminate against intrastate commerce?

The powers of the General Government and the powers of the State in the regulation of interstate and intrastate commerce are respectively identical, and unless both the proposition as stated by Judge Sanborn and its converse are true, neither can be true; and it is submitted that these authorities demonstrate it.

In Gibbons v. Ogden, 9 Wheaton, page 1, the respective powers of the State and National governments over commerce—using the term in its most comprehensive sense—were defined. Chief Justice Marshall, speaking for the court, at page 197, said:

> "If, as has always been understood, the sovereignty of Congress, though limited to specific objects, is plenary as to those objects, the power over commerce with foreign Nations, and among the several States, is vested in Congress as absolutely as it would be in a single government, having in its constitution the same restrictions on the exercise of the power as are found in the Constitution of the United States."

Referring to the power of the State, he said, at page 195:

> "The completely internal commerce of the State, then, may be considered as reserved for the State itself."

Again, at page 203, he said:

> "They [referring to 'inspection laws'] form a portion of that immense mass of legislation which embraces everything within the territory of a State not surrendered to the General Government; all of which can be most advantageously exercised by the States themselves. Inspection laws, quarantine laws for regulating the internal commerce of a State, and those which respect turnpike roads, ferries, etc., are component parts of this mass.
>
> "And no direct general power over these objects is granted to Congress; and, consequently, they remain subject to State legislation."

The great Chief Justice evidently foresaw that such a question as this might arise.

He clearly forecasted such a situation as the one now presented:

> "So, if a State, in passing laws on subjects acknowledged to be within its control, and with a view to those subjects, shall adopt a measure of the same character with one which Congress may adopt, it does not derive its authority from the particular power which has been granted, but from some other, which remains with the State, and may be exercised by the same means. All experience shows that the same measures, or measures scarcely distinguishable from each other, may flow from distinct powers; but this does not prove that the powers themselves are identical. Although the means used in their execution may sometimes approach each other so nearly as to be confounded, there are other situations in which they are sufficiently distinct to establish their individuality.
>
> "In our complex system, presenting the rare and difficult scheme of one general government, whose action extends over the whole, but which possesses only certain enumerated powers, and of numerous State Governments, which retain and exercise all powers not delegated to the Union, contests respecting power must arise. Were it even otherwise, the measures taken by the respective governments to execute their acknowledged powers, would often be of the same description, and might, sometimes, interfere. This, however, does not prove that the one is exercising, or has a right to exercise, the powers of the other" (p. 204).

In Cooley v. Board of Port Wardens, 12 Howard, page 300, the controversy over the concurrent powers of the State and the National governments, in the silence of Congress, which had been presented by Mr. Webster and Mr. Oakly in Gibbons v. Ogden and then left undecided, was there determined. Mr. Justice Curtis, page 320, said:

> "It is the opinion of a majority of the court that the mere grant to Congress of the power to regulate commerce, did not deprive the States of power to regulate pilots, and that although Congress has legislated on this subject, its legislation manifests an intention, with a single exception, not to regulate this subject, but to leave its regulation to the several States."

As interstate and intrastate commerce are each accurately determinable and each exclusively in the power of one or the other government, this concurrent power, in the silence of Congress, is not especially important in this discussion, but still it is pertinent because Congress has expressly left to the States the regulation of intrastate commerce. It is contained in a proviso of the Interstate Commerce Act of 1887, (Chap. 104, page 529):

> "Provided, however, that the provisions of this Act shall not apply to transportation of passengers or property or to the

receiving, delivering, storage, or handling of property wholly within one State and not shipped to or from a foreign country from or to any State or Territory as aforesaid."

Thus it is seen that even if the regulation of intrastate freight or passenger traffic are within the power of Congress the Congress has elected to be silent as to its exercise.

In Peik v. Chicago, etc., Ry. Co., 94 U. S. 164, 177, the Court said:

> "As to the effect of the statute as a regulation of interstate commerce. The law is confined to State commerce or such interstate commerce as directly affects the people of Wisconsin. Until Congress acts in reference to the relations of this company to interstate commerce, it is certainly within the power of Wisconsin to regulate its fares, etc., so far as they are of domestic concern. With the people of Wisconsin this company has domestic relations. Incidentally these may reach beyond the State. But certainly, until Congress undertakes to legislate for those who are without the State, Wisconsin may provide for those within, even though it may indirectly affect those without."

In Sands v. Manistee River Improvement Co., 123 U. S. 288, the Court said:

> "The internal commerce of a State—that is, the commerce which is wholly confined within its limits—is as much under its control as foreign or interstate commerce is under the control of the general government."

In L., N. O. & T. Ry. v. Miss., 133 U. S. 588, this court said:

> "It has often been held in this court, and there can be no doubt about it, that there is a commerce wholly within the State itself not subject to the constitutional provision, and the distinction between commerce among the States and the other class of commerce, between the citizens of the single State, and conducted within its limits exclusively, is one which has been fully recognized by this court, although it may not be always easy, where the lines approach each other, to distinguish one from the other."

In Covington & C. Bridge Co. v. Ky., 154 U. S. 204, the Court said:

> "The adjudications of this court with respect to the power of the States over the general subject of commerce are divisible into three classes. First, those in which the power of the State is exclusive; second, those in which the States may act in the absence of legislation by Congress; third, those in which the action of Congress is exclusive and the States can not interfere at all.
>
> "The first class, including all those wherein the States have plenary power, and Congress has no right to interfere, concern

the strictly internal commerce of the States, and while the regulations of the State may affect interstate commerce indirectly, their bearing upon it is so remote that it can not be termed in any just sense an interference. Under this power, the States may authorize the construction of highways, turnpikes, railways, and canals between points in the same State, and regulate the tolls for the use of the same."

Again the Court said, *supra:*

"Congress has no power to interfere with police regulations relating exclusively to the internal trade of the States."

Then the court construes the second class, those which may be termed concurrent jurisdiction, where the States may act in the absence of Congressional action; it is believed that the State power of regulating intrastate railroad rates is not a concurrent power, but if it be considered as such, then the expressed withdrawal of such exercise by Congress would leave the State supreme in controlling such regulation.

Then the Court passes to a consideration of the third power; that in which the action of Congress is exclusive and the State can not interfere at all. It can not be stated more strongly nor more broadly than in the above-given quotations from Chief Justice Marshall.

In the Employers' Liability Cases, 207 U. S. 463, the Court said:

"The act, then, being addressed to all common carriers engaged in interstate commerce, and imposing a liability upon them in favor of any of their employees, without qualification or restriction as to the business in which the carriers or their employees may be engaged at the time of the injury, of necessity includes subjects wholly outside the power of Congress to regulate commerce."

Again, the Court said:

"As the act thus includes many subjects wholly beyond the powers to regulate commerce, and depends for its sanction upon that authority, it results that the act is repugnant to the Constitution, and can not be enforced unless there be merit to the propositions advanced to show that the statute may be saved."

The Court disposes of another contention, as follows:

"It remains only to consider the contention that we have previously quoted, that the act is constitutional although it embraces subjects not within the power of Congress to regulate commerce, because one who engages in interstate commerce thereby submits all his business concerns to the regulating power of Congress. To state the proposition is to refute it. It assumes that because one engages in interstate commerce he thereby endows Congress with power not delegated to it by the Constitution; in other words, with the right to legislate concerning matters of purely State concern. It rests upon a conception that the Constitution destroyed that freedom of com-

merce which it was its purpose to preserve, since it treats the right to engage in interstate commerce as a privilege which can not be availed of except upon such conditions as Congress may prescribe, even although the conditions would be otherwise beyond the power of Congress.

"It is apparent that if the contentions were well founded it would extend the power of Congress to every conceivable subject, however inherently local, would obliterate all limitations of power imposed by the Constitution and would destroy the authority of the States as to all conceivable matters which, from the beginning, have been, and must continue to be under their control so long as the Constitution endures."

In Mo. Pac. Railway Co. v. Larabee Flour Mills Co., 211 U. S. 612, the Court said:

"But the main contention on the part of the Missouri Pacific runs along an entirely different line. It is that the Missouri Pacific and the Santa Fe are common carriers engaged in interstate commerce, and as such are subject to the control of Congress and therefore in these respects not amenable to the power of the State. It appears from the findings that about three-fifths of the flour of the milling company is shipped out of the State, while the other two-fifths is shipped to points within the State. In addition to hauling of empty cars from the Santa Fe tracks to the mill was, if commerce at all, commerce within the State. The road was therefore engaged in both interstate commerce and that within the State. In the former, they are subject to the regulation of Congress; in the latter, to that of the State; and, to enforce the proper relation between Congress and the State, the full control of each over the commerce subject to its dominion must be preserved. Fairbanks v. U. S., 181 U. S. 283. How the separateness of control is to be accomplished, it is unnecessary to determine."

It is not difficult to determine the separateness in these cases. In fact, it has been accurately determined. In the warp and woof of our complicated industrial development, our commerce, interstate and intrastate, move side by side. They are drawn by the same locomotive, handled by the same employees, carried in the same train, and ofttimes in the same car. The passenger from Little Rock to Texarkana sits side by side with the passenger from St. Louis to Dallas, and the tourist from the East to California travels in the same seat with the farmer from his station to his county town. Yet there is no difficulty in separating the commerce. Each package and each car of freight has its own bill of lading. Each passenger has his ticket. The revenues of the company are made up from shipments of freight and passenger fares. The records of the company show definitely, accurately, and precisely, whether each pound

of freight is intrastate or interstate, and the passenger fares are separated definitely, even to the farthing.

The able accountants, representing the State and the raliroads in this case, have gone through the records of the railroad offices containing the record of revenue of intrastate and interstate for a given period. These revenues are the basis of this suit, and their separation into the two classes, intrastate and interstate, have been made to a nicety, and there is no dispute over them. Therefore, the separateness of the traffic is not a feature of this case.

The character of the traffic being fixed, then, under the principles above-quoted, the power regulating each character becomes a known quantity. As soon as a given shipment of freight is ascertained and it is found to be intrastate, it is moved under the intrastate tariff, and this is framed by the Railroad Commission acting under the Constitution and the laws of the State of Arkansas. As soon as an interstate shipment is ascertained, it is moved under a tariff promulgated by the railroad shipping it, and filed with the Interstate Commerce Commission, and subject to the regulations of that Commission.

As soon as a person becomes a passenger he purchases a ticket, and it fixes absolutely whether he is an intrastate passenger or an interstate passenger. Or, if he fail to buy his ticket and pays his fare to the conductor, his fare fixes his character as certainly as the ticket would fix it. The report of the ticket and the cash payment definitely determine the tariff under which each passenger has been carried.

There is no confusion of the powers in such cases as these. There is no converging of the lines. Each line runs parallel throughout its course, with the other. The full force of the contract of shipment as determinative of whether the shipment was intrastate or interstate was considered in Gulf, C. & S. Ry. Co. v. Texas, 204 U. S. 403. It was further held in that case that there was no difference between a passenger contract and a freight contract as determinative of whether the commerce was intrastate or interstate. It seems clear that, when the commerce is accurately differentiated as it is here, and the character of the traffic determined absolutely and its class definitely ascertained, the power of regulation over that class being accurately defined in the authorities quoted heretofore, there can be no room for a question as to the power of regulation applicable to each.

The power of the State to regulate internal, or as it is more commonly called, intrastate, commerce, is as exclusively in the State as if there were no other government existing, so far as this question is concerned—of course, over all State and National regulation, the guarantees of the Federal Constitution against the taking of property without due process, impairment of the obligations of contract, etc., exist supremely; but assuming that no other provision of the Constitution is violated, the commerce clause is no more violated by State regulation of internal or intrastate commerce, than if there

were no Federal Government, and the State alone were the sovereign power.

On the other hand, owing to the Commerce Clause, the Congress may regulate interstate commerce wherever it goes as completely and as exclusively as if there were no State governments whatsoever. If, in the exercise of these two distinct powers over the two distinct classes of commerce, there comes an impingement, it is one of those results which naturally follow from our dual system of Government; but the power of each government can not be abridged because in the due exercise of it, an indirect effect may be had upon the regulation of the other government in its own sphere. These are the indirect and incidental interferences so often referred to, that can not be avoided, nor remedied, and must be endured by those who may suffer from them, but they do not constitute a direct interference with the power of the other, which the Constitution equally guards.

Therefore, we submit that the power of the State over its internal commerce can no more be hampered by its incidental and indirect effect on interstate commerce than the power of Congress over interstate commerce can be hampered by the State regulation of intrastate commerce.

## INTERFERENCE WITH INTERSTATE RATES.

So far as we can recall the testimony, there can be a claim of the intrastate rates interfering with the interstate rates in only four instances, out of the many thousand rates in controversy, and each of those will be examined in order to ascertain whether it is an interference within the meaning of Judge Sanborn's decision, if it be accepted as sound. Mr. Charles L. Stone, Passenger Traffic Manager of the Missouri Pacific and the Iron Mountain railways, testified that when the local rate in Arkansas was reduced from three cents to two cents a mile, that the passenger traffic department immediately began to work on interstate tariffs, and put them into effect as soon as possible, using the two-cent rate as the basis in the State of Arkansas. After the injunction was granted by Judge VanDeventer, the rates were put back to three cents and the interstate was readjusted upon that basis (R. p. 266). Mr. Stone claims that when the rate per mile in Arkansas was reduced by the Legislature from three cents to two cents, that it had the effect of making various reductions between border points into the State of Arkansas, numerous intsances of which he gave (R. p. 270), and that these reductions had the effect of reducing interstate rates between the territory which he outlined upon the map attached to the testimony as exhibit 24. He was asked when the rates were put back to three cents a mile, if he increased the interstate rates correspondingly, and he said that his road did so where it was upon its line, but in the territory indicated there were several other lines interested, and the other roads

had to join in a corresponding advance (R. p. 271). He said California rates were not affected very much by the change in Arkansas; that that was a rate fixed by competition, and based upon the rates fixed by another road (R. p. 271). He says, with some exceptions which he mentioned, there was no change in the transcontinental rates by reason of the reduction to the two-cent fare in Arkansas (R. p. 272), and of these, the homeseekers and excursion rates are about one and one-half cents per mile (R. p. 272), and the other transcontinental rates are about two cents per mile; and there is also a colonist rate, the figures of which he does not give, but which is presumably lower than any of the others. He was asked if all the interstate passenger traffic crossing Arkansas was not at the rate of about one and one-half cents a mile, and said he thought not, but said he could not give the exact figures, and stated that in his opinion it would average about two cents per mile (R. pp. 273, 274). On redirect, he took back the broad statement that the average interstate rate was about two cents per mile, and stated that he thought that was only true of special rates, homeseekers' rates, excursion rates, etc. (R. p. 275). Then the statistics of the case were shown to him as prepared by Mr. Johnson, the statistician of his road, and it was shown that the interstate passenger rate was 1.865 (R. p. 276). We have gone somewhat tediously into Mr. Stone's testimony because we believe it reduces the proposition that State passenger rates interfere (in its legal sense), with interstate rates to an absurdity. The average interstate rate through Arkansas is less than two cents. Many of these rates were one and one-half cents, or less, yet it is claimed that because Arkansas reduces its rate from three cents to two cents that interstate rates were interfered with by that fact, when their level was less than the reduced State rate. Mr. Stone gives numerous examples of a reduction of rates from a point close to the border to a point within the State made by the railroads immediately after the reduction by the Legislature of the passenger rates to two cents. This was evidently done because a passenger might get off at the station nearest the line and buy another ticket; but there was no compulsion, other than the convenience of the railroad in making these rates; there was not even competition to compel them, and where competition existed, the rates are much under the level of those established by the State; yet, because the State established a rate higher than the average interstate rate, it is seriously argued by this witness that this is an interference with interstate commerce.

2. Much testimony has been given touching the sugar rate. It will be somewhat tedious to refer to it by pages, and as there is really no controversy over the facts, it can be stated in such a way that the court will grasp it without turning to the record. There was a rate on sugar from New Orleans to Helena, Arkansas, of ten cents per cwt. The ten-cent rate also extended to Memphis, Tennessee. There was a rate from New Orleans to Texarkana, Arkansas,

of 26 cents, and to Fort Smith of 26 or 27 cents. The merchants in Fort Smith and Texarkana complained of this rate to the Railroad Commission. Merchants at Helena also appealed to the Commission for a reduction of the sugar rate in Arkansas. Three hundred miles was the longest mileage upon which the Arkansas Commission fixed rates, as that distance was supposed to cover the longest haul possible within the State. The Railroad Commission, after investigating the matter, concluded that if the railroads could haul sugar from New Orleans to Memphis for 10 cents, a distance of about 600 miles, that they could haul sugar for 300 miles in Arkansas for 13 cents. One of the Railroad Commissioners testified that one of the reasons in fixing this rate was to enable the people of Texarkana and Fort Smith to get a reasonable sugar rate, and that the rates that were in force to both places were, in the opinion of the Commission, unreasonable. The Commission could not regulate the rate from New Orleans and could only regulate the rate within the State, and this the Commission did, and only this, reduced the sugar rate from 15 cents, which it had been theretofore to a maximum of 13 cents for a 300-mile haul in Arkansas. The result was that sugar could be shipped from New Orleans to Helena for 10 cents, and reshipped from there to Texarkana or Fort Smith for 13 cents, making a rate of 23 cents to those points, or several cents per cwt. less than the rate made by the railroads. The railroads could then have done one of several things: They could have raised their rates to Helena, or they could have let the rates stay as they were to Texarkana and Fort Smith, and allowed sugar to be shipped via Helena to Fort Smith and Texarkana for 23 cents, or, they could have reduced the rate from New Orleans to Texarkana and Fort Smith. That was a situation wholly within their hands. The only interference, if interference it could be called, with any interstate rate, was in enabling shippers at Helena to avail themselves of the interstate rate to that point, and a State rate to Fort Smith and Texarkana. If the railroads objected to this course, all that was necessary for them to do was to raise their rate to Helena, or lower it to the other points. Either their rate to Helena was too low, or the Fort Smith and Texarkana rates were too high. The Arkansas rate could not be questioned as unreasonable, for it was higher than the rate for the haul from New Orleans to Helena and Memphis, a haul of about double its length. It may have worked an interference with the discriminative rate in favor of Helena and Memphis against Fort Smith and Texarkana, but it did not interfere with any legal or moral right of the railroads.

3. It was in testimony from Judge Wallace, one of the Railroad Commissioners, that in 1900, when the Commission Tariff was first put into effect, that it caused a material reduction in the rates in Washington and Benton counties, Arkansas. There are only small towns in those counties. The Government census shows that Rogers

and Fayetteville are the principal ones, of about 2,500 and 5,000 respectively. These towns had been buying their goods from Springfield, Missouri, although Fort Smith, Arkansas, a jobbing center of about equal importance, was nearer to them, owing to the railroad rates being lower from Springfield to those towns. When a graduated distance tariff was put into effect it enabled Fort Smith to reach that territory, though its shorter distance giving it better rates. In that way the interstate commerce to Springfield was disturbed; in other words, the railroads had been favoring Springfield by giving it a lower rate than the other jobbing center nearer to this territory, and equitable rates were put into effect, and that favoritism was disturbed thereby, and interstate commerce was interfered with.

4. Mr. J. D. Watson, Assistant General Freight Agent of St. L. S. W. R. Co., put into evidence exhibit 51, which shows a decrease in rates in certain territory south of Pine Bluff, between April, 1900, and September, 1900, owing to Standard Distance Tariff No. 1, which became effective April 10, 1900.

These are rates from Memphis, Tennessee, to about 33 stations on the lines of the road south of Pine Bluff.

Owing to the rates from Pine Bluff and Little Rock, both jobbing towns, to these points being fixed by the Standard Distance Tariff, and the differentials between Memphis, St. Louis and Kansas City and Little Rock being fixed, as shown in exhibit 50, at definite sums, the Memphis rate to these 33 points had to be lowered in order to meet competition from Little Rock and Pine Bluff. This was also a situation wholly in the control of the railroads. They made their differentials from one city over another to preserve a trade balance—or, more properly speaking, a railroad-carrying balance between them. These differentials may or may not be good policy; much can be said for and against them, but it is sufficient here to say that they were absolutely voluntary on the part of the railroads, and to promote their own traffic. If they did not wish to preserve these balances, then they could or not, as they pleased, put in rates to these points complained of. If these rates put in were compensatory, they have lost nothing; if they are not compensatory, then it was bad management to put in rates to carry traffic at a loss. The fact that they put them in September 6, 1900, and continue them to this date is fairly good evidence that they are compensatory. Mr. Watson explained fully that it was all "up to the railroad" to meet or not meet a competitive rate. If the railroad thought it good business to make the lower rate, it did so; or, if it did not, it could refuse to meet it and carry the freight at a compensatory rate, or not carry it at all. This is one of the rights of the railroads, which they freely exercise, and no rate made by the Arkansas Commission, has or can affect that right.

It doubtless will occur that any system of rates promulgated by a railroad, an association of railroads, or a State Commission, will

have an effect produced on other systems of rates promulgated by any other rate-making body, whenever the rates touch or connect. Precedent alone has an effect, and competition and commercial conditions a controlling effect, but the interferences or influence or control of one set of rates over another set is produced by the precedent, the competition or the trade conditions.

Had these rates complained of been promulgated voluntarily by another railroad, the effect would have been exactly as claimed the Commission-made rates affected the Memphis rate. The only difference is that the Commission-made rates were on a distance scale and there was no playing of favorites.

## DIVIDING THE PROPERTY ON THE REVENUE BASIS.

Meeting the plaintiffs at the threshold of the case is the necessity of dividing the property in the State of Arkansas between the intrastate and the interstate traffic. This is done in the exhibits filed by the railroads upon a straight revenue basis. To illustrate, if 20 per cent of all the revenue in Arkansas was from intrastate business, 20 per cent of the property in Arkansas would be assigned to intrastate business, and the remainder assigned to interstate and miscellaneous. Assuming the miscellaneous to be 10 per cent, that would leave 70 per cent assigned to interstate traffic. In exhibit No. 5, filed by the Iron Mountain railroad, it is shown that its intrastate freight revenue was 13.377 mills per ton per mile, and the interstate freight revenue was 6.750 per mills per ton mile, figured during the six months ending December 30, 1907, the period of inquiry in these cases; and the St. Louis Southwestern is 20.945 per ton per mile for intrastate, and 8.665 for the interstate. In round numbers, the Iron Mountain intrastate freight revenue is 100 per cent. more than the interstate, and the St. Louis Southwestern 140 per cent. more. For facility in analyzing the proposition the Iron Mountain figures alone will be used. Exhibit No. 5 also shows that the total intrastate freight revenue was 13.41 per cent, and the interstate freight revenue was 86.59 per cent of all freight revenue, and that the intrastate ton miles was 7.25 per cent, and the interstate ton miles were 92.75 per cent of the total tons mile. To put the proposition in other words, it was this: The ton miles represented the use made by the intrastate traffic of the railroad; this was 7 per cent of the whole; while the earnings from that 7 per cent represented 13 per cent of the total earnings from freight traffic. The revenue from the intrastate traffic being nearly double that of the interstate traffic, on the Iron Mountain, and much over double on the St. Louis Southwestern Railway, almost doubles in the one case and much over doubles in the other the amount of property assigned to the State for doing an equal amount of business. The amount of extra cost of intrastate traffic comes up as a matter of expense. For

illustration, if the extra cost of intrastate freight traffic was one hundred per cent, and the revenue is 100 per cent more, then the extra cost is taken care of by the amount of revenue over the interstate equaling to the extra cost. When the revenue from the intrastate traffic is used to divide the property, it is assigning double the amount to the State in the Iron Mountain case, and thereby the State is twice mulcted, once in dividing the property, and again in dividing the expense. Conceding that it is right to so divide the expense, and that the extra amount assigned to the State on account of the higher revenue only compensates for the extra cost of the intrastate traffic, yet, if that extra cost does not exceed 100 per cent, then when the same factor is used to divide the property, 200 per cent has been charged to the State. This is manifestly unfair unless the extra expense is 200 per cent, and, if so, then the extra cost should not be added in pursuance of testimony of the operating officials who give it as their opinion that there is an extra cost of 100 to 800 per cent. These questions were not before Judge VanDeventer. The revenue per ton per mile, either State or interstate, was not put before him. He merely found the extra expense to be 100 per cent for the intrastate freight, and there was no evidence before him that that was cared for by the excess in the revenue when used as a factor to divide expenses. Judge Trieber said, at page 325, 187 Fed.:

> "Whether the ton mile, car mile, train mile, or revenue basis is adopted to arrive at correct results, it is necessary to ascertain the relation of the tariff rates charged for the interstate business and those charged for the intrastate business; for, if the latter are sufficiently high to make up the difference in cost found to exist between the two, then that difference has been fully provided for, and to make any additional allowance therefor would be doubling the cost, and to that extent doing an injustice to the State."

Judge Trieber finds, for the reasons stated in his opinion, that intrastate freight revenue per ton per mile is as above-stated, yet, as a matter of fact, that the intrastate tariffs were only 50 per cent higher than the tariff rates for the interstate traffic per ton per mile (*Id.* p. 330). Why the learned judge rejected the actual statistics and adopted the rates as a test, is something we are unable to understand, and it will be discussed hereafter. Be it as it may, whether we accept the statistics of the revenue on the Iron Mountain, that it is 100 per cent higher for the intrastate than the interstate business and 140 per cent on the St. Louis Southwestern, or accept Judge Trieber's theory that the rates were only 50 per cent higher, still, a grave injustice is done to the State in using the revenue with which to divide the property, whether the higher percentage be 50 or 100, or 140, the injustice is plain, its degree only uncertain. Suppose a railroad in Arkansas was valued at $1,000,000.00, and it was wholly a freight-

carrying road: Its annual expenses were $500,000.00. Twenty per cent of its revenue was from intrastate traffic, and 80 per cent from interstate traffic. Ten per cent of the ton miles was intrastate and 90 per cent interstate. If the ton miles are used as a basis to divide the property and expenses, 10 per cent or $100,000.00 would be set aside as the proportion of the property used by the intrastate traffic. Using the same factor to divide the expense, $50,000.00 would be set aside as representing the expenses of intrastate traffic. If the testimony convinces the court that it cost twice as much to earn a dollar in intrastate traffic as it does in interstate traffic, then another $50,000.00 should be added to the expense thus ascertained, making the total intrastate expense $100,000.00, and interstate expense $400,000.00. This 10 per cent of the ton miles, however, owing to the rate per ton per mile being twice as high for the intrastate as the interstate, has earned 20 per cent of the revenue. If the revenue is used as the factor, then $200,000.00 is set aside as the proportion of the property devoted to intrastate traffic, instead of $100,000.00 if the ton mile is used; and $100,000.00 is set apart as the expenses of the intrastate traffic. If the intrastate traffic cost twice as much as the interstate traffic, then the correct amount has been set apart as the intrastate expenses. The higher rate has taken care of the added cost, but the other side of the equation has not been cared for. Two hundred thousand dollars of property has been set aside to the intrastate traffic by reason of the double amount of revenue earned in that traffic over the interstate. Whatever may be the solution or the proper adjustment of the expenses between intrastate and interstate traffic, the solution of the division of property has not been reached in applying the revenue as the basis therefor. The actual figures in these cases are practically the same as those given in the illustration above. The intrastate ton one mile was 7 + per cent, the interstate being 93—, while that of the interstate revenue derived from that 7 per cent was 13 per cent. Putting it in other words, the State freight business in volume is 7 per cent of the total, and in revenue 13 per cent of the total. Thirteen per cent of the property is assigned to intrastate business, while it only represents 7 per cent of its use. Mr. McPherson used the apt expression that the revenue does not represent the use, but the result of use. The result of use here is that owing to the higher State rate, 7 per cent of the volume of the traffic has earned 13 per cent of the revenue, and 13 per cent of the property is set aside as representing the intrastate property while, as a matter of fact, only 7 per cent of it was used. What is the proper factor to divide the property by is a question of great difficulty. It is not for the State in this case to work out that problem; it has tried to work out a good many problems for the railroad herein, but has not attempted to work out this one, but has attempted merely to show the absolute inaccuracy and injustice of adopting the plan presented by the railroads. When we demonstrate that to be

wrong their case necessarily fails. The learned experts who testified on behalf of the railroad in their case in chief as to the revenue being the proper basis, Messrs. McPherson, Nay and Doddridge, gave but scant attention to the problem of dividing the property. Their attention seemed to be wholly directed to the problem of dividing the expenses and except in a few passing remarks including property with expenses, there was absolutely no argument made by them in favor of the revenue theory of dividing the property. They offer many criticisms of the ton mile theory of dividing the expenses. Much of it, if not all of it, the State may heartily agree to, and it tried to meet all the valid objections against the ton-mile theory, in its plan of division and only used it to divide train expenses, after the expenses of the two classes of trains had been equalized; and that was the use to which some of these learned witnesses for the railroads have said was a proper use of the ton mile.

Mr. McPherson, at pages 307-320, discusses many objections to the ton-mile basis, all of which go to its use for dividing expenses. None of his criticism of it is applicable if it be used as a basis with which to divide the property. It would seem more logical to use it as a basis for dividing the property than to divide the expenses, for the expenses do not result from the ton mile. As Mr. McPherson says it represents the cost between stations, and does not represent the cost of terminals, and many other costs which he enumerates. These must be cared for in other ways, upon some such plan as that adopted by the State in this case, which properly allocates each item of the expenses; but the ton mile represents ultimately the use of the railroad by its freight traffic. The passenger miles represent the passenger use of a railroad. If the ton mile was used to represent the use of the property, it would be a fairly accurate factor, probably more so than any other factor that could be used for this purpose. It would represent exactly the use of the property by the freight traffic. It might be that some station property would not be represented in this, but the station property, so far as freight traffic is concerned, is purely auxiliary to the ton miles of freight carried. We submit, for the consideration of the court, that the ton mile might be a fair basis upon which to divide the property. Certainly it is true that the revenue basis where the revenue for the intrastate is so much greater than that for the interstate as it is in this case, and where the revenue represents double the amount of the use of the property as represented in ton miles, it can not be a fair factor with which to divide the property between the State and interstate traffic.

The railroads are practically without evidence to support the revenue basis as the proper one for dividing property, and the State has, with many witnesses, pointed out and, we believe, proved its unreliability. The expense basis has been suggested by some of the State's witnesses, but it, too, has been criticised, while others have pointed out the ton mile as the logical basis. It is not the duty of

the State to find a basis; the burden is on the railroads to produce one which satisfies the court clearly that it fairly divides the property between the State and interstate traffic.

Surely it can not be said that a basis which, owing to the fact that the State revenue is 98 per cent higher per ton per mile than the interstate, is a fair basis when it automatically sets apart to State traffic 98 per cent more property than it would set apart if intrastate and interstate revenue were the same; and when it is shown that the intrastate traffic only amounts to 7 per cent of the whole traffic, then it becomes indubitably certain that a formula that assigns for the use of 7 per cent of the freight traffic, 13 per cent of the property which is 98 per cent more than would be assigned if the revenue of the two classes of traffic were even, is unquestionably wrong.

## SUIT PREMATURELY BROUGHT.

In the motion to dissolve the injunction, the defendants set forth in paragraph 4 reasons why these suits should not be maintained until after an application to the Railroad Commission had been fruitless. This paragraph was stricken out of the motion without an opinion from the Court, but at the hearing on the merits the question was again presented to the Court and decided against the State, for the reasons given by Judge Trieber in his opinion, at pages 306, 307, in 187 Fed. Reporter. His ruling thereon is made the basis for the first three assignments of error. Judge Trieber quotes an excerpt from the testimony of Mr. Hampton, one of the Railroad Commissioners, to the effect that all the reductions made by the Commission were after public hearings, to which the railroads were invited, and which they attended and most always against their protest and objection. But this was said concerning the few reductions made by the Commission from the promulgation of the Standard Distance Tariff, April 10, 1900, till it was enjoined by Judge Vandeventer, September 3, 1908. Mr. Hampton and Mr. Swaim fully explained each of these reductions and their trifling effect upon the revenue as a whole. There were joint rates made in 1900, but these were declared invalid on account of lack of power in the Commission, which was given to it by the Legislature of 1903, and the joint rates re-enacted.

Exhibit "B" gives all the changes subsequent thereto. A glance over it will suffice to show how trivial were the changes, considering such a vast body of rates existing from 1900 to 1908.

When it is remembered that the intrastate freight revenue produced from this tariff for six months was $640,248.17 (exhibit "5"), it will readily be seen that all these changes could not have affected it appreciably. The evidence is undisputed that from a revenue standpoint these changes were wholly immaterial. Necessarily such minor changes should be made in any comprehensive system of rates. Exhibit "D" shows the granting of many orders on the request of the



PAGES

railroads and the denial of many complaints of individuals seeking relief against the railroads.

The history of the promulgation of the first tariff is derived from the testimony of Judge Wallace, a distinguished jurist of the State, a member of the first Commission and once its chairman. (R. pp. 875-896.)

Briefly stated, the system was put in after long conferences with the railroad traffic officials and after many increases and changes from a tentative tariff had been made at their instance. The railroads were told that the system was an experiment, the Commission believed a good one, but if it worked harshly and proved noncompensatory the railroads were assured the Commission would correct it and make such changes as were needed to correct any errors or injustice in it. Judge Wallace served on the Commission several years after this, and tells of the great reform the Commission rates worked in abolishing special rates and favoritism of localities and persons; and he attributed much of the succeeding prosperity of the railroads to them; and so far as he knew the railroads were fairly well satisfied with them; they came back with no request for relief. Mr. Hampton, who served from the time Judge Wallace retired until the injunctions were granted, testified that the railroads asked no relief of the Commission, and he, too, was led to believe that the general scheme of rates was satisfactory and compensatory. Judge Wallace, Mr. Hampton, Mr. Allen and Mr. Crockett, the succeeding members, all testified that the Commission would have granted relief to the railroads at any time they applied therefor and satisfied them that the rates were too low or unreasonable or unjust. Instances were given, and the record as shown in exhibit "D" prove them, where, upon proper showing, relief was granted railroads, such as increasing the oil rate, applying the tariff to roads desiring it and denying petitions of complaining citizens, etc. And the Commission refused to reduce the passenger fare from 3 cents to 2½ cents per mile.

All of this testimony is undisputed, directly or indirectly.

The procedure before the Commission is judicial. Any person or corporation may object to any tariff approved by the Commission and a hearing after notice shall be had; they shall hear the parties in person or by attorney or both; may take testimony, administer oaths and regulate arguments and conduct investigations in such a manner as to arrive at the truth. It is further made the duty of the Commission, in fixing or changing rates, to take into consideration the character or nature of the service to be performed, the entire earnings of the roads, the expense of operating the same and the revenue and value thereof. All of this is set out in paragraph 4 (R. pp. 58, 59), heretofore quoted.

We submit that the principle of Prentiss v. Atlantic Coast Line Co., 211 U. S. 210, should apply here.



BLURRED PAG

Rates are legislative work, not judicial, whether made by Commission or Court; and whether they are constitutional or void is a mere matter of fact—not of law. The railroads can not be denied the right to try these facts before a court of their choosing which has jurisdiction. But before resort should be had to the courts, the complainants must make it "absolutely certain that the officials of the State would try to establish and enforce an unconstitutional rule." The comity which the judiciary extends to the legislative department calls for this, and *a fortiori*, the comity which a Federal Court extends to State legislation insists upon this action.

This is not a case of "keeping a previous watch upon the bodies that make laws, and using every effort and all the machinery available to prevent unconstitutional laws from being passed." The Legislature has wisely relieved the carriers of that unsatisfactory remedy and provided a forum and judicial procedure to work out this delicate legislative function of rate-making.

The Virginia Constitution went one step further than ours in giving an appeal from the Commission to the Supreme Court of Appeals, but the Court of Appeals, when hearing such appeal, would be performing a legislative function, and it is the fact that the State has provided a forum for final legislative action and provided process and procedure for adjusting rates equitably that the Federal Courts fail to interfere until the State tribunals evince a determination—after such hearing—to inflict confiscatory rates upon its carriers; and then resort to the Federal Court is right and proper.

Save alone an appeal to the appellate court the laws of Arkansas safeguard the railroads as fully against unconstitutional enactment as the laws of Virginia. In the Prentiss case the railroads went before the Commission with their evidence, but failed to exercise their final right in the State tribunals by appealing to the Court of Appeals. They were denied a hearing in the Federal Court until they exercised their right or attempted to do so. In this case they presented no petition to the Commission, they offered no evidence there. They failed to take the primary step for relief in the State tribunal and should they not be denied hearing in the Federal tribunal sitting in equity until they exhaust the remedy provided by the laws of Arkansas?

What was said in the Prentiss case is equally true here:

"It seems to us only a just recognition of the solicitude with which their rights were safeguarded that they should make sure that the State, in its final legislative action, would not respect what they think their rights to be, before resorting to the courts of the United States"

The facts here present much stronger equities than the Virginia case. Those were new rates, and resort to the final remedy in the State tribunal was required. These were old rates, long acquiesced in, and put in after the roads had been consulted and were largely

instrumental in framing them and under solemn promise that any injustice in them would be corrected. The good faith of the promise is not questioned; that the successors of the Commissioners who made it were ready to redeem it was undisputed; that their actions showed judicial fairness in disposing of other issues, for and against the roads, was undenied.

The passenger rates had been taken out of their jurisdiction, but the power to increase freight rates to compensate for any loss on passenger rates was unquestionably with them, and would have been exercised on petition and proper showing; is established.

Judge Trieber says that the Prentiss case is fully explained in Willcox v. Gas Co., 212 U. S. 19. True, and, it may be added, emphasized. The action there was leveled against two acts of the Legislature of New York, and not against a system of rates made after hearing by a body clothed with power and required by law to alter them, after hearing, to make them compensatory, and provided with machinery to determine the questions judicially, and more effectually than a court, whose duties forbid an exhaustive examination into details so necessary to make reasonable rates.

It is respectfully submitted that these plaintiffs have not accorded to the State, which protects their property and furnishes them a tribunal to correct what they claim are noncompensatory rates, with decent respect when they ignore this tribunal and bring to the Federal Courts matters which properly should be adjusted there.

## QUANTUM OF PROOF NECESSARY TO SUSTAIN AN ATTACK ON THE CONSTITUTIONALITY OF THE RATES.

We contend that the evidence on part of the plaintiffs fails to meet the heavy burden of proof which this court has laid upon those seeking to invalidate as unconstitutional State enactments.

In San Diego v. National City, 174 U. S. 739, on page 759, the Court said:

> "Judicial interference should never occur unless the case presents, clearly and beyond all doubt, such a flagrant attack upon the rights of property under the guise of regulations as to compel the Court to say that the rates prescribed will necessarily have the effect to deny just compensation for private property taken for the public use."

In the case of the City of Knoxville v. The Knoxville Water Company, 212 U. S. p. 1 (these excerpts are to be found at pages 8 and 16 and 17), the Court said:

> "There can be at this day no doubt, on the one hand, that the Courts on constitutional grounds may exercise the power of refusing to enforce legislation, nor, on the other hand, that that power ought to be exercised only in the clearest cases. The con-



BLURRED PA

stitutional invalidity should be manifest, and where that validity rests upon disputed questions of fact, the invalidating facts must be proved to the satisfaction of the Court."

The opinion continued, as follows:

"Disregarding for the moment all the errors which were committed in the Court below, the decision of this cause may be rested upon a broader ground, which is clearly indicated by the previous judgments of this Court. The jurisdiction which is invoked here ought, and as has been said, is to be exercised only in the clearest cases. If a company of this kind chooses to decline to observe an ordinance of this nature and prefers rather to go into Court with the claim that the ordinance is unconstitutional, it must be prepared to show to the satisfaction of the Court that the ordinance would necessarily be so confiscatory in its effect as to violate the Constitution of the United States."

In *Ex parte Young*, 209 U. S. 123, the Court said:

"To this it may be answered, in the first place, that no injunction ought to be granted unless in a case reasonably free from doubt. We think such rule is, and will be followed by all the Judges of the Federal Court."

The presumption of the validity of State-made rates is strengthened by the long time in which these have been in force. In Judge VanDeventer's opinion, rendered when granting the temporary injunction in this case, he said:

"True, some of the rates in question have been in force in substantially their present form for a considerale time, but enough of influence is accorded to this fact when it is made a reason for requiring stronger and more persuasive proof of inadequacy than otherwise would be required." (R. p. 42.)

[In passing it may be noted that on the hearing before Judge Vandeventer it was not developed that all the freight rates, except a few minor changes, had been in force eight years, and that the passenger rates had been in force fifteen months, and the average interstate revenue from passenger traffic through Arkansas was less than the two-cent rate complained of.]

The proof of the inadequacy of the freight rates should be very persuasive in this particular case in the light of their history. The history of these rates as developed in the record shows this: The Railroad Commission was organized in 1900. It began to work upon the rate situation shortly after its organization. And the Commissioners spent some six months or longer in investigating the situation before they took any affirmative action to establish a system of intrastate freight rates.

They finally promulgated a tentative system of rates and invited the railroads of the State to a conference with them to consider this tentative system of rates, which they had drawn up.

That conference lasted some three or four months, and the rate situation was thoroughly reviewed. This tentative system was changed and almost universally raised, at the request of the various representatives of the railroads who were in conference with the Commission, who attempted to show them where this rate or that rate should be higher than set forth in the tentative system which they had been invited to consider.

After many concessions had been made by the Commission, after the railroads had been heard fully, and their opinions given great weight and effect in the schedule of rates prepared, the first Standard Distance Tariff of class and commodity rates was issued in the year 1900.

At the time of its promulgation the Commission notified the railroads, more particularly the two now before the Court (it is shown that their representatives were in constant conference with the Commission throughout this period), that this system of rates which they were then putting into force was an experiment; that the Commission could not tell and the railroads could not tell, until it was tried, whether it was compensatory or not; but the Commission believed from all the information before it and by a careful comparison with the rates prevailing in other States similarly situated to Arkansas, that it would be a fair scale and just to the railroads; it told the railroads that if it proved noncompensatory; if their anticipations of it were not realized, for them to bring the matter back before the Commission and they would readjust the rates. (See Judge Wallace's testimony, R. pp. 875-896.)

The first tariff put in the distance schedule on one line and also on the joint lines.

The railroads contended that the Commission did not have a right to make joint rates and they brought an injunction suit, and their contention was sustained that the act investing the power to make the rates did not allow the Commission to make joint rates over two railroads.

The Legislature of 1903 passed an act giving the Commission this power.

Then the Commission adopted joint rates on a basis of 80 per cent of the sum of the locals. When the joint rates were made they likewise were made after conference, suggestions and advice from the railroad traffic officials. (Testimony of Hampton, pages 800-810.) Therefore, the whole rate situation was put in force after the passage of the act of 1903; but the substantial part of it, the part which really tells the story, has been in effect from 1900 until the injunction granted by Judge VanDeventer in the summer of 1908.

It is in evidence here that during that time there were changes; however, there had been no substantial change as a revenue-producing factor from 1900 until 1908, when the rates were enjoined.

Some attack was made in argument and on cross examination of

the Commissioners as to the constant orders which had been made upon complaint of shippers and others; and there was put in evidence, and it is here as exhibit "D," not only the petitions which had been granted, which tended to reduce the rate by a change from class to commodity rates, which is exhibit "B," but the various acts of the Commission which denied action against them; exhibit "D."

There was a petition before the Commission to put in a 2½-cent passenger rate. There was much more involved in that to the railroads than all of the reductions which had taken place in the seven years; and the Commission declined to grant the petition of a large body of citizens who asked them to put in force a 2½-cent passenger rate.

When you consider the evidence which seeks to strike down a system of rates, you must consider this long period of time in which the railroads operated under them. You must consider the fact that they were told it was an experiment, and that if they found it unremunerative, then to come back to the Commission and they would adjust it; and you find in the proceedings of the Commission herein every evidence of judicial fairness.

When you consider those facts, this acquiescence becomes a strong factor. It has passed beyond mere test of rates to see if they were reasonable. It has passed into an acquiescence after eight years' operation under the rates put in force by the State.

Instead of going back to the Commission to show that these rates were unremunerative, the railroads go to the courts.

This Court will apply the principles announced in the cases we have quoted and require of these plaintiffs the clearest and most decisive proof of the fact that the State-made rates work confiscation, before they will be invalidated, and will further raise a strong presumption of their validity based on the carriers' acquiescence in their continuance. Weighing the evidence in the balance with these requirements upon one side of the scale, we contend that the evidence of the plaintiffs utterly fails to balance with them, and insist that this is apparent from an examination of the exhibits in this case, without the necessity of the Court going through the detail of the evidence. We do not take the law to be that the Court must strike an account between the railroads and the State, as would a Master in Chancery stating an account in the winding up of a partnership business.

Furthermore, the plaintiffs are asking the court to give a weight to opinion evidence to which it is not entitled and which has not heretofore been accorded to it.

*Opinion Evidence Insufficient.*

In Chicago, Milwaukee & St. Paul Ry. Co. v. Tompkins, 176 U. S. 167, objection was made to the opinion testimony there introduced. The testimony there objected to was the opinion evidence of several experts as to the relative cost of doing local and through business.

There the Court reviewed the well-known facts in the movement of local and through trains and the obviously greater cost of the movement of the local train, and properly held that the opinion of experts familiar with railroad business is competent testimony, and can not be disregarded simply because it can not demonstrate by figures the difference in the cost of the operation of such trains. Such expert testimony gives the Court the benefit of the experience and observation of a witness familiar with the operation of such trains and the attendant cost of the operations of each, and from such opinion evidence a reliable, if not accurate, percentage of difference could be determined.

Much of such testimony was introduced in this case, leading up to the proposition that the intrastate traffic is chiefly carried on the local train, which is the more expensive train, and is the vehicle for the intrastate traffic, while the interstate traffic is carried on the through train, more economically operated. It was competent for the State, in order to meet it, to show by men versed on the subject that the estimates were over-high; or it was competent to show, as was done, that conditions in Arkansas did not square with the conditions which the experts introduced by the railroads say are the prevailing conditions as to intrastate and interstate traffic, and concerning which they testified:

It was shown in this case that the local freight train, instead of being a vehicle of intrastate traffic, was more nearly the vehicle of interstate traffic. Upon the one road its load being 72 per cent interstate freight and upon the other 68 per cent. The competency of expert testimony as to the comparative cost of the two trains is not for a moment questioned; but this class of opinion testimony is a small part of the opinion testimony necessary in order for the plaintiffs to establish their case.

The plaintiffs' experts say the ton-mile and passenger-mile theories, presented in other cases, are unsound, and they say in surrebuttal that the plan of separating the expenses worked out by the State is unreliable and impracticable.

The railroads predicated their case in chief, and from that position they have not wavered, that the revenue basis is the best basis yet found. They admit that it is an arbitrary basis and admit that many objections can be taken to it in individual cases and many instances may be cited where it will not be perfect; but on the whole they say it is the best basis yet found. They admit that it is not in common use as a factor in railroad operation and accounting and admit that it originated in rate litigation and in State regulation of railroads.

They offer no other basis for the division of property. They do try to patch up in their surrebuttal testimony a division of expenses on the plan of the State exhibits, which effort upon their part is so



BLURRED

plainly a caricature of the State plan that it has not been given serious consideration, either by them or the State.

Before they can determine upon what property they are entitled to a return, which is compensatory, they must segregate that property from the mass of property in the State and say: "This is property devoted to intrastate traffic upon which we are having no adequate return." Until they find some basis for that, they have no case. Until they segregate their expenses and say, "Thus much is intrastate expense, and thus much interstate expense," they have no method of determining whether the revenue from intrastate business is compensatory or confiscatory. After they find a basis, which they say is the revenue basis, to separate the property and separate the expense, then they ask that to the intrastate expense thus separated there be added a given per cent on account of extra cost of intrastate traffic, and to that proposition they adduced competent testimony to sustain it, and the State introduced competent testimony to rebut their evidence upon it; but before this feature could possibly be reached, the basis of separating property and expense must be determined. They must establish their basis both as to property and expenses before they get the benefit of their legitimate opinion evidence, as to the extra cost of operation; until they divide the expense, so that to the intrastate expense so divided the extra cost may be applied, they have no sum to which to attribute the extra cost.

Therefore, the railroads are in this position: The revenue theory of dividing the property and expense must be sustained wholly upon opinion evidence before the opinion evidence as to what is the extra cost of doing intrastate freight and passenger traffic is reached, which extra cost must be added to the expense already segregated to the intrastate freight and passenger traffic. Of this revenue theory, Judge Trieber said, in deciding this case, "is clearly wrong," and he quotes from the Tompkins case, 176 U. S. 176, where this Court condemns it. (Yet Judge Trieber, while rejecting it as a whole, uses it for some of the largest items of expense.)

Is this subject matter of opinion evidence like the opinion evidence in the Tompkins case, which can be safely relied upon? No witness claims that his judgment of the revenue theory is based upon experience or observation of its use; for it has not been used until these rate cases arose.

Heretofore a separation between State and intrastate traffic has not been needed and has not been made, and therefore the testimony can not be justified as the result of the witnesses' observation and experience in this line of work. If it belongs to the domain of science, then it is the science of accountancy, and, with the exception of Mr. Nay, they have offered no opinion evidence from any one who qualifies himself as expert in accountancy.

Messrs. Johnson and Kimbell, the able accountants who represented the railroads in statistical matters in this case, did not become



AGES

opinion witnesses in favor of the revenue theory, however much they may have agreed to it as evidenced by the compilation of their statistics upon it. Neither Mr. McPherson or Mr. Doddridge qualified themselves as versed in the science of accounting, and in fact their training shows that they are not versed in it. They have always been railroad officials in the operating department.

On the other hand, Messrs. Ludlam, Hillman, Whitehead, Wharton, Hamilton, Willmering and Fitzgerald were all accountants and men who had given special study to these very problems and unqualifiedly condemn the revenue theory for a division of either property or expense and gave their reasons therefor.

In the examination of witnesses for the plaintiffs, and the cross examination of the State's witnesses, it was plainly indicated that the plaintiffs' position was that only experienced railroad officials were competent to testify as to the basis of dividing property and expense, and that it was not a proposition which accountants would be qualified to speak; but this is wholly a question outside of railroad operation; they confuse the experience of operating officials as to knowledge of local and through trains, with knowledge of a proper basis for dividing property and expenses between State and interstate traffic, and none of them have to do with this problem in operating trains, and none claim that they have.

The State contended that a knowledge of the rate situation was necessary to give value to opinion evidence as to the revenue basis, because the rates produce the revenue, and without knowledge of the rates, and the relation of one to the other, the element of cost and of profit entering into each, that the witness would have no qualification to speak of the use of the revenue from the rates without an intimate and accurate knowledge of the rates themselves.

It seems incomprehensible to us that a railroad official like Mr. McPherson, who is experienced in the operating department of railroad work, should pose as an expert on the use of the revenue which was derived from two classes of rates, intrastate and interstate, both of which he was unfamiliar with, and which he repeatedly declined to discuss, owing to his professed lack of knowledge of rates and rate questions.

Mr. Nay's experience was entirely in the auditing department, and he said that he had only such knowledge of rates as would come to him from his work in the auditing department of his road.

Mr. Doddridge did not show any familiarity with the rate situation, and his railroad experience was wholly operating, and he stated that while he was general manager, rate matters were in charge of a traffic manager.

The rate experts introduced by the defendant, Flippin, Perkins and Watson, did not discuss the revenue basis for dividing either property or expenses. They discussed the rates—the subject with which they were familiar.



BLURRED

The rate experts introduced by the State, Bragg, Lincoln and Bee, met the rate experts of the other side upon their own ground and discussed the rates. On cross examination, Mr. Lincoln discussed extra cost and Mr. Bee, from his knowledge of the rate situation, discussed, and condemned, the revenue theory, predicating his condemnation of it entirely upon his knowledge of interstate and intrastate rates and their lack of relation to each other, and the further fact that the cost of the service only incidentally entered into their making.

Therefore, it may be safely stated that the plaintiffs were overwhelmed by the preponderance of the evidence as to the value of the revenue theory, taking the term "preponderance" in its best sense, not of numbers only but of testimony from witnesses best qualified to speak, least interested, and giving the most cogent reasons for their views.

But our position goes farther than this: Had the State introduced no testimony on this subject, we contend that the evidence introduced by the plaintiffs to sustain the revenue theory is not such evidence as is sufficient to overcome the presumption of the validity of the rates made by the State.

In Sturgis v. Clough, 1 Wallace, 269, the Court said: "The charge for demurrage allowed by him (the commissioner) was not justified by the evidence, although there was testimony to support it, such as can always be obtained when friendly experts are called to give opinion."

In "The Conquerer," 166 U. S. 110, the Court said: "The mere opinion of witnesses unfortified by any *data* as to what the earnings would probably have been, is usually regarded as too uncertain and conjectural to form a proper basis for estimation, though in a few cases they seem to have been received."

If, in a civil litigation between private parties, opinion evidence as to profits is too uncertain and conjectural to be the basis of a money judgment, *a fortiori*, opinion evidence as to a theory of division of property and expenses which theory may prove a loss in a given part of a prosperous business, is too uncertain and conjectural to invalidate State legislation regulating that part of the business.

The opinion of this Court upon expert evidence to sustain a theory was written down by Mr. Justice Lamar in Bene v. Jeantet, 129 U. S. 683. That was a suit for infringement of patent. The plaintiffs introduced as a chemical expert one Keith. The defendants introduced one Marchand, who had made practical tests. The case hinged on the testimony of these two witnesses. The Court said:

> "But the testimony of Marchand relates to facts declared to be within his knowledge and experience; whilst that of Keith is largely the assertion of a theory and the presentation of argument showing that the facts testified to by Marchand can not exist."

* * * * * * * * *



AGES

"We think the complainants did not make out a case of infringement. There is not a preponderance of evidence in their favor."

The Court of Appeals of the Ninth Circuit said:

"More weight is given to the testimony of a witness based upon facts within his knowledge and experience than to the testimony of a witness which is 'largely the assertion of a theory." Overweight C. Elevator Co. v. I. O. Redmen, 94 Fed. 155.

The only difference between the class of testimony condemned in that case and the one at bar is this: The testimony condemned was largely the assertion of a theory, while the testimony sought to sustain plaintiffs here is wholly the assertion of a theory.

It has, from its intrinsic character, no such weight of itself sufficient to invalidate State legislation, when such legislation is only invalidated by clear and decisive evidence which convinces the Court beyond doubt that under the guise of regulation the State is working confiscation.

## THE EXHIBITS ALONE SHOW THAT THE PLAINTIFFS FAIL.

The exhibits give the statistical facts of the case. There are many conflicts in bases and theories to support this method or that method, but the accountants representing the respective sides have been enabled to put in exhibits on each side, the mathematical accuracy of which is not questioned. Some errors, of course, were made, but those were detected and corrected before the case closed. The exhibits of the plaintiffs are numbered from 1 to 60, the exhibits of the defendants are lettered. The exhibits begin at page 2290.

Exhibit "47" (R. p. 2431), filed by the Iron Mountain Railroad Company, shows that four years prior to obtaining the injunction herein that it paid annually a 10 per cent dividend upon its stock, and its stock had increased during that period from (in round numbers) twenty-five millions to forty-four millions and the 10 per cent dividend was paid on all of it. Exhibit "48" (R. p. 2432) shows that in addition to paying this dividend of 10 per cent on its stock, it paid in 1907, $5,692,152.00, and in 1906, $5,455,877.19 in taxes, rentals, interest on bonds and sundry accounts. Mr. F. P. Johnson, accountant for the Iron Mountain, testified that the dividends were paid on the lines in this suit, and no other, as the subsidiary lines were not included either in the suit or in the payment of dividends. (R. p. 362.)

Mr. McPherson testified that from 1901 to 1908 the Iron Mountain spent in Arkansas in improvements to increase the efficiency of train service the sum of $8,684,411.00, principally in reduction of grades.



BLURRED

He also testified that the company during those years purchased 323 locomotives and 6,680 freight cars at a cost of $9,660,372.00 (R. pp. 331, 332).

Mr. Johnson has properly prepared exhibit "47," but, as shown by the report of the Interstate Commerce Commission, the Iron Mountain really earned a dividend of 14 per cent in 1906, but owing to a rule of the Commission that dividends are not credited to stock issued during the year, it made the 10 per cent dividend amount to 14 per cent for that year by not crediting it to the stock represented by the new line constructed. (Report 1906, p. 701.) Batesville is an old town on White River, served for many years by a branch line from the main line at Newport; this line was extended through the Ozark Mountains to Missouri and northwestern connections. The line in Arkansas is known as the White River Branch, and is the most expensive and less profitable part of the line. It runs through a sparsely settled country, very illy developed, and is but a link in a line from the Northwest to the Gulf. On the other side of the State is a low grade line from Helena to McGehee, completed about the same time. The record is full of references to their new lines, and it is apparent that they did not earn any profits, but the whole system earned 10 per cent, and, excluding them, the whole system earned 14 per cent. The next year, 1907, while freshly burdened with these new lines, a 10 per cent dividend is earned and declared.

Exhibit "2" shows that the total mileage of the Iron Mountain Railroad Company was 2,599.15, of which 1,355.09 were in Arkansas. That is, 52 per cent of it is in Arkansas. Statements 3 and 4, exhibit "3," shows the proportions of the various expense accounts divided between Arkansas and the rest of the Iron Mountain railroad, and it will be seen that in the four principal accounts, Arkansas is charged with 54 per cent, 55 per cent, 53 per cent and 53 per cent respectively of the expense of those particular accounts as against the rest of the road.

Exhibit "6" (R. p. 2313), another of the Iron Mountain exhibits, shows these statistics:

| | |
|---|---|
| Average number of passengers per train mile on the Iron Mountain as a whole | 47 |
| On the Iron Mountain in Arkansas | 49 |
| Average revenue per passenger per mile on the Iron Mountain as a whole | 1.908 |
| On the Iron Mountain in Arkansas | 1.903 |
| Average number of tons per train mile, Iron Mountain as a whole | 385.58 |
| Iron Mountain in Arkansas | 407.41 |
| Average revenue per ton mile Iron Mountain as a whole | 7.26 |
| Iron Mountain in Arkansas | 7.23 |
| Density of traffic, Iron Mountain as a whole | 472,738 |
| Iron Mountain in Arkansas | 487,910 |



AGES

Exhibit 6 also shows percentage of expenses to earnings, Iron Mountain as a whole..... 74.24
Iron Mountain in Arkansas..... 73.88

This is explained by Mr. F. P. Johnson (R. pp. 39-52) to mean that for every $100.00 earned $74.24 was expenses, on the whole line, and in Arkansas for every $100.00 earned, the expenses were $73.88. Exhibit "32" (R. p. 2397), filed by Mr. McPherson, covering six months, ending December 31, 1907, shows the percentage of expenses on the Missouri Pacific system, $73.99; Iron Mountain, in Arkansas for that period, $71.19. This table also shows both revenue and expenses per mile, and shows the net revenue per mile on the Missouri Pacific is $951.38, and the net revenue per mile on the Iron Mountain in Arkansas, $1,421.40.

Exhibit "Z" (R. p. 2569), one of the defendants' exhibits, is a comparison of the revenue to expenses per train mile for the years ended June 30, 1897 and 1907, shown by the Interstate Commerce Commission Report for those years. For the year ended June 30, 1907, the operating revenue was $2.17; operating expenses, $1.36 net revenue, 81 cents; for the year ending June 30, 1897, operating revenue, $1.45; operating expenses, 97 cents; net revenue, 48 cents; and the net increase in the ten years, 33 cents per train mile, or an increase of 69 per cent. The same exhibit shows an increase on the St. Louis Southwestern of 163 per cent. It also shows that for the entire United States the net increase was 58 per cent, and in Group 8, in which Arkansas is situated, it was 85 per cent.

Exhibit No. "5" (R. p. 2327) shows the freight revenue per ton per mile interstate, 6.750; intrastate, 13.877 mills; passenger revenue per passenger mile, interstate, 1.865; intrastate, 1.903 mills.

Exhibit "8," as corrected by exhibit "8-A" (R. p. 2390), shows the Iron Mountain in Arkansas for the year ending June 30, 1907, earning a net profit after paying operating expenses, taxes and rentals upon all of its property in Arkansas (at the agreed valuation, double the State assessment) of 9.89 per cent, or, after the correction as shown in exhibit "8-A," of 9.97 per cent, practically 10 per cent return upon its property, as well as 10 per cent dividends upon the stock.

Exhibit "3" shows for six months ending December 31, 1907, it is earning a net return on its property in Arkansas of 7.44 per cent, and after correction in exhibit "3-A" (R. p. 2317-8), a return of 7.50 per cent from all business.

The evidence in this record is full of the effect of the panic of 1907. It is not necessary to have evidence upon it, because that is part of the history of the times of which the Court takes cognizance. It began in October, but its effect on the railroad traffic, particularly the revenue, was felt later. This easily accounted for the reduction of the return upon the property in the last half of 1907, as com-

pared with the fiscal year ended June 30, 1907, to 7.50 per cent instead of 10 per cent.

Exhibit "45" (R. p. 2411) shows the gross earnings of the Iron Mountain since 1900 per mile of road. It shows a larger earning the World's Fair year than any other period, and after those years, 1904, $8,760.00; 1905, $8,391.00; 1906, $9,254.00; 1907, $9,566.00, and the first half of 1908, plainly the result of the panic, the worst half of any six months' operations given in the statement, being $3,619.00.

These statistics prove the Iron Mountain was a prosperous road. It was earning a good return upon its property even when suffering from the panic during a part of 1907, earning 7½ per cent on its investment in Arkansas, and paying 10 per cent dividend on its stock; and for the year ending June 30, 1907, before the panic affected it, making 10 per cent upon its property invested in the State, as well as 10 per cent dividends upon its stock. These statistics further prove that the proportion of the road in Arkansas, 52 per cent in mileage, is bearing about 54 per cent of all the expenses of the road; and yet the ratio of expenses to earnings was less than on the balance of the road, and less than on the entire Missouri Pacific system. Its passenger and freight traffic in Arkansas is denser than on the rest of the road, which probably accounts for the fact that the ratio of expenses to earnings is less in Arkansas than the balance of the system.

Mr. McPherson, Assistant to the General Manager of the Iron Mountain, testified at great length and in much detail as to the falling off in freight revenue from 1897 to 1908 and of the increase in material, labor and taxes. He put in a graphic chart, exhibit No. 30, illustrating his evidence as applied to the Iron Mountain. On the line designated thereon as "Transportation" he explained to mean freight revenue. (R. pp. 739, 380.) It rose in 1897, and fell from 1898 to 1901, remained level 1901-2-3 and rose considerably in 1904 and fell in 1905, 1906 and rose slightly in 1907. In his cross examination his attention was called to the established fact that there had been no material change in the intrastate freight rates in Arkansas since 1900, and, assuming that to be true, he was asked if his descending line of freight revenue did not represent a decrease in interstate revenue, and he reluctantly assented to this. (R. pp. 381-2.) As exhibit "B" (R. p. 2500), heretofore referred to, and the testimony of Mr. Swaim, and of members of the Commission, shows it to be a fact that there was no appreciable reduction in the intrastate freight rates during that period the conclusion is irresistible that if the road was losing money in the last few years, owing to the increased legal burdens and the increased price of material, labor, etc., and if its revenue was decreasing, the loss is in interstate revenue, not intrastate; but the difficulty with his argument is that the road is not losing money, but making money.

Exhibit "Z" (R. p. 2569) shows that notwithstanding this increase in the cost of material, labor, taxes, etc., that the net revenue per mile of road has increased 69 per cent in a ten-year period. Mr. McPherson's chart does not deal with the passenger side of the question; but, as the statistics just quoted show, the intrastate passenger revenue per mile to be more than the interstate revenue, there can be no contention made that the supposed losses could be due to a reduction in intrastate passenger rates. Attention is again called to the fact that the intrastate freight revenue per ton per mile is double that of the interstate freight revenue per ton per mile. Therefore, to make any showing whatsoever on the loss on the intrastate business in this case, it is necessary to show enormous expenses against the intrastate traffic as compared with the interstate. Those expenses on the passenger side must wipe out the increased intrastate revenue in passenger traffic, and on the freight side must wipe out the 100 per cent greater intrastate revenue than interstate, and after wiping out the increased intrastate income, the expense must be so great as to reduce the return upon the property to a level below that which would be compensatory. As shown by these statistics, the expenses in Arkansas as a whole are less in proportion to revenue than the balance of the road. Arkansas is paying more on the expenses than its mileage calls for, and the statistics show the net revenue per mile of road in Arkansas much greater than in the system. Therefore it recurs that the intrastate expenses as against the interstate must be enormous, when such prosperity is shown on the whole business in the State. In face of this it can not be argued for a moment that while the Iron Mountain system as a whole is prosperous, that the Iron Mountain in Arkansas is not, because the statistics prove it to be the most prosperous part of the road. Necessarily the plaintiffs' whole case must rest on proving enormous intrastate expenses in Arkansas, notwithstanding its prosperity and notwithstanding less expense generally in Arkansas than the balance of the line, and notwithstanding more revenue per mile than on the rest of the system. This remarkable proposition is what the plaintiffs must prove in order to make out their case. They made no separation of expenses between State and interstate further than a separation upon the revenue theory; they made no separation of expenses between the local and the through trains, the end to which all of their arguments go to prove ground for the enormous expense of intrastate over interstate traffic. This remarkable proposition is sought to be sustained merely by opinion evidence to the effect that the expenses could and should be divided between the intrastate and interstate traffic in proportion to the revenue received from each respectively, and when so divided mere opinion testimony to the effect that to the intrastate expense thus found there should be added various amounts, ranging from 100 to 800 per cent, for intrastate freight, and 25 to 50 per cent for intrastate passengers. The chief reasons for this additional expense are two: First, the theory that

all intrastate traffic has two terminal expenses in the State and part of the interstate has none, while the remainder has one; second, but principally that the local trains, both freight and passenger, are a great burden upon a road, and they are the vehicles of the intrastate traffic. This is the most expensive train that is run, and the opinion was generally expressed by those witnesses with whom plaintiffs sought to make their case that the local train was a vehicle devoted practically to intrastate traffic, especially the local freight train was a vehicle of intrastate freight, and so much interstate freight as found its way upon it was trifling and negligible in quantity. A brief summary of the evidence upon which the State relies upon these points, much of which was brought out in the cross examination of the plantiffs' witnesses, and supplemented by much testimony on its part is, first, as to the terminal expenses on passenger traffic; on the eastern side of Arkansas is Memphis. It is considered by the railroad companies in this case as situated in Arkansas. It is a city where much of the commerce of Arkansas is transacted. In the extreme western part of the State is the second largest city in it, Fort Smith, which, by the accident of the lines of the Iron Mountain crossing the State line between Van Buren and Fort Smith, makes all of its traffic interstate, and it is so treated by the railroads in their exhibits. Therefore all of the passenger traffic through these two gateways is interstate, and has two terminal expenses charged to Arkansas, and all of the transstate passing through these stations has at least one terminal expense in Arkansas. Little Rock is the largest city in the State. The Iron Mountain lines radiate out of it as the spokes from a hub. It is shown without dispute, particularly in the testimony of Maurice Wright (R. pp. 2265-6), that the great body of interstate passenger traffic, with the exception of a small portion of it, which goes through on through trains, comes into Little Rock and is there transferred to other trains; with the exception of a half a dozen through trains, all of the interstate travel will have a terminal handling at Little Rock, Newport, Texarkana and other junction points, and much, if not most, of the transstate travel will have at least one terminal in the State. This situation is wholly different from that testified to by the learned experts for the plaintiffs, who base their opinion on the general proposition, which is not applicable to Arkansas. Secondly, as to local passenger trains: The St. Louis Southwestern put in exhibit "25," and it shows that all of its passenger trains in Arkansas were local trains. It carried no through trains. All of its interstate as well as its intrastate passenger traffic was carried on these very expensive local trains. The Iron Mountain put in exhibit "46" (R. p. 2412), which shows that it carried eight through trains, and of them one is a fast mail (with scarcely any passengers, as shown in the evidence), and 48 are local trains.

Exhibit No. 3, paragraph A (R. p. 2292), shows on the Iron Mountain 47 per cent of passenger revenue is from intrastate, 32 per

cent from interstate and 21 per cent from miscellaneous. Statement 3 of exhibit "3" (R. p. 2302) shows that there was carried during this period 1,702,490 passengers. It is apparent that these seven through trains carried a small proportion of the interstate passengers. It was in evidence that some intrastate passengers were carried on these trains. It is plain that the local passenger train was not an item of extra expense peculiar to the intrastate passenger traffic as it was necessarily used indiscriminately by both classes of passenger traffic. It was also shown that these through passenger trains were the most expensive trains that the railroad carried, and that they carried less passengers per train than many of the local trains. As these trains were less patronized than many locals, and principally made up of interstate passengers, although not exclusively so, and the local trains carried the great bulk of both classes of traffic, it must be apparent that the interstate passenger traffic is the more expensive, and yet the revenue per passenger mile is 3.48 per cent more for the intrastate. Next, as to local and through freight trains: The local freight train, the "beast of burden," as some of the witnesses aptly called it, is the great and controlling reason usually given for the enormous expense attributed to intrastate traffic. In fact, many of the witnesses seem to regard the local train as synonymous with intrastate freight traffic. Page after page is filled with explanations of the enormous expenses of the local freight compared with the through train. Every witness offered by the plaintiffs, with the exception of Mr. Doddridge, said more or less emphatically that practically all of the load of the local train was intrastate freight, which it peddled out from station to station, and with unanimity referred to whatever interstate freight it carried as negligible in quantity. Principally upon this point they conclude their testimony with the statement that the extra expense of intrastate freight traffic is from 100 to 800 per cent more than interstate, usually about one, two or three hundred per cent more. The St. Louis Southwestern, under the supervision of its assistant auditor, Mr. Kimball, made a test of the performance of the local and through trains for the month of October, 1908. It was done for the purpose of being used in evidence in the Missouri Rate Case and this rate case. Mr. Doddridge, formerly General Manager of each of these railroads, was an expert witness for the railroads in both the Missouri case and this case, and he requested this test to be made for the uses aforesaid. Mr. Kimball testified it was carefully and thoroughly made; the result of this test month is given in statistics shown in exhibits "19" and "20" (R. p. 2375-7). They show that the local freight trains carried 1,084,580 ton miles of intrastate freight, which was 78 per cent of all the intrastate freight carried by that road for that month, and it carried 2,236,361 ton miles of interstate freight, which was 8 per cent of all the interstate freight carried by that road

during that month, but this shows the load on the local trains contained 1,151,781 ton miles more of interstate than of intrastate freight, and 22 per cent of the intrastate freight was carried on the through trains. Exhibit "26" (R. p. 2391) was put in evidence by the Iron Mountain. It shows the transstate, intrastate and interstate freight hauled by it for the month of October, 1907. The Iron Mountain did not work up the performance of the local and through trains as the St. Louis Southwestern did for October, 1908, but the State's accountants took this exhibit and worked up from the records of the Iron Mountain a statement similar to exhibits "19" and "20" of the St. Louis Southwestern. This is exhibit "I" (R. p. 2516), offered by the State. It shows the freight carried by the local trains was composed of 71.49 per cent interstate, and 28.51 intrastate on the Iron Mountain. Only 5.59 per cent of the intrastate freight was carried on the through trains, as against 22 per cent the St. Louis Southwestern, but on both roads, the bulk of the heavy expense of the local train was chargeable to interstate traffic, in the one case 68 per cent, and in the other 72 per cent. At first the accuracy of exhibit "I" was questioned, but that was practically abandoned, although attacks were made upon the system under which it was worked up, which will be considered at length in another connection. We feel that we can safely say that the court will be thoroughly satisfied of its accuracy, and that October was a normal month of the six months' period is established by statistics that are undisputed, although there is quite a conflict between plaintiffs' witnesses as to their opinion of the normality. The State in its plan of separating the expenses, after allowing for extra expense of intrastate traffic on account of two terminals, and all other items which are located in the testimony of the witnesses on each side of the case, divide the expense of each train between intrastate and interstate freight traffic in proportion to the load carried by each of each class of traffic. The passenger train expense is apportioned between passenger, mail and express and passenger between interstate and intrastate. It disposes of the two terminal propositions against itself by charging all of the State traffic with two and the interstate traffic with one, although there is a considerable amount of interstate freight traffic which receives two handlings. All of the traffic in and out of Fort Smith and Memphis receives two terminal handlings, and all of this is interstate traffic. Much of the cotton, grain and lumber traffic, each large interstate movements, receives two and three handlings.

The State adopted the plan of dividing these expenses for the purposes heretofore explained, to demonstrate that the expenses could be divided on practical lines by the use of factors common in railroad accounting and operation, instead of upon an arbitrary basis; and, second, to show that when all of the extra expenses are charged up to the State, after making maximum allowances in every instance where there was a difference of cost, that the intrastate expense was

less per ton per mile than would be compensated by the higher intrastate revenue per ton per mile. The plan of dividing these expenses was supported by many witnesses, who are just as well qualified to speak upon the subject as those who testified against it. They were more in number, and, as we believe we can demonstrate, more of them in position to speak authoritatively upon the subjects testified by them than those offered by the railroads. For these reasons, we think we can confidently assert that the exhibits of the State are supported by a preponderance of the testimony.

Exhibit "O," which shows the results of the application of this plan, gives a percentage of net earnings on the valuation of all the property invested in Arkansas, and shows it made for the six months period 7½ per cent return on all of its property invested in all classes of business, subdivided as follows:

| | |
|---|---|
| On intrastate freight | 10.93 |
| Intrastate passenger | 5.21 |
| All intrastate traffic | 7.69* |
| Interstate freight | 9.84 |
| Interstate passenger (loss), (red) | 3.44 |
| Total interstate business | 8.23 |
| Mail business | .04 |
| Express business (loss), (red) | 9.61 |

This loss on express surprised some of the railroad experts.

Exhibit "36" (R. p. 2404) shows the contract under which the express business was carried on the Iron Mountain. Judge Trieber (187 Fed. 351) explains this contract fully. In consideration of the Missouri Pacific Railroad Company, which was the owner of the entire capital stock of the Iron Mountain, giving the Pacific Express Company the exclusive control of the express business on the lines controlled by it, the Missouri Pacific received $3,400,000.00 of the express company's capital stock, or 40 per cent of the entire capital stock. This was paid without any consideration than that it were to have the exclusive express contract on the Missouri Pacific lines. It was further provided that the capital stock should not be increased above $6,000,000.00 without the consent of the railroad company. It is also proved that the Missouri Pacific has received ever since this contract was made an annual dividend of 6 per cent on the stock, amounting to $144,000.00 annually. Judge Trieber gave the Iron Mountain, the Arkansas portion of it, credit for its proportion of the annual dividend for 1907. That contract readily accounts for why the railroad is carrying the express business at a loss, as the loss of the railroad was fully compensated, or more, in the express company's dividends, in which it so generously shared. When the chapter on train mileage division of common expenses between pas-

*The error in Pullman passengers, hereafter explained, reduces this figure to 7.09 per cent.

senger and freight is considered, another, and probably more definite, reason will be seen why the mail and express, as well as intrastate passenger, is unduly burdened.

Exhibit "U," which is an exhibit of the St. Louis Southwestern corresponding with "O" on the Iron Mountain, just given, shows that the St. Louis Southwestern was making a net earning on all its property invested in Arkansas of 12.83 per cent, divided as follows:

| | |
|---|---|
| Intrastate freight | 13.99 per cent |
| Intrastate passenger | 5.79 per cent |
| Total intrastate | 9.16 per cent |
| Interstate freight | 15.00 per cent |
| Interstate passenger | .66 per cent |
| Total | 14.38 per cent |
| Mail business (red) | 11.85 per cent |
| Express business | 1.28 per cent |

The express business here where no deal between the express company and the railroad company is in evidence, widely differs in result from the Iron Mountain, where there is such a deal proved. The State's testimony also shows (R. p. 2065) that the extra cost of intrastate freight over intrastate freight traffic is 86 per cent. As heretofore shown in these statistics, the intrastate freight revenue is 98 and a fraction per cent over the interstate, and so long as the extra intrastate freight expense is less than the extra intrastate revenue, there can be no argument that these rates were confiscatory; because it is undisputed that upon both roads, upon all the business, they were earning a return which is more than compensatory, towit: 7½ per cent in the last six months of 1907, and 10 per cent for the fiscal year ending June 30, 1907, and on the St. Louis Southwestern road is 12.83 per cent.

Another theory closely allied to the theory that the local train carries only intrastate freight is that the interstate freight is largely package freight, L. C. L., and is usually peddled out on local trains. It goes without saying that L. C. L. is the most expensive freight handled, and, when handled on a local train, of course is still more expensive.

The exhibits in this case do not generally separate car load and less than car load freight, but there are two exhibits where they are separated.

In the October, 1907, statement of the Iron Mountain, exhibit "26," the car load and less than car load are separated, and any accountant can work out their percentages, and the same is true of the January, 1909, statement on the St. Louis Southwestern.

Mr. Nay testified that of the total intrastate tons handled, a greater percentage is less than car load than in the case of the intrastate business, and therefore a basis which charged two station expenses to intrastate for one for interstate was unfair.

Then he was given these two exhibits to figure out whether such

was the case, and no one will question the accuracy of a mathematical computation of the Comptroller of the Rock Island System.

He shows that in January, 1909, exhibit "A," prepared by the assistant auditor of the St. Louis Southwestern Railway Company, shows 13 per cent of the interstate tonnage was L. C. L. and 12 per cent of the intrastate tonnage was L. C. L. And on the Iron Mountain a showing, exhibit "26," filed by that road, that 7 per cent of the interstate tonnage was L. C. L. and 6 per cent of the intrastate was L. C. L. (R. p. 2059.)

These exhibits prove:

The Iron Mountain as a whole is a prosperous road, making large annual dividends to its stockholders.

That Arkansas is 52 per cent of the road in mileage and bears 54 per cent of its expenses, and its traffic is denser—both freight and passenger—and is conducted at a less ratio of expense than the rest of the road.

That for the year ending June 30, 1907, it earned on its Arkansas business a return of 9.97 per cent upon its property, and in the last six months of 1907 it earned 7½ per cent on all its property in Arkansas.

(And in this connection attention is called to the statement of Mr. Nay that "the slump" in revenue on his road, due to panic of 1907, began in November. (R. p. 2075.) That the St. Louis Southwestern Railway was earning on all its Arkansas business 12.83 per cent.

That the average revenue per ton mile is almost as much in Arkansas as on the rest of the line—7.23 mills v. 7.26 mills.

That the usual double expense for terminals of interstate versus intrastate traffic in Arkansas, owing to the interstate character of Memphis and Fort Smith traffic and the extra terminals for all cotton, much grain and lumber, and the system of passenger transfers at junction points, is much modified, if not nonexistent. While this is not shown in the exhibits—to which this chapter is directed—these facts are undisputed—although the extent of the modification of the general proposition is disputed; and they should be borne in mind while considering the exhibits.

That the heavy expense of the local freight trains is attributable chiefly to the interstate traffic, 68 per cent on one road and 72 per cent on the other; while 22 per cent of the intrastate freight on one road is carried on the though train and 5 per cent on the other road, thereby further reducing the costs of intrastate freight usually attributed to it as borne wholly on the local freight.

That there is upon one road no through passenger trains and upon the other comparatively few, and the interstate and intrastate passenger traffic is indiscriminately carried on the local trains.

That the freight revenue is 98.18 per cent more per ton per mile for intrastate than interstate on one road and on the other 141 per cent more; and the passenger revenue is also greater on intrastate than interstate traffic.

That there is proportionately more L. C. L. (the most expensive freight handled) interstate than intrastate.

If these roads were not prosperous, these statistics might avail nothing to show that the intrastate traffic was compensatory; but in view of their prosperity and the higher State rates and the nonexistence of most, of not all, the factors which usually render intrastate traffic the more expensive, it is impossible for the condition to exist on these roads in the face of these established facts; that the intrastate traffic is moving under rates so low and expenses so heavy that they are earning these large returns despite the heavy drains of the intrastate, from the interstate traffic. If this be so, then it is time for the Interstate Commerce Commission to look into a system of interstate rates which are so high that they can carry this load and yet earn for the roads respectively 10 and 12 per cent on the business in the State after paying the great losses from the intrastate, through the interstate revenue.

Mr. Nay was confronted with the fact that as a witness for his road before the Interstate Commerce Commission, asking for an advance in rates, he presented the whole expenses without separating the intrastate and charging it with one hundred to eight hundred per cent extra cost and deducting that from the total expenses when he was making estimates asking for an advance in interstate rates.

His road runs through twelve States and he says the intrastate traffic amounts to 20 per cent of the whole, and in Arkansas, Oklahoma, Nebraska, and partially in Minnesota, he had for rate cases on those States worked out a separation, on the revenue basis, of State and interstate traffic, showing an increased expense of intrastate.

He admits that such statements would have had a considerable effect on his statement of expenses which he put before the Commission. It is due to Mr. Nay to say that he gives several pages of explanation of why he did not so make up his statements. (R. pp. 2035-2039.)

The fact remains that if these enormous State expenses are true, they should be presented to the Interstate Commerce Commission, so that it may adjust interstate rates to a lower basis while the courts are enjoining States' commissions from enforcing rates which are confiscatory by reason of these great expenses incident to the traffic in the States.

These statistics, however, would be a potent answer to the contention, if made before the Interstate Commerce Commission, that the interstate rates were too high, as compared with the revenue derived from State rates, if the condition in Arkansas was under investigation.

It is respectfully submitted that the statistics in these exhibits are sufficient alone to end the railroads' case when the rules of evidence heretofore applied in similar cases are applied to this case.

## RATE OF RETURN ON THE PROPERTY.

Before proceeding to a discussion of the facts, we desire to call attention to a question of law, or probably one of mixed law and fact which may necessarily arise in the case. That is: What rate of return upon the property is sufficient to save the tariff of rates producing it from being confiscatory?

The Constitution of Arkansas, adopted in 1874 provides: "When no interest is agreed upon, the rate shall be 6 per centum per annum." Article 19, section 13.

In Reagan v. Farmers' Loan & Trust Company, 154 U. S. 362, the Court said:

> "It is unnecessary to decide, and we do not wish to be understood as laying down as an absolute rule, that in every case a failure to produce some profit to those who have invested their money in the building of a road is conclusive that the tariff is unjust and unreasonable. And yet justice demands that every one should receive some compensation for the use of his money or property, if it be possible without prejudice to the rights of others."

In Covington & L. Turnpike Road Co. v. Sanford, 164 U. S. 164, the Court said:

> "If the establishing of new lines of transportation should cause a dimunition in the tolls collected, that is not, in itself, a sufficient reason why the corporation, operating the road, should be allowed to maintain rates that would be unjust to those who must or do use its property. The public can not properly be subjected to unreasonable rates in order simply that stockholders may earn dividends. * * * If a corporation can not maintain such a highway and earn dividends for stockholders, it is a misfortune for it and them, which the Constitution does not require to be remedied by imposing unjust burdens upon the public. So that the right of the public to use the plaintiff's turnpike upon payment of such tolls as, in view of the nature and value of the service rendered by the company are reasonable, is an element in the general inquiry whether the rates established by law are unjust and unreasonable. That inquiry also involves other considerations, such, for instance, as the reasonable cost of maintaining the road in good condition for public use, and the amount that may have been really and necessarily invested in the enterprise. In short, each case must depend upon its special facts; and when a court, without assuming itself to prescribe rates, is required to determine whether the rates prescribed by the Legislature for a corporation controlling a public highway are, as an entirety, so unjust as to destroy the value of its property for all the purposes for which it was acquired, its duty is to take into consideration the interests both of the

public and of the owner of the property, together with all other circumstances that are fairly to be considered in determining whether the Legislature has, under the guise of regulating rates, exceeded its constitutional authority, and practically deprived the owner of the property without due process of law."

In Stanislaus County v. San Joaquin & King's River C. & O. Co., 192 U. S. 201, the Court said:

"It is not confiscation, nor a taking of property without due process of law, nor a denial of the equal protection of the laws, to fix water rates so as to give an income of 6 per cent upon the then value of the property actually used for the purpose of supplying water as provided by law, even though the company had, prior thereto, been allowed to fix rates that would secure to it 1½ per cent a month income upon the capital invested in the undertaking. If not hampered by an unalterable contract, providing that a certain compensation should always be received, we think that a law which reduces the compensation theretofore allowed to 6 per cent upon the present value of the property used for the public is not unconstitutional. There is nothing in the nature of confiscation about it."

In Willcox v. Consolidated Gas Company, 212 U. S. 19, the Court approved the decision of the Court of Appeals of New York on the rate of return upon gas property, which held that rates which would permit a return of 6 per cent would be enough to avoid the charge of confiscation.

In Knoxville Water Co. v. City of Knoxville, 212 U. S., the Court said that the net income shown from the evidence in that case would be substantially 6 per cent, or 4 per cent after the allowance of 2 per cent for depreciation, and that it could not clearly know if the revenue would not exceed that return, and did not feel called upon to determine whether the reduction of the income to that point would or would not amount to confiscation.

In railroad accounting depreciation is annually struck off under rules of the Interstate Commerce Commission, so the question of depreciation is not in these cases.

The rate of return is dependent upon the locality and upon the current rate of interest in the locality in the particular business before the Court. This is fully discussed in Beale & Wyman on Railroad Rate Regulation, sections 394-402. In section 394, the authors say what constitutes a fair rate of return must obviously be determined by circumstances. "The current rate of return for enterprises of a similar character is submitted to be a true basis for fixing the percentage." The authors take this quotation from the opinion of Judge Pardee in L. & N. Ry. Co. v. Brown, 123 Fed. 946:

"I think it will be conceded that since the rates are reasonable and not unjustly discriminatory, the company is entitled to earn some amount; and it seems reasonable and clear to me that if

entitled to earn something under the above conditions, it is entitled to earn under the same conditions a compensatory amount equal at least to the usual and legal rate of interest in the locality in which the railroad is situated."

In section 401, of Beale & Wyman, is the statement of the proposition, sustained by many authorities, that a risky enterprise is entitled to a larger return than a sound investment.

In San Diego Land & T. Co. v. Jasper, 189 U. S. 439, the Court said:

> "If the plant is built, as probably this was, for a larger area than it finds itself able to supply, or apart from that, if it does not as yet, have the customers contemplated, neither justice nor the Constitution require that, say, two-thirds of the contemplated number should pay full return."

This last principle is particularly applicable here. It is in evidence that the Iron Mountain Railroad recently completed two extensions —the White River Branch and the M., L. & H. Branch—each as a short line for their interstate traffic and each through sparsely-settled country, which will require years of development to make either an individually paying proposition, and yet with these encumbrances upon the Arkansas business, the one road was earning on all business in the State, according to its own statistics, 7½ per cent in the last half of the year 1907, and the other road over 12 in the last half of the year 1907, and the Iron Mountain for the fiscal year ending June 30, 1907, instead of making 7½ per cent as it did for the last half of that year, was making 9.97 per cent return upon all its business in Arkansas.

If the return had been much under these figures with the two new and expensively constructed lines, it would not be right to make the customers of the balance of the line pay the full return upon the whole line, including these expensive branches, under the principle decided in the San Diego case. But, passing that question for the moment, and coming back to the main proposition of what return should be allowed upon the whole property:

These tables are instructive, and it seems to us, controlling; they are of the Iron Mountain statistics; it is not necessary to encumber the argument with the statistics concerning the St. L. S. W. Ry. Co. While it has not been a dividend-paying road like the Iron Mountain, yet, its statistics here show its earnings are more than the Iron Mountain. Hence, if we establish that the return on the Iron Mountain is compensatory, it follows without argument that the larger return of the St. L. S. W. Ry. is compensatory.

The first of these tables gives the capital stock, dividends paid and the bond interest paid on the Iron Mountain for each fiscal year from 1899 to 1907, inclusive, as taken from the Interstate Commerce Commission's report of statistics of railroads. The page of the report is given in each instance:



BLURRED

## ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

Capital stock, dividends paid, bond interest paid, for years indicated. Taken from Interstate Commerce Commission's annual report of statistics of railways.

| Year Ended June 30 | CAPITAL STOCK | | DIVIDENDS PAID | | | BOND INTEREST PAID | | |
|---|---|---|---|---|---|---|---|---|
| | Amount | See Interstate Commerce Report, page | Rate | Amount | See Interstate Commerce Report, page | Rate | Amount | See Interstate Commerce Report, page |
| 1899 | $25,795,055 | 661 | .... | $..... | .... | 4.80% | $2,311,226 | 575 |
| 1900 | 25,795,055 | 641 | 2% | 515,746 | 559 | 4.60% | 3,082,440 | 559 |
| 1901 | 25,795,710 | 643 | 6% | 1,547,243 | 561 | 4.57% | 3,120,377 | 561 |
| 1902 | 25,795,710 | 651 | 6% | 1,547,283 | 570 | 4.62% | 3,259,409 | 570 |
| 1903 | 25,795,710 | 659 | 10% | 2,578,832 | 574 | 4.62% | 3,462,817 | 574 |
| 1904 | 25,795,710 | 659 | 10% | 2,578,832 | 578 | 4.51% | 4,110,620 | 578 |
| 1905 | 29,397,374 | 675 | 10% | 2,578,832 | 588 | 4.50% | 4,432,575 | 588 |
| 1906 | *44,397,374 | 701 | 14% | *4,114,588 | 614 | 4.49% | 4,651,040 | 614 |
| 1907 | 44,397,374 | 731 | 10% | 4,438,992 | 643 | 4.47% | 4,785,797 | 643 |

The stock issue increase in 1905 and 1906 aggregates $19,000,000 over 1904. This represents the White River Division and M. H. & L. line construction.

The next table, taken likewise from the Interstate Commerce Commission's annual reports, gives rate of bond interest paid by railroads in Group 8, and by the Iron Mountain Railroad for each fiscal year from 1899 to 1907, inclusive. Group 8 is that large group of States in which Arkansas is situated under the Interstate Commerce Commission's classification.

## RATES OF BOND INTEREST PAID BY RAILROADS IN GROUP 8 AND BY THE IRON MOUNTAIN RAILROAD.

| Year Ended June 30 | RATE OF INTEREST PAID | | Taken from Interstate Commerce Report. See page |
|---|---|---|---|
| | Group 8, per cent | Iron Mountain, per cent | |
| 1899 | 4.29 | 4.8 | 575 |
| 1900 | 4.14 | 4.6 | 559 |
| 1901 | 4.47 | 4.57 | 561 |
| 1902 | 4.03 | 4.62 | 570 |
| 1903 | 4.08 | 4.62 | 574 |
| 1904 | 4.11 | 4.51 | 598 |
| 1905 | 4.16 | 4.50 | 588 |
| 1906 | 4.10 | 4.49 | 614 |
| 1907 | 4.09 | 4.47 | 643 |

*The railroad company, in exhibit 47, reports the 1906 dividend as 10 per cent, but the Interstate Commerce Commission shows the dividend rate to be 14 per cent, and states that this is calculated on basis of the stock issue *less stock issued during the year.*



PAGES

It will be seen from the table that for eight years the interest has fluctuated from 4.47 to 4.8 per cent paid upon the bonds of the Iron Mountain road, and it will be noticed that its rate per cent is a trifle higher than that paid by other roads in Group 8, it ranging from 4.03 per cent to 4.47 per cent. Attention is especially called to the fact that there was a small decline in the rate of interest from 1905 on the roads in Group 8, and from 1902 on the Iron Mountain. But the interest has been reasonably stable at about 4¼ per cent for the roads in Group 8, and about 4½ per cent on the Iron Mountain.

One of the best discussions that may be found on the rate of return upon the property is the very exhaustive one in Steenerson v. Great Northern Railway Company, 69 Minn. 353, same case 72 Northwestern Reporter, 713.

> In that case the Court said: "It is not material how the property has been split up into different rights, interests and claims. For the purpose of fixing the rates, the holders of all these stand in the shoes of the sole owner of the property unincumbered."

In Omaha v. Omaha Water Company, 218 U. S. 180, this Court evidently had the same thought in mind when pointing the difference between the value of a plant under an option to purchase, and its value in regard to returns on the property in rate regulation. In speaking of the former value, the Court said:

> "But it did not limit the value to the bare bones of the plant, its physical property as well as its lands, its machinery, its water pipes or settling reservoirs, nor what it would take to reproduce each of its physical features."

Clearly, it must be held that in fixing the rate of return upon the property, when considered as to whether the rate is confiscatory, its physical features—its "bare bones"—are the test; and that seems to have been the view of the court in the Knoxville Water Company case and the Willcox Gas case.

In the Steenerson case, the amount of interest paid upon the bonded indebtedness was a dominant factor in determining what was a reasonable return to save it from the charge of confiscation.

The Court concluded:

> "It is not necessary here to determine just what rate of annual income on the cost of reproducing all of the road except the terminals is the least which the court would uphold before declaring the rates fixed by the Commission confiscatory, but we are of the opinion that in such times as existed in 1894, an income of 5 per cent per annum on such cost is certainly not unreasonably low or confiscatory, and that is as far as it is necessary to go in this case."

Judge Trieber, in deciding this case, held that the earnings should yield 6 per cent return on the property, and in addition thereto, 1½ per cent for a surplus should be made, thus holding that a return of

less than 7½ per cent to be confiscatory. 187 Federal Reporter, pp. 347-349. The learned Judge in that opinion, lays much stress upon the recent decision of the Interstate Commerce Commission in their investigation of the "Advances of Rates" in both Eastern and Western cases. The Commission held that the sum remaining after payment of fixed charges, including as a fixed charge the dividend upon the preferred stock, should be equivalent to between 7 and 8 per cent upon the common stock, or 6 per cent upon the common stock, and carry 1½ per cent as surplus, or 5 per cent on common stock, and carry 2½ per cent to surplus. In other words, an earning of 7½ per cent upon the property.

But the question before the Interstate Commerce Commission was entirely different from the one before this Court. There the roads were seeking an advance of rates and it was the duty of the Commission to allow rates to be made high enough to produce reasonable returns upon the property, and to guard against unprosperous years, providing such rates were not oppressive. That is a very different question from determining whether the rates established by law are subject to the charge of confiscation in not producing sufficient return upon the investment. One is a question of reasonableness of the rates and reasonableness of return compared with rates, and the other a question of confiscation pure and simple.

It would be right and proper for the Interstate Commerce Commission to consider rates to be reasonable which would be far above a limit of confiscation. For instance, if this Court would hold that rates, producing a return only under 6 per cent were confiscatory, and the railroad companies showed the Commission that they could earn 10 per cent upon their investment and not have a system of rates which would be oppressive or be unreasonable in themselves and in line with rates on other roads similarly situated, there could be no valid objection to the Interstate Commerce Commission holding them entitled to rates producing a 10 per cent return upon their property. If the rates were of themselves proper and just to the traffic, it would be reasonable to allow a return upon property far above the line of confiscation.

We can not present a better answer to the ruling of Judge Trieber upon this point than to quote from the decision of Judge Trieber when this case was before him on the motion to dissolve the injunction. 168 Fed. Rep. 720.

After quoting authorities upon the subject, the learned Judge said:

> "Another matter which is entitled to consideration is the fact which has been brought out at this hearing, that the St. Louis, Iron Mountain & Southern Railway Company, and the Chicago, Rock Island & Pacific Railway Company have, within the last few years, and since the establishment of the Commission rates, constructed extensive branch lines through new and unsettled sections of the State; that these lines were constructed at great

expense, owing to the fact that the greater part of these branches run through swampy country, some of it subject to overflows, which necessitated high embankments; that these roads were built principally to serve as feeders for the main line, and at the same time enable these roads to obtain shorter lines for that part of its interstate traffic which merely passed through the State. These are matters which must be taken into consideration in determining what would be proper net earnings on the investments. It would hardly be proper for the courts to say that such roads are entitled to as great a compensation on their investments from intrastate business as the ordinary roads built for the accommodation of the intrastate as well as the interstate business. As is well known, some of the Pacific roads traverse the desert for hundreds of miles through a strip of territory where there is practically no intrastate business, either freight or passenger. Would it be proper, in such cases, to hold that the road should have the right to charge for its intrastate traffic in that section, tariff rates high enough to enable it to earn a certain, fixed percentage on its investment? Would not, in such a case, the rates have to be so high as to be confiscatory of the property of the residents of that State? Must the public guarantee the railroads a certain income on their investment, regardless of the condition of the country traversed, or whether bad judgment was exercised in the selection of the route? We do not think so. New lines or branches to increase the business of the main line, or the exercise of bad judgment in the building of a railroad, are matters to be considered in determining what rates would be fair and just to the corporation as well as the public. That the railroads are entitled to reasonable profits on their investments, and the public to reasonable rates, or, to express it differently, that the rights of the public and railroad companies are reciprocal, is the correct rule of law."

Then follow quotations from decisions of this Court, after which Judge Trieber resumes his opinion, as follows:

"Guided by these principles, the Court is of the opinion that rates which will enable the complainants to earn 6 per cent on their investment, if fairly entitled thereto by prevailing conditions, would be reasonable, especially in view of the fact that a large part of the money used in the construction of these roads was obtained from loans secured by mortgage, and these loans only bear 4 to 5 per cent interest per annum, thus leaving a larger return for the stockholder, who, of course, is unsecured, and in case of insolvency of the company, would be postponed until the mortgage bondholders are paid in full. For these reasons, the risk of the investment of the stockholder being greater than that of the bondholders, he is entitled to a higher rate of interest on his investment. In determining what rates

would be just and reasonable, the court is relieved of passing upon conflicting evidence for the purpose of determining the value of the investment. Complainants, in their bills, only ask for compensatory rates on the values of the roads as determined by the State Board of Railroad Assessors,, for the purpose of taxation. The assessments in this State are conceded to be upon the basis of 50 per cent of the actual value of the property, and they therefore ask to be permitted to earn fair dividends on double the amount their roads are assessed for taxes."

Judge Sanborn, in Minnesota Rate Case (Shepard v. Northern Pac. Ry. Co., 184 Fed. Rep. 765, on pp. 815, 816), held that 7 per cent per annum should be earned on railroad property to save the rates from being confiscatory.

Judge Sanborn says to deprive them of such a return would prevent advances and tend to compel reduction in the wages and salaries of the employees, and it would tend to prevent extensions of their lines. The contrary of these facts are found in the history of the Iron Mountain.

Mr. McPherson's chart, exhibit 30, shows on the Iron Mountain road in Arkansas, that train labor advanced from 100 in 1897 to 137 in 1907-1908, and shop labor advanced from 100 in 1897 to 123 in 1907-1908.

Mr. McPherson testified that during 1907, that there was an increase of wages on the Iron Mountain of 6.7 per cent. (R. p. 288.)

We have heretofore referred to the testimony of Mr. McPherson wherein he showed that for improvements in grade, alignment and other work of improvement, the Iron Mountain had expended from 1901 to 1908, the sum of $8,684,411 in Arkansas (R. p. 331).

The Interstate Commerce Commission reports, from which the foregoing table is compiled, shows increase in capital stock of the Iron Mountain in 1906 to $44,397,374 from $29,397,374, the increase representing the construction of the branch lines referred to, the White River branch and the Memphis, Helena and Louisiana.

Therefore, it is apparent that this road has been meeting with a return on its Arkansas business sufficient to make the development and improvement, and increase materially its wage level, which Judge Sanborn says it should have in order to carry out these beneficent purposes. Whether that return has been 1 per cent or 10 per cent, the desired result has been obtained, and the stockholders have not suffered for they have received with regularity their dividends, and increasing dividends, so that, commencing with 2 per cent in 1900, then 6 per cent in 1901 and 1902, and 10 per cent up to and including our period of inquiry.

Judge Trieber says that in addition to 6 per cent earned when everything is prosperous, an allowance of 1.5 per cent additional for surplus should be made; evidently to carry over lean years. But the Iron Mountain has had no lean years since 1901, when it commenced

paying its stockholders 6 per cent, and then in 1903 commenced paying 10 per cent. If lean years were to come, certainly a surplus should have been set aside from the 10 per cent dividends which were paid for five years before the injunctions were granted in these cases. Judge Trieber refers to the falling off in the dividends in 1908 and 1909 to 5 per cent, and 4 per cent (exhibit 47), respectively, as not being due to the increased net revenue resulting from the granting of the injunction (187 Fed. Rep. 348). What occurred since the granting of the temporary injunction was not in issue, and the issue was of the condition of the road at the time those injunctions were granted. The pleadings and evidence of the plaintiff pointed to the last half of 1907 as the period when the rates were confiscatory. However, it is not far to look for the drop in the dividends; the record is full of the blighting panic of 1907 and 1908. It is for such panics that careful management should save a surplus from overfull dividends and not seek to increase rates whenever a panic arises. They should have good dividends, but the earnings of prosperous years should not all go in dividends so that in lean years, the shippers and passengers must bear the hard times and the carriers be exempt. For instance, suppose instead of paying 10 per cent dividends for the last five years, only 7½ per cent had been paid, and 2½ per cent carried forward as surplus, there would have been on hand when the panic of 1907 and 1908 fell upon the road, the sum of $4,072,569, which spread over the next two years when 4 and 5 per cent were paid, would have more than paid the 7½ per cent for each of those years, and still had a surplus for the next lean years.

But what occurred during this litigation is not the test, still, these facts points forcibly to the argument we are making that these overfull earnings should not have been paid out in dividends without a surplus being held for unprosperous years. Suppose, one year the road makes 20 per cent, and pays it all out in dividends, and the next year makes nothing; can it have an injunction against the rates which produced one year 20 per cent, and the next year nothing?

This, however, wanders from the main thought, but the wandering only follows naturally an analysis of the right to a surplus over a return on the property. That is a question of railway economics. The stockholders of this road preferred overfull dividends in prosperous years, and lean ones during the panic, whereas, reasonable dividends of 7½ per cent could have been paid during the prosperous years and the panic also. Some other road might pay less dividends than 7½ per cent and prefer to fatten the stock; all these questions are beside the main issue; and that is simply if this road has during the period of inquiry, which it selected—the last half of 1907—paid a compensatory rate of interest upon its property invested in Arkansas traffic under the rates permitted by the laws of Arkansas.

It is not a question here of what the stockholders are entitled to

nor the bondholders. It is a question of what the property is entitled to earn, and, as aptly stated by the Minnesota Court for the purpose of fixing the rates, there is but a sole owner, although the property may be split up into various interests; ownership may be in first and second mortgage bonds, preferred stock, common stock, etc., but the law looks not to these liens or claims; it looks to the sole owner of the property, and says he shall have a compensative return upon it.

You have before you the property itself irrespective of its ownership. The prevailing rate of interest in this section of the Union in railroad securities is 4¼ per cent and upon Iron Mountain 4½ per cent. This is the test of the safety of the investment. This is the prevailing rate of interest upon money invested in railroad property in Arkansas. Suppose that there were no bonds upon the road, and the property earned 4½ per cent interest to its stockholders, and that is shown to be the prevailing rate of interest in Arkansas for railroad bond securities; and as the owner without incumbrance on his property would be as secure in his investment as the owner of a bond secured by mortgage on the property, it would necessarily follow that 4½ per cent would save the return from being confiscatory under the authorities heretofore quoted.

The capital stock represents the control of the railroad. A large part of the real ownership is represented in the bonds. When the bondholders are satisfied to accept 4½ per cent on their property invested in railroads in Arkansas, then it seems that the Court should say that if the whole property produces a return of 4½ per cent, it is not confiscatory. This property is so arranged that it pays interest upon a large bonded indebtedness, and also 10 per cent dividends upon the stock, but that is a mere detail of arrangement of the ownership of the property, and is useful evidence here merely to show that the rates are compensatory as a whole.

What this Court has before it is the rate of interest upon the property as an entity, irrespective of what are the interests into which its ownership is split, shall pay, and if it pays a rate of interest that is usual in such enterprises in the section of the country where the enterprise is situated, then it is spared from the charge of confiscation.

Applying such a test to the evidence in this record, we submit that by no possibility can 6 per cent return be held to be confiscatory. It is the legal rate in Arkansas and that is sometimes held to be one of the tests. In the Stanislaus County case it was expressly adjudicated in regard to an enterprise not near so stable as this railroad property that 6 per cent was not confiscatory, and in the Steenerson case, it was expressly stated that 5 per cent was not confiscatory in regard to railroad property, and this Court held 6 per cent not confiscation of gas property.

When the element of safety and stability in the investment is considered, this road presents an exceptionally secure investment. Excepting its recent branches, it is an old road. The main trunks of it are the Cairo & Fulton road, and the Little Rock and Fort Smith road, old "land-grant railroads," whose history are well known.

The road has materially helped to develop Arkansas, and Arkansas in turn has enriched it. Mr. McPherson says it is the best road west of the Mississippi River (R. p. 432). The statistics quoted show its freight and passenger traffic denser than in Group 8, and also show that immense sums have been spent in the last eight years improving the road. Its interest rate is low and its dividends high. The State increased in population as shown by the last Federal Census, 20 per cent, keeping even pace with the balance of the Union. Vast sums have been spent in the two new branches, which are to carry traffic to the Gulf on low-grade lines, and the opening of the Panama Canal will increase their tonnage enormously. There is no record of default in interest, nor in recent years in dividends.

The railroad's exhibits show return in June, 1907, on its Arkansas business of 9.97 per cent, and in December, 1907, after the panic cut into its revenues, of 7.50 per cent on all of its Arkansas business.

While some complaint has been made of new laws, like the three-brakesmen law, electric headlight law, and a few others of kindred nature, yet, they are all in line with modern regulation for safety and better operation, and no law is referred to which injures in the least the safety of the investment. The Courts of Arkansas have been as sound even as this Court in preserving inviolate vested rights and due process of law. From every standpoint, the owners of this property have a safe investment; one not liable to encounter business risks and venturesome chances.

The question before you does not take the broad scope of rate of return presented to the Interstate Commerce Commission, which, as a rate-regulating body, can so regulate rates as to provide for lean years and fat years, and adjust rights of stockholders, common or preferred, and shippers and passengers; that body looks to a stable adjustment of rates for years; this body looks to the narrow question as to whether for the period complained of the rates yielded a return on the property which is sufficient to be treated as regulation, and not confiscation in the guise of regulation.

The owner of the property unencumbered has as safe security—and safer—than the holder of a mortgage upon it. There may be some vice inherent in the mortgage or priorities between mortgagees may arise. The owner encounters no such risks. Under the laws of Arkansas, liens and judgments prevail over mortgages of railroad property just as they prevail over owners. If this property was owned unincumbered, the owner would have all the stability of the investment which a mortgagee enjoys. If investors seek investments in mortgages on this property, and are content with 4½ per

cent interest on their investment, the owner should not be permitted to say that a rate of return equal to the investers' return is confiscatory.

It is earnestly presented for your consideration, that if the rate of return is found equal (and it will be shown to be much more), to the interest rate on the bonds of the road, which rate has long prevailed, that such long continued rate should fix the limit of compensation; and certainly, a rate equal to the legal rate of the State where the property is situated—6 per cent—is free of confiscation.

## AN ANALYSIS OF SMYTHE v. AMES, 169 U. S. 466.

Several judges have referred to Smythe v. Ames, 169 U. S. 466, as an authority to support the revenue theory of dividing expenses between State and interstate traffic. It is far from being an authority for it, as an analysas of the opinion will show when read in the light of the testimony and exhibits in the case. We have had the benefit of the printed record in the case, and find in it double paging, one printed in black ink and the other stamped in red ink. Presuming the latter are correct, references are to the stamped red ink numbering of the pages.

There were numerous railroads involved in the case and each road presented separately its exhibits.

Mr. William Randall, ticket auditor of the Burlington & Missouri Railroad, of Nebraska, was introduced by that railroad company.

On page 541 he stated that the earnings of his company were $1,883,036.59 for the year 1902.

Then he was asked what were the operating expenses on its business and he answered that the operating expenses, including taxes, amounted to $972,000 (in round numbers).

He was asked the cost per ton per mile on intrastate business. He said the average cost is the only thing they could get at; that they can not get at the actual cost and that the average cost was 1.091 mills and the earnings on intrastate traffic was 2.039 (see pages 541-4).

On cross examination he said that the amount of earnings given were made up from the waybills.

He testified he did not personally make these calculations.

There is something in that to which Mr. Justice Harlan called attention in his decision.

He was asked how he apportioned the expenses and he stated it was impossible to apportion them and that all you could do was to estimate the apportionment, as it could not be separated, and he had not discovered any better method than to make an approximation of expenses based on experience (pages 558-9).

He was asked how he made his calculations per ton per mile on

Nebraska business and he stated he did it by dividing the cost by the number of tons carried every mile.

In other words, he took the $972,000 and divided that by the number of tons hauled.

At page 568 he was asked on what basis and he replied he found the earnings in Nebraska was 21.27 per cent of all the earnings and he applied this 21.27 per cent to all the expenses.

That is the revenue basis as it appeared in that case, only to disappear.

He reasoned thus: "That if that business consisted of 21.27 per cent of all the earnings, that it was reasonable to tax it 21.27 per cent of the expenses. I could not see any other way of assigning the expense to the business the termini of which was in Nebraska (page 569).

That he did not make an examination to find out mathematically the amount of business done in the State. That he reached his figures of $1,853,036.59 as the whole business done in Nebraska, by taking two months in the year 1892, June and September, being good representative months, and found the whole business for those months and all that business which had its termini in Nebraska amounted to 21.27 per cent of the whole earnings in June and September, and he applied the 21.27 per cent to the whole earnings and arrived at the sum stated by him, as the earnings made on the business with its termini in Nebraska for the year. That he took the waybills as a basis for the freight carried in Nebraska for those two months (pages 569-70). The same percentage, 21.27, was applied to get at the other items of cost as well as taxes (pages 573-74).

He stated it was impossible to make an exact apportionment of cost between passenger and freight, and in his calculation he assigned 70 per cent to freight and 30 per cent to passenger. This was based on experience of railroad men.

In apportioning the cost of operating expenses between freight and passenger business, he did not make an apportionment upon the income of the two classes of business; that the apportionment made by him he did not think was far from the apportionment made on revenue from said classes respectively. He did not use the earnings on the passenger business to obtain the proportion of expenses assigned to that business.

On cross examination Mr. Randall seriously shook the competency of his testimony as to the figures put in by him, as he had no personal knowledge of them; they were prepared by a force of clerks under his direction, but not under his supervision. He was recalled by the railroad companies and asked if he had verified the figures he had put in by personal examination since he had put them into evidence, and he said he had. He was asked to state as to the correctness of the figures he had given when he testified before, and he answered:

"The figures I gave when I testified before are perfectly correct, except on operating expenses; that should be $1,221,742.84 on strictly Nebraska business."

There is no explanation asked as to whether this was a clerical mistake, or whether he changed the basis, or how he arrived at the latter figures. It will be noticed that it is a difference of a quarter of a million dollars.

So far as we have been able to gather from the record in this case, this is the only witness who framed his tables on the revenue basis in that case.

Mr. Andrew S. Van Kuran, auditor for the receivers of the Union Pacific, testified, his testimony beginning at page 617. He gave the freight earnings per ton per mile, estimated that they amounted to about 15 per cent of the total earnings; from that estimate the cost per ton per mile on the local or intrastate business; then gave the freight operating expenses, inclusive of taxes, and the cost per ton per mile, exclusive and inclusive of the taxes, and obtained the ratio of the expenses to the earnings upon all business in the State, making 54.36 per cent without the taxes and 58 per cent including the taxes.

He obtained his revenue figures from the waybills, having the revenue ascertained therefrom under his direction, and he found that the total operating expenses to the total earnings were 58 per cent; that is, of every hundred dollars, $58 were spent for operation. Then he estimated the passenger earnings at 30 per cent; the actual figures given were only of the freight earnings. That railroad men proportioned the freight and passenger business on train mile basis, which gives it 70 per cent to 30 per cent (page 620).

(Mr. Randall said he just estimated his, but the others made a calculation on the train mileage and seem to have reached the same result.)

The Government required his company to make a separate showing of the earnings east of Cheyenne, and from those earnings he deducted a proportionate amount of the mileage represented by the distance from Cheyenne to the Nebraska State line, which was forty-three miles, and the remainder represented the earnings of Nebraska, and upon these bases obtained his earnings per ton per mile. That he (Mr. Van Kuren) was unable to say what proportion of the traffic carried over his road originated and ended within the State. Thus it is seen the Union Pacific, which is the principal road in that litigation, made no effortt o use the "revenue basis" to sustain their contentions and put in no exhibit based thereupon.

In fact, it is seen in the decision of Judge Brewer and the decision of this Court, that the calculations were made upon an entirely different basis, which will be noted later.

When the court came to consider the case, it largely relied upon an exhibit put in evidence by Mr. Dilsworth.

The only reference in either Judge Brewer's opinion or in the



ED PAGES

opinion of the Supreme Court, which shows any consideration to Mr. Randall's calculations, is in the latter.

It seems that the counsel for the State based an argument upon this testimony of Mr. Randall; that is, upon the calculations as first made by Mr. Randall, and Justice Harlan called attention to the fact that he corrected his figures of the apportionment of operating expenses from $972,000 to $1,221,000 (speaking in round figures).

When you turn to the exhibits in that case, you will find that the theory upon which the case was really decided:

On exhibit 4 (it is referred to on page 529), you will find that in the first column is given the number of tons hauled locally, and that in the next column shows the average amount received for each ton handled. Those figures were derived from the waybills.

The third column is the total amount received for tons hauled locally and those also were derived from the waybills.

The next is the total amount of reduction caused by H. R. 33.

The next is the amount received from passenger business.

Then follows exhibit 19, which follows the same plan.

The next exhibit, No. 20, likewise following the same plan, except the last column is the percentage of expenses to earnings.

You will see from page 533 this is the percentage of all earnings on all business done on the entire road.

The next table, at page 536, adds 10 per cent to the percentage of all expenses to earnings on all business in the State, and thereby obtains a factor by adding this 10 per cent based on the minimum amount given by Mr. Dilworth, as the extra cost on all intrastate business.

The next table deals with the legislative reductions.

The decision was based upon those tables making up the ratio of cost, and when the ratio of cost was obtained, and then adding the 10 per cent to represent the added cost of State over interstate business, this being the amount admitted by the State's accountant to be the minimum, and the percentage thus obtained represented the ratio of expense to earnings on the intrastate business.

Therefore it is plain that the revenue basis as presented here was not the factor determining this case but the bases of division made up as above stated, on a totally different theory.

Another significant fact found in the record of that case is that the revenue per ton per mile upon which the calculations were based was the same in intrastate as in interstate traffic.

The railroad exhibits show the revenue from State and interstate revenue jointly. They did not get the revenue, apparently, from the State waybills and the interstate waybills, as has been done in this case, but they took the revenue on all business. So that made the ton per mile revenue the same on State as it was on interstate business.

In the trial before Judge Trieber we had the tables analyzed by the accountants, who demonstrated this to be a fact.

When they come to measure the extra cost in that case, they started on a level basis; that the revenue per ton per mile, State and interstate, was the same. We know it is not true here, because we know the revenue per ton per mile on State traffic is almost (98.18 per cent) double that on interstate. So there is 100 per cent difference in the basis to start in, without adding extra cost, whereas, in Smythe v. Ames such was not the case, or if true in fact, was not developed in the evidence, and the statistics were based on uniformity of revenue, intrastate and interstate, per ton per mile.

## C., M. & ST. P. RY. CO. v. TOMPKINS, 176 U. S. 167, ON THE REVENUE BASIS.

Whatever construction may have been put on Smythe v. Ames, there can be no misconstruction placed on the opinion by Justice Brewer in the Tompkins case in its unqualified rejection of the revenue basis of dividing property and expenses between State and interstate traffic on the gross earnings or revenue basis.

There is a statement of the finding of fact made by the lower court That is on page 170.

It is shown in paragraph 4 of the finding that the trial court divided the property on the gross earnings basis between State and interstate traffic. The figures on each road are given and the percentage of gross earnings to total earnings, and the trial court made a division of the property upon the gross earnings basis, in order to get a valuation upon which to obtain a return on the property.

This Court, through Mr. Justice Brewer, said:

> "We are of opinion that neither the findings made by the court, nor such facts as are stated in its opinion, are sufficient to warrant a conclusion upon the question whether the rates prescribed by the defendants were unreasonable or not, and we are also of opinion that the process by which the court came to its conclusion is not one which can be relied upon. The Court proceeded upon the theory that a comparison of the actual gross receipts of the company from its South Dakota local business with those which it would have received if the rates prescribed by the defendants had been in force was sufficient to determine the question of the reasonableness of these latter rates, and instituted such comparison with respect to the four years preceding the commencement of this suit. Now, it is obvious that the amount of gross receipts from any business does not of itself determine whether such business is profitable or not. The question of expenses incurred in producing those receipts must be always taken into account, and only by striking the balance between the two can it be determined that the business is profita-

ble. The gross receipts may be large, but if the expenses are larger, surely the business is not profitable. It can not be said that the rates which a Legislature prescribes are reasonable if the railroad company charging only those rates finds the necessary expenses of carrying on its business greater than its receipts.

"In the light of these general and obvious propositions, we proceed to examine the computation and reasoning of the court. For reasons which will be apparent hereafter we do not stop to inquire whether its findings are correct deductions from the testimony, but take them as they are stated. It may be premised that the books of the plaintiff, showing its business for the four years, were examined, and so much as was deemed necessary admitted in evidence. From those books was disclosed with mathematical accuracy the gross receipts of the company on all its business in all the States during each of the four years and the actual cost of doing that business during each of those years; also the gross receipts from the business done in South Dakota, and separately the amount which was received in that State from interstate business and that from local. If the schedule of rates prescribed by the defendants had been in force during the four years, and the same amount of business had been done by the company, the reduction in gross receipts from the passenger business would have been 15 per cent and from the freight business 17 per cent. Of course, the cost of doing the business would be substantially the same. The Court found the value of the plaintiff's property in South Dakota to be $10,000,000, although, according to the testimony, it was bonded for over $19,000.00. It held that it was not fair to consider that sum, $10,000,000, the value of the property employed in doing local business; for it was also used in doing local interstate business; and that the true way to determine the value of the property which could be regarded as employed in local business was by dividing the total value of $10,000,000 in the same proportion that existed between the amount of gross receipts from interstate business and that from local business, each of which amounts was, as we have seen, accurately shown by the testimony. Upon that basis of division it found that the value of the company's property employed in local business was for the first year, $2,200,000; the second year, $2,600,000; the third year, $2,100,000; and the last year, $1,900,000; and also that the gross receipts from local business were for the first year, 18.5 per cent of the valuation; for the second year, 12.7 per cent; for the third year, 15.6 per cent; and for the last year, 16.3 per cent. In other words, for these several years the company received as compensation for doing its local business the per cent named of the real value of the property used in doing that business. Then, proceeding on the supposition that



BLURRED PA

the defendant's schedule had been in force and the rates reduced as therein prescribed during these four years, it divided the valuation of $10,000,000 on the like proportion of the receipts from interstate business to the receipts from local business as thus diminished, and upon such division found that the valuation of the plaintiff's property engaged in local business would have been for the first year, $1,900,000; for the second year, $2,300,000; for the third year, $1,800,000; and the last year, $1,600,000; and upon such basis that the gross receipts from local business would have amounted to 18 per cent of the value of the property for the first year, 12.1 for the second, 15.3 for the third, and 16.2 for the last. Upon this it held that the difference between the per cent of receipts in the two cases was slight, and that there was no change in what may rightfully be called the earning capacity of the property sufficient to justify a declaration that the reduced rates prescribed were unreasonable. In other words, it was of the opinion that the earning capacity was so slightly reduced that it could not be affirmed that the new rates were unreasonable.

"But that there was some fallacy in this reasoning would seem to be suggested by the fact that, although the defendants' schedule would have reduced the actual receipts 15 per cent on the passenger and 17 per cent on the freight business, the earning capacity for the last year was diminished only 1/10 of 1 per cent. Such a result indicates that there is something wrong in the process by which the conclusion is reached. That there was, can be made apparent by further computations, and in them we will take even numbers as more easy of comprehension. Suppose the total value of the property in South Dakota was $10,000,000, and the total receipts both from interstate and local business were $1,000,000, one-half from each. Then, according to the method pursued by the trial court, the value of the property used in earning local receipts would be $5,000,000, and the per cent of receipts to value would be 10 per cent. The interstate receipts being unchanged, let the local receipts by a proposed schedule be reduced to one-fifth of what they had been, so that instead of receiving $500,000, the company only receives $100,000. The total receipts for interstate and local business being then $600,000, the valuation of $10,000,000, divided between the two, would give to the property engaged in earning interstate receipts in round numbers $8,333,000, and to that engaged in earning local receipts $1,667,000. But if $1,667,000 worth of property earns $100,000 it earns 6 per cent. In other words, although the actual receipts from local business are only one-fifth of what they were, the earning capacity is three-fifths of what it was. And, turning to the other side of the problem, it appears that if the value of the property

engaged in interstate business is to be taken as $8,333,000 and it earned $500,000, its earning capacity was the same as that employed in local business—6 per cent. So that, although the rates for interstate business be undisturbed, the process by which the trial court reached its conclusion discloses the same reduction in the earning capacity of the property employed in interstate business as in that employed in local business, in which the rates are reduced.

"Again, in another way, the error of the Court's computation is manifested. The testimony discloses that the operating expenses of the entire system during each of the four years were over 60 per cent of the gross receipts. If the cost of doing local business in South Dakota was the same as that of doing the total business of the company, then the net earnings of that local business would not exceed 40 per cent of the gross receipts. Reduce the gross receipts 15 per cent—and the reduction by the defendants' rates was 15 per cent on passenger and 17 per cent on freight business—it would leave only 25 per cent of the gross earnings, to be applied to the payment of the interest on bonds and dividends on stock. But the testimony shows that the cost of doing local business is much greater than that of doing through business. If it should be 85 per cent of the gross receipts (and there was testimony tending to show that it was as much if not more), then a reduction of 15 per cent in the gross receipts would leave the property earning nothing more than expenses of operaion. These computations show that the method which the court pursued was erroneous, and that without a finding as to the cost of doing the local business it was impossible to determine whether the reduced rates prescribed by the defendants were unreasonable or not." Chicago, M. & St. P. R. Co. v. Tompkins, 176 U. S. 168.

The revenue theory, which was tried out in the Tompkins case, and thus emphatically rejected is reasserted, not even in disguised form, in this case, when its application is even worse than in the illustrations made by Mr. Justice Brewer.

At the expense of some repetition, as this matter is presented in another connection, yet in this connection we want the attention of the Court to these facts:

The railroad's exhibit No. 5 shows that the State freight revenue per ton per mile was 13.37 mills; and that the interstate freight revenue was 6.75 mills per ton per mile, during the six months under inquiry.

Exhibit 5 also shows that the total State freight revenue was 13 per cent and that the interstate revenue was 87 per cent of all freight revenue. And that the State tons one mile were 7 per cent and the interstate tons one mile were 93 per cent of the total tons one mile.

As the value of the property assigned by the railroads to State



BLURRED PA

traffic was divided between State and interstate business on the basis of the revenue, this would assign to the State freight business a property valuation of 13 per cent of the property and would assign to the interstate freight business a property valuation of 87 per cent.

That is, the State freight business in volume is 7 per cent of the total and has assigned to it 13 per cent of the property upon which it is required to earn a fair return.

The value of the property devoted to the State use is ascertained by the railroads on this revenue basis; that is, 7 per cent of the ton miles which represent the State use of the common property is not used as a factor to ascertain the State's proportion of the property.

But the revenue derived from the ton miles is used to segregate the State property from the interstate, resulting in charging 7 per cent of the traffic with the use of 13 per cent of the property.

The practical application of the revenue basis for dividing expenses is shown in exhibits here made by Mr. Kimbell, Assistant Auditor of the St. Louis Southwestern Railway Company, of actual conditions more striking than in Judge Brewer's illustrations above quoted.

At the request of the State, Mr. Kimbell put in exhibit "A," giving statistics which he had worked up on his road for January, 1909, showing the transtate, interstate and intrastate freight handled for that month and the amount received per ton per mile for each class of traffic.

It will be remembered that Judge VanDeventer granted the injunction herein against the Commission freight tariff on September 5, 1908, and since that time the Commission has made no freight rates.

The railroads having a free hand put in, in October or November, 1908, both interstate and intrastate tariffs and all the freight in Arkansas until June 7, 1909, when the "Court Tariff" became effective, was hauled upon tariffs of their own making. The statement showed an increase per ton per mile of 9.4 per cent intrastate and 96.1 per cent interstate over the rates existing when its intrastate tariff was enjoined. (R. p. 769, 770). (These are the rates Judge Trieber declared unreasonable on the motion to dissolve the injunction.) Mr. Kimbell was requested to calculate the effect on the actual expenses assigned to the State, on the revenue basis, assuming that these increases had occurred to the revenue in the last six months of 1907. In other words, to take the expenses assigned to State traffic as found in his exhibit for that period, according to the revenue then existing and what they would have been had the revenue increased for that period as it did for January, 1909. (R. p. 771.)

In compliance with that request, he put in exhibit "E."

His exhibit 33 shows intrastate freight revenue for last six months of 1907 on $173,064.45. Had the increase of January, 1909, been in effect on the freight it would have been $339,380.07, and expenses assigned to that traffic of $89,227.26, the percentage being 9.64; according to an application of the increase of January, 1909, applied

to this period the intrastate revenue would have been $339,380.07 and interstate expense $148,796.46, or 16.26 per cent.

In other words, had the revenue, State and interstate, been increased for the six months' period as it was actually increased during January, 1909, for moving exactly the same commodities on exactly the same expenses, the greater increase of State rates would have increased the expenses assigned to the State from $89,000 to $148,000, without a single actual increase of one dollar of expense. Surely, as Justice Brewer says, "such a result indicates that there is something wrong in the process by which the conclusion is reached."

## THE EVIDENCE ON THE REVENUE THEORY.

*Explanation and Application of the Revenue Theory.*

The railroads predicate their case on the revenue theory of dividing property and expenses between State and interstate, and it will be useful at the threshold of the case to understand exactly what the railroads consider the revenue theory to be. In a question to Mr. McPherson, Assistant to the General Manager of the Iron Mountain Railroad, one of the chief witnesses for the railroads, by the counsel for the railroads, it was thus stated: "In compiling exhibit 3, I understand that the auditing department ascertained all the expenses chargeable to the State of Arkansas, for both intrastate and interstate and miscellaneous traffic, on the basis of actual expenditures, as far as possible, and then assigned to the intrastate traffic a portion of the total expenses of the State of Arkansas, based upon the percentage of the intrastate revenue to the total revenue." (R. p. 304.) To state the proposition concretely, the revenues of a railroad are ascertainable quanities. The books of the railroad company show the sources from which every cent is received, interstate, intrastate and miscellaneous; every cent paid to a railroad for shipping freight or for passenger fare, or for express, or from mail contracts, or from rents, or whatsoever other source of revenue, is definitely located. In this case they have been located accurately for the period of the inquiry, which was the last six months of the year 1907. The railroad selected that period to present in detail their revenues and expenses, and the accountants for the State have carefully gone over their calculations, and wherever errors were discovered they have pointed out, and the final exhibits have their approval, as substantially accurate as to the actual revenues received by the railroads during the period of inquiry. Likewise the expenses incurred in the State of Arkansas have been accurately ascertained. The division of them between freight and passenger is the subject of another chapter. There is no controversy in this case over the value of the railroad property. That was settled by a stipulation, which reads as follows:



BLURRED

"It is agreed by counsel for defendant in this case that the assessments introduced in evidence at the hearing of the applications for injunctions in these cases before Judge VanDeventer, and which are set out in the exhibits filed by the accounting officials of the respective complainants, in the evidence taken before the Master in these cases, were made upon the basis of 50 per cent of the value of the property; and that said assessments, multiplied by two, respectively, represent the value of the property for the purposes of this case." (R. p. 653.) There is some difference of opinion among the accountants and the witnesses on the opposite sides of the case as to the proper crediting of revenue received. There is a wide difference as to the proper distribution of expenses between State and interstate, and a wide difference as to a division of the property between State and interstate, but the actual revenues and the sources from which the same were received, the actual expenditures and the actual value of the property, are not matters of controversy. Primarily, the court must find a method of dividing the property between State, interstate and miscellaneous traffic and between freight and passenger. There is controversy in this case as to some part of the property, and as to whether certain expenses charged here to the State of Arkansas should be charged. For instance, the Iron Mountain Railroad rents from the St. Louis Southwestern Railroad the use of its tracks from Paragould, Arkansas, to the Thebes Bridge, on the Mississippi River. Thirty-six miles of that track is in Arkansas. For its use the Iron Mountain Railroad pays in round figures about $35,000 a year, and bears its proportion of the maintenance-of-way on a car-mile basis. This track is used exclusively for interstate freight traffic. The Iron Mountain has agreed in its contract of lease that it will not run passenger trains, or stop its freight trains, for any local business on this line. There is some controversy, or rather difference of opinion, among the witnesses as to the purpose of this contract, Mr. McPherson contending that it serves the purpose of a double track to relieve the congestion of traffic of the main line from St. Louis south, but he admits in his testimony, and that fact is well brought out by other witnesses, that one of the purposes was to carry the interstate freight on a low-grade line, instead of hauling it over the high grades in and about DeSoto, Missouri, a point between St. Louis and the Arkansas line, on the main line. Be the purpose what it may, it is an established and admitted fact that this track, at an expense of $35,000, is used exclusively for interstate freight; yet, in the statistics of the case relied upon by the railroad, that $35,000 is charged as an expense to Arkansas, and is divided between all business of the State as if it were an expense existing generally; in other words, the intrastate freight and passenger traffic and the mail and express traffic are charged with the same proportion of this as they are with any other expense incurred in the opera-

*Agreed Valuation of the Property.*



PAGES

tion of the road in Arkansas. Memphis, situated on the east bank of the Mississippi River, immediately opposite the State of Arkansas, is entered by the Iron Mountain road, there being about a mile and a half of trackage in Tennessee, and expensive terminals in the city of Memphis. All the expenses of Memphis, including the salary of attorneys attending to the Tennessee business of the road, are charged to Arkansas, and this expense divided between the various classes of traffic, just exactly like the terminal expenses of Little Rock and the expenses of the legal department of the State of Arkansas are divided between the various classes of traffic. On the western side of the State is the city of Fort Smith, situate on the Oklahoma border. There are expensive terminals in Fort Smith, and these terminals serve both Arkansas and Oklahoma, but all the expense of Fort Smith is charged to Arkansas except the legal department located there, which is divided between Arkansas and Oklahoma, on a mileage basis. These matters are mentioned in this connection, not to present them in argument at this time, but to explain that while the expenses are ascertainable quantities and there is no controversy over them, or over the value of the property in this case, yet there are controversies over the division of the property; what property is properly chargeable to the State; over the apportionment of the expenses; and, as to many items of expense—whether they are proper charges at all.

The least matter of difficulty is to ascertain the revenues of the railroad, and to divide them between intrastate and interstate traffic. While this traffic is commingled and handled interchangeably, yet it is indellibly impressed with its true character from the time the railroads assume it. The instant it receives a shipment of freight its origin and destination are known, and its character as State or interstate fixed, and the same is true of a passenger; he is either an intrastate or an interstate passenger from the moment the relation begins. Most of the passenger trains carry mail and express. Some of this has origin and destination within the State. Some of it is transstate, passing through the State without having its origin or destination within the State, while other has origin and destination in this State, and other origin or destination in another State. But all of this traffic passes upon the tracks alike, is handled upon the tracks alike, and there is no change in the handling on account of passing the State line. After obtaining the revenue derived from all sources in the State of Arkansas, the railroads proceed to divide the property and the expense on this revenue basis, and to do this, they take the percentage which the revenue of each class, divided between interstate passenger, intrastate passenger, interstate freight, intrastate freight and miscellaneous freight and miscellaneous passenger, bears to the whole as the factor to find the property devoted to, and expense incurred by, each of said respective classes of traffic. This puts concretely an example of their methods, disregarding, for simplicity, the freight and passenger subdivisions. Suppose the revenue from a railroad to be



BLURRED P

one million dollars from all sources. Of this, one hundred thousand was for mail, express and other miscellaneous traffic; $200,000 was from intrastate freight and passenger traffic, and $700,000 from interstate freight and passenger traffic; the proportion of intrastate revenue would be 20 per cent, miscellaneous 10 per cent, interstate 70 per cent. Suppose the expense of conducting the whole traffic for the year would amount to $500,000; then, under the revenue basis of dividing the expenses, 20 per cent of that expense would be assigned to intrastate, 70 per cent to the interstate and 10 per cent to the miscellaneous. Suppose the property of the railroad was valued at $40,000,000, the amount assigned to intrastate traffic would be 20 per cent, or $8,000,000; to the miscellaneous 10 per cent, or $4,000,000, and to the interstate 70 per cent, or $28,000,000. This is the application of the revenue theory before reaching the extra cost of the intrastate traffic, which will be presented at some length hereafter, which is, briefly stated: Various railroad operating officials testified that it cost from 100 to 800 per cent more, varying in accordance with the opinions of the different officials, as to the increased per cent to operate intrastate freight over interstate freight traffic. Then, after the expenses are divided, as above outlined, and the proper per cent assigned to intrastate freight business, 100 per cent is added then to that sum, or 200, or 600, or 800, according to the theory adopted as to the amount that it will cost. Similarly as to the intrastate passenger, the increased cost varying from 25 per cent to 50 per cent

Mr. R. E. Kimbell, Assistant Auditor of the St. Louis Southwestern Railway Company, an accomplished accountant and a representative of his company in this case in the preparation of statistics, was asked the effect of an increase of State rates without a corresponding increase of interstate rates on the expense assigned to the State under the revenue theory. He answered correctly the effect, and at the request of counsel for the State, worked out the following example, which is exhibit No. 23: Assuming the entire revenue from freight in the State is $100,000 and the entire freight expense of the State $70,000, interstate freight revenue $85,000, intrastate freight revenue $15,000; then calculate the amount of expense chargeable to State business, and the amount of expense chargeable to interstate business, and then assume intrastate rates are increased 33⅓ per cent. Then make the same calculation of what amount is chargeable to State business and what to interstate, assuming the $70,000 expense account would remain stationary, and that the interstate rates would remain stationary; also make a calculation under the rule followed in granting the preliminary injunction in this case—assume 100 per cent more cost for State freight operation than interstate freight operation:



GES

## ANSWER TO JUDGE HILL'S EXAMPLE.

| Item. | Per Cent. | Amount on Straight Rev. Basis. | Amount Under Judge VanDeventer's Theory of 100 Per Cent Extra Cost for State Business. |
|---|---|---|---|
| State freight revenue..... | 15 | $15,000.00 | |
| Interstate freight revenue.. | 85 | 85,000.00 | |
| | 100 | $100,000.00 | |
| State freight expenses..... | 15 | $10,500.00 | $18,200.00— 26% |
| Interstate freight expenses. | 85 | 59,500.00 | 51,800.00— 74% |
| | 100 | $70,000.00 | $70,000.00—100% |

STATE FREIGHT REVENUE INCREASED 33⅓ PER CENT WITH NO CORRESPONDING INCREASE IN INTERSTATE REVENUE.

| | | | |
|---|---|---|---|
| State freight revenue..... | 19 | $20,000.00 | |
| Interstate freight revenue.. | 81 | 85,000.00 | |
| | 100 | $105,000.00 | |
| State freight expenses..... | 19 | $13,300.00 | $22,400.00— 32% |
| Interstate freight expenses. | 81 | 56,700.00 | 47,600.00— 68% |
| | 100 | $70,000.00 | $70,000.00—100% |

FORMULA FOR ADDING 100 PER CENT EXTRA COST.

| | | | | |
|---|---|---|---|---|
| 15% × 2 = 30 = | 26 | Difference | 11% + |
| 85% | 85 = | 74 | " | 11% = |
| 100% | 115 | 100 | | |
| 19% × 2 = 38 = | 32% | Difference | 13% + |
| 81% | 81 = | 68 | " | 13% = |
| 100% | 119 | 100% | | |

Exhibit 23.

To explain this problem without following it in detail, it is this: On the assumed hypothesis the expense assignable to the State freight business would be $10,500.00; if the State rates were increased 33⅓ per cent and the interstate rates were not increased, the division of the same expense would assign to the State of Arkansas $13,300, or an increase of $2,800, without any real increase whatsoever, but an increase due solely to the methods adopted for dividing this expense, which would be an unreal expense against the State of $2,800, merely



BLURRED

because the State rates were increased 33⅓ per cent. Assuming the correctness of 100 per cent extra cost for State business over interstate, instead of $10,500 there would be assigned to the State business $18,200, and when the rates were increased 33⅓ per cent then the 100 per cent extra cost for State business would assign to the State $22,400.00, an increase of $4,200, as against an increase of $2,800 merely due to the methods adopted; and, in fact, there being no increase of State expenses whatsoever.

Mr. Frank Nay, Comptroller of the Rock Island System, another accomplished accountant and the chief witness for the railroads upon all accounting subjects, in his carefully-prepared essay on the revenue basis, which he read, contended that a similar calculation to the one which Mr. Kimbell prepared, at the request of the State's counsel, refuted an argument which he heard advanced against the revenue basis, that it was like traveling in a circle, and that when the revenue of intrastate traffic is doubled, the operating expenses also doubled and the end was just the same as in the beginning. And then he made his calculation to demonstrate that it did not thus work. His calculation using differently-assumed totals was exactly the same as Mr. Kimbell's. It will be found on pages 634, 635. On cross examination, his attention was called to Mr. Kimbell's exhibit No. 23, and he said that it is the same as his illustration and that was worked out correctly. (R. p. 655.)

While somewhat a digression, yet it may assist the court to call attention to actual conditions shown to have existed in this case which made this example of the operation of the revenue theory a practical one and not a mere theoretical one, as is contended by the witnesses for the railroads. They say that such a condition as assumed in exhibit 23, an increase in State rates without a corresponding increase in interstate, is impractical and not consistent with railroad practice. After the temporary injunctions were granted in this case by Judge VanDeventer, the railroads who secured the injunctions put in voluntary intrastate freight tariffs. These tariffs went into effect November 2, 1908. In February, 1909, the State filed a motion in the Federal Court to dissolve or modify the injunctions on the ground that the railroads had taken advantage of the injunctions to inflict unreasonable and discriminatory rates on the people of Arkansas. This came to a decision in April, 1909. The Circuit Court held that the rates were unreasonable and at least 50 per cent higher than the Standard Distance Freight Tariff, which had been the tariff in force for the past eight years for all intrastate freight traffic. In the testimony of Mr. Flippen, the General Traffic Manager of the Iron Mountain, he said that the increase of interstate rates was 10 to 15 per cent when the State rates were increased. (R. p. 263.) Mr. Perkins, the General Freight Agent of the Iron Mountain, testified they were increased 10 per cent. There is an exhibit to the testimony of Mr. Kimbell, when he produced as a wit-



PAGES

ness for the State, in which was shown that in January, 1909, the month during which the railroads made both the intrastate and interstate rates, that the interstate revenue of his road, the St. Louis Southwestern, increased 9 per cent, and the intrastate revenue was increased 96 per cent per ton per mile (R. pp. 769, 770) set forth in exhibit "A.") Subsequently, Mr. Kimbell, after a careful examination, testified that the increase of 96 per cent of the State revenue was not due wholly to the increase of State rates, but was due in a large measure to the shifting of commodities, and that the actual increase of rates was 48 per cent. There was no showing by him, although it was requested, of whether the 9 per cent interstate increase was entirely due to the increase of rates, or was likewise due to both increase of rates and shifting of commodities. Mr. Perkins, one of the witnesses for the Iron Mountain on rate matters, testified that there was no shifting of commodities as between State and interstate business in January, 1909. (R. p. 1632.)

Thus it is seen in actual practice that if at any time following November 2, 1908, and before the railroad rates were annulled by order of Judge Trieber, the State and interstate expense had been separated under the revenue theory, there would have been a tremendous increase of the State expenses by reason of the great increase of the intrastate rates and revenues over the interstate rates and revenues without in fact a single dollar of actual increase. Surely such a basis can not be a sound one.

The discussion of the revenue theory calls for its division into its component parts. The theoretical side of it is the opinion evidence of gentlemen learned upon the subject as to its being a proper factor for this purpose. This is opposed by the opinion evidence of men learned upon the subject, who contend that is not a proper factor. Opinion evidence is weighed from the standing of the men, their experience, their observation, their learning upon the given subjects, their character, and the cogency of their reasoning. We will divide this discussion into three parts: (1) The theoretical side of it; (2) the relation of the rates to the cost of service; (3) the relation of the intrastate and interstate rates to each other. In addition to having these matters discussed by men learned in the subject, the State has gone further and exhibited the rates under which the great body of interstate traffic moved, and has, we think, demonstrated that the rates bear no relation to the cost of service, and that there is no cost relation between State and interstate rates; and, in fact, no relation between any given set of rates, either State or interstate. The subjects will be presented separately and in order.

## (1) THEORETICAL SIDE OF THE REVENUE BASIS.

On the theoretical side of the case the railroads presented Mr. C. J. McPherson, Assistant to the General Manager of the Missouri Pacific

*Plaintiffs' Evidence.*

and Iron Mountain System. Mr. McPherson has had thirty-two years' experience in railroad service ranging from telegraph operator, station agent, general yardmaster, master of transportation, chief clerk to the general manager and assistant to the general manager.

The next witness is Mr. W. B. Doddridge, who has had a very extensive railway experience and was general manager of the Missouri Pacific System from 1893 to 1900, since which time he has not been an official of any railway. He was also at some time the general manager of the Cotton Belt road.

The next and only other witness on this subject was Mr. Frank Nay, Comptroller of the Chicago, Rock Island & Pacific Railway. Mr. Nay's work in railway service has been entirely in the accounting department. An analysis of the testimony of those witnesses is necessary in order to get a correct understanding of the revenue basis as presented by the railroads themselves.

It will be interesting to note in the testimony of these three gentlemen upon this subject practically nothing is said in support of the division of property between State and interstate business on the revenue basis.

Probably one of them made a general statement that it was the proper basis for both property and expenses; but with the exception of some general remark of that kind, there is absolutely nothing developed in this record to sustain the revenue theory as a basis of division of property in the State between State and interstate traffic. They make arguments in favor of dividing the expenses between State and interstate, and go into it exhaustively. They present fully their views upon that phase of the question. But upon the other phase of the question, and an absolutely necessary one, they are silent.

Mr. McPherson's testimony on this subject begins at page —. (R. p. 304.) He first takes up what is called the "units of measure," which run through railroad operation. He discusses "train mileage," "car miles," "number of tons," "number of passengers," "ton miles," "passenger miles." He discusses learnedly and fully the use of these measures and applicability of each to some given conditions and argues that none of them can be used to divide expenses between State and interstate business. In explanation of the various uses of these different units that are in vogue among the railroads for the purposes of measuring different quantities, he throws a good deal of light upon when and where each measure should be used, in his argument against using any one of them to divide expenses between State and interstate traffic. As none of these various measures that he speaks of is used by the State in this case to divide generally interstate and intrastate traffic, his argument against their use for that purpose, was largely wasted.

The State's accountants have in exhibits prepared by them, used these measures in their appropriate places to measure such matters

as should be measured by the unit applicable to that particular matter and used them much as Mr. McPherson and other railroad officials have testified they should be used. In fact, a large part of the authority for the use of each measure which is used by the State's accountants is found in the explanation of the use of this particular measure in the testimony of Mr. McPherson, Mr. Doddridge, Mr. Rawn and other experts called by the railroads. As the court will see in reading the cross examination of these experts put forth by the railroad, the State attempted, when it found one of these witnesses qualified to speak on a given subject, to find the proper basis for each item of expense, so that when the proper basis was found, it might be used by the State in the various exhibits in which it sought to use the proper basis for dividing each item of expense.

That, however, is a digression from Mr. McPherson's argument.

After making his dissertation against the use of any of these methods, particularly the "ton mile" method of dividing expenses, Mr. McPherson finally comes down to his reasons for adopting the "revenue basis." This is given at page 320. In answer to the question, what is the best basis upon which to divide the expenses of operation, as between intrastate and interstate traffic, he says that the natural basis for dividing the cost of intrastate and interstate business respectively, would, in his opinion, be the proportionate revenue derived from each. This he designates as the "revenue basis." Then he adds: "To this basis as a fundamental one should be added such additional cost as may attach to the handling of intrastate business over that of the interstate." The proposition amounts to this: The best basis for dividing the cost between State and interstate business is the proportionate revenue derived from each and yet to that result should be added additional cost which may attach to the handling of intrastate business over that of interstate. Mr. Nay puts the same proposition in this way (page 635): "After making basic approximation of the operating expenses for intrastate freight or passenger traffic, the figures thus arrived at may be increased in the proper proportion to represent the excess of the cost of transporting intrastate traffic, over the cost of transporting interstate traffic."

It is interesting to note that Mr. McPherson in the beginning of his testimony adds the extra cost to his basis and then argues why the revenue, and by that is meant the straight revenue without the extra cost, is the proper measure of expenses, while on the other hand Mr. Nay makes his argument for the revenue being the proper basis of expense and closes his essay on the subject with the proposition that to the factor obtained on the revenue basis must be added certain extra sums for handling intrastate traffic. Attention is called to it here merely to show the lack of logic of the revenue basis when to it must be added something to make it worth anything—this hypothetical extra cost of intrastate traffic.

That is the revenue basis as developed by these gentlemen. They spent page after page in arguing and in presenting their views to sustain the proposition that the rates represent the cost of the service and that there is a relation between the State and interstate rates. They say that the value of the revenue theory is based upon the cost of the service being a fundamental proposition in the rate and the relation always existing between State and interstate traffic, yet they say after you find that, to give this any value whatsoever you have got to add something to it based upon the opinion of some of the railroad officials, in order to give it any value whatsoever.

That is the revenue basis as presented by them.

After explaining that the revenues are derived from different sources, such as freight, passengers, miscellaneous, rentals, etc., and that a division of these earning can be actually ascertained, then he adds: "Naturally, they reflect the value to the railway of each class of the service it performs." In the next paragraph he makes this statement:

> "Moreover, the revenue basis is reflective of the efforts of the traffic men who make the rates, to consider in a measure the value and character of commodities, and the risk and distance attached to their transportation. This is apparent in the classification of commodities into classes and the different rates established for their carriage."

Then he instances the fact the rate on first-class is higher than on second-class, etc., and that such differentiation in the commodities and rates is recognized by the railways and by all rate-making bodies. He says:

> "The revenue expresses value, character, risk and distance, rather than quantity, and likewise considers to no little extent the question of cost, as it is obvious that it costs more to transport some commodities in small quantities, than it does other commodities in larger quantities."

Then he makes another argument against the ton mile theory and concludes by saying that the revenue basis is a proper basis on which to apportion the cost of operation, as between interstate and intrastate traffic.

Next he takes up the extra cost proposition, which will be considered separately.

At page 401 Mr. McPherson was cross examined upon the revenue basis. He was asked if the revenue basis didn't reduce the price for hauling a commodity to a common level and said that it did not. That the various rates, first, second and third, and other class and commodity rates have considered the differences in character, volume, risk, bulk and as a result of the work, not as a measure of it. The revenue is the result. Then he was asked, does it bear the proper relation to the work done. He answers:

"I never have said that I thought the revenue basis was an exact basis to use, but I believe it has less objections than any other basis, and there are more reasons why it is logical, than any other basis that has been suggested. And it expresses a result of the things that have been done, after they are done."

It was insisted that this was not in answer to the above question, as to whether the revenue bears a proper relation to the work done and he further answered that question as follows:

"I do not know that it bears an exact relation to the work done. That is doubtful. But it probably comes nearer doing so, considering all of the elements, than the other basis. It, of course, does not deal with quantity. It deals with what has been paid for the quantity transported; and that has considered, undoubtedly, the elements of character, bulk, risk and distance."

He was again asked, does it bear proper relation to the cost of transportation, and he says that it comes nearer the proper relation with the cost than any quantity consideration. Then he was asked if it wasn't a fact that rates were largely based upon competitive conditions and not upon the cost of the service. He said that he was not a rate man, but from his general knowledge he knew competition must be considered in rate-making between localities, as well as between railroad companies. He denied that it would necessarily or naturally follow that when rates were made on competitive conditions, that they would not reflect the cost of the service. He takes refuge in the statement that the revenue basis is not perfect, but it possesses less objections than others, and tries to switch off the argument to the ton mile theory. When held down to the question, he says that it is a subject that he does not feel like discussing, as he is not a rate man (page 402).

Mr. McPherson has been put forward as one of the chief witnesses for the railroads, to support the revenue basis.

But Mr. McPherson's experience has been in the operating department. Whenever Mr. McPherson was questioned about rates he declined to answer and stated, as he stated here at pages 402, 403, and again at page 436, that he did not know anything about rates and that these questions that had been discussed by rate-making bodies, and that he did not feel competent to discuss them.

What of the competency of this witness to sustain the revenue theory, when the revenue theory is dependent entirely upon the rate representing the cost of the service, and upon the further proposition that there must be a relation of cost between the State and interstate rates to give it any value?

To proceed with Mr. McPherson's testimony: He was questioned about the cost of handling lumber from Arkansas to its market, St. Louis and other places, where it is handled on a blanket rate and the cost of the service widely differing, but the revenue identical. He admits that there would be a difference in the cost of the service that

would not be reflected in the rates in an instance like this, and admits that the revenue basis is not an exact one. He finally admits (page 403) that distance does not control altogether in rate-making and admits that distance would be ignored in the instances given in order to give two localities an equal chance at the market.

Then he was questioned about shipments of merchandise from St. Louis and other Eastern trade centers to Texas, where shipments are made to various points in varying distance from the common market, like St. Louis, which take the same rate. An illustration of this is given at pages 404 and 405. He admits that on three cars passing through Arkansas from Texas to Texarkana, where the service would be identical, the actual expense identical, the Iron Mountain would receive for one $20.58, for another $14.77 and for another $19.31.

In getting the division of revenue on interstate business where there is a haul in two States, the railroads take the *pro rata* hauled in each State. For instance, if the haul was 100 miles long, fifty miles in Arkansas and fifty miles in Missouri half of the revenue of that haul would be credited to the Arkansas interstate business, notwithstanding the rates in Missouri and Arkansas would be quite different. An illustration of the way that this would work out is given at pages 407 and 408, which shows the inequality of using this revenue as a means of dividing the expense with the intrastate traffic, as there will be a different apportionment for exactly the same service in Missouri, Arkansas and Texas, owing to the difference in the State rate in each of those States. The answer to this question, after several days' consideration, is found at page 426, in which the correctness of the hypothesis is admitted, but it is claimed that such shipments as illustrated therein were obsolete.

But that was no answer to the proposition. An illustration was given of a movement from Carondelet, and so on. But the fact remains that as to some traffic—it may not be a very large volume of traffic—but as to some traffic that would move through those three States, if there were rate suits pending in each of them, there would be a different apportionment of the expense of that traffic in each State, because the State rate in each State is different, while the interstate rate was cut by the State line as a measure of the other.

Mr. McPherson was asked if it was not true that an increase of the State rates made the apportionment of cost to the interstate traffic proportionately higher, and he said that while there was no increase of cost of operation, yet if the revenue proportion of the State as against the interstate was increased, that there would be a proportional increase in the proportion of expense charged to the State.

He admits that an increase in the State rate, without a relative increase in the interstate rate, would increase the expense apportioned

to the State, without any actual increase in the expense under the revenue theory of dividing State and interstate expenses.

He admitted that the interstate passenger and freight rates were not immediately increased when the rates were increased in Arkansas after Judge VanDeventer granted the injunction, and that, therefore, during the period in which there was no increase in interstate rates, application of the revenue basis would have apportioned greater expenses to Arkansas than would have been apportioned prior to these increases, without any actual increase of the expenses. (R. pp. 409-411.)

To Mr. McPherson was quoted the testimony of Mr. Flippen, who stated that there had been an inordinately low interstate rate from Memphis to Arkansas points, and he was asked, assuming this to be true, if under the revenue theory this would not make the apportionment of the expenses charged to Arkansas greater than should be in proportion as the Memphis interstate rates were inordinately low. After a good deal of fencing he says that he does not understand that it would have any effect on the revenue basis of apportioning the expense, and was asked why it would not, and answered as follows:

> "As a probably exact relation does not exist between intrastate and interstate rates in every instance, and it would be difficult to say just what the exact relation should be. There is undoubtedly a relation, but it would be hard to define just what it is.
>
> "The prevailing condition for a short time may have disturbed the relation; that would not be illustrative of or affect the general revenue basis proposition; it would merely throw it out of line temporarily, so long as there was not a proper relation, whatever that might be." (R. p. 427.)

Mr. McPherson, like all other witnesses on this subject, is driven to establish a relation between the State and interstate rates. It is a necessary assumption of the whole revenue theory that there must be a relation between the State and interstate rates in order to make the revenue theory of any value. That testimony will be referred to later, but attention is called strongly to the fact that Mr. McPherson, as all other witnesses for the railroad, necessarily base their revenue theory upon a relation existing between the State and interstate rates. When that relation is demonstrated to be nonexistent, necessarily the revenue theory is exploded.

By all rules of law and evidence, the burden is upon the railroads to prove this relation. That they have signally failed to do, and the State has disproved it. Mr. McPherson finally says that these inordinately low rates from Memphis, which were testified to by the traffic manager of his railroad, might affect the relations between the intrastate and interstate business, but he did not think it would do so materially. Then, again, he apologizes for the revenue theory by saying:

"I would say again that the revenue basis is not perfect. It is open to illustrations that would demonstrate that, but whatever the relations might be between State and interstate raffic rates, so far as my judgment is concerned, it would average up well, taking the whole into consideration, in its entirety." (R. p. 428.)

At other places in his testimony, he frequently says that he is not a rate man and knows nothing about rates, and declines to be questioned as a rate expert (see his statement, pages 402 and 436), yet a relation between the rate, State and interstate, is a necessary factor to make the revenue basis of any value whatsoever, according to his own testimony and admission. And yet he says he knows nothing about rates.

Mr. McPherson says:

"I don't understand the traffic proposition well enough to say what the relation between intrastate and interstate rates is. * * * I must assume that it exists. I believe that it is generally assumed that it exists. If the State rates for any reason are lowered, and that relation would doubtless continue under such circumstances. If the State rates are raised I presume that the relation is still continued by a raise in the interstate rates." (R. p. 429.)

He admits that when the rate is changed that it readjusts relations between State and interstate and readjusts the apportionment of expenses, State and interstate under the revenue basis, but he regards those readjustments as negligible quantities, and yet he admits he does not know what establishes the relation between State and interstate rates. He admits that commercial conditions largely govern both State and interstate rates, and that commercial conditions, as well as others that would enter into rate-making, would apply to both State and interstate rates. (R. pp. 429, 430.)

He finally says that the revenue basis must necessarily give and take in a great many ways, and no doubt illustrations could be multiplied showing where inequalities really would exist under the revenue basis of dividing expenses (page 431). He denies, however, that it gives unto the State which has low rates and takes from the State which has high rates. But that is necessarily the case. The higher the State rates in proportion to the interstate rate, the greater the expenses apportioned to State traffic is, and take States like Missouri and Arkansas, lying side by side, with one interstate rate prevailing for shipments, say from St. Louis to Texas, where the Missouri rates are lower than the Arkansas rates less expenses are charged to Missouri than would be charged to Arkansas, because less revenue is being produced from State traffic in Missouri than is being produced from State traffic in Arkansas, while the interstate traffic in each State bears the same the proportion of revenue, being divided and on a mileage scale.

This is pretty well proven in illustrations put to Mr. McPherson, although he denies them by taking refuge in his lack of knowledge of rates.

On re-direct examination Mr. McPherson says that the cost of the service is kept in view as a fundamental underlying principle upon which rates are fixed (page 435). Mr. Moore then called his attention to Mr. Flippen's testimony that the interstate rates were inordinately low in Arkansas from Memphis and asked him if it were true if the intrastate rates were less inordinately low would the low interstate rates affect the relation as between the two kinds of traffic? He answered that he would have to know the rates and conditions before he could answer the question. That it would be true if conditions were disturbed all round; there would be only one answer to that question, and the answer would be, if the conditions were disturbed all round the revenue basis would be the only basis that they could look to for any hopeful solution of dividing the interstate and intrastate expense of operation. He says that if both classes of rates were inordinately low, it would not affect the relation, and was asked if that would not depend upon the degree of inordination, but the counsel of the railroad preferred to make it a question of co-ordination (page 436). These questions were not answered, but answer themselves.

Mr. McPherson further says on re-direct examination that the revenue theory was the only basis that he knew of that would recognize the classification of commodities or articles that appear in the classes (pages 444, 445). In evidence introduced by the State it is shown that relation between first, second, third, fourth classes, etc., is demonstrated to be a pure theory and not existing in fact, but it is one of the theories which go to make up the argument for the revenue basis. Attention is called to it here, because hereafter attention will be called to the evidence which explodes it.

There is absolutely no relation between these rates, State and interstate. There is no relation between the classification, State and interstate, under which the great body of the traffic moves, and without that relation Mr. McPherson and Mr. Nay and Mr. Doddridge all are forced to admit that the revenue theory has no value. It is a theory absolutely opposed to the conditions, and it is a condition and not a theory which confronts the Court in determining the force of these facts.

Mr. Doddridge was the next witness on behalf of the railroads to sustain the revenue theory. He had had a wide and varied experience, having been general manager of both these railroads, but he has had no active railroad experience since 1900.

He admitted on cross examination that in the Missouri Rate Case and in this case he had acted as adviser to the counsel for the railroads, and in the Missouri case he had discussed the questions with a great many of the witnesses. (R. pp. 466, 467.)

So we may safely infer from Mr. Doddridge's position as adviser to the counsel in expert matters and put forward as one of the leading witnesses, his statements are entitled to consideration, at least. In the later development of the case much that had been said by Mr. Doddridge as to the physical management of the property has been disputed by witnesses put on by the railroads.

He says there is no method he is aware of by which the separation of the expense of conducting State and interstate traffic can be definitely ascertained, and the question arises as to the best manner of arriving at the truth in dividing those two kinds of traffic for the purpose of ascertaining the difference in cost of operation.

He then says there are several bases which have been spoken of, among them the ton mile basis and the revenue basis. He then proceeds to discuss the ton mile basis and attacks it as a proper method for dividing the expense of State and interstate traffic. As the State does not adopt it, although the railroads evidently thought it would, it is useless to follow his argument against it. It might be well, however, to call attention to the fact here that the State does use the ton mile basis for one purpose and one only, and for that purpose Mr. Doddridge says that it is a proper unit of division of such expense. And that is the use of it to divide the traffic between State and interstate on the same train, after the cost of that train has been ascertained.

He says the ton mile as a unit is available for a limited number of comparisons, such as testing the efficiency of car loading, train loading and average cost of revenue derived from certain commodities and the making of comparisons of one commodity with another upon the same railroad or upon different railroads. In the formula for this division prepared by the State, the expenses of the local and through trains are ascertained and then the proportion of interstate and State traffic in each of those trains is ascertained by using the ton mile, in that way deciding the efficiency of car loading and train loading for the actual cost of traffic between State and interstate (R. p. 454.)

After discussing the ton mile, Mr. Doddridge says to be fair and equitable a unit must be used that will reflect all of the average conditions under which the transportation is furnished and charge each ton mile or each passenger mile with the proper proportion of all the expenses. Then Mr. Doddridge continues:

> "In the establishment of rates many elements are considered, such as the physical cost of the service, the weight, the distance, the competitive conditions, the space occupied, the character of the service and the value of the service to the shipper. It is, therefore, necessary to use an arbitrary unit."

Then he says that, in his judgment, the best method that has been suggested for this purpose is what is commonly known as the gross earnings basis. That is, that the gross earnings derived from each

class of traffic for a given period being accurately known, the expenses between State and interstate traffic may then be divided and apportioned upon the per cent each class of gross earnings is made up of, thousands of small units, and they represent the amount received for transportation of the individual shipments. He then adds this statement:

> "The sums charged for transportation bear some definite relation to the cost. These sums vary, being governed by circumstances and conditions, such as weight, distance and classification, and the commercial conditions under which the transportation is furnished." (R. p. 455.)

As will be seen when the State's evidence is analyzed, the definite relation which the sum charged bears to the cost is an unknown quantity. It is true that it varies, as stated by Mr. Doddridge, and the variance is so great and without any system or relation with the cost, that it totally destroys the revenue as a factor to determine the expenses. The whole theory is predicated upon the indefinite hypothesis that the sums charged bear some definite relation to the cost, but no witness has been found to state what that relation is, and the State's testimony shows that it is nonexistent.

Then Mr. Doddridge takes up the commercial conditions and admits and explains how they influence railroads in determining the proper rates to be charged for transportation. He says that all of the elements of expense are reflected in the revenue, and by allotting the expenses in proportion to the amount which each class of traffic produces in the aggregate seems to be the most reasonable and equitable method by which expenses can be apportioned between State and interstate traffic. He says the difference in the value of articles transported and the liability incurred are always taken into consideration as one of the factors to be considered in the establishment of rates. This is undoubtedly true, theoretically, but as will be seen from the admission of the traffic men, who testified on behalf of the railroads and the demonstration of the rates themselves put in by the State, it is theoretical and not in actual use. Mr. Doddridge admits that there are many other considerations which affect the establishment of rates, such as competitive conditions between producing sections and consuming markets. He takes as illustration the interstate rates upon the products of the forest, which constitute a large proportion of the tonnage of Arkansas, and he says that they are established mainly upon the value of the service to the shipper and to the consumer, based upon existing commercial conditions, and that the physical cost of transportation individual cases being a secondary consideration, as a whole the traffic yields a profit either directly or indirectly. (R. pp. 455-457.)

That is the reason, from the railroads' standpoint, that this lumber is transported these great distances at the same rate; that the rate is divided in numerous cases between several carriers, producing a vary-

ing revenue on almost every car of lumber that moves through the State.

That method is not a subject of criticism in this case. That is for the railroad management to determine; whether it is good or bad is for them to determine.

But when they put forward the rates thus made, that are based upon the value to the shipper and consumer, and where the distance and the cost of the service is a secondary consideration, then they can not come in here and claim that the rate represents the cost of the service.

But to return to Mr. Doddridge's testimony. He says at page 456:

> "Changes in rates are necessary from time to time and would affect the allotment of expenses as between State and interstate traffic to that extent, while it is not contended that the actual physical expense would be changed."

He says that interstate rates frequently extend across several States and if below normal by comparison with other rates, for the reason stated, each State would bear its *pro rata* in the reduced expense thus allotted and interstate rates as compared to the total may be abnormally high, which would tend to equalize the condition in the example pointed out. Then he says that interstate rates into and out of Arkansas must be so adjusted as to enable its products to find markets in competition with other producing sections. This principle is essential to the prosperity of both the State and the railroads. Intrastate traffic depends upon this condition being maintained. This is an excellent argument in favor of commercial conditions fixing rates instead of the cost of service fixing rates, and may justify such anomalies as the lumber rates, but certainly this argument does not sustain the proposition that the revenue produced from these rates is a proper measure for the expenses of handling two classes of traffic.

After making the above argument, then Mr. Doddridge says:

> "Transstate traffic as a whole being carried at a much lower cost than short haul traffic, low interstate rates applied to that class of traffic in some cases works no injustice to the interstate traffic in the apportionment of expenses as a whole. The gross earnings method of apportionment of expenses deals with all of the intrastate traffic as a single unit and with all of the interstate traffic as a single unit, upon a system of general averages, without reference to individual shipments or particular rates." (R. p. 456.)

The next argument that Mr. Doddridge makes, is on the allotment of expenses to miscellaneous earnings. In his judgment the State has the best of it, because if there were no miscellaneous earnings from mail and express, the expense would not be very much reduced, as the necessity for running passenger trains would still remain. This is an admission against the accuracy of the revenue theory, but in this case against the interstate side of it.

He makes one statement in his direct examination, to which attention is now called, although somewhat of a digression, that is well worth looking into. He was asked how he thinks taxes assessed and collected in the State of Arkansas on the property of the railroad should be divided between State and interstate traffic, for the purpose of ascertaining the relative cost of those two classes of traffic and he answers that the apportionment of taxes should be based upon the relative amount of property used in the transaction of the different classes of traffic.

For the purpose of ascertaining the relative proportion of taxes on those two classes of traffic he says the proportion of taxes should be based upon the relative amount of property used in the transaction of the different classes of traffic. He says the result of that method of division would be to divide the taxes in proportion to the expense of operation, and that method was adopted by Judge VanDeventer in this case when he granted the temporary injunction, and that is a correct method. He says the division of taxes upon expenses is a correct method and it was adopted by Judge VanDeventer. (R. p. 465.)

In Judge Van Deventer's opinion there is something to that effect, but he obtained his expenses by the revenue theory and, of course, when he used his expenses to apportion his taxes he was using the revenue theory, although his mind evidently ran to the expenses as the proper basis for dividing the taxes.

Mr. Doddridge admits that if the Arkansas Commission should take out of the Western Classification various articles and add them to the commodity lists, thereby resulting in a reduction of revenue on intrastate traffic, it would follow under the revenue theory that this would cause a proportionate decrease of expense against the intrastate traffic in the division of expenses between State and interstate. (R. p. 477.)

At pages 479 and 480 of Mr. Doddridge's cross examination he says that in the division of interstate revenue where the traffic is carried over several roads it would be just to charge the middle road with a part of the terminal expense before the division is made, but that as a general rule that is not done. For instance, take a shipment from Chicago to Dallas, Texas. Say it originates on the Chicago & Alton in Chicago and is delivered by the Chicago & Alton to the Iron Mountain in St. Louis and by the Iron Mountain to the T. & P. at Dallas, Texas; there would be heavy terminal expenses on the C. & A. and on the T. & P. in delivering the shipment at Dallas. There would be no terminal expenses on the Iron Mountain, other than the expenses at division points, particularly in the State of Arkansas. And yet the interstate revenue would be divided in proportion to the mileage, utterly ignoring the heavy terminal expenses at each end of the line. Some system of general averages might equalize this, but no such system is shown and, as usual, Ark-

ansas would get the worst of it, because Arkansas has heavy shipments of cotton and lumber where the terminal expenses originating that traffic are very heavy and yet the interstate rate would be divided on a mileage *pro rate*. In other words, the revenue would be an inaccurate and unjust measure of the cost of the service in this respect.

He admits that he did testify in the Missouri case that the cost between State and interstate traffic could not be correctly determined without using a percentage based on opinion and judgment, and he also admits that it was not accurate and that it was not scientific, but he still clings to the contention that it is the best method or plan in his judgment, for the purpose for which it has been used. (R. pp. 480-483.)

He admits that the only use to which it has been put, has been in litigation and in questions affecting State regulations. (R. p. 481.)

Mr. Doddridge testified in the Missouri case and also in this case (R. pp. 499, 500) that if intrastate rates were put on a compensatory basis, that they would be prohibitive, and further, that it is impossible to have any State regulations, in view of his opinion, as to the cost of intrastate traffic. He says that for commercial reasons the railroads would not adopt a tariff that would be prohibitive, but that State regulations could not get a tariff high enough to be compensatory, therefore there could be no State regulations of intrastate rates. Mr. Doddridge is evidently right if his revenue theory is true. The higher the State rates are put, the more expenses are apportioned to State expenses, and then add the so-called extra cost of intrastate traffic on to the revenue divisions, then it is impossible for the States to have any regulations of passenger and freight rates which would be proof against an injunction as noncompensatory.

At page 502 he admits that there is no accounting system on the Iron Mountain or any other road, with which he is familiar, that will show the cost of the traffic except in a general way and that the only statistics they have are the ton mile statistics of their entire traffic.

Mr. Frank Nay, the comptroller of the Chicago, Rock Island & Pacific Railroad, was the only other witness the railroads presented who developed the theoretical side of the revenue basis.

Mr. Nay has given the most logical evidence of any of the railroad witnesses.

Mr. Nay, beginning at record page 630, gave a carefully-prepared essay which he read into the record. His testimony can not be summarized, and all material parts are copied in full:

"Practically all trains carry both intrastate and interstate traffic at the same time; a very large number of passenger cars and of freight cars carrying less than carload freight carry both intrastate and interstate traffic in the same car; both classes of traffic move over the same rails, roadbed, bridges, etc.; both classes of traffic are super-

vised by the same officers and employees; the accounting work is performed, for both classes of traffic, by clerks without reference to the time expended on either class.

"It is a fact that the two classes of traffic are handled simultaneously through all the various departments of railroad service in such a way that an accurate division of the operating expenses between intrastate and interstate traffic, is an accounting proposition which has never been solved, and probably never will be solved.

"In very rare cases, such as suburban traffic, lying wholly within one State, where separate tracks, equipment, etc., are used for such suburban service, a part of the expenses can be definitely assigned to such intrastate passenger traffic. Certain small railroads situated wholly within one State may be able to assign certain expenses to intrastate freight traffic, but as a general proposition, it is an absolute impossibility to make any definite and accurate assignment of the operating expenses of railways to intrastate traffic. Therefore, when for any reason it is desirable or necessary to approximate the operating expenses for intrastate traffic, some basis for such approximation must be selected."

Then he takes up the fact that the revenue may be accurately determined, the number of tons may be accurately determined, the number of passengers handled, and so forth.

Then he says that it is necessary to find some basis by which to apportion the expense side. He says:

> "In determining which one of the three factors, or bases, should be used the one should be selected which will more nearly represent the service performed, bearing in mind all the time that which is being attempted is the segregation of the total operating expenses of every character of freight and passenger traffic into two classes—intrastate and interstate; that the total amount expended is not increased or decreased, but the aim is to arrive at the best estimate of the proportion of operating expenses to be assigned to the class of traffic under consideration."

"First, with reference to passenger traffic: The passengers, the passengers' one mile, and passenger revenue, can be definitely ascertained for intrastate and interstate traffic separately, and the proportion of each one of these three factors, which is intrastate or interstate, may be positively known."

First taking the passengers; using the number of passengers as the basis, would assume that the cost of transporting a passenger five miles would be the same as the cost of transporting a passenger 500 miles, which is an absurdity, and hence that basis is discarded immediately and search made for something better.

Next, taking the passengers one mile; that factor measures the number of passengers and the distance, so that using that basis assumes that the cost of transporting a passenger 500 miles, is 100 times as much as the cost of transporting a passenger five miles,

which is obviously more nearly the fact than to assume that it cost the same to transport a passenger 500 miles as to transport him five miles. However, the cost of running a train is not greatly increased by doubling the number of passengers therein; as, for example, it would cost but little more to haul one hundred passengers a given distance, than to haul 50 passengers the same distance. Hence, it has been the custom of railroads for a great many years to make excursion rates, in order to produce train loads of passengers instead of having the cars partly filled; while the excursion rates are at a low average rate per passenger per mile compared with the maximum rates the remuneration to the railroad company is greater with such low average rates because the cars are filled, thus producing a higher average revenue per train mile and causing only a slight additional cost for hauling a train with all the cars filled over the cost of hauling one with the cars practically empty. Where the traffic is regularly heavy, the rates are frequently lower than where the traffic is light; as, for example, the average suburban service of the various railroads conducting such service into the city of Chicago, is handled at less than 1 cent per mile, because of the density of the traffic. Therefore, we find that the passenger mile basis is faulty and that the passenger revenue will more nearly correspond to the expenses of the service. If the revenue per passenger per mile was uniform in all cases, the passengers one mile basis would be as good a basis as the passenger revenue in approximating the division of the operating expenses between intrastate and interstate, but since the passenger revenue recognizes certain conditions herein explained which are ignored by the passengers one mile, the best basis known at this time for approximating the operating expenses of intrastate passenger traffic is the passenger revenue basis.

As to freight traffic, first take the tons transported; this basis considers weight only and to use the tons hauled as a basis for dividing the expenses between intrastate and interstate freight traffic, would assume that the cost of hauling a ton 1,000 miles is just 100 times as much as the cost of hauling a ton 10 miles; that the cost of hauling freight in carload lots per ton is the same as the cost of hauling the same kind of freight in less than carload lots; that the cost of hauling a ton of coal is the same as the cost of transporting a ton of showcases; that the cost of hauling a ton of baskets is the same as the cost of hauling a ton of brick; that the cost of hauling a ton of paper boxes is the same as the cost of hauling a ton of canned meats. That the cost of hauling a ton of chicken coops is the same as the cost of hauling a ton of cement in sacks; that the cost of hauling a ton of lantern frames is the same as the cost of hauling a ton of gravel; that the cost of hauling a ton of millinery is the same as the cost of hauling a ton of pig iron; that the cost of hauling freight in full train loads where the engine is loaded to its maximum capacity, is the same per ton as the cost of hauling freight in trains where the

traffic is light and moves in short trains where the engine is not loaded to nearly half of its capacity. The ton basis is very faulty, and is immediately discarded for something better.

Next, taking up the ton mile basis; this basis modifies one fault of the ton basis because it takes into consideration both the weight and the distance, but it assumes that the cost of hauling a ton 1,000 miles is exactly 100 times the cost of hauling a ton ten miles; it is manifest that such is not the case, because there are terminal expenses in connection with every shipment, and the longer the distance carried, the less per mile is the cost of terminal service. Other factors exist which operate to make the cost per mile less on any shipment when the length of haul is increased. This fact is recognized by all rate-making bodies, including the various State railroad commissions which make rates; that is to say, none of the commissions, nor any other reputable rate-making bodies, make the rate for 300 miles 30 times that for ten miles. Such rate-making bodies recognize the fact that the cost per mile decreases as the length of the haul increases, and the rates are made accordingly; therefore, even if we had only the two conditions, weight and distance, to measure, the ton mile basis would be faulty for the reason that it assumes that the cost increases in exact proportion to the increase in the length of the haul and the increase in the weight; then again, the ton mile basis has all of the objections to the ton basis, with the exception of the one which is modified by taking into consideration the distance; but, as has been stated, the cost does not increase in exact proportion to the increase in the distance; for these reasons, a basis is sought which will give more satisfactory results than either the ton basis or the ton mile basis.

The only basis left is the revenue basis.

As has heretofore been stated, the revenue basis assumes that the cost of the service increases when the haul increases but not in proportion to the length of the haul; thus, the rate on a given shipment for a haul of 50 miles is not ten times the rate for a haul of five miles, because it is universally recognized that the cost of a haul of 50 miles is not ten times the cost of the haul for five miles. The rates for distances are graduated, and, while they are increased for greater distances, the increase in the rate is not in proportion to the distance; hence the revenue basis takes into consideration the fact that the cost of the service does not increase in proportion to the length of haul, which is ignored by the ton mile basis; in fact, the ton mile basis assumes positively that the cost of transportation does increase in exact proportion to the increase in the length of the haul. Then again, the rate for carloads is less than the rate for less than carload freight, thus recognizing that the cost of transporting less than carload freight is greater than the cost of transporting carload freight. Likewise, the rate on coal is less than the rate on fruit and vegetables or live stock, because it is recognized that the

cost of transporting fruit and vegetables or live stock is greater than the cost of transporting coal, and so on, the various illustrations heretofore given about baskets and brick, millinery and pig iron and so on, could be mentioned as illustrating the fallacy of the ton mile basis; or, rather, the superiority of the revenue basis over the ton mile basis. In portions of the country where the traffic is very great and is moved in full train loads, the rates are usually made lower per ton mile than in portions of the country where the traffic is very light and moves in short trains, with only a few cars in a train. The ton basis, or ton mile basis, would assume that the cost of transporting freight which required the use of special equipment, such as refrigerator cars, stock cars, etc., was the same as for transporting ordinary dead freight, not requiring the use of any special equipment, but the rates for such freight requiring special equipment are usually higher than those for ordinary dead freight not requiring special facilities and equipment, and therefore the revenue basis recognizes the cost of transporting such freight requiring special equipment, is greater than the cost of other freight which does not require such special equipment and facilities.

A large number of other conditions which are considered in the rate used in arriving at the revenue might be mentioned, and thus show the superiority of the revenue basis over either the ton or ton mile basis. It is not claimed that the rates are made on the actual cost of service, but that the cost is consciously or unconsciously given consideration in making rates, and that any rate schedule made by a reputable rate-making body will give evidence of the fact that the cost of transporting different kinds of freight is given consideration in making the rates.

An argument is sometimes used to the effect that using the revenue basis is like traveling in a circle, and those who take that position claim that when the revenue of intrastate traffic is doubled, the operating expenses are also doubled, and the end is just the same as in the beginning. The following illustrations will demonstrate the fallancy of that argument:"

Then he gives an example of its operation when the rates of intrastate traffic are increased and the interstate is not, and the expenses are stationary. It is, excepting the figures used to illustrate his point, exactly the calculation made by Mr. Kimbell, at the request of the State, exhibit 23, heretofore set out. (R. p. 635.)

Mr. Nay concludes as follows:

"While it is recognized that it is impossible to accurately divide the operating expenses for freight traffic between intrastate and interstate traffic, it is believed that the revenue basis is preferable to either of the other two available bases, and that an approximation of the operating expenses of intrastate freight traffic, or interstate freight trains, based on the revenue derived from such traffic as compared with the revenue derived from both kinds of traffic, more nearly approximates

the facts than by the use of either the ton or ton mile basis, which are the only other two bases available.

After making the basis approximation of the operating expenses for intrastate freight or passenger traffic, the figures thus arrived at may be increased in the proper proportion to represent the excess of of the cost of transporting intrastate traffic over the cost of transporting interstate traffic.

Q. You mean by that you make your computations on a straight revenue theory and then add to your State traffic such proportion as you think the State traffic should bear?

A. Yes, sir."

Special attention is asked of the testimony of Mr. Nay, given on cross examination.

Q. Mr. Nay, as I understand the substance of your testimony, it is you prefer as more nearly accurate the revenue theory than the other two theories you mentioned in your testimony?

A. Yes, sir.

Q. You do not mean to state that the revenue theory would bring exact results, do you?

A. No, sir; I think I stated in the opening that to bring an exact division between State and interstate expenses was an accounting impossibility, that we had not yet found a solution of.

Q. Necessarily, the revenue basis is dependent upon how nearly the rate is based upon the cost of the service, isn't it?

A. Yes, sir.

Q. If the rate does not reflect the cost of the service, then this as a basis for ascertaining the respective expenses, intrastate and interstate, would not be of value?

A. If that was true. If the rate did not reflect at all the cost of service, it, of course, would be of no value.

Q. Its value is entirely dependent upon how nearly the rate reflects the cost of service?

A. Yes, sir.

Q. Have you had any experience in rate-making?

A. No, sir.

Q. That is outside of your experience in railroad matters?

A. Yes, sir.

Q. Your knowledge upon that is largely theoretical, I assume?

A. Well, it is based on the knowledge of classifications and tariffs that have been prepared by other people.

Q. That is what I mean. It is not first-hand knowledge?

A. No, sir.

Q. It is knowledge that has come to you from your experience in the auditing department of railroads, and so far as you are concerned is theoretical; isn't that true?

A. You mean the knowledge of?

Q. Of rate-making?

A. Yes, sir; of rate-making. (R. pp. 654-5.)

* * * * * * * * *

Q. That is on the assumption that there is a relation between the lowering or raising of State rates to the interstate. If that proper proportion were not kept between them, then the value of the revenue basis would be destroyed, wouldn't it?

A. No, sir; it might be somewhat impaired, but certainly not destroyed.

Q. It would be very considerably impaired, wouldn't it, Mr. Nay, if both rates were changed and no change in the rate proportion to each other?

A. Well, not necessarily. It might have been they were not in proper proportions in the first place. That, of course, involves the making of rates.

Q. Of course, you would have to assume at some time a proper proportion between them?

A. But the assumption is, as stated in my direct examination, that the rate-making bodies, while they do not take the cost of service as an exact basis, yet every schedule of rates they produce will give evidence on its face, practically every schedule, that the cost of the service is considered. (R. pp. 658.)

* * * * * * * * *

Q. The fact that I asked you in particular was, if the facts existed that way, will the revenue basis be a proper measure of relation between State and interstate rates?

A. Well, for the revenue basis to be the proper measure excluding in this consideration the addition of anything for increased cost, the State rates should be enough higher than the interstate rates to balance that excess of cost which operating men say exists in connection with State business over interstate business, and if the State rates were not sufficient to produce that revenue, the State basis would be faulty to that extent. And if they were too high and so much higher than interstate rates, of course it would be faulty the other way.

Q. The point of that testimony to which I have just called your attention, is this: There was not a proper relation between State and interstate rates during the period we have under inquiry (that is 1907) and if that is true then the revenue basis would not be a proper factor with which to apportion the expenses, would it?

A. Well, it would not be an accurate factor, but being, in my judgment, the best that is known, it would be the proper one. I think in the first question you have the word "accurate;" it is not an accurate factor.

Q. It will fluctuate according to the fluctuation between State and interstate rates?

A. Yes, sir.

Q. And it will, of course, be inaccurate to the extent that the proper relation does not exist between State and interstate rates?

A. Yes, sir; I think that is true.

Q. And when the rate does not represent the cost of the service, it would not be of any value at all, would it?

A. Well, if there was such a rate, no sir; it would not be. If there was any such rate that did not represent the cost of service at all.

Q. Now, Mr. Nay, does not the rate presuppose it covers the cost of service and a profit also?

A. Surely, I would think it would. As I say, I am not a rate-maker, but it would seem that the railroads should have some profit or return upon their investment.

Q. There should be two factors in that rate; one, the cost of the service; and the other, the profit to the railroad company in performing the service?

A. If I were making rates, I think as a novice, I would use those two factors. I suppose there are others. There are commercial conditions which necessarily govern; and of course, the density of traffic which reduces the cost of the service.

Q. That just goes to the cost of the service in that particular country, I should take it?

A. Yes, sir.

Q. Then it depends upon how much profit or how little profit the railroad company puts into its rate, as well as those other matters, in order to use the basis as a factor to determine the expenses; isn't that true?

A. I should not think the profit would make any difference, Judge Hill. That is, as to the relation between the different kinds of rates. Because I should assume that where a profit was made and my opinion is probably not worth much on that point, but I would assume it to be distributed pretty evenly over all the rates. (R. pp. 659, 660.)

Not only the cost of the service, but the profit of the railroad must find reflection in this rate. And Mr. Nay further assumes that the profit is evenly distributed over all these rates, State and interstate.

Mr. Nay made another explanation, to which attention is called:

Many of the witnesses for the railroad, patricularly the traffic men, were continually referring to the *"relation"* between State and interstate rates, and none of them could locate that mythical being. Mr. Flippen and Mr. Watson made desperate efforts to locate it, and so far as their testimony is concerned, it is a trade relation, an adjustment between trade centers, or something of that kind. Of course, such relations between State and interstate rates when taken to measure the expenses, is nonsense. These traffic men, like Mr. Flippen and Mr. Watson, are out of their domain when they were speaking of these relations in the sense of an accounting proposition—what they had in mind, as shown by their testimony, is the relation of

rates between St. Louis and Memphis and New Orleans and the Atlantic seaboard. Those trade relations and balances; these differentials that exist, 30 cents from St. Louis over Memphis; and 20 cents from Chicago over St. Louis; and all these various differentials that adjust the relations between the various trade centers for commercial and competitive reasons. Those are the relations that the traffic men have in mind. They are the relations they know about. Those are the relations they are talking about.

Mr. Nay is a man of great accounting experience, and he recognized those facts at once.

"Q. If there is a larger profit in the intrastate rate than in the interstate rate, owing to competition that largely controls the interstate rates, wouldn't that fact, the difference in the profit on the two rates make it unfair to use the revenue, intrastate and interstate to measure the expenses of operation with?

A. Of course, in the first place it would depend on what basis was used in determining the profit was larger in one case than in the other. But if that could be absolutely determined beyond any question of a doubt, which is an impossibility, I think, then, of course, the revenue basis would be faulty to the extent that difference existed. Going back to the same statement again, that the revenue basis is not a perfect basis, but is the best known basis at this time.

Q. It seems to have several faults, doesn't it, Mr. Nay?

A. These faults are really the same fault under different names, I think.

Q. Not under different names, but under different circumstances; isn't that more clearly the case than under different names?

A. My idea in making the statement that they seem to be the same fault was that the two rates, intrastate and interstate, seem to be out of proportion to each other, and that is what produced this unfairness that is spoken of. If they were in exact proportion all the time, the revenue basis would be a perfect basis.

Q. And if it represented the cost of the service? You would have to have that also?

A. I presume if they were in proper relation to each other they would represent the relative cost of the service. When I say "in proper relation to each other" I mean in reference to the cost of the service.

Q. Some of those traffic men use that term in an entirely different sense. I think your use of it is correct, but you will see from the testimony the others use it as having a proper adjustment to the commercial conditions. A just rate of one trade center with another trade center. That is the reason I was particular in calling your attention to it. You mean by it a proper relation of the cost of the service; isn't that right?

A. That is what I had in mind.

Q. That is what you had in mind in your testimony generally, I assume?

A. The proper relation?
Q. The proper relation of cost, you mean?
A. Yes, sir; the proper relation in regard to the cost. (R. pp. 667, 668.)

The foregoing is a complete summary of all the material evidence of the plaintiffs to support the revenue theory.

While we have interspersed it with our comments, yet we have endeavored to set forth fairly the position of each witness in his own language.

## (1) THEORETICAL SIDE OF THE REVENUE BASIS.

*The State's Evidence.*

On this opinion side of the proposition, the State introduced H. C. Whitehead, W. E. Fitzgerald, Henry Wilmering, R. D. Parker, C. B. Bee, Charles S. Ludlam, C. W. Hillman, T. A. Hamilton and T. F. Wharton. Mr. Whitehead is a public accountant and auditor practicing his profession in Chicago. He had thirty-five years in railway service, beginning as office boy and ending as General Auditor of the Santa Fe Railroad, which position he held for nine years, and was then consulting auditor for two years, his active railroad service ending in 1907. He was connected from the beginning with the American Association of Railroad Accounting Officers and was its president.

There is no witness presented by the railroads who has had an experience which would better qualify him to speak on this question than Mr. Whitehead.

The plaintiffs have put forward Mr. Nay as having a great accounting experience. Here is a gentleman who had exactly the same experience and held a similar position on the Santa Fe Railroad as Mr. Nay's on the Rock Island.

He says the method pursued by the railroads for dividing State and interstate expense is in his judgment not a sound basis. "That basis is not sound," he says, "where you attempt to divide the expenses as a whole, or a portion of them on that basis. My personal reasons for my view are, that in the case of a trader in merchandise—he would, if he followed that line of argument or reasoning—determine his cost on the basis of his sales of his product; and it further implies the assumption that the end and aim of the railroad enterprise is gross earnings and not net earnings, as I look at it." (R. p. 1077, 1078.)

Mr. W. E. Fitzgerald, at present Auditor and Expert Accountant of the Railroad Commission of the State of Texas, is the next witness to whose testimony your attention is invited. Mr. Fitzgerald had 24 years' experience in railroad service, before he became Auditor and Expert Accountant of the Railroad Commission of Texas, as voucher clerk, general bookkeeper, chief clerk and various other

accounting positions in the accounting department of different railroads. Since becoming an official of the Commission, his work and study has led him into broader fields which caused him to investigate the questions involved in this litigation. He is familiar with the various bases of division of railroad expenses, such as a ton mile, train mile, car mile, etc. He was asked his opinion of the revenue basis as a method of ascertaining the expenses of State and interstate traffic. He says that it appears to him to be an exceedingly erroneous basis, in view of the fact that the operating expenses of a railroad bear little relation to its income or revenue derived from traffic, for these reasons: First, the preponderance of expenditures being apportioned as a whole on a basis irrespective of revenue coming in, makes the expenses largely independent of the amount of traffic, the constant expenses being considered as an average, we will say of 60 per cent. Second, it is a well known fact that the actual cost of service is more often disregarded in arriving at rates, the same being based frequently on other conditions, such as competition or commercial conditions, industrial developments, etc., without any consideration to the distance of the haul. In his opinion the revenue theory would not be a fair basis under these conditions. (R. p. 1081.)

On re-direct examination Mr. Fitzgerald said that since he had been at work with the Commission, they have had under consideration methods of dividing expenses between State and interstate traffic. It was a live question before his Commission and one to which he had given study and thought. The conclusion which he and others connected with the work have reached is, to start with obtaining a unit of revenue on each class or commodity. The Commission has required reports to that end, the intention being not to make any changes in connection with the expenses, until they are better satisfied as to a plan that might come nearer bringing an approximate result. In other words, they are trying to find out from the railroads the cost and the revenue on given commodities, both local, intrastate and interstate. (Rec. p. 1105.)

Mr. R. D. Parker, a civil engineer by profession and expert engineer of the Railroad Commission of Texas, is the next witness to whose testimony attention is invited (R. p. 1161). Mr. Parker is an educated engineer, with much experience in the practical operation of railroads, before he became connected with the Commission. His testimony is largely upon the technical questions, filling in some of the technical sides of the State's system of separating State and interstate business. Attention will be called in another connection to the force of his testimony along those lines.

After explaining the use of the various bases which were adopted by the State's accountant and approving them in their effort to properly allocate State and interstate expenses—he was speaking more particularly of maintenance-of-way, as that had been the line of his work chiefly before he went to the Commission, he having

been in charge of some division of the Southern Pacific Railway, in charge of maintenance-of-way; Mr. Parker was asked whether in his opinion, based upon his experience in the study of these problems, if the expenses of State and interstate business could properly be divided on the basis of revenue derived from each class of their business, and whether such divisions would fairly reflect the cost of operation, as he has observed the cost of operation in his practical experience. He says that it would not be a proper basis; that he can have no conception of a division on the revenue basis of reflecting in any manner the way in which the service accrued. In the first place, the idea of expense carries with it the cost of it and the basis should be on the cost, not on the profit that accrued from the business; and any manufacturing establishment predicates the price of their commodity on the cost basis, plus a reasonable profit. The railroad company has transportation to sell. While he doesn't say the cost of the service controls the making of the rates, yet there are a great many items that enter into it and he does not believe from his practical experience in the operation of railroads and the expenses incurred thereon, that the revenue properly reflects a division of these expenses between State and interstate traffic. (R. p. 1167.)

Mr. Henry Wilmering is Auditor of Accounts and Statistics of the Corporation Commission of Oklahoma. He had various positions in the railroad service prior to his engagement by the Oklahoma Commission, which are set forth in his testimony, beginning at page R. p. 858. He had been with the Corporation Commission of Oklahoma for several years, and has made a study of the accounting system put in force by the Interstate Commerce Commission, and has given much time and thought to railroad accounting, and the distribution of railroad costs. He has heard the testimony of eminent railroad accounting officials, and attended the conventions of Railroad Accountants. He has read the works of Professor Adams, of the Interstate Commerce Commission, and has endeavored in every way to get all the light possible on these problems. He was asked as to the value of the revenue theory of dividing property in the State between State and interstate traffic, and said it is not a fair basis and that the property assignable to any character of business should be obtained on a cost basis. If the rate is increased or decreased the value of the property will be correspondingly increased or decreased on the same volume of business, and will be put up or down according to the rate, and is therefore too elastic. There should be some fixed basis that would in some way assign the property to some particular class of traffic that would be more rigid than the revenue. He was given the rate of increase in the State and interstate revenue per ton mile as shown in the exhibit, after the injunctions were obtained and the railroads made both intrastate and interstate rates; and he said it illustrated the objection he urged to the

revenue theory as throwing an extra burden on the State traffic without, in fact, there being any increase in the property devoted to State uses. (R. pp. 860-862.) He thinks property should be divided on the expense basis, as it is obvious that the expense would remain the same whether the rate was increased or decreased, and it is a more rigid way of ascertaining the value of property not subject to the ups and downs of rates. Then he was asked as to his opinion as to dividing the expense between State and interstate on the revenue derived from each class respectively: He said he had worked out the formula in numerous ways and applied it to the railroads operating in Oklahoma, and found always, owing to the higher rate of charge for State business, it showed unreal profits for interstate business, and the extra cost theory, in addition to the revenue basis shows there would not be any rate made by the State authority that could not be declared confiscatory.

He says he believes that the formulas were invented for litigation purposes only. (R. p. 862.) Mr. Doddridge stated substantially the same thing. (R. p. 481.)

Mr. Wilmering then goes on to say that in a general way he is familiar with the rates in effect in the Southwestern country, and said, as a general proposition, they are not made on the cost of service and they are largely made on tradition and primarily made by the traveling freight agent or contracting agent after feeling the pulse of the business around the territory occupied by his company, and they make the rates irrespective of cost of service, to get the business. He heard many eminent railroad traffic officials testify on this subject, but never heard one state positively that he had any regard for the cost of service in making rates. The railroads have no cost accounting system by which they could ascertain the cost of handling any given traffic. The only statistics they have is the aggregate cost per ton per mile of the entire system of all business, without any differentiation of the particular commodity. (R. pp. 862, 863.) He knows of many rates prevailing in this section of the country that are made upon the zone or blanket-rate, and that is one of his reasons for stating that the rates are made irrespective of cost. He explains the lumber zone rates (R. pp. 863-4) as affecting Oklahoma. As they are explained more fully as affecting Arkansas in another connection, his testimony will not be followed on this point. He shows there is a wide difference in the revenue received from rates for the same service by the railroad from these zone or blanket rates. The grain rate is a similar one. There is a difference in the grain rate on grain moved into Oklahoma from five miles per ton to 20 mills per ton per mile, and there is a large volume of traffic moving under these varying rates into Oklahoma. The same thing is true of rates on crude oil and petroleum and its products from the Kansas refineries to the Gulf and the same conditions prevail on coal. He found in

investigating tariffs that there are more than 10,000 rates in existence that are lower per ton per mile from mines in Indiana and Illinois to points in Dakota, Minnesota and other States, than any rates ever made by the Corporation Commission of Oklahoma or the Railroad Commission of Arkansas. (R. p. 865.)

He takes up the Texas common point rates. These are explained by other witnesses as affecting Arkansas, and it is not necessary to follow them with Mr. Wilmering. (R. pp. 865-874.)

He says that in his State there is a very short haul. And the rate per ton per mile for interstate business through the State is very thin, which results in assigning to the Sate, on account of this high intrastate revenue per ton per mile, a large volume of expenses; and that this traffic passing through Arkansas or Oklahoma, being long haul traffic, where the rate is "thin"—as the traffic men express it—they take out of that a mileage proportion for Arkansas or for Oklahoma, as the case may be, and use a very low interstate rate with which to measure the interstate expenses. And the lower your rate the lower your expenses, under this revenue theory; and the higher the rate the higher the expenses.

So by taking these long hauls on this Texas common point traffic (and it is a large traffic), and the same is true about the lumber traffic, it is a long haul, and the rate is exceedingly thin per ton per mile, and that is divided between Arkansas and the balance of the system on the milage in Arkansas, thereby assign to the interstate traffic a thin share of expenses.

As Mr. Wilmering puts it, at page 866, this assigns unreal expenses to the State—and that is a very happy expression of his—"unreal expenses." He says all of this is true without any regard to the question of the extra cost of 100 per cent or any other percentage to be added to it.

Mr. T. F. Wharton, a member of the firm of Haskins & Sells, certified public accountants, is the next witness for the State. His testimony begins at page 1000. Mr. Wharton is the only witness who has had no practical railroad experience, but he has had a very wide experience in installing cost accounting systems in various branches of business, and various industries, some of them of gigantic proportions, where the factory owner or plant, of whatever nature, wants to put in a system and does put in a system which allocates all the expenses, so they will know what it costs them to manufacture each article.

That is done in a scientific manner and they can find out to a nicety the cost of any product, by putting in a scientific and accurate accounting system.

Mr. Wharton's life has been devoted to that work.

Except in this and the Missouri case he has given no thought to railroad work. But he applies the same principles and says they should be applied the same as to any other great industry in the

country. He states that they do by various systems allocate the expenses of the various departments of any business so they can intelligently and scientifically make out what each article costs.

Mr. Wharton first discusses division of property on the revenue basis, and says he does not see any relation between the revenue of each class of traffic with the property sought to be assigned to either class. His opinion is that the cost basis would be a more correct basis, owing to the fact that the cost would take into consideration the elements of extra use of the property required, if any extra property is required in the service performed, and that would better measure the property required; and, furthermore, it would not be subject to fluctuation, except the fluctuation of expense, and not to the fluctuation of revenue.

In regard to the revenue as a basis for dividing expenses, he says it is no basis of division at all. (R. p. 1013.)

The next witness is Mr. Charles S. Ludlam. His testimony begins at page 1309.

He is one of the partners of the firm of Haskins & Sells, and lives in New York.

He gives an interesting account of the firm of Haskins & Sells. Then he takes up his own career and gives his experience in railroad work. He was an auditor and accounting officer for several railroads and for some land and mining companies before he became a public accountant.

Since he has been a public accountant his firm has had the auditing and supervision of the audit of a great many of the largest railroads in the United States.

This railroad audit work is in charge of Mr. Ludlam, for his firm.

He says as accountant he does not feel himself at liberty to give the names of any of his clients for whom he has worked, except where the companies publish the certificates of the audits made by his firm.

Mr. Ludlam gives in his testimony the names of some of the companies who publish their certificates of audit. Among them are the Louisville & Nashville, the Lehigh Valley, the Atlantic Coast Line, the Philadelphia & Reading, the Erie, the Mobile & Ohio, and the Carolina & Northwestern.

When such large railoads as these publish the audit of Mr. Ludlam and his firm, there can not be any question of his ability to discuss railroad accounts.

He was one of the accountants attending to the State's side of the Missouri rate litigation also, and, of course, has necessarily had to give a great deal of investigation to this very problem before us.

He takes up the testimony of the railroads, particularly that of Mr. Nay, and calls attention very sharply to this proposition:

Mr. Nay says after you get your division of cost then you have to add something to it to make it of any value, viz., the extra cost of intrastate traffic.

Mr. Ludlam is one of those positive men, and probably his emphasis gave some offense to Mr. Nay. He spoke of Mr. Nay's testimony as being like building up a "snow man," and in Mr. Nay's testimony in rebuttal he resents his argument being described as being like a "snow man" built up and then knocked down.

He said another trouble about it was that after you got your basis it was not a basis; you could hardly find any two men who would agree as to just what you would have to add to it after you got it.

He said in the Missouri case the variation was much wider than it was in this case, and some one started out in the Missouri case with the statement that it was 15 times State over interstate—probably it was Mr. Sturgis of the Burlington.

Mr. Ludlam analyzes the revenue theory thoroughly, and an excerpt of his testimony can present it better than a summary of it:

*Ludlam's Analysis of Revenue Theory.*

"A. It is absolutely contrary to all accounting principles and practices. I have never heard the revenue theory advanced for a basis of determining the expense, except in the Missouri case and in the State of Arkansas case.

Q. In what way does it run counter to accepted accounting principles?. A. I would say both the manufacturing, wholesaling and retailing and railroad business, on the ground that the ratio of profit is not the same on all transactions and necessarily can not be.

Q. When you go to ascertain the value of the property, what significance do you attach to the gross earnings of the property?

A. Given the gross earnings by themselves, they would mean nothing. I might illustrate that by saying that if an investor was thinking of buying a factory it would mean nothing at all to him to know that the gross earnings of that factory were a million dollars a year. He would have to know what the expenses and net earnings were. He would probably base his ideas of value upon the net earning capacity of the property.

If a man was going to buy a sugar factory, we will say, and an automobile factory, and he knew that the gross earnings of each was one million dollars, and that the combined operating expenses of the two, we will say, 75 per cent of the earnings, it would never occur to him to buy the sugar factory or the automobile plant on the basis of the expenses being the same as the ratio of expenses of the two together. He would find out as positively and definitely as it could be ascertained, on the actual facts, what the actual expenses and the gross earnings of the particular factory he was thinking of buying were.

You asked me about the relation of gross earnings. A plant might be earning a million dollars gross, and still be losing money; whereas another plant might be earning a million dollars and earning a large per cent of profit. Consequently, unless you considered the expense

and the resulting net earnings, the gross earnings mean nothing in themselves.

Q. Yet the railroads have used gross earnings in this case to determine the relative expense of State and interstate business?

A. Yes, and I think it is illogical, unsound and contrary to all accounting principles, and I think Mr. Nay, in his last paragraph, illustrates that more forcibly than anything I could say. It looks to me as though he had built up in several pages of essay an elaborate—you might call it a snow man—only to knock it down in the last three or four lines; because he proceeds to say after you have thus determined your costs, they are not your costs, but you must find out what they are.

Q. I believe he also stated, if I remember it correctly, that unless there was a proper relation between the State and interstate rates—and by relation he meant relation of cost one to the other—that the revenue theory of dividing expenses would have no value.

I think that is the substance of his statement on that.

Assuming that to be correct, what are you going to do with the extra cost that you have to put on it after you get it bottomed on the theory that there is a cost relation between the two to start with?

A. You will have to ask somebody besides an accountant, I think, to find that out.

Q. Have you given study and investigation to the subject of whether there is a relation, cost relation, I mean, between the revenue derived from State traffic and the revenue derived from interstate traffic?

A. Yes, sir.

Q. What have you found in that regard?

A. As a result of my study, I am of the opinion that there is no relation; not only between State and interstate, but between the different rates in interstate and State.

Q. What do you base that on, Mr. Ludlam?

A. The examination I have made of the rates in the State of Missouri and the State of Arkansas, in a general way, and also the exhibits which have been filed in this case.

Q. Do you understand from your investigations, the system upon which interstate rates are built?

A. In the sense that they are made largely on competitive and commercial conditions; I would not say as to any individual rate.

Q. I am not speaking of individual rates.

A. I know in a general sense, for instance, that rates from St. Louis to New Orleans are cheaper than from St. Louis to Little Rock, which illustrates the point I am trying to make.

Q. Are you also familiar with the varying distances on which large movements are carired on the same rate? You have looked into those propositions, I presume?

A. Yes, sir; in a general sense. Divisions that are made on tap line connections; things of that kind.

Q. Mr. McPherson says in his testimony (R. p. 320):

"My reasons for this opinion are that the revenues of the railway are derived from different sources; the transportation of passengers and freight, and from miscellaneous services rendered, rentals, etc.

"A division of these earnings can be exactly ascertained, and, naturally, they reflect the value to the railway of each class of the service it performs."

Then he follows:

"The passenger and freight revenue consist of both intrastate and interstate traffic; the revenue from each of which can also be exactly ascertained. Moreover, the 'revenue basis' is reflective of the efforts of the traffic men who make the rates, to consider, in a measure, the value and character of commodities, and the risk and distance attached to their transportation. This is apparent in the classification of commodities into classes and the different rates established for their carriage.

"The revenue derived represents the well-established and generally recognized elements considered in fixing rates of the railway for the service it performs."

Then he takes up some illustrations. Now, I ask you to state what is your view of that analysis of the situation by Mr. McPherson?

A. Assuming that Mr. McPherson refers to the gross earnings, I disagree with him, because the value to the railroad of the business which it does is the net earnings which it derives therefrom, and not the gross earnings which it receives therefor.

Q. That is true whether you take it as referring to passenger and freight; State or interstate; miscellaneous, or what not?

A. Yes, sir. Naturally the value of the business is what it will earn, not what it will earn gross, but what it will earn net. It would not profit a railroad to take a million dollars' worth of business if it cost them a million and a half dollars to execute it.

Q. I call your attention also to the fact that in this case the railroads divide their property which is in the State of Arkansas, between State traffic and interstate traffic, in proportion to the gross earnings of each, after setting aside the miscellaneous.

I will ask you what your view is of that division?

A. I think that division is wrong, on account of the fact that the gross earnings, which fluctuate with every change in rate, are not, in my opinion, a fair basis to divide the property. I think you have a more equitable division if you will apportion your property on the basis of the cost.

In my judgment, the cost would represent more correctly the use made of the property by the different classes of business.

Q. Suppose there was an increase in State rates, without any exact proportional increase in the interstate rates: What effect would that have on a division of the property or a division of the expenses?

A. The amount which the State rates were increased in excess of the interstate rates would, on the basis of apportioning the property on the gross earnings, naturally increase the property assignable to the State business.

Q. Have you seen the exhibits worked out here by which it is shown that there was an increase of nine and a fraction per cent on interstate rates, and an increase of ninety-six and a fraction per cent on State rates, put in by Mr. Kimbell?

(This was for month of January, 1909, when the railroads had a free hand and made both State and interstate rates.)

A. Yes, sir; that increase appearing during the month of January.

Q. Yes. These figures, as I understand it, represent the increase of revenue per ton mile.

That is necessarily, is it not, a result of fluctuation in gross revenue, that every time there is a change of rate, either State or interstate, as the case may be, producing a change of revenue, that there will be a change in the amount of property apportioned to the respective class and a change in the amount of expense apportioned to the respective class, when in fact there is no change?

A. Yes, sir. Apportioning the property, expenses or anything else on the revenue basis would naturally mean that if you carried a piano one day at one price, over a certain part of the road, and a month afterwards you carried another piano of the same kind over the same piece of property and charged twice as much for carrying it; that your cost was twice as much and the proportional use of your property was twice as much in the latter case as in the former.

Q. If that piano happened to move in State business and the rate was double, it would to that extent increase the State property and State expenses?

A. Yes, sir; when figured on the gross revenue basis.

Q. If it happened to move across a State line and the rate was doubled or trebled, it would to that extent decrease the amount of interstate property and interstate expenses, and as a matter of fact there is no increase or decrease, as the case may be, in either, by reason of the change of the rate on that piano?

A. There would be no change in the cost or use of the property on account of the rate changing.

Q. Suppose they increased the piano rate 9 per cent in interstate traffic and 96 per cent in State traffic; where would you be then?

A. I think you would be just where you started, on a false premise, on the revenue basis.

Mr. McPherson says (at page 320, 321):

> "The revenue, therefore, expresses value, character, risk and distance, rather than quantity; and likewise considers to no little extent, the question of cost, as it is obvious that it costs more to transport some commodities, and commodities in small quantities, than it does other commodities, and commodities in larger quantities.

"A consideration, therefore, of cost on the mere basis of quantity, would mean the blending of all classes of freight; a reduction of all classes of freight to a common unit, and the assumption that the cost of their transportation was equal. Also that the length of haul and other conditions affecting the cost were equal or the same.

"For these reasons, in my opinion, the revenue basis is a proper basis on which to apportion the cost, or to divide the cost of operation as between intrastate and interstate traffic."

I wish you would state wherein you think that is based on a wrong premise, if you do think so?

A. He says, if I understand your reading correctly, that they consider—

Q. Look over it, if you did not catch it.

A. (After examining statement)—many other elements rather than quantity. I never heard of a railroad rate that did not consider quantity.

I disagree with Mr. McPherson in this, because I think railroad rates do consider quantity equally with value, risk and distance, and I disagree with him in his premise that the revenue—by "revenue" meaning gross earnings—considers to no little extent the question of cost.

He goes on and it seems to me he contradicts himself, because he says:

"It is obvious that it costs more to transport some commodities, and commodities in small quantities, than it does other commodities, and commodities in larger quantities."

I am unable to understand what he means when he says that they don't consider quantity, and then says that it costs more to transport commodities in small quantities and others in large quantities.

Q. Does the revenue derived from the rates represent the cost of the service, as you find it in your investigations in your railroad experience?

A. No, sir.

Q. Is there any system, to your knowledge, by which a rate-maker can ascertain the cost of service?

A. I don't think the rate-maker, as a rule, has any specific data as to the cost of the service.

He knows in a general way how much it costs per ton per mile to move freight on his railroad—as a general rule he does not have that information by divisions—and he knows in a general way—to use the illustration that has been referred to here frequently, that a carload of baskets won't weigh as much as a car of pig lead, and therefore has some idea of equalizing, that they should charge more per pound for a carload of baskets than they should for a carload of pig lead.

Q. Well, there is a vast difference of expense upon one division of the road than another, I should take it.

A. Yes, sir.

Q. We had evidence here this morning that the difference in the ratings of locomotives on the White River branch of the Iron Mountain and locomotives that were run on the main line of the Iron Mountain:

Q. What effect would that have on the cost of the service?

A. There would be a great difference in the cost of service on different divisions of the line, according to the grades and curvatures.

Q. And the ability of the engine to handle larger or smaller trains, I suppose?

A. Yes, sir.

Q. Suppose there was a lime kiln on the White River branch on the Iron Mountain road and they wanted a lime rate; that lime would move on every other line of the road:

How would the rate man know the cost of the service when he started in to fix that rate?

A. I have never seen any statistics of any railroad company that would show the specific cost by divisions of handling lime or any other specific commodity.

Q. Have you seen the statistics of any of the railroads in operation in this Southwestern country that show the cost per ton per mile in the handling of the various commodities?

A. No, sir.

Q. Has any system been worked up so that a rate man can have the cost per ton per mile on coal, lumber or merchandise, as the case may be?

A. No, sir; not that I know of.

Q. Have you gone pretty fully into railroad accounts in this country and investigated that, so if there were such systems you would have some familiarity with them?

A. Yes, sir.

Q. Then, when these gentlemen speak about the cost of service being reflected in the revenue, I would like to know if you can explain to me what basis they had in mind when they made these statements, if you are able to do it?

A. I think their basis is theory, the same as the revenue basis, and not facts.

Q. I presume the rate-maker has before him, or should have before him, the cost per ton per mile of handling freight upon his entire road for the preceding year:

What value would that be to him in making specific rates?

A. In my judgment, I should say only in a general way. It would give him an idea, roughly, of the average cost of moving freight on his line, and, in a general sense, a figure below which he would try not to go.

Q. That is about as far as they have gone in the statistical work of the railroads in the Southwest, is it not?

A. As far as I know; yes, sir. (R. pp. 1315-1320.)

The next is the testimony of Mr. C. W. Hillman—which begins at page 1479.

Mr. Hillman is now an accountant, president of the Mutual Audit Company, of Louisville, Kentucky. He is 53 years of age. He is an educated man, a college graduate, a graduate in civil engineering. His first railroad work was engineering work on the Cumberland Valley.

Then he determined to go into the operating department of railroad service and went into the office at Carlisle, Pennsylvania. He went in as a mesesnger in order to learn the business of telegraphing. He served in various positions, ticket agent, freight clerk, scales clerk, yard clerk, agent and as assistant dispatcher, stationed at Harrisburg, Pennsylvania. He then went to Chambersburg, Pennsylvania, and was the superintendent's clerk, transferred very shortly to the position of assistant dispatcher at Chambersburg, the headquarters of the road.

He remained there until the fall of 1880, when he resigned and took a position in the treasurer's office of the Northern Pacific Railroad, in New York City. His duties there were that as stock bookkeeper, keeping record of the transfers of the capital stock of the road.

Six months afterwards he was transfer agent of the road and had charge of the transfers of both stocks and bonds.

He worked in various capacities in that office for seven years and was then elected assistant treasurer of the Northern Pacific road, with headquarters in New York City.

In 1891 he was transferred from the New York office to the Chicago office of the Northern Pacific road, that line having then leased the Wisconsin Central and obtained control of the terminals in the city of Chicago, and the express business of the Northern Pacific was placed in his charge.

He served the Northern Pacific until 1893, when it went into the hands of a receiver.

He served the receiver for 18 months and when the control of the road passed into other hands he left there and took the auditorship of the Metropolitan Westside Elevated Railway Company.

He devised a system of accounting for that road and placed it in operation.

The management of the road changed in 1903, and he left the road and went to the Rock Island for a year or a little longer, in the office of the assistant comptroller.

He had special charge in that road of the insurance matters, having been in that line when he was connected with the Northern Pacific.

He left there and went into the public accounting business for himself.

He has represented the Railroad Commissions of Kentucky, North Carolina, Alabama, Florida, Minnesota, Illinois and Ohio.

He has recently been engaged, but has yet not done active work, by the Railroad Commission of Indiana.

He was called into consultation for a short time in the Missouri case, but his work was merely advisory and he did not get into the details of that case.

He has been the accountant handling the Minnesota rate case.

He has, of course, given a great deal of thought, study and investigation to these problems.

He first takes up in the discussion of it the claim that the opposition to the revenue theory is in opposition to court decisions; he says that it has been used in these cases because it has been the only factor presented, and the factor most nearly representing the truth in the given cases, but he says he finds there is no adjudication anywhere that it is of itself a proper factor, and that each case must depend upon its own facts. That he does not consider that in criticising the revenue theory he is criticising any judicial utterance supporting it of itself.

Beginning at page 1482, the first reason which he gives for saying that the revenue basis is unsound is:

> "That in the use of this factor, the earnings equalized the operating expenses; all matters are handled on the same percentages.
>
> "This leads to the second point, that an unjust rate, one which is producing too high an operating revenue, would be enabled to perpetuate itself by having assigned to itself a high operating cost, and the converse of that proposition, which is that a non-remunerative rate, one causing a loss, would also tend to perpetuate itself by having assigned to itself a low operating percentage.
>
> "Also, the contention on the part of the carriers of the inadequacy of a rate, and the contention on the part of the State of the unjustness of a rate, would necessarily in each case be measured by the yardstick that is in dispute, which is the earnings." (R. p. 1482.)

Now, that is exactly the situation here. This evidence is full of criticisms of the State's rates, that they are too low, and not properly adjusted; that they do not bear any proper relation one with the other, or with the interstate fabric; and yet the railroads are using the earnings from that yardstick to measure the cost of doing their business, both State and interstate.

Mr. Hillman says:

> "We can illustrate that, perhaps, by taking the comparison of the roads having a longer mileage than other roads between certain points; that is, a road which is in competition for a large portion of its business with short line competitors. This road

must necessarily spend more money in handling trains because it has a longer haul and, therefore, increase the cost of what you might call 'haulage expenses,' and it also must offer extra inducement in the way of equipment in order to obtain the traffic over its longer road, or it must have more expert traffic men, solicitors who can obtain business for them, even under these adverse conditions, and such men come high and must be paid higher salaries than the average traffic man.

"Yet, under this plan of the gross earnings basis, the relative expenses in these two roads would be measured by the earnings and it alone.

"This is quite forcibly illustrated in the Minneapolis & St. Louis Railroad, which is one of the parties to the rate case in Minnesota.

"This road is in competition with other roads for Chicago business. The route from the Twin Cities to Chicago is over the Minneapolis & St. Louis to Albert Lea; from Albert Lea to Chicago over the Illinois Central.

"In handling the grain business from the West, the Minneapolis & St. Louis, together with other roads, are compelled to grant a mill-in-transit privilege at the various mills along the road, principally those at Minneapolis.

"The result is that on this rate the Minneapolis & St. Louis will take a carload of grain and haul it to Minneapolis at its local rate. If this car is destined to Chicago, or the products of this car, after milling, is destined to Chicago, the road is then compelled to haul this car from Minneapolis to Albert Lea, 113 miles, without receiving any compensation whatever, the entire proportion of that through rate going to the Illinois Central road. Therefore, on the carload of grain passing locally from a point in Minnesota to Minneapolis, the M. & St. L. will collect a full rate.

"On another car going the same way, to Minneapolis, being milled in transit, and then proceeding on its way to Chicago, they will obtain exactly the same rate, plus $2.00 per car for the privilege of milling-in-transit.

"As the expense of milling-in-transit amounts to something, the practical result is that the earnings on a car from the western part of southern Minnesota to Minneapolis, and the earnings on another car from the same point to Minneapolis and thence southward to Albert Lea—a distance of 109 miles—are the same, while the expense of handling must necessarily be larger.

"This condition of affairs is borne out by the analysis of the M. & St. L. accounts and is used by me as an illustration of the unfairness and inadequacy of the earnings basis for a division of the expenses.

"Where this method is used, as it is often used by railway

companies, for the division of expenses, first adding an arbitrary varying from 15 to even 100 per cent as an extra charge, or an extra cost of carrying intrastate freight over interstate freight this inadequacy and unjustness of the earnings method is accentuated.

"The usual method of applying that is to consider that it costs 15 per cent more of the gross earnings to do one class of business than the other, regardless of how those gross earnings may be made up, whether on a ratio of intra, two, and inter, one; or whether that ratio is intra, one and one-fourth and inter, one.

"To the earnings intra, will be added the arbitrary percentage of 15 per cent or more. To that result will be added the entire earnings and a percentage taken of the totals, and that percentage is used in the case of this arbitrary addition of the amount which we assume to be 15 per cent, as the percentage of expenses which should be charged to intrastate.

"This is the method adopted by the Chicago & Northwestern Railway Company in their exhibits, in the case against the State of South Dakota."

Q. Mr. Hillman, you are stating the matter too modestly for the railroads in this case. They charge from 100 to 400 per cent on the freight and 25 to 50 per cent on the passenger, intrastate, extra expenses.

A. I left a little margin. I said, "15 per cent or more."

Q. It is the "more" proposition we are up against here. Did you finish?

A. I finished concerning the expenses. I believe our question, if I recollect it correctly, also asked concerning the apportionment of the property—

Q. Before you go into that, I want to ask you a question on the subject of expense.

Has your attention been called to a claim of a parity or relation between the rates, State and interstate, as affording a means by which the two classes of traffic could be measured, the revenue produced from these rates? Have you made any investigation as to that question?

A. I have given no investigation to that phase of the question, personally. Of course, in the hearings where I have been, that matter has been up, more or less, and has been discussed, and I will say here, very much in the same manner as of the showing of Mr. Hamilton yesterday on this stand.

As an illustration, in showing graphically the rates which were in existence on railroads and which were proposed tby the Minnesota Commission, I had made a graphic representation of those, using first-class only, to show how they would work out.

I have not presented it in the Minnesota case, but it was referred to in that by me in my testimony.

Q. Is there any such relation between them, so far as your investigation as an accountant went—

A. No, sir; I should say there was not. (R. pp. 1482-1484.)

Mr. T. A. Hamilton was the last witness to speak on this subject. His testimony, beginning with his personal history, commences at page 1402. He filled many minor positions in the railroad service, in which he had spent his life until 1906, when he entered the employ of Haskins & Sells as an accountant, in which service he has since continued.

His railroad experience splendidly equipped him for the work of investigating railroad accounts and rates and railroad operations, in which work he had been engaged in the Missouri rate litigation and in this litigation. His testimony in regard to the revenue basis is found at pages 1478 and 1479, and is as follows:

Q. Now, to go one step further: Take the evidence that has been introduced in this case as to the rates—principally this which you have been developing—which it is apparent does not represent the cost of service in the instance given: I will ask you what is your opinion, as an accountant, based upon the experience that you have had in the accounting problem, of using the revenue derived from these rates, or, rather, these two sets of rates, interstate and intrastate rates, to measure the cost of operation of business, State and interstate?

A. I would say in that connection that I agree most heartily with Mr. Nay. As I heard him say in this case, the value of the revenue basis is predicated or is dependent entirely on the assumption that the rates are based on the cost of service.

I think that it is a plain proposition, and, as a matter of plain logic, if your revenue is derived from rates which are not based on the cost of service, it is mathematically impossible to accurately divide those expenses on the basis of factors derived from that revenue. If there is no relation between the revenue and cost, I can not see how you can use the revenue to divide cost.

Q. In your experience as an accountant, have you known the revenue basis to be used as a method of ascertaining the cost of production?

A. No, sir; never.

My first acquaintance with the revenue basis for dividing operating cost or cost of production was in the Missouri Rate Case, where it was presented by the railroads.

Q. I call your attention to the further statement made by Mr. Nay, that the revenue theory was not only dependent upon the cost of service, but also dependent upon their being a proper relation of cost between the State rates and the interstate rates, and ask you,

from your experience with the rate situation in Arkansas, whether there is such a relation in the State and interstate rates so that those could be used as the two yardsticks with which to measure the cost of service of that respective kind of business?

A. There may be rates published effective in Arkansas, which are built in that way, but they are few.

When you consider the whole rate fabric, as I have found it in going through the company's waybills, which are records of actual movements, as I have been illustrating from these lumber and other movements, considering it all, there is not any such thing. If there is we have not been able to find it.

Q. Take, for instance, this: What relation could there be between the lumber moving interstate on these various tariffs that you have put into evidence and the lumber moving within the State on Standard Distance Tariff?

A. I think I have made illustrations this afternoon to the effect that the further you haul the lumber the lower the rate you get. I know the Standard Distance Tariff increases the rate according to distance.

Q. That makes the relation or parity between those an impossibility?

A. Yes, sir; that is a good instance of it.

It is respectfully submitted that on the theoretical side of the question, the preponderance of the evidence is decisively against any value ataching to the revenue as the basis upon which property and expenses may be divided between State and interstate.

## (2) THE RELATION OF THE RATES TO THE COST OF SERVICE.

*The General Proposition.*

As has been seen from the testimony of the opinion evidence supporting the revenue theory, the fact that the rates represent the cost of the service is a necessary predicate to give value to the revenue derived from the rates as a proper factor to use to divide property and expenses between intrastate and interstate traffic. In fact, that is the major premise, and the minor premise is the relation between State and interstate rates—cost relation—not trade or commercial relation. Without these predicates the revenue basis to divide property and expenses has no value whatever is the admission made by the learned doctors advocating it, as heretofore seen in the quotations given. Mr. McPherson and Mr. Nay testified that after the expenses are divided on the revenue basis between intrastate and interstate, then, to obtain a correct result, there must be added to the intrastate expenses the percentage, which, in the opinion of operating men, should be added thereto in order to equalize them; in other words, the revenue basis without the element of added cost does not obtain

true results, but is merely used to obtain a result to which something else might be added, towit: the extra cost, so when it is added, then the object to be attained—the true separation of the two classes of expenses, would be accomplished. This alone should be a refutation of the fact that a cost relation exists between the State and interstate rates. If such relation did exist, then a division on the revenue basis might accomplish the result sought, a fair division of expenses of the two classes of traffic using the revenue as a factor, but when something is to be added to the result obtained by using this factor, then clearly there is no cost relation between the two classes of rates, or this additional element brought into the case to make the basis true would not be needed. Certainly there is no relation between one State system and another. Texas, Arkansas, Oklahoma and Missouri each has its own system of rates, and Missouri has two systems, one south and the other north of the Missouri River. The interstate rates prevailing in these four States are practically the same, with many exceptions, and it depends on how high each of these States make their rates as to the degree of confiscation each is working. The higher the intrastate rate the greater the confiscation, according to this revenue theory. There is much testimony in this record in regard to whether the rates are based on cost of service, but the differences of opinion between the various rate experts on opposite sides are more in detail than principle. The rate experts introduced by the railroads have admitted freely that commercial and competitive conditions largely control the rates, and have, at the instance of the State, put in hundreds of illustrations of rates upon large movements, which are not based upon the cost of the service, but into which some other element entered and controlled the making of the tariff. The differences may be summed up about as follows: The rate experts on behalf of the railroads contend that the element of cost is always considered, while not always controlling, and that it is an exceptional condition which makes rates not based on the cost of service; while the rate experts introduced by the State contend that the rates made on account of competition, commercial or trade conditions, are the prevailing rates, and that the movement of traffic is largely upon those rates, and not upon such rates as those wherein the cost of the service may have been a controlling element.

*Plaintiff's Evidence.*

The railroads introduced five witnesses on this proposition—Mr. B. M. Flippen, Traffic Manager of the Iron Mountain; Mr. C. E. Perkins, General Freight Agent of the Iron Mountain; Mr. J. D. Watson, Assistant General Freight Agent of the St. Louis Southwestern; and on the passenger side of the proposition, Mr. Charles L. Stone, Passenger Traffic Manager of the Iron Mountain, and Mr. R. H. Laing, of the St. Louis Southwestern, and Mr. F. O. Becker on classification, Mr. Flippen made this general statement: "In fact, the making of

rates have to do with the commercial conditions; the cost of service; the conditions generally; and where the earnings have not been, as we figure it, compensatory in respect to State traffic, the same is frequently true of interstate adjustments, because one is so very seriously affected by the other."

That is probably as concise a statement of the whole railroad attitude upon this subject as can be found. On cross examination he was asked:

"Q. You can not fix rates on the cost of operation?

A. You have to fix rates on the cost of operation in a general way, or you will not land right." (R. p. 248.)

Mr. Flippen stated that the adjustment of the interstate rates was relatively higher than the State rates. His attention was called to the fact that Mr. Kimbell, Assistant Auditor of the St. Louis Southwestern, had filed an exhibit showing that upon his road the revenue produced per ton per mile for intrastate freight was about two and one-half that produced by the interstate freight, and he was asked if that was true on his road, and he answered that he had made no computation on those points. (R. pp. 249, 250.) The statistics heretofore quoted on his road show that the interstate is 6.750 mills per ton per mile; intrastate, 13.877 mills per ton per mile. This witness, put on by the railroads, as an expert on questions of relating to State and interstate rates, was absolutely ignorant of the fact that on his road the revenue per ton per mile from intrastate traffic was twice that of the interstate traffic, and that his companion road, the one with which he ought to be almost as familiar as with his own road, the revenue was two and one-half times greater per ton per mile for the intrastate traffic than the interstate traffic; and yet, with this density of ignorance on hand, he devotes many pages to the relative adjustments and relation of State to interstate rates, leading to the theory that the intrastate rates are confiscatory. He was asked when his road put in a rate to meet competition, what consideration was given in the making of the rate, and he said competition, but not competition necessarily alone; that it is either the road meets the rate formulated or ignores it. He says there is a potential competition—one not active—such as river competition. He was asked if he took into consideration the cost of service when making rates to meet a competitive one. He said: "In a general way, we can not lose sight of that fact. We figure we do not like to sell our goods at less than cost, and still we do not always know what it costs."

Q. Why, don't you know what it costs?

A. No man has ever been able to figure out just what it costs to handle any one particular commodity in relation to the whole traffic handled by a railroad company.

Q. If you meet a rate at a competitive point you fix your rate primarily on the rate your competitor has fixed; on what basis does your competitor fix his rate?

A. There might be a variety of things which would fix it for him. He might make an inordinately low rate on the raw material into a manufacturing point, contingent on the manufactured article going out at a high rate. And, therefore, taking it as a whole, it might be remunerative. Or it might be a low rate, State rate, predicated on a high interstate rate, and it might be remunerative.

Q. Don't you have any statistics compiled by which you can get at the cost of handling a given commodity?

A. The costof handling any given commodity can not be figured; no, sir." (R. pp. 250, 251.)

Mr. Flippen developed this further point:

"Q. Then the rate is more a relative proposition than it is one of cost of operation, isn't it?

A. No, sir; you can not say that. You must bear in mind the cost of operation, or you would not be making the rate. The rate is the price at which we sell transportation; and you must bear in mind, according to the best judgment and experience of men who know what it costs, otherwise we would not be making a rate. You would not last long if you made it without regard to that." (R. p. 252.)

Further on he said:

"Q. In speaking of the cost of transportation awhile ago, on cross examination, you stated that in many instances it would be based on what the traffic would bear; please state what you meant by that statement, and in what sense you used it?

A. I meant by saying that the rates were made upon just what the traffic would bear, considering the competitive conditions. Certain traffic will only bear a certain measure of rate in competition with a similar article or commodity produced in some other State or some other section of the country directly competing with this particular article in a common market of purchase.

* * * * * * * * *

Q. In your efforts you tried to avoid making rates that will be prohibitive to some of the industries upon your line?

A. Absolutely so. If rates were made so as to restrict or prohibit the movement of certain articles, then the general effect upon the development of your traffic and your earnings which is not confined to that particular product, as it were, but it is the general development of the country in which it is produced, and the contingent qualities or features which bear upon the production of this particular article.

* * * * * * * * *

Q. Is the average cost of handling business any indication of the cost of handling any particular commodity or kind of business?

A. That is simply one element. There are various elements that enter into the question of rate-making. There is competition; the amount of tonnage involved; the movement of traffic in one direc-

tion *versus* the empty car movement in the other direction. And all those sort of things.

* * * * * * * * *

Q. Is the average cost of handling business any indication of the cost of handling any particular commodity or kind of business? The question is, is the average cost of handling the business any indication of the cost of handling any particular commodity or kind of business?

A. As I said this morning, it is absolutely impossible to figure what it costs exactly to handle any particular commodity or article. It may be figured in its relation to the whole. You can not segregate it." (R. pp. 260, 261.)

Mr. Stone's testimony has heretofore been abstracted, in discussing the alleged interference of State rates with interstate rates. His testimony was largely upon the effect of the two-cent rate in Arkansas, the substance of which is heretofore given. Mr. Stone tells us that competition has fixed the rates through Arkansas on California business, and that his road has met the rates fixed by its competitors. (R. pp. 271, 272.) He gives much interesting information as to what rates are fixed by competition, and what are not. Mr. Stone states that his road enjoys more intrastate traffic in Arkansas than interstate, and that it gets much more revenue out of the intrastate, and that the intrastate is more profitable, but when asked if the intrastate traffic was much more profitable at two cents, stated that it was not, but that he had no statistics on the subject that would throw light upon it. (R. p. 274.)

Mr. R. H. Laing, Assistant General Passenger Agent of the St. Louis Southwestern (his testimony appears with the State's evidence, but he was plaintiffs' witness), gives testimony principally on the readjustment of the passenger rates when the fare was restored to three cents. He was asked if the reduction of the State passenger business in Arkansas affected the Texas excursion or homeseeker's rates from St. Louis or Memphis, and he said it did not affect the rate per mile to any extent. He says the Arkansas reduction to two cents did not affect the California rate, but the Missouri reduction did. (R. p. 1614.) Mr. Laing tells of various specific rates affecting Arkansas, which are controlled by competition, the details of which are not profitable. (R. pp. 1614-1616.) He was questioned as to variation of rates, and this occurs (R. p. 1616):

"Q. Is that rate based on the cost of service?
A. No, sir; it is not.
Q. Is it not on the cost of service?
A. No, sir.
Q. Is not that California based on cost of service?
A. I don't think so.
Q. What is it based on?
A. It is simply an agreed rate.

* * * * * * * * *

Q. An agreed rate?

A. Yes. There is no basis for it.

Q. No basis for it?

A. Some thought that was the right figure and put it there.

Q. Is that the sum of the local between here and California?

A. No, sir.

Q. These gentlemen have been teaching me that is the way rates are made.

A. That is the rule; yes, sir; but there are a few exceptions to the rule.

* * * * * * * * *

Q. Do you know the cost per passenger mile for carrying passengers in Arkansas?

A. No, sir.

Q. Do you know what it is in Texas?

A. No, sir.

Q. Do you know what it is in Missouri?

A. No, sir. I am not familiar as to the cost of doing business.

Q. The cost of doing business—the cost of handling business. You make the rates generally?

A. No, sir; the State Legislatures have been making them.

Q. Do they make the interstate rates for you?

A. Practically, yes.

* * * * * * * * *

Q. Do you think the State Legislatures makes them on the cost of the service?

A. I don't know, sir.

Q. Does your office make them on the cost of the service?

A. No, sir; we don't.

Q. What do you make them on?

A. We make them so much per mile, as a rule.

Q. What determines it? How do you figure that?

A. Well, in the State of Arkansas we figure out a rate of three cents a mile.

Q. Not all of them do?

A. Ninety-eight per cent of them.

Q. Well, let us see about it. Don't you have a lot of books to sell down there at two cents?

A. No, sir.

Q. Or, at two and a half cents?

A. No, sir. We honor an interchangeable mileage credential.

Q. Don't you issue them?

A. We are a party to an arrangement under which travelers get a net two cent per mile.

Q. Do you not sell a good many of those books, or honor a good many of them?

A. We honor quite a number; yes, sir.

Q. Don't you sell these 2½-cent-rate tickets then where the Rock Island and these other roads come in competition with you?

A. We meet competition, but there are very few points between which their fares affect us.

Q. The Iron Mountain meets them at a good many points, does it not?

A. The Iron Mountain will meet them probably more than we do.

Q. Do you think that 98 per cent of your rates through Arkansas are 3 cents?

A. Our one-way fares; yes, sir.

Q. I am not talking about one way; I am talking about the whole business. We are not taking it piecemeal.

A. One-way fare is really the basis for everything. That is the standard.

Q. I am asking you about what your fares are in Arkansas, and you said 98 per cent was three cents. After calling your attention to those—

A. I would not say that on 98 per cent of our business we get three cents per mile.

Q. I didn't think you would when you thought about it.

A. But you take our tariff, and the figures are 98 per cent of three cents a mile. (R. pp. 1616, 1617.)

Further on this question was asked:

Q. Is it the cost of the service that you consider when you fix those Hot Springs rates and California rates?

A. Well, the passenger department, as a rule, does not figure on the cost of service.

Q. It does not? Are you sure of that, Mr. Laing?

A. They figure on the amount of business that can be secured." (R. p. 1619.)

Mr. J. D. Watson, Assistant General Freight Agent of the St. Louis Southwestern, testifies, as does Mr. Perkins and several other witnesses, as to the effect of the classification upon rates. As no one was so well authorized to speak on the subject of classification as Mr. F. O. Becker, Chairman of the Western Classification Committee, whom the railroads put upon the stand, we will omit the discussion of this subject by other witnesses, and give it fully as outlined by Mr. Becker. Mr. Watson brings out the fact where the article is changed to a commodity rate, it is taken out of the classification; and that the volume of traffic and commercial conditions incident to the marketing of that particular traffic is what produces the commodity rate, and its elimination from the class rates. (R. p. 556.)

"Q. Is there any uniformity of rules among railroads governing the cases in which commodity rates shall be applied?

A. Uniformity as to locality only. For example, in the lumber district, each line would have lumber commodity rates; and in a coal

district each line would have coal commodity rates. (R. pp. 557-8.) The commodity rate is fixed in the territory involved, from the point of origin to destination, or where the commodity is marketed; and is governed almost entirely by commercial conditions. If, for any reason, the carrier feels the rate is from common point too low to be handled with profit, of course the carrier would not make as low a rate by its rails as would be applicable by some other line. From local points the rate is fixed with a view of earning a reasonable revenue for the service performed." (R. p. 558.)

He says that the commodity rate is fixed in various ways by the cost incident to the service, as to the particular traffic, "minimum weight is one. That is fixed by the difference in the cost of the service. For example, if the minimum weight has to be low, as in the case of hay, you make a higher rate on account of the low minimum weight, but, hay being a necessity and governed by various and sundry considerations other than value, a very low rate is necessary in that case. Each commodity in itself has its own rules and regulations governing the fixing of a rate." But in no case are commodity rates fixed without regard to cost of service. (R. p. 558.) He says: "The commodity rates are governed by the same conditions that govern the rates generally. In addition to that, the volume of the traffic; value of the traffic; the direction of the movement, and the length of the haul, are governing factors in the fixing of rates on commodities, on rates other than those that are classified, and in taking them out of the classification." (R. p. 561.) On cross examination he says that he does not believe that Standard Freight Distance Tariff No. 3 was ever represented as a properly constructed tariff, and that he does not think it represents the cost of the service, nor anywhere near it. Furthermore, he says that he does not think that any tariff could be used to determine the cost of the service; that in addition to the cost of the rate, you should have a profit. (R. p. 569.) He says that the cost of service can not be absolutely determined and that he has not stated that rates are based entirely on cost; that the cost is one of the controlling factors in fixing certain commodity rates, and that the cost can be approximated; that from the accounting department they have the revenue per ton mile, but he does not think that is the proper measure of the cost, but use can be made of it in this way; that it would be improper to assign a rate to any particular portion of the traffic, which would yield a less revenue than the general average on certain classes of traffic; but he admits that they have no statistics on any particular class of traffic. (R. p. 570.) The only service that the statistics of the cost and of revenue per ton per mile is to determine as near as can be where the minimum rate should be. He says they have no separate figures on any separate commodities or classes, and merely have the general result in ton miles. He says there is no cost-accounting system in use on his road. (R. p. 571.) "I

don't think I said that we got at the cost of service, because we do not get at the cost of service; but we have a general idea of the cost of transportation, and that idea fixes for us the minimum charge that we can afford to handle traffic for.

Q. You state that that idea fixes the minimum charge; where do you get that idea?

A. We get that idea altogether from the reports—from various sources, compiled by the Accounting Department—the ton-mile basis of the whole aggregate tonnage; that fixes the general question as to the actual cost for all classes of traffic. Then we must take into consideration our experience and knowledge of the cost of handling the different kinds of traffic, and from that deduct the result that we must have to determine whether we shall handle it or shall not handle it; for example, we would haul stone for considerably less than a higher class commodity.

Q. But you have no data at all to show the cost of handling stone?

A. Absolutely none.

Q. Now, you have referred to commercial conditions; I wish you would explain just what you mean by that term, as a factor in fixing rates?

A. That term has a general application in fixing all rates on commodities that must move. Probably one of the best explanations is the lumber proposition. A mill is located in a certain district, and it must meet competition with another mill handling the same class of lumber in another district. There is a commercial condition the railroads must meet in order to carry the commodity.

Q. In other words, you must foster the industries on your line and protect them in marketing their products?

A. That is one commercial condition.

Q. Then, the competition is another commercial condition?

A. That is a competitive condition; that is not altogether a commercial condition.

Q. You are not including that in your term "commercial conditions?"

A. Competition between localities would be included in commercial.

Q. But as between railroads it would not?

A. Yes; that is a competitive condition.

Q. Those two factors largely enter into the determination of the rates, where they do enter into them, have a large bearing on the volume of the rates, and when the rate is fixed to meet competition, or to meet these commercial conditions you have referred to, it fixes them on a different basis than the basis of cost?

A. Necessarily." (R. p. 577.)

Mr. C. E. Perkins, General Freight Agent of the Iron Mountain, testified, like Mr. Watson, largely of classification, and his discus-

sion of that will be omitted. He was asked if the railroad company in fixing commodity rates paid regard to the cost of service and said they regard the cost of service always; that is, they attempt to do so; that commodity rates are often fixed on commercial conditions which necessitates special rates, but they always tried to make a profit on the business which they handled. (R. p. 593.) In regard to the division between connecting carriers who transport lumber and other commodities from zones, Mr. Perkins says it is always a matter of negotiation and agreement. "There is this general principle, however, that the originating line gets the largest share of the earnings; that is, according to distance. In other words, it gets more than a mileage *pro rata* would yield for the reason that its service is considerably more; for the reason that it originated the business and must furnish the equipment for hauling the business; reasons of that character. (R. p. 596.) Mr. Perkins says that classification committees do not fix rates, they simply assign the articles to the various classes, and that classification applied to the tariff enables the railroads to fix the rate. Each road and each section of the country is governed by its own individual rates. They will use the same classification individually in all of the territory west of the Mississippi River. The rates on the Iron Mountain would be very different from the rates on foreign roads. (R. p. 599.) Mr. Perkins was called upon to identify various tariffs and maps, illustrating the tariffs, which was attached as exhibits Nos. 38-44 inclusive, known as the zone maps. (R. pp. 614, 648, 649.) He was asked if his road furnished any record of the cost for the movement of lumber, or any other article, and said it did not; that in the making of a rate the traffic officials had no data whatever as to the cost of the service on any particular commodity. They have the data of the cost of the service as a whole. and they have statistics of the revenue per ton per mile, and that is of some service as a guide to how much revenue they should receive from different commodities. (R. pp. 615, 616.) The following is his statement of how rates are made: "We know about what our general revenue is and about what our general cost is, and we know from our classification the relative adjustment you might say which we must assign to the various commodities to bring about that revenue. Some articles we know are handled at less cost and must be handled at a lower rate than some other commodities, and our rates are adjusted really on a relative basis. That is, on the various commodities. The rate which we would assign to each one varying, of course, as to the commodity, as to its value and as to its cost and as to the direction of its movement, and as to the length of its movement.

Q. Then you do use these ton-mile statistics showing the cost per ton per mile of your entire traffic in order to divide the charges to be apportioned to one traffic as against another kind of traffic?

A. No, sir; I can not say that we would do that. As a matter of fact, our rates are fixed—that is, our general line of rates, you might say, are a fixture. They have been established for a great many years. There have been changes in this rate or that rate, but the general rate fabric has been in existence, of course, with the changes that are necessary, for years. We know about what results that rate fabric brings us. We know we are charging a little more on one article than on another. But that relative adjustment with all these other incidents I have mentioned—that is, the direction of the haul, the length of the haul, the bulk and value of the commodity to be handled, commercial conditions, all govern us in making a rate on any specific commodity.

Q. That rate is not made on the cost of the service, is it?

A. Yes; fundamentally it is.

Q. What do you mean by "fundamentally?"

A. I mean that the cost of the service enters into our rate-making to a very large extent. I do not mean to say by that the actual cost of the service, but the relative cost of the service.

Q. I am talking about actualities and not relations.

A. The only way we could make this is on a relation adjustment. (R. p. 616.)

* * * * * * * * *

Q. Where do you get the figures upon which to base that relative adjustment?

A. We do not have actual figures." (R. p. 617.)

Mr. Perkins said that in fixing any particular rate, they (traffic men) can not bear in mind the cost because they do not know the cost, and can not bear in mind the profit because they do not know the profit.

Mr. J. M. Johnson, Vice President, in charge of traffic of the Missouri Pacific and Iron Mountain railroads, is the head of Mr. Perkins' department. Mr. Perkins testified that Mr. Johnson was an experienced man in traffic and rates; then this testimony, given by Mr. Johnson in another litigation, was put before Mr. Perkins:

Q. Mr. Johnson, in your experience as a traffic and freight man, have you studied the cost of the movement of the different classes of freight, and the different kinds of tonnage, in determining what would be a reasonable rate in the handling of different classes of traffic, and are not railroad rates based on the assumption that they make a fair return on the cost of the movement of that freight?

A. It is very difficult to determine the cost of moving any particular commodity any particular distance. In fact, it might be said to be impossible to do it. We can only figure in a very general way. We know about what it costs to move a ton of freight one mile, at the end of a year, and we know what we have received for moving a ton one mile.

Now, that is on the business as a whole, which of course, is made

up of hundreds of thousands of different shipments. It is impossible to know the exact cost of moving one ton of any particular class of freight for any particular distance.

Q. But in making the rates, is the general average of cost of moving a commodity taken into consideration in fixing a rate that will be compensatory in the moving of any particular commodity? I refer to the general average of cost you have spoken of, as shown by your records at the end of the year.

A. No, sir; rates are not made that way. By experience we have some knowledge of about what we ought to have for the service in question.

Rate-making, as a general proposition, is largely a guess; and the railroad people claim that by experience they are very much better able to guess correctly than the other fellow.

There are so very many factors entering into the cost that it is impossible to determine the cost of moving the different classes of freight. And we can only determine in a general way, from experience, about what is fair and compensatory." This Mr. Johnson verified the complaint in this case. (R. p. 71.)

Mr. Perkins was questioned as to whether his views coincided with his superior upon the question as to how rates were made, and it was found that they differed considerably, as could readily be seen from Mr. Perkins' previous testimony, showing his views of their method of creation. (R. pp. 650-653.)

The whole of Mr. Johnson's testimony given in the other case was later put into evidence by the State and is found at pages 1603-1610.

Mr. F. O. Becker, Chairman of the Western Classification Committee, and Superintendent of the Western Railway Association Weighing and Inspection Bureau, is a witness of importance. His testimony begins at page 738. He said that his committee has jurisdiction, generally speaking, of the territory west of the Mississippi River; that the purpose of his association is to classify all freight, offered for transportation, which is done as a basis of rate-making by railroads, and that, primarily, the committee first takes into consideration the density of an article; because the lighter and more fragile the more it costs to handle and transport it. Secondly, the value; the greater the value, the greater the element of risk, which also enters into the cost of handling and transporting. Thirdly, the character of risk, susceptibility to damage; the volume—the weight per cubic foot, or the matter of cubic feet per hundred pounds, plus the value per hundred pounds, makes what we call "a unit." And, taking the several hundred commodities, for instance, rated in the classification as "first class," we have found the first-class unit to be approximately 20.61. The other classes range downward from that.

Q. That figure you gave, 20.61, is a kind of a base, is it?

A. Yes, sir; just a basis which we first consider. There may be other conditions subsequently entering into the consideration, but primarily we consider the density and the value.

He says the cost of transportation, including transportation service and handling and the risk incident to the transportation, enter into the consideration of the committee in the classifications made by it. He tells interestingly of the work of the classification committee, which sits as a kind of court of appeals among railroads and shippers. (R. p. 739.) On cross examination Mr. Becker was asked how they got the cost of service, this element which he said was always given consideration, and he answered:

"A. We know that it costs to transport; what it costs to handle; that the element of risk necessarily enters into the cost. We, of course, do not know the total cost; but all of these are factors in the total cost.

Q. You have no basis of cost?

A. I hardly understand what you mean by "basis."

Q. Do you use the ton per mile as a basis in ascertaining the cost of a given line of road, or through a given country?

A. Oh, no, sir.

Q. You do not give any consideration to that?

A. No, sir.

Q. You know that railroad companies prepare statistics of their cost per ton per mile?

A. I believe they do. That is not in my line, but that is my understanding.

Q. But your Western Classification Committee does not use those statistics in making its classification?

A. No, sir.

Q. You know that this element of risk exists, and you bring to bear your experience and your observation on that; is that a fact?

A. Yes, sir.

Q. You have no actual figures on that?

A. Yes, sir; we take the aciduous carboys, for instance, and we know, of course, there is great liability to damage and subsequent loss to other freight.

Q. What I mean is, you do not have the cost of carrying those acids in carboys. You do not know what it costs to carry that particular commodity, do you?

A. No, sir; not definitely.

Q. You know it is very liable to injury and easily broken and you put a high rate on it?

A. Yes, sir." (R. p. 741.)

He states that his committee makes no rates; that it makes the classification upon which rates may be fixed, but that this classification has many exceptions made by railroads in different parts of the country. He says that the Western Classification is generally

accepted by State Commissions, although there are quite a number of exceptions; that each Commission in the Western States has its own classification, but they are largely based upon the Western Classification, but they contain many variations. (R. p. 741.) There are other classifications besides the Western, the Official and the Southern. The classifications are not the same in the Southern or the Official and Western. The ratings are different in each of these classifications; that the traffic is more dense and the rates are lower, but, generally speaking, the classification ratings are similar. Relatively they should be approximately the same. The Western Classification covers a large territory where there are many different local conditions, and that makes the exceptions necessary. (R. pp. 474-475.) The conditions in Arkansas and Nebraska are quite different; that in fact there is a greater difference in different parts of the Western Classification Committee territory than between the Official and Southern Classification so far as the aggregate charge is concerned, but so far as the relation between the different committees are concerned he thinks not. He says that the Texas Commission has worked out a classification of its own and its own exceptions to the Western; that in the interstate tariffs there are exceptions to the Western Classification in the nature of commodity rates. He says that commercial and competitive conditions make these necessary. He says that the traffic moving through Arkansas to Texas would be governed by the exceptions to the Western Classification made to meet the Texas conditions. (R. p. 742.) Further, Mr. Becker said:

Q. Does your committee give consideration to commercial and competitive conditions also, in making classifications?

A. More or less; not to the same extent, of course, that governs in the commodity rating. You know our classification governs over quite an extensive territory and there might be local conditions that would make it necessary to except to that classification. He says that there is a distinct relation between the rates made by the Texas Commission and the interstate rates governing to Texas points. (R. p. 744.)

He further says:

Q. I do not understand you to have stated that your classification is based on a knowledge of the actual cost of transportation of the several commodities embraced in the classification. I understand you to mean that it is made relatively with reference to the cost of the article you are dealing with?

A. Yes, sir.

Q. That you are able to determine, in the way you spoke of, by comparing the density, bulk, weight, the value and those qualities that pertain to the articles that enter into your classification?

A. Yes, sir.

Referring to the relation between the rates made by the Texas

Commission and the interstate rates to Texas points, he said: "That is on account of commercial conditions." Concerning the large volume of traffic through Arkansas from St. Louis to Texas, he says: "It will be governed largely as to both classification and rates by the classification or rates put in by the local authorities of Texas. (R. pp. 745-746.)

This was the substance of all the plaintiffs' evidence on this phase of the question.

## (2) THE RELATION OF THE RATES TO THE COST OF SERVICE.

*The Defendants' Evidence.*

(a) On this issue the State presented Mr. J. C. Lincoln, Traffic Commissioner of the Merchants' Exchange, of St. Louis; Asa R. Bragg, Manager Merchants' Freight Bureau, of Little Rock; Mr. C. B. Bee, Rate Expert for the Corporation Commission of Oklahoma; Messrs. Wilmering, Ludlam, Hamilton, Lewis and others touched also upon this issue and part of their testimony may be profitably read in this connection.

As against the rate experts for the plaintiffs, Flippen, Perkins and Watson, we present equally qualified rate experts, Lincoln, Bragg and Bee; and the latter fortified in their positions from many angles.

Mr. James C. Lincoln is Traffic Commissioner of the St. Louis Merchants' Exchange. His testimony begins at page 961. He was in railroad service from 1876 to 1906, when he left the position of Assistant Freight Traffic Manager of the Missouri Pacific and Iron Mountain System to take his present position. He thus states his experience:

"A. My original work was that of a general utility boy around headquarters. I was then in the office of the Superintendent of car service and from that in the office of the Master of Transportation; then in the General Freight and Passenger office as chief clerk. That, however, was in my association with the St. Joseph & Denver City Railway, now the St. Joseph & Grand Island Railroad, which company I left in September, 1888, to accept service with the Missouri Pacific Company.

I served the Missouri Pacific Company at Atchison, Kansas, for one year, in charge of their Central Branch and their Nebraska Division, in the Traffic Department. I then came to headquarters and served through the various offices from Assistant Freight Agent to Assistant General Traffic Manager.

Q. Was the St. Louis, Iron Mountain & Southern a part of the system that you served?

A. Yes, sir.

Q. Are your duties in your present position such as keep you in touch and familiar with the rates prevailing in the Southwestern country?

A. Quite generally; yes, sir. I have to keep in touch with the general rate adjustment to this entire section. I have to watch the adjustment from other markets in competition with St. Louis.

Q. In what year did you leave the railroad service?

A. In May, 1906."

Mr. Lincoln says:

"The controlling factors in the making of rates, State or interstate, or the foundation upon which a rate is made, is the maximum rate allowed by law, either State or interstate, or on through business the combination of State rates. They are departed from as commercial conditions require."

Then he was asked:

"What consideration in the making of interstate rates is usually given to the cost of actual service performed in transporting the traffic under the given rates?"

A. Very little consideration is given to the actual cost of service in making rates. Rates are made generally, as said, upon competition or commercial conditions. The traffic man necessarily should be informed to a greater or lesser extent as to what it costs, but in the making of any individual rate he is unable to determine what is the cost of handling that individual traffic.

Q. What information or statistics do the railroad companies have before the traffic men when they make rates; that is, as to cost?

A. Well, there are all kinds of statistics that reach a traffic man, or the traffic man can avail himself of them if he wishes to—as to the movement of the tonnage, the various commodities making up the tonnage, car movement and the averages. The ordinary traffic man is not well versed upon the expense of conducting the transportation as to any commodity on any division, but deals in totals.

Q. In fact, there are no statistics made by the railroad companies operating in this immediate section of the Southwest that have the cost of transportation of any given commodities, are there?

A. Not that I know of. I never saw them.

Q. In your experience you did not meet such?

A. Not such statistics.

Q. In fixing rates from large distributing points, say St. Louis to Arkansas, and through Arkansas to points beyond, say New Orleans and the Texas common points on the other side, how largely, if at all, does the cost of the length of the haul from Arkansas points to New Orleans and to Texas common points determine the rates that are fixed for these various movements?

A. Except in a very remote way, consideration is not given to the expense of conducting the transportation in making the rates from St. Louis to New Orleans, from St. Louis to Little Rock, or from St. Louis to Texas points. (R. pp. 962, 963.)

He was asked as to how he would divide expense, State and interstate, and said he had some opinions on the subject, but had never

worked them out, and therefore did not care to go into that matter. He was asked:

"Are there any controlling factors in the difference of the service, State and interstate, or the difference in long hauls and short hauls?"

A. That is in connection with expenses?

Q. Yes.

A. In connection with the expenses of conducting transportation there are controlling factors in the way of terminal expenses. There are controlling factors in the way of these short hauls being more expensive than the long hauls.

Q. How is that taken care of in practical railroading?

A. In the adjustment of rates.

Q. The evidence in this case shows this—I will just speak in round figures—that the revenue per ton per mile on the State traffic is 12 mills and the revenue per ton per mile on the interstate traffic is 6 mills.

Do those statistics indicate to your mind that this extra cost for short hauls have been taken care of in the rates?

A. This would indicate to my mind that in a measure the short haul has been taken care of in the rate by the fact that the average rate per ton per mile is higher than for the longer haul.

Q. And that is the way, as I understand you, in which this extra cost of the short haul, terminals and so forth, is taken care of?

A. It is contemplated in the rate adjustment, taken care of by the higher rates, for the shorter hauls than for the longer hauls. (R. pp. 963, 964.)

On cross examination he testified:

"Mr. Lincoln, you think the length of haul affects the expense of conducting traffic, do you not?"

A. Unquestionably the longer the haul the less the cost should be per ton per mile.

When he was asked the cause of that, he said:

"The causes are the continuous transportation over divisions and that after freight is in movement it would be hauled greater distances without a progressive rate of expense for each mile hauled.

Q. There are two classes of interstate traffic: From one State into another, say adjoining States, and that which crosses States. The latter kind has been termed "transstate" traffic in this case. A movement may originate in St. Louis and terminate in Galveston and it is a transstate shipment in Arkansas because it has no origin or destination there.

To what extent does that enter into and affect the relative cost of transportation as between interstate, including that interstate on one hand and intrastate on the other, in the State of Arkansas?

A. Well, I would say this: That business can be conducted with less expense, which is the average shown by the result in the rate per ton per mile for the longer haul from St. Louis to Galves-

ton than for a short haul within that distance, passing over the same line and in the same direction.

Q. Is there any other element that, in your opinion, would enter into the relative difference in expense than the long and short haul?

A. All things being equal, no.

Q. What is the service rendered with relation to transstate traffic and interstate traffic, in the more limited sense that I explained a while ago, in the State of Arkansas?

A. What is the relative service as between transstate and the interstate?

Q. Yes; in the State of Arkansas.

A. Well, within the State on State traffic, terminal expenses are embraced in the rates.

Q. On what traffic?

A. On the intrastate or short haul traffic. The same terminal expenses are embraced on an average of a long haul. The continuous movement of freight for a long haul enables—when there is a volume of business to move—the conduct of that business cheaper than the short hauls, because the short haul is usually handled in local trains.

Q. Will you charge any terminal service on a transstate shipment to the expense of conducting traffic in Arkansas?

A. No; there should be no expense charged in Arkansas for the terminal service.

Q. When you say there is a terminal service, you mean the traffic itself requires a terminal service?

A. Yes, originally; there would be no terminal service on through business.

Q. How would it be in interstate traffic as distinguished from transstate from St. Louis to Little Rock?

A. There would be one service there in the State and one there out of the State.

Q. How is it usually in State business?

A. There are two terminal services in these States.

Q. Is there any material difference in the expense of conducting intrastate and interstate traffic, referring now to the State of Arkansas, without having to repeat that each time?

A. No.

Q. You think there is no very material difference in expense?

A. In handling State and interstate business?

Q. Yes.

A. No, sir.

Q. On what do you base that view, Mr. Lincoln, that there is no material difference?

A. I base that view upon the fact that an imaginary line does not increase expense. I support the proposition that there is a greater expense attached to the handling of short haul business, State or

interstate, than on long haul business, State or interstate. (R. pp. 964, 965.)

On further cross examination he said:

Q. Mr. Lincoln, when you say, in regard to the cost of service being the large factor in determining the rates, you mean in determining the details, don't you? You do not mean that a railroad could operate unless it could fix its rates with some reference to the cost of the service?

A. I say that the cost of the service is not the factor that controls the making of the rates. The results of operation necessarily, as to the revenue, you would have to have some regard to cost or you would go into the hands of a receiver.

Q. That is what I want to know.

Could a railroad be operated successfully if its rates were fixed without any reference to the cost of the service it rendered to the public?

A. If it absolutely disregarded it and handled its business without regard to cost of the service, it would either have to get a receiver or raise the rates.

Q. When you speak of the disregard of the cost you mean in fixing particular rates?

A. Yes; the particular rates, though, do not take into consideration to any great extent the cost—

Q. But you would not say that railroads are not governed by the same rules that all other industrial institutions are governed by, would you?

A. I say if they do not govern themselves by the same rule, they ought to.

Q. Are they not governed by the general and universal law which is necessary in manufacturing or industrial concerns, to so fix their prices that they would not be under the cost of production?

A. It should.

Q. Would not a railroad that disregarded it, be in the hands of a receiver?

A. Well, it has not done it. (R. p. 760.)

Without going too much into detail, this part of the cross examination is instructive:

Q. How are the rates adjusted from St. Louis and Little Rock, as compared with the adjustment to Benton, Malvern and Arkadelphia, three points on the main line below Little Rock—how are they graduated?

A. I have not studied those rates lately, but I was of the impression that the rates were made to points south of Little Rock by adding the rates out of Little Rock to the Little Rock rate.

Q. In that case length of haul controls?

A. The length of haul south of Little Rock and the measure of rates control that.

Q. Take a shipment from St. Louis to Memphis, which you said on first class was at the rate of 70 cents and to New Orleans a rate of 90 cents—

A. I think those are the figures.

Q. Why is the rate 20 cents higher to New Orleans than it is to Memphis?

A. The rates made from St. Louis to New Orleans and to Memphis are made as against water competition. I presume they could get more money to New Orleans than they could to Memphis. They had boats running in the old days—they do not have them now—from St. Louis to Memphis. We also had boats which operated through St. Louis to New Orleans.

Q. Is it not a fact that the distance from St. Louis to those two places is a factor in fixing those two rates?

A. I do not think so at all, because intermediate rates this side of New Orleans are higher than they are to New Orleans.

Q. What is the intermediate rate to Jackson and Meridian, as compared with Memphis?

A. I do not recall, but it is higher than from St. Louis to New Orleans, the rate from St. Louis to Jackson and Meridian, although the traffic moves through Jackson and Meridian to get to New Orleans.

Q. That establishes the proposition that this disturbance produced by these exceptional conditions is confined to the point where the exceptional condition exists, and does not affect the intermediate rates.

A. I say there was a commercial or competitive condition that required a departure from the mileage scale.

Q. As to New Orleans?

A. Yes, sir.

Q. But does not affect the intermediate points like Jackson and Meridian?

A. Not to the same extent; to some extent, but not to the same extent. (R. p. 978.)

The operation of the Western Classification was also touched up in Mr. Lincoln's cross examination:

Q. Are you familiar with the ratings of the Western Classification Committee?

A. Yes, sir.

Q. Do you know the classification they make for the various commodities moved?

A. They divided them into ten classes.

Q. Do they have any regard or pay any attention to the character of the articles transported with reference to the cost and the risk that enters into the service in reference to the particular classes that are defined by them?

A. They consider a great many things in the development of the

proper rating to be applied. The cost, the risk, the density and the volume of the traffic.

Q. They take all of those things into consideration, do they?

A. They do; by intuition, if not directly.

Q. Why is it that they would classify an article of small value and little density, weight, etc., lower than they would an article of greater value, that did not have so much density and was lighter?

A. To distribute the proportion so as to make the commodity as nearly as possible contribute its share toward the total revenue of the road.

Q. And they have in mind the cost of handling those different classes of commodities?

A. Those are all factors that should be taken into consideration.

Q. Does not this Committee do that?

A. Very largely.

Q. Does not the classification on its face show that?

A. As a whole it shows very good judgment.

Q. Take an article that is very valuable and fragile, easily broken, that would involve a heavy loss and damage claim; they are likely to put a higher classification on that than on one that is less likely to be broken?

A. The classification is the best prepared document of the relations that should exist between the different commodities. The classification shows the relations that should exist, not the rates." (R. p. 981.)

In re-direct the subject came up again:

"Q. Speaking of the Western Classification of commodities as the basis of fixing rates, do not the railroads in the interstate tariff make many exceptions to that?

A. A great many, State and interstate.

Q. Both State and interstate. The State Commissions make exceptions and the railroads make exceptions?

A. Yes, sir. (R. pp. 982, 983.)

As to the movement of commodities in interstate on distance scale tariffs, or on competitive rates, this statement is important.

Q. Mr. Moore has asked about a great many rates which he has called "exceptional" rates, like these New Orleans competitive rates; zone rates and things of that kind that are excepted from the distance scale:

I will ask you, as a general proposition, whether the traffic most largely moves under these competitive rates or does it move under the distance rates?

A. It moves under the competitive rates.

Q. They constitute the larger volume, these rates Mr. Moore has been discussing with you, as based on competition conditions, river conditions and things of that kind?

A. A larger volume moves under competitive rates." (R. p. 983.)

Mr. Asa R. Bragg's testimony begins at page 816. For five years he has been manager of the Merchants' Freight Bureau of Little Rock; his duties are really those of a traffic manager for the merchants and manufacturers of Little Rock. He has to get them rates, see that they are protected against other jobbing centers and manufacturing places in the matter of freight rates, and act as their agent so far as traffic is concerned. Prior to his present position he was in the Traffic Department of the Iron Mountain road for 25 years. His service was from local freight agent to division freight agent.

He was Division Freight Agent at Little Rock for 15 years.

These excerpts from Mr. Bragg's testimony are pertinent:

"Q. I wish you would state from your knowledge and familiarity with the freight rates prevailing in this country, the manner or system on which they are constructed?

A. You mean the method of making rates?

Q. Yes.

A. Well, they have two methods—one is by conference among themselves; that is, with reference to competitive rates; the individual or local tariffs, I think, are made up in their offices, by their rate people.

Q. Their competitive rates are made in conference?

A. Yes, sir; altogether; they are promulgated by a chairman or agent.

Q. You are referring, I presume, to the interstate rates?

A. Yes, sir.

Q. Prior to the adoption of a Commission tariff, how were the State rates made?

A. They were made in practically the same way; they didn't, however issue—their tariffs were not—I don't think their tariffs into Arkansas were issued by a chairman, not all of them, some of them were, and some were not; some of the tariffs even to competitive points were not issued by a chairman.

Q. Prior to the Commission rates were there any what was known as jobbing rates, to commercial centers in the State?

A. Yes, sir; between certain points; that is, from jobbing centers to local territory, what is known as noncompetitive points." (R. pp. 816, 817.)

It was shown by him that prior to the Commission Tariff that special rates and jobbing rates were the rates upon which practically everything in Arkansas moved, and the issuance of the Commission Tariff in 1900 abolished all these rates and put the intrastate traffic on a mileage scale. (R. pp. 817-819.)

Then he explains the much-mentioned "Memphis Adjustment," which briefly was this:

The Little Rock & Memphis road, now part of the Rock Island, adopted the Commission Tariff out of Memphis by practically placing Memphis on the west bank of the river. The Iron Mountain pro-

tested, and it was a year and a half before the Iron Mountain adopted the Commission Tariff for its Memphis business. Its adoption was brought about through a suit between the city of Memphis and the Iron Mountain over franchises (other witnesses say terminals), and an agreement was made by the Iron Mountain, in consideration of the franchises (or terminals), to put in force from West Memphis the Arkansas Commission Tariff. This was in 1902. (R. pp. 819. 820.) In cross examination it was brought out that in consideration of the vacation of certain streets and alleys, the Iron Mountain agreed to forever maintain the same scale of rates from West Memphis that were maintained in Arkansas. (R. p. 839.)

Mr. Bragg was asked to make an estimate of the amount of interstate traffic which was affected by this Memphis adjustment. He says that no part of the transstate traffic was affected by it. Exhibit 26 (R. p. 2391) of the Iron Mountain shows transstate traffic to be 51.16 per cent total ton miles, interstate 40.69 per cent and intrastate 8.15 per cent. He estimates that of the remaining 41 per cent (erroneously put to him in question as 49 per cent) that not over 15 per cent was affected, and gives definite reasons for his estimate. (R. pp. 823, 824.)

Assuming for the moment that the Commission Tariff is iniquitous and confiscatory, the Iron Mountain voluntarily adopts it for 6 per cent of its total business in the State—15 per cent of its strict interstate business—in order to get a franchise or terminals in Memphis, and then seeks to enjoin it on account of 8 per cent (the intrastate) of its traffic, because it is confiscatory.

This evidence, however, is not directed to that point, but to show that cost of service was not regarded in putting in rates for Memphis traffic, but other considerations controlled.

Mr. Bragg explained the fundamentals of the rate situation in Arkansas as follows:

"A. Well, away back twenty-odd years ago, they fixed—the St. Louis, Iron Mountain & Southern Railway Company into Memphis, and the Frisco, or the Kansas City, Springfield & Memphis, as it was at that time, fixed a differential basis between St. Louis, beginning—really it began at the Missouri River, and came on down and came to New Orleans; all these rates were predicated on the Memphis basis, St. Louis was 30 cents, Cairo was 20 cents over Memphis, and St. Louis was 30; in other words, the St. Louis basis was fixed first, and Memphis was fixed at 30 cents per hundred; we are using one class as an illustration, under the St. Louis rate; they went on down below and made the New Orleans rate the same as St. Louis. I am speaking of rates over the line into Arkansas, interstate rates.

Q. Let's get that a little more clear; the Memphis rate was fixed at 30 cents, using one class as an illustration?

A. No; St. Louis.

Q. What was New Orleans fixed at?

A. At the same as St. Louis. If St. Louis was a dollar to Little Rock, it would be 70 cents to Memphis, and a dollar to New Orleans; Kansas City was 10 cents higher than St. Louis; those differentials applied all the way down, and were the basis then and are today the basis of fixing the rates to Little Rock from that territory.

Q. How was that arbitrary or differential arrived at? Was it based on the cost of service or commercial conditions, or what was it based on?

A. No, sir; it is a system that obtains all over the country, and it is used—it is an arbitrary made by traffic people. If they get together and they find that two rates added together are against the movement of traffic generally, they fix a basis for making a through rate; for instance, from Chicago, Cincinnati, Louisville or Pittsburg, or from any point beyond the river.

Q. Are those arbitraries or differentials determined by differences in costs in moving that commodity or are they determined by other considerations?

A. The cost, I don't think, enters into the basis of making those rates.

Q. What does enter into it?

A. The territorial location is largely the reason for it.

Q. What you might term commercial, competitive and geographical conditions?

A. Yes, sir.

Q. Trade conditions?

A. Yes, sir; in all those rates, I presume, they tried to keep all markets on a parity as far as possible.

Q. That is the object of these arbitraries, to keep these various markets on a parity?

A. Yes, sir; that is the only object; of course, the cost of doing business, I presume, is thought of, at the time these rates are made.

Q. Is it any more than thought of?

A. That is all.

Q. Is there any data before them by which they could act upon any more than thinking about it?

A. I don't think so; I would like to explain a little further about this basis; it is followed very closely in making all through local rates; the same basis; Little Rock is the hub, is the axle that controls the entire rates of this State.

Q. You are referring now to interstate rates?

A. Yes, sir; in making rates out of Memphis and St. Louis to local territory, like Arkadelphia or Malvern, or some of these points down here, they hug pretty close to the same basis, the differential between Memphis, St. Louis and New Orleans, that they do to the common points.

Q. Now, take the rates that have been denominated in this hearing as transstate rates, that is, freight moving across Arkansas that

does not stop in it; for instance, lumber from Louisiana north, from States west to common points, such as fruit, from California to the east, live stock, and various freights that move across Arkansas, without having any destination in the State or originating in the State, what effect, if any, do the State rates have upon those rates?

A. None whatever; you have business from St. Louis to Louisiana and to Texas and to Mexico.

Q. Business passes through Arkansas, without any destination or origin in Arkansas, and for convenience in this case, it has been termed transstate business.

A. I don't think Arkansas rates have any effect on those rates. (R. pp. 820-822.)"

On cross examination as to cost of service, Mr. Bragg says:

"Q. Did you ever know of a business, large or small, that was conducted successfully, in which the output of the business was not sold with reference to the cost of its production?

A. I consider that the railroad corporations in that respect are entirely different from any other kind of business.

Q. Can any business be conducted successfully unless it sells its wares upon a basis that will enable it to make something above the cost of producing it?

A. Of course not.

Q. Isn't that true of railroads, the same as any other enterprise?

A. They are trying to make money, there is no question about that.

Q. Can they conduct their business intelligently with reference to results, unless they fix the price upon what they have to sell with some reference to the cost of producing it; isn't that true just as well with railroads as with any other industry?

A. I don't think so; I don't think they can calculate it very closely.

Q. If the cost of transportation is not an element that is absolutely essential that railroads should consider, must they not consider it if they conduct their business successfully?

A. Of course, they must do that.

Q. You do not mean to say that rates are fixed without any reference at all to the cost of service?

A. About half of them are.

Q. How is it with the other half?

A. I don't see how they can figure a rate at all, on the cost of—

Q. Let me ask you, I believe you said awhile ago that the rates depended upon the classification; does the element of cost enter into the consideration of those persons who are charged with the duty of making the classification?

A. No, sir; in a general way, they make these classifications—they are inconsistent; they will classify a commodity, one of the

very cheapest commodities, perhaps, which costs the smallest sum to handle, they will put it away up in a high rate. (R. p. 846.)

He was cross examined at length in regard to the Western Classification, but nothing developed different from the statement given.

In re-direct he was asked:

Q. Now, I understand, your testimony about the classification is that, while the committees are supposed to take into consideration bulk and space and value and risk and things of that kind, that the result of their work is full of inconsistencies where those considerations are ignored. Isn't that about the effect of your testimony about that?

* * * * * * * * *

A. That has been my experience.

Q. You have had pretty intimate experience with the Western Classification, too, have you not?

A. Yes; I have been handling it a long time.

Q. Mr. Moore brought out that you had been attending some meetings of the Western Classification. Did they give you a hearing on your matters?

A. No, sir.

Q. Kind of a hard crowd to get in to?

A. Well, it is usually out horseback riding and a few clerks do the work.

Q. Have a pretty good time down there, don't they?

A. Yes; they usually do. Incidentally a few games of poker.

Q. Are those meetings attended very generally by the intrastate shippers?

A. Oh, they are always besieged principally by manufacturers and people who are sometimes merchants—generally manufacturers, though.

Q. Men that have very large shipping interests go down and have their meetings with them?

A. Well, they go down there and apply for changes in weight or rate or something of that sort.

Q. They go there and discuss changes in weight or bulk and the rates as it refers to manufactured articles?

A. The rate; that is, the Classification sometimes fixes the weight or rate on manufactured goods that become prohibitive, perhaps, or with some other point that has the same goods possibly in a territory covered by some other classification. They are getting around to as nearly perfect as they can. It is a good deal better than it used to be." (R. pp. 853, 854.)

Mr. C. B. Bee, Rate Expert of the Corporation Commission of Oklahoma, testified at great length on rate subjects principally, but his cross examination carried him into almost every subject connected with the case. His testimony begins at page 1176.

He is in charge of the Rate Department and has been for three years past.

His duties are to advise the Commission as to rates in effect in different States of the Southwest, and the interstate rates in effect in the Southwest, and the conditions governing freight rates, and to assist the Commission in making freight rates to govern shipments in Oklahoma and generally the handling of the rate situation in Oklahoma. (R. p. 1176.)

At the time he was selected as Rate Expert for the Commission he was acting as Assistant General Freight Agent of the Mexican Central Railway Company. All his railroad experience had been on Mexican roads and he gives this sketch of his work before going with the Corporation Commission:

"I started in as stenographer to the division superintendent, his office stenographer; promoted from that to car stenographer; and through the different positions in the superintendent's office, such as overcharge and damage clerk; chief clerk; and then on the road with the superintendent as handy man, going where he directed; from that to the motive power department with the assistant superintendent of machinery, and numerous positions in the motive power department; my last service in that department was balancing power; and I was transferred to the freight department, holding all the positions in the freight traffic department up to acting as assistant general freight agent; that is, commercial agent; all the rate positions—first, second, third and fourth rate clerk; chief rate clerk; chief clerk of the rate department; commercial agent; division freight agent; general agent and back into the office." (R. p. 1176.)

Mr. Bee's views are found in answer to these questions:

"Q. I will ask you what relation interstate rates prevailing in the Southwestern territory, particularly in Arkansas and Oklahoma, that you are familiar with, bear to the cost of the service, and what consideration is given in making interstate rates, to the cost of service for work done?

A. Other than a fixed figure which has sometimes been recognized in railroad rate making, I have never known of the cost of service entering into the making of a freight rate; that fixed figure has now been discarded, entirely by all traffic officials; it was the old bugbear of five mills per ton per mile, which was for years considered the actual cost of service on long hauls. That figure has been dropped, and no traffic man at present uses it, and freight rates are not made on the cost of service.

Q. What considerations govern the making of interstate freight rates?

A. All the traffic will bear.

Q. Explain just what that means in rate-making parlance?

A. It takes into consideration the commodity of the traffic, the value of the commodity, the points between which it is moving, the competitive conditions surrounding the movement, and, of course, regard is given in all instances to the nature of the commodity, and

that is the nearest that a traffic man ever comes to the cost of service; the rates on a low value commodity, and one which will suffer very little from damage, are considered low grade commodities, while the reverse is true on high grade commodities; no traffic man would consider the same rate on oil as he did on sand, but he would not be attempting to place the cost of service upon the two, but rather the liability, and the rate that the two commodities would stand.

Q. That is, the relation of one commodity to another?

A. That is it exactly.

Q. That is best expressed in the classification of commodities, isn't it?

A. That is true; the classifications as published today largely govern those things.

Q. But even those classifications are full of exceptions, are they not?

A. Yes, sir; and made largely upon guess work.

Q. Are the exception sheets to classifications prevailing in Oklahoma?

A. Yes, sir.

Q. Are you familiar with the exceptions sheets prevailing to the Texas common points?

A. I am.

Q. Is that large or small?

A. Very large.

Q. Are you familiar with the exception sheets prevailing in Arkansas traffic?

A. Yes; both State and interstate.

Q. That puts another variable quantity into the rates, doesn't it?

A. It does." (R. pp. 1178, 1179.)

* * * * * * * * *

Then Mr. Bee takes up the subject of zone or flat rates on lumber and grain particularly. (R. pp. 1179, 1180.) Mr. Bee explains the movement of cotton. It is delivered to the railway company and by it carried to a compress point, then held on cars till ordered compressed; delivered to the compress, unloaded by the railway company; again taken from the compress when compression completed; loaded again by the railway company, and hauled to final destination. It is treated as L. C. L. throughout its entire movement; the rate is based on bales..

Its first movement from point of origin to compress point is billed on a local rate, but, when forwarded to its destination, the rate from point of origin to final destination is charged and the local rate refunded, or the difference refunded. The entire movement is interstate and all the cotton moved in Arkansas (excepting an infinitesimal amount) is shipped out of the State. (R. p. 1181.) He says that

cotton is the most expensive commodity handled by a railroad company, and these are his reasons therefor:

"I think it entails great expense and more liability upon the railroad company than any other commodity handled, and the reason is that it requires a large force to load and unload. As a rule, cotton is loaded at small stations where there is but one man employed; it is necessary to bring the section foreman into that station to load that cotton on, else employ people there in the town to load it. Oftentimes, railroad companies pay the owners of the cotton to load it for them. Care must be taken to get a perfect car in which to load this cotton. After it is loaded, railroad companies by their rules require that the doors be batted, which requires an additional expense, and this batting is always thrown away at destination, unlike grain doors, which are returned. This cotton must be placed in the yards at the compressing point, and it is a very unusual thing, during compressing season, if there is not an extra switching engine at all large compressing points; as cotton is not handled upon its arrival at the compressing point, but the people who own it hold it, and there is no way for the railroad company to tell what car is next going to be called for. I have seen as high as five hundred cars of cotton laying in a yard, and some of them would be there twenty and some thirty days, some only three days, and every time a car is called for, it generally means the switching of that entire cotton yard to get that car out and switched to the compress. Demurrage and storage has not been charged on cotton heretofore; it is now, in order to do away with this extremely heavy expense. After cotton is moved to the compress, it is again put back in the car, the same process being gone through with. In the cotton countries in our State, some railroads equip their engines with oil burners, in order not to throw sparks. They haul oil a long distance and do not handle oil on other branches of their road; it is merely to protect this cotton. Cotton moving from point of origin to the compress point is in big bales, and I think it requires about 2½ to three cars of open cotton or flat cotton to make one car of compressed cotton, so that there is that many cars moved into the compress which must move back empty for other cotton, and the liability on the cotton is very strong; it is always loaded at shipper's count at blind sidings, sealed after he closes the doors, seldom counted by the agent; fires have often been known to occur where there was a question as to whether there was a bale of cotton in the car at all."

Q. What is the casualty rate on cotton?

A. High, exceedingly so; once a fire starts in a bale there is no telling when it will stop, or when it will be discovered. (R. p. 1180.)

The rates on cotton are thus explained:

From Oklahoma there is a flat rate of 70 cents into the New England States.

From Little Rock it is 80 cents, and from Fort Smith 85 cents.

This is to the New England mills. Most of the railroads in New England participating in the rate, and applies generally in New England irrespective of distance. The 80-cent rate from Little Rock would apply from that point and for some distance around it; and this flat rate is divided between the various carriers, irrespective of number of carriers. (R. p. 1183.)

He also explains the citrus fruit flat rate. A train of oranges from California to New York will be carried, after it gets east of Colorado, on a flat rate. A car dropped at El Paso, Texas, at Houston, Texas, at Texarkana, at Little Rock, at St. Louis, at Pittsburg and at New York each pay the same freight.

"There would be a haul in there of approximately a thousand miles, over that, between the Little Rock car, the New York car, and if the New York car was pulled on the cost of service, there would be an exceedingly high profit made out of the Little Rock car, or *vice versa*, somebody would lose money in carrying that car to New York." (R. p. 1184.)

The Texas common point rates are explained:

"Q. There is a map there on Texas common points?

A. I am thoroughly familiar with that.

Q. State the effect on the revenue of shipments passing through Arkansas under that Texas common point schedule?

A. The conditions could be so changed on two carloads of freight of exactly similar commodities, loading from a given point of origin, to separate destinations in Texas that the revenue received by the lines participating in the business would be almost double on one car what it was on the other. That Texas common point rate applies from the north to the south, and from the east for a long distance west; the highest distance between two points being 662 miles, in what is known as common points territory.

Q. That is at the Texas end of it.

A. Yes, sir; I think that is the highest distance; I figured it out the other day for the Interstate Commerce Commission.

Q. How would that result be brought about?

A. The result would be brought about by two shipments originating at St. Louis, the cars being loaded with identically the same commodity, one being destined to Texarkana, Texas, instead—take to the first point in the common point territory of Texas—I believe there are two stations in Texas (referring to map). Take two shipments originating at St. Louis, handled over the Iron Mountain, one destined to the first station in Texas, on the T. & P. Railroad south of Texarkana or west of Texarkana, the other being destined Big Springs, Texas, which appears from this map to be the end of the common point territory. The distance between those points is in excess of five hundred thirteen miles, and the rate would be exactly the same. Dividing the rate by the miles handled, figuring in mills per ton per mile, it would show a figure nearly one-half for the car

destined for the last station as for the car destined for the first station. The exact figure would be easily worked out. In other words, the haul on one would be something over 513 miles more than on the other, and the rate would be the same per hundred pounds.

Q. What effect would the distribution of that rate between the different carriers in Texas, have upon the matter?

A. The other carriers in Texas would receive a part of the rate.

Q. Within that Texas zone would there be different carriers handling this commodity?

A. Yes; you can figure rates from defined territory to Texas points that would require the handling of three or more carriers to deliver the shipments. (R. p. 1185.)

If this freight movement originates east of St. Louis a similar condition exists. The longer the haul, however, the less disparity. Take Grand Glaize, Ark., the last point in the defined territory to the first point in Texas taking the rate, and it would be about three times as much as for the longest haul. Pittsburg is the eastern limit and a group surrounding Pittsburg take Pittsburg rates, a group surrounding Chicago take Chicago rates, etc. A shipment of steel from Pittsburg to the farthest common point, Big Springs, Texas, would be carried by as high as ten or twelve carriers, or as few as three or four, depending on the routing, but generally about six carriers; this flat rate would be divided between these carriers, whether three or twelve. In its passage through Arkansas the freight to Texas common points would usually be handled by four or five lines and a fluctuating condition of the revenue apportioned to Arkansas for almost every shipment, although the cost would be the same." (R. p. 1186.)

The water competition fixing rates is discussed by the witness. Owing to it there are rates from St. Louis to New Orleans less than to Little Rock which they have under the cheaper rate right through Little Rock to New Orleans. Many of these rates are based on a theory of water competition where none exists. (R. pp. 1187, 1188.)

In the Southwestern country some of the States have combined Commission, legislative and voluntary rates; this is true of Kansas and Oklahoma. Some have all Commission-made rates, Texas and Arkansas; Missouri, Louisiana and Mississippi have partly Commission-made and party voluntary. State rates are strictly arbitrary, mostly on a distance scale. (R. p. 1188.)

Each State has either its own classification or adopts the Western Classification, subject to its own exceptions.

"Q. What effect does this variation in the classification that you have just explained, have upon the revenue?

A. It is possible to change the revenue materially by variations in classifications.

Q. In what way; that is clear to your mind as a traffic man, but to the lay mind it would probably require a little explanation of just how it is done.

A. As a sample we will say the first-class rate is 40 cents, and the second class is 30 cents; a change was made in the classification, and the exception would reduce it to second class; it would immediately change the rate from first to second, and would make a change in the revenue of the railroad of ten cents a hundred pounds." (R. p. 1189.)

Regarding the general proposition that the longer the haul the cheaper, proportionately, it can be carried, Mr. Bee makes a statement worth considering:

"I want to add there that the traffic men themselves say, the longer you haul the shipment the cheaper you can handle it per ton per mile. That is a misunderstanding. I don't think any traffic man will go on the stand and say you can haul a shipment 200 miles cheaper the second hundred than the first hundred. But the fact is that by reducing the rate per ton per mile, you are still paying your terminal expense, and the cost of the haul just the same 100, 200, or 300, with the exception of the terminal expense; and of course the longer you have to go you can exact a smaller fraction on each mile to pay that terminal expense with, and that is the only reason that I know of why it costs less to handle the shipment a long distance than a short distance. After a shipment goes over one terminal or one division, it costs just as much to handle it—

Q. You mean the cost per ton per mile?

A. Yes; or the cost as a whole; any way you want it. The terminal expense at origin and destination has to be taken care of, and if you can haul that shipment 500 miles you can take a less figure on each mile to pay those two terminal expenses, than if you are going to haul it only 100 miles. The actual cost of transportation is just the same, if the condition of the road is the same.

Q. Suppose this factor enters into it: Suppose the longer the haul, the more intermediate carriers?

A. That is largely true.

Q. And the rate is thinned out by every division?

A. It continues to thin all the time. A shipment passing through interstate from road to road will stand a heavier terminal expense, right here in Kansas City than it would cost to be delivered in Oklahoma. I understand that the expense there has been figured out at $4.80 or about that.

Q. Do you refer to St. Louis or Kansas City?

A. I meant Kansas City, $4.80 there, from line to line. They have never contended it cost over $2.60 to deliver freight in Oklahoma, at our largest and most expensive terminal we have. (R. p. 1207.)

On cross examination Mr. Bee, after repeating to him the substance of his statements on direct, on the way rates were made, was asked:

"Is the desire to get a remunerative rate the cause of his taking

these elements (the character of the commodity, its value, etc.) into consideration?"

He says to a certain extent he (the traffic man) does, but he can not tell whether it is remunerative or not, but he has to handle the business just the same.

He will not go below the cost if he can help it, but he does not know the cost, but he does the best he can to get a rate above cost except to meet competition; then he does not take it into consideration at all. (R. pp. 1217-1219.)

In making special rates they take into consideration the volume of business. (R. p. 1219.)

He formerly thought that rate men took into consideration reciprocal tonnage in fixing rates, but from experience and observation of the roads operating in Arkansas and Oklahoma he does not think such is the case, and pressed for his reasons he gives numerous instances, the roads and the officers, who refused to make rates on that basis. (R. pp. 1219-1221.)

A full statement of Mr. Bee's opinion on the cost of service may be gathered from this excerpt from his cross examination:

"Q. In view of what you have stated in connection with the elements that are taken into consideration—since you have been discussing this subject this morning—with reference to the effect of value; length of haul; liability incident to the haul, the nature of the commodity; and in view of your statement that those matters are considered by traffic men, although you think they have not the information as to what the cost is, I want to ask if you think it is correct that traffic men do not give any consideration to the cost of service in fixing rates?

A. I think they give very little consideration to the actual cost. Now, understand me. I don't want to be understood as saying that a traffic man is going to solicit a shipment or make a rate on any figure that might come into his head. I don't want to put a traffic man in that light. I don't want to indicate for one moment that any traffic man is that much of an idiot. But I mean, he is not figuring what the cost of service is. He does not know that the cost of service represents six mills for 100-mile haul or eight mills for a 50-mile haul. He has no figures of that kind. He takes a rate and tries to get what he can out of it. He has in his head, probably, an arbitrary figure that he will not go below, but if he was asked tomorrow to testify as to the cost of service, he would be unable to do so. He is trying to hold the business down so his road can get some money out of it. He is taking business and instructing his men to take business which is paying him enough, or he thinks is paying him enough. He considers he has to take it to keep his trains moving.

Q. And you stated a while ago that he could not give the cost of service?

A. Or even approximate it.

Q. In the nature of things, it is quantity that is unknown to him, yet in fixing the rates he regards the cost in so far that he will not fix a rate which is nonremunerative, and he does consider these elements you have mentioned?

A. He would fix that on a new rate and a rate over which he had the power to make it; there is no doubt about that.

Q. That is where the conditions are normal?

A. Where the conditions are entirely in his power. The other might be a condition where he would not have any power over the rate at all. Some one else might have stepped in there ahead of him." (R. pp. 1221-1222.)

The testimony of Mr. Becker, Chairman of the Western Classification Committee, heretofore given, as read to Mr. Bee and he was asked as to his views on the subject and said:

"A. I agree with him, as I said before, that classification is built upon the relation of the cost between the two articles; it is not made on the actual cost of service to handle it, and I don't think Mr. Becker intended that; as between the first and second classes, Mr. Becker is trying, in making the classifications with his committee, to so arrange those two commodities that they bear a relation to each other, but not that they bear a relation to the cost of service, but to each other, and as far as traffic conditions are concerned, the revenue coming from them, he feels that one commodity will stand a higher rate than the other, and it goes in the classification higher, and that is what I think Mr. Becker refers to when he says the cost of service is the basis.

Q. Isn't it also true that traffic men, in making rates, are influenced by the same considerations?

A. To a certain extent they are; yes, sir; not to the actual exact cost of service—I want to be understood at all times, in making a statement that a traffic man or any traffic man takes into consideration the cost of service or the approximate cost of service; that I mean that he attempts it between the two articles only; rates are made upon a comparison entirely." (R. p. 1224.)

Questioned in regard to the rate from the Southern lumber zone, he says he thinks it an unremunerative rate, and his attention was called to testimony that the freight agents of the roads maintaining it had testified it was remunerative, considering all factors, and they figured on the cost of service, and he says: "The freight agent was figuring that on the 22-cent rate he was not making a profit on shipments from the southern part of the zone, but his idea was that what he was making on the northern end of it would compensate him for it, and that he was trying to make some one else bear the burden of it." (R. pp. 1227-8.) (Elsewhere it will be seen that Mr. Perkins' testimony that about 15 per cent of the lumber movement on this flat rate was from Arkansas and the rest of it south of it, therefore the greater part of it was at an unremunerative rate, according to

Mr. Bee's views.) Mr. Bee goes into very specific illustrations to prove his assertions in regard to the lumber rate, not being based on cost of service. (R. pp. 1228-1230.) In fact, the cross examination of Mr. Bee deals largely with specific instances given to illustrate any statement he makes, and, to get the full force of it, it must be read in its entirety.

Mr. Ludlam testified that a rate-maker, as a rule, has no specific data as to the cost of service; he knows in a general way the cost per ton per mile to move freight on his road, but does not know it by divisions.

There is a vast difference in expense of one division compared with another, and this would make a great difference in the cost of service dependent upon the division of the road upon which it moved, and there are no statistics to give this data and guide the rate-maker. (R. pp. 1319, 1320.)

Mr. Wilmering testified on this subject as follows:

"Q. Are those rates so made that they reflect the cost of service, and that the rates can be taken as a measure of the cost or expense of handling the traffic?

A. In a general way the rates are not made on the cost of service. I believe that railroad rates are made on tradition, not on condition, and from my investigation I find that railroad rates, when they are made without restriction, are primarily made by the traveling freight agent or a contracting agent, and by up-to-date freight agents; they feel the pulse of the business around the territory occupied by their company, and in the past it has been the custom that if the business was offered and could not move at the standard rate, a lower rate was made, irrespective of the cost of service, to get the business. I have been present at the cross examination and assisted in the cross examination of many of the eminent railway traffic officials who are at the head of the traffic departments of those roads operating through the State of Oklahoma, and I have never heard one state positively that he had any regard for the cost of service in making rates." (R. pp. 862-3.)

On cross examination he was asked upon what he based this statement and explained it more fully, and then was asked to give instances, which he did in great abundance. (R. pp. 1123-1130.)

These specific details are too numerous for condensation, but are well worth studying.

Mr. T. A. Hamilton had quite a useful apprenticeship in minor railroad positions and then five years' experience in a rate-making office, and in the last few years has made a minute investigation of the rate situation in Missouri and Arkansas. His views, based on these experiences, are well worthy of consideration. He says:

> "I gave a great deal of thought and study to the rate conditions in that territory—Southeastern territory—for a good many years. I had to do it to earn my bread and butter. I saw those

rates in their daily application, covering practically all the territory east of the Mississippi River and south of the Ohio and Potomac rivers, and I do not believe that there is a more complex territory, from a rate-making or rate-applying standpoint, in the world.

"Rates were made down there—or at least they appeared on their face to be made—so no sane man could understand the reasons for them. Certainly a great many of them were made without any relation to the cost of service. I would like to illustrate that just a little:

"The Mississippi Valley tariffs to common points in the New Orleans group, carry from St. Louis a great many commodity rates.

"For instance, the rate on soap from St. Louis to Mobile, was 28 cents. The rate applied from the west bank of the river. The L. & N. paid the river transfers, as did all of its competitors, the Illinois Central, the Mobile & Ohio and the Southern Railway.

"The rate to points directly north of Mobile, through which Mobile traffic would pass on its way from St. Louis, were almost double the Mobile rate.

"The shippers here in St. Louis would secure what we called 'combination rates.' They had the privilege of shipping their stuff to Mobile at 28 cents and shipping it back at the local rate, making a much cheaper rate than the local rate to any intermediate point. As I recall it, those rates reached clear back to Montgomery. That is, we could make a combination rate cheaper than the straight of way local as far back as Montgomery; and not only that, but when you made the combination on Mobile, you made a St. Louis rate which absorbed a transfer. Your local rate was an East St. Louis rate, which did not.

"That is just one illustration of a great volume of rates that we made in that way.

"I recall that we had a considerable movement of stoves into interior Georgia points, and we found that in the every-day application of the rates we could make a cheaper rate by applying the rate from St. Louis to Jacksonville, Florida, and the local rate back into the interior of Georgia, than the published straight rate to the interior point. (R. p. 1474.)

* * * * * * * * *

"Another instance of making rates to meet the necessities of traffic, regardless of the cost of service, was a set of rates we had in another matter, East St. Louis to the Ohio River, on grain destined to the Southeast.

"We got grain delivered to us at East St. Louis that originated west of the Missouri River, as I recall it, and if it was properly reconsigned through the Southern Freight Commit-

tee—virtually a milling-in-transit arrangement, we hauled it to Evansville, Indiana, for one cent, and if it originated in Missouri locally we got four cents for the same haul. If it originated in an East St. Louis elevator with no indication or surrender of tonnage beyond St. Louis, we got 6½ cents for the same service.

"We had what was known as a proportional rate on grain, which was the same as that. We had a connecting link between Henderson, Kentucky, across the river from Evansville and Louisville, which was much shorter than our own line through Guthrie.

* * * * * * * * *

"It was along those lines, the handling of rates, not the making of them, their practical application to the every-day traffic, and applying that division of them between our line and other lines; work of that character. The building up of rates where we found that the fabric of our through rates could be defeated by combinations. It required quite a study; not only of the railroad I was with, but all of our competitors in that territory.

"That lasted some five years, that actual every-day experience in meeting these problems and applying them to the freight traffic of my employer, the railroad company.

"I have listened with a great deal of interest to what has been said by the gentlemen in this case regarding rate-making and it coincides quite a little with my experience in applying rates, and I would like to summarize that with my best thought on the matter.

* * * * * * * * *

"When a railroad traffic man states that the cost of service is considered in making rates, he undoubtedly has in mind the ideal condition. But as a matter of fact, the basis of his rates, owing to the manner in which they are adjusted from time to time—patching a new rate on to the old—must necessarily be tradition and precedent, and it would be necessary for the origin of that tradition and precedent to go back to the very genesis of railroad rate-making. Assuming that even at that time the first schedule of rates had a cost basis; that the road knew its costs and added a certain percentage of profit to that in making its freight rates—we would have to assume it knew its cost by actual commodities, but even that is doubtful, because the first railroads had to meet stage and wagon competition, as well as canal boat competition. Stages and canal boats were there before we had any steam engines, and if they had to meet that competition they had to meet the cost ideas of the canal boatman, the stage driver and the man who drove the freight wagon.

"If that is the basis of the present rate fabric, and rates are made by readjusting and rearranging, patching, extending and

contracting existing rates, I feel that any traffic man will bear me out in my statement.

"That does not seem to be a cost foundation, to begin with. If a traffic man has any idea at all as to the cost of service, it must necessarily express itself to him in some specific terms—he must have a unit, a yardstick to measure by.

* * * * * * * * *

"Even if we assume that the ton-mile cost of transporting each individual commodity on a given line of railroad was known to the traffic manager of the road and he desired to make his rate based on that cost, plus his percentage of profit, it is a grave question how far he could go in that direction. Certainly, he could not go beyond the first junction where he met short-line competition. He would have to meet his competitor there, and his cost ideas, or go out of business. He could not go beyond the first navigable stream where he would meet boat competition with rates made on a package basis in many instances, as in the case of many commodities between St. Louis and New Orleans and St. Louis and Memphis.

* * * * * * * * *

"It is a question whether a traffic man could solve all these problems and meet so many different conditions of operation and cost on other lines, and so many other traffic men's ideas of what rates are profitable, and still adhere to a basis of actual cost, plus a percentage for profit.

* * * * * * * * *

"As a matter of fact, a traffic man gets out of such traffic as high a rate as he can, but he must be satisfied with what the traffic will bear, or the industries will not open and his cars will come back empty.

"This reciprocal traffic must be considered, too, in making rates on business in the opposite direction where the volume of traffic is, where the predominating traffic is, as the fewer empty cars you have to haul back the less burden of that empty car movement cost your outbound traffic will have to bear.

"Rates to and from large territorial zones are made by freight committees and tariff bureaus, for all the roads operating in the territory affected, and while each road has nominally a voice in making the rates so promulgated, still the views of all or the majority of those roads interested must be met and harmonized. If they did not do that they would not promulgate the rate.

"Rates made in this way are applied by divers routes and the length of haul and general operating conditions, I would say, are seldom, if ever, the same on any two roads between any two given points.

* * * * * * * * *

"Surely rates made on the bureau plan are not based on the operating cost of any one railroad interested. Rates so made often operate to keep down rates to an intermediate and strictly local points where the conditions and cost of operation are entirely different.

* * * * * * * * *

"Combination rates are authorized by many railroads. That is, the through rate to a given point for a longer haul, plus the local rate back to an intermediate point, makes a combination that is lower than the rate published direct to the intermediate point.

"It is plainly apparent that the cost of service is not considered in making both these rates. It may be considered in making one." (R. pp. 1475-1478.)

In examining the record in Smyth v. Ames, the testimony of Mr. Albert Fink, a prominent railroad official of his day, for many years connected with the Louisville & Nashville Railroad Company, and at one time receiver of a railroad in Arkansas, was found to be in point on this subject. He was a witness introduced by the railroads in that case.

*Testimony of Albert Fink in Smyth v. Ames.*

Beginning at page 683 of the Smyth v. Ames record is found this:

"Q. In point of fact, have freight tariffs been framed and are they framed with reference to this matter of cost? A. Of course, the cost ought to be considered as an element in freight tariffs, especially to the extent that you should not do any work at a loss. Q. Would you say cost on any particular shipment or the average cost of transportation? A. If you would ascertain the cost of any particular shipment, of course you should not take the freight at a loss; but it is impossible to ascertain the cost of particular shipments, as I have explained before. You asked me the question how tariffs are formed, and I merely mentioned that cost was an element to the extent that you ought not to take any business at less than cost, but beyond that the cost has very little to do with the framing of tariffs; in fact, as a matter of practice, it is hardly ever considered. A general manager may have in his mind a certain minimum cost under which he does not want to take freight, but the freight agents don't know any more about the cost than the man in the moon. They make their tariffs on commercial principles. They find out what they can get and they adopt the tariff with a view of securing business. If a shipper does not want to ship by them at a certain rate, they must either go out of the business or they must take a less rate, and they have to regulate that from time to time to meet the demands of the public and commerce and of competition, but it is much oftener the case that the tariff of the road is made up by some other road; in fact, there are few roads that have much control over tariffs. They are simply guided by competition with other roads

and water lines and the competition in the market. That forms the principal basis in making tariffs. The cost of transportation is hardly ever considered.

Q. Then you would say freight tariffs are the outgrowth of experience more than arbitrary rules?

A. I would; they are changed constantly to meet the constantly changing conditions of the market and competition. If you were to fix a tariff permanently and some other competing road would lower its tariff, you would lose the business.

On page 670, this occurs in his testimony:

Q. You think the tariffs as made are not based on the cost of transportation?

A. As a practical question, I don't know any of the freight agents in the country who know anything about the cost of transportation.

Q. You think they are ignorant on that point?

A. They have no use for it.

Q. And they base it simply on commercial principles?

A. Commercial principles; that is the principal basis. Of course, I take it for granted that the general manager is looking after the cost of transportation, and no doubt the general freight agent might get his instructions as to what rate he may charge in certain given cases so as not to be below the cost.

Q. And the tariff is based usually, then, on what the traffic will bear?

A. Yes; if you understand that in the proper sense.

Q. I think I do.

A. If you mean by it, do men charge everything they can—I would not like to use that expression. Instead of that I would say what the service is worth to the shipper.

Q. In other words, the first item to be considered is the value of the article to be transported?

A. No; the first item is the value of the transportation service to the shipper. Suppose a certain article of transportation is to be moved from New York to this place; it depends upon the market whether the price here is high enough to stand a certain charge for transportation in addition to the cost of the article. If, for one reason or another, that same article is supplied in Chicago from another source at less than the charge for transportation added to the cost of the article in New York, then the article can not be transported here from New York unless the rate is reduced so as to put the New York article on a footing with the article from elsewhere."

## THE STATE'S DEMONSTRATION EVIDENCE ON COST OF SERVICE.

(b) Heretofore is set out the opinion evidence on both sides of the proposition that the rates are based on the cost of service, and

EXHIBIT 38
Zone Rate on Grain.

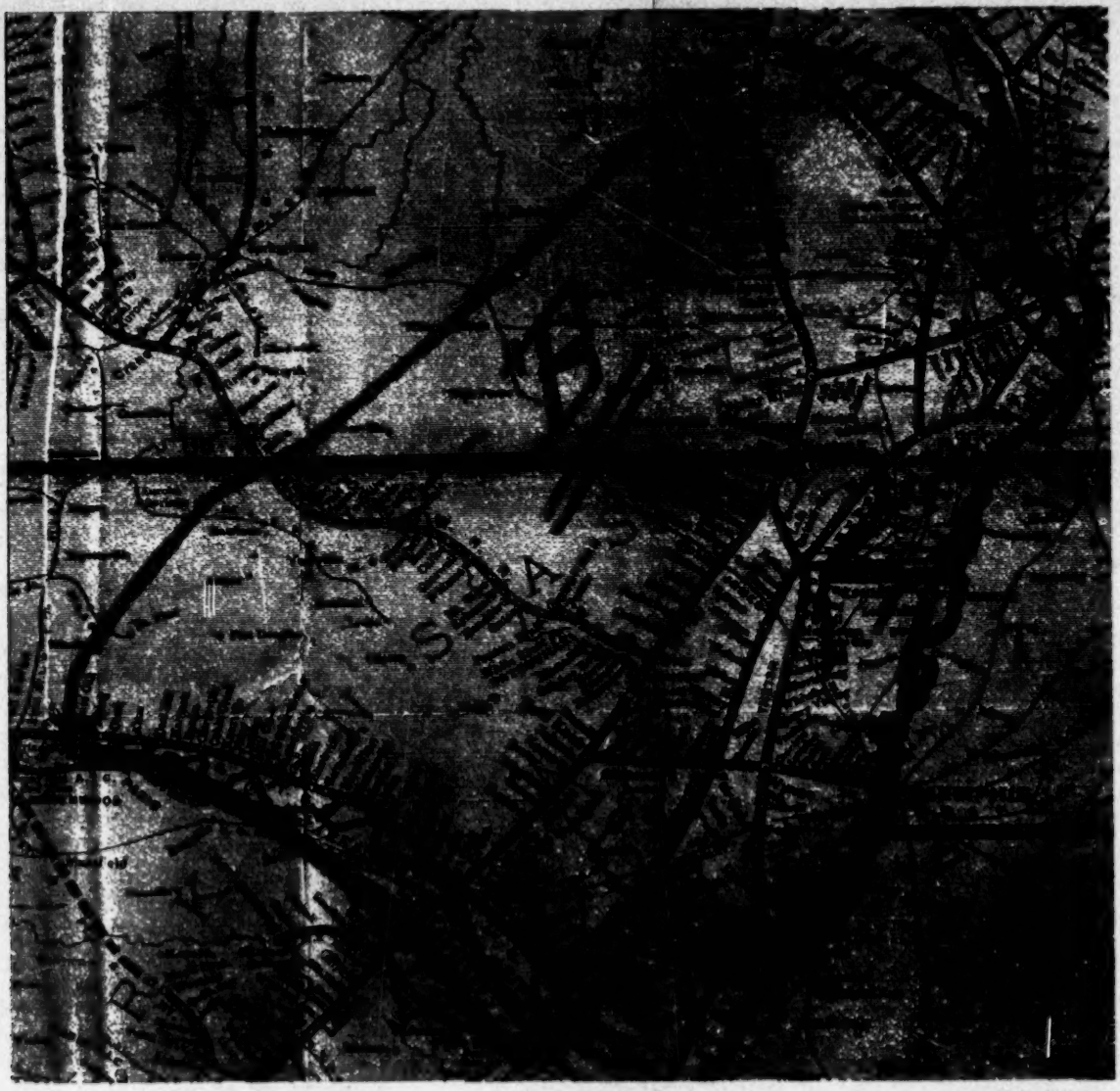

**EXHIBIT 38.**

**Zone Rate on Grain.**

your attention is called to another class of evidence on the subject, which we term demonstrative evidence, wherein the defendants showed from the rates and movements under them that the rates bore no relation to the cost.

*Zone Rates.*

The zone rates will be first considered. This term is not one accepted only by traffic men (R. p. 1647), but is an expressive one to the lay mind, and, as the facts are undisputed, may be adopted. These zone rates are fully explained in the testimony, and, to illustrate some of them, maps were filed, exhibits 38 to 44 inclusive. These are approved by Mr. Perkins, the Iron Mountain Traffic Agent, and made exhibits to his testimony. These maps are not printed, as they are too pictorial and expensive. Exhibits 38 and 40 are reduced and printed with this brief to illustrate pictorially the evidence regarding these zone rates.

The first zone rate considered is grain and grain products. It is illustrated by maps in exhibit 38. In reduced form these zones are herewith presented on opposite page. The grain rates are taken from Iron Mountain Tariff 5714-A, I. C. C. 9975. It names a blanket rate of 19 cents per hundred pounds in carloads on corn and 44 other commodities from all points on Missouri Pacific Railway Company, indicated as Group A, to all points on Iron Mountain, indicated as Group B on the map.

It applies from 157 stations in Missouri and Kansas to 369 stations on Iron Mountain in Missouri and Arkansas.

A blanket rate of 23 cents per hundred pounds is named for wheat and 13 other commodities from all except 11 stations in Group A to all stations in Group B.

The casualty risk on these different commodities vary materially, the minimum weight of cars for these different commodities varying 10,000 pounds and the car capacity varying also for the different products.

The records were investigated and quite a movement found under it—it was not a "paper tariff."

In illustration of the inequalities of the revenue derived under this tariff, flour moving from Independence, Missouri, into Arkansas with a 23-cent rate, moved through Arkansas to Southern territory at 14 cents for the Iron Mountain haul from Independence to Memphis. A shipment moved from Independence, Missouri, to McCrory, Arkansas, at 23 cents and another from the same mill to Asheville, North Carolina, passing through McCrory on its way to Memphis, paid the Iron Mountain 14 cents. (R. pp. 1462, 1463.) Yet this revenue is used in this case as the proper factor with which to divide the expenses of traffic!

The lumber zones are next considered, and are illustrated in maps in exhibit 39. The rates are taken from Tariff No. 5116, I. C. C. 6228.

It is a rate on Iron Mountain and 34 connecting lines situated from Little Rock south to points on Missouri Pacific in Missouri, Kansas, Nebraska and Colorado on D. & R. G. Railway in Colorado. There are three zones in the tariff for the destination of the lumber.

One zone extends from Coffeeville, Kansas, to Omaha, Nebraska, as far east as Etlah, Missouri, 80 miles west of St. Louis. The rate to that zone is 23 cents.

The next zone is in Middle Kansas and the rate is 28½ cents.

The third zone begins just west of Hoisington, Kansas, and extends to Pueblo and takes in the D. & R. G. as far north as Denver and as far south as Trinidad. The rate is 34 cents.

The producing territory covers 236 stations on the Iron Mountain and 300 stations on the named connections.

The zone to which the 23-cent rate applies includes 390 stations, the zone to which the 28½-cent rate applies includes 42 stations, and the zone to which the 34-cent rate applies includes 52 stations on Missouri Pacific and 80 on D. & R. G. Railway.

Testing the movement under this tariff for the first 15 days of October, 1907, it was found 426 cars moved (R. pp. 1456, 1457); a train of 28 cars per day, a very respectable sized train.

Another lumber zone rate is next illustrated in exhibit 40 A reduced edition of it is herein shown.

The rates are taken from Iron Mountain Tariff No. 4903-A, I. C. C. 5057, and provides a blanket rate of 18 cents on pine and cypress lumber, carloads, to St. Louis and 16 cents to Cairo from the zone extending from the Arkansas River to the Gulf of Mexico, including all South Arkansas, Louisiana and part of Texas.

The map does not show the Texas territory, but the evidence shows it applies to part of it, included in another tariff.

Taking this tariff alone, and it shows this rate applies from 584 stations in Arkansas and Louisiana to St. Louis and Cairo.

The most northerly point is Little Rock; the most southerly Lake Charles—a difference in the hauls of 214 miles, giving the shortest route to the Lake Charles movement.

Three hundred and nineteen of these 584 stations are located on connecting lines, and each of which receives its division of the 18-cent rate. To illustrate: If a car was shipped from Lake Charles to St. Louis, the shipper would pay 18 cents per hundred; it would be delivered to the St. Louis, Watkins & Gulf Railway and by it carried to Alexandria, Louisiana, and there delivered to the Iron Mountain, and the St. Louis, Watkins & Gulf would receive 6 cents and the Iron Mountain would receive 12; but if the Iron Mountain picked up another car at Alexandria, it would receive 18 cents for carrying it to St. Louis along with the Lake Charles car; and, going still further, if it picked up another at Little Rock, 150 miles north, it would receive 18 cents for hauling it to St. Louis.

There is no excuse from terminal service in the varying revenue;

**EXHIBIT 40.**

**Zone Rate on Lumber.**

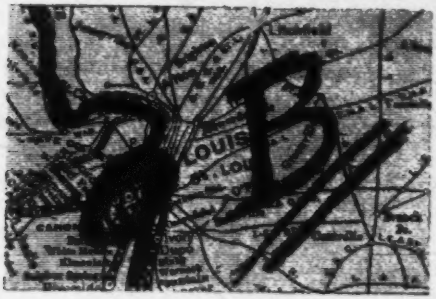


EXHIBIT 40.
Zone Rate on Lumber.

EXHIBIT 40.
Zone Rate on Lumber.

the record shows that during the first half of October, 1907, there were 22 lumber cars going to Iron Mountain from Louisiana Railway & Navigation Company, the Iron Mountain division being 13 cents, and 16 cars from Watkins & Gulf, for which it got 12 cents, both connecting lines, and exactly the same service, and a cost per hundred pounds dependent on the favor to the connecting carrier; and alongside these cars were picked up at Alexandria in the same period nine cars, for which the Iron Mountain got 18 cents. The total movement for the first 15 days of October, 1907, into St. Louis was 566 cars on this tariff. (R. pp. 1450-1456.) This would be 37 cars a day. The average through-train carload is 33 cars. Thus it is seen that under this one tariff alone more than an average through train went into St. Louis every day.

The zone rates on cotton seed products from producing territory in Arkansas and Louisiana to consuming territory in Missouri and Kansas are illustrated in exhibit 41.

There is a blanket rate of 17½ cents on hauls ranging from 256 to 598 miles. The first half of October, the time the books were examined, showed only a light movement under this tariff, 25 cars, for the 15 days (R. p. 1460), but that much moving so early in the cotton oil season would indicate a heavy movement later, and was so explained by the witnesses.

The rates on cotton from Arkansas, Louisiana and Missouri to Eastern seaports, principally Boston and Boston rate points, are illustrated in map shown on exhibit 43. There are numerous zones in the producing territory, but they are comparatively small, but the consuming zone is very large.

The lines east of the river got 35 cents of the rate, those west got the balance. On the eastern end of it the division of the rate is the same, whether the cotton is handled on to Portland, Maine, through the Boston terminals or stops at some mill near New York. (R. p. 43.)

The Texas common point rates are much discussed in the evidence They are illustrated on map in exhibit 42. The map does not show all the zones, but only illustrates three; the evidence explains them fully. The map only gives the Pittsburg territory and St. Louis territory and the receiving zone, which is the common points in Texas. This is all a southbound movement. The same commodities moving north bear another rate. The St. Louis territory extends from Southern Mississippi and a portion of Southwestern Alabama to Central Illinois, extending almost to the Missouri-Kansas line, taking in most of Missouri and part of Arkansas. The result is that the same rate applies from all that St. Louis territory to all of the 2,600 stations in Texas. For instance, the same rate applies from Jefferson City, Missouri, to any of these 2,600 Texas towns that applies from Newport, Arkansas, 60 miles north of the capital of Arkansas. The Chicago and Cincinnati territory extends from

Frankfort, Kentucky, to Omaha, Nebraska; there is an added difference here, as these shipments go into St. Louis on fixed differentials, and when the Iron Mountain takes it there its division of the rate shrinks on account of it, while the rate to the shipper is the same, and the Iron Mountain gets less from the haul from St. Louis to Texas, owing to the differential under which the shipment moved into St. Louis. The cost of the transfer at St. Louis would be more than the cost of receiving it from an industry at St. Louis, but the revenue is less. (R. p. 1458.) The same is true of the Pittsburg territory, the shrinkage greater.

Taking the other end of the situation: The Iron Mountain ends at Texarkana, Arkansas, on the Texas line; it does not deliver a car of this freight to any of the Texas common points, the first one being a few miles from Texarkana. Its haul of all of it (except the small part picked up between St. Louis and Newport, Arkansas), is identical. These Texas towns are distant 626 miles from furthest points. In every case one, and from that up to half dozen, railroads would get divisions of this flat rate, and yet the cost of the service is identical for all of it so far as the Iron Mountain is concerned. (R. pp. 1456-1459.)

Mr. Perkins, the Iron Mountain Freight Agent, testified at great length about these rates, in explanation and justification of them. We are not concerned with their righteousness—merely whether the revenue derived from them is a proper factor with which to divide expenses. (R. pp. 1620, 1627.)

It is in evidence that the transstate traffic of the Iron Mountain is 51 per cent of the total ton-mileage, and Mr. Perkins was asked what proportion of that 51 per cent was the movement to Texas common points under these rates; he said it would be from 5 to 10 per cent of the 51 per cent. (R. pp. 1644, 1645.) In other words, it would be about 3¼ per cent of the total ton-mileage of the road in Arkansas, just about half as much as the intrastate ton-mileage. This is the only evidence in the case on this subject and we presume may be taken as correct. Mr. Perkins was questioned in regard to the divisions between other roads and the divisions between Arkansas and the other States on the track mileage of the revenue received from these Texas shipments. He admitted the revenue would be different on the different shipments owing to the point at which the shipment originated, although the service would be identical. He admits that the apportionment of the revenue to Arkansas by the track mileage would give different revenue for shipments carrying the same rate where the length of haul of the Iron Mountain was identical. He also admits it would vary owing to how many carriers handled it in Texas, although the service of the Iron Mountain was identical, whether handled by one or half dozen. To illustrate: On a shipment of shoes from St. Louis to San Antonio, and a similar one to Marshall, Texas, each carried in the same train or car from St. Louis

to Texarkana, there would be a difference of 25 cents per hundred in the revenue to the Iron Mountain for the identical service. (R. pp. 1640-1646.)

The zone rate on citrus fruit is also explained. While the movement is small, it is an extreme case, and part of the interstate revenue is made up of it, which is the factor used by the railroad to apportion their expenses. It is taken from Iron Mountain Tariff. (R. p. 5118.)

It applies to lemons, oranges, grapefruit. The rate is $1.00 (for 1907) on lemons and other citrus fruits from California to Colorado common points, Missouri common points, Mississippi River common points, Chicago common points, Cincinnati and Detroit common points, Pittsburg, New York and Boston common points. There are several exceptions in Texas, Colorado and the far East, but, broadly speaking, the same rate prevails from the eastern ridge of the Rocky Mountains to the New England States. The same rate applies from Los Angeles to Denver as from Los Angeles to Portland, Maine; Topeka, Kansas, and Boston enjoy the same rate from California.

The member of Congress from Lincoln, Nebraska, pays the same freight on his lemons from California while in Washington that he does at home. Similar rates from the Pacific Coast obtain for dried fruits, canned goods and vegetables, dried beans, celery and some fresh vegetables. There is a constant, but not large, movement of this over Iron Mountain rails. For instance, 22 cars of California dried fruits moved in the first half of October at $1.25 per hundred pounds over Iron Mountain rails, and of it these cars well illustrate the whole:

One shipment of dried raisins from Fresno, California, via El Paso to Knoxville, Tennessee, delivered by Iron Mountain to Southern Railway at Memphis, and the part of the rate from Fresno to Memphis was 90 cents; on a similar car going to Atlanta, likewise delivered by the Iron Mountain at Memphis, the western proportion of the rate was 85 cents. This rate, like the cotton rate, breaks at the Mississippi River. Of this class of fruit traffic there were about 100 cars the first half of October. (R. 1464.)

Outside of the lumber zones, there are interesting lumber rates. One hundred and eighty-four cars moved in first half of October to Kansas City from Alexandria. They were hauled each 812 miles by the Iron Mountain from Alexandria to Kansas City, and were delivered to different connections going to different points not in lumber zones; the Iron Mountain received for two of the cars 11 cents, two cars 12 cents, one car 12½ cents, 11 cars 13 cents, seven cars 14 cents, one car 14½ cents, two cars 15½ cents and two cars 16 cents.

From Smithton, 600 miles from Kansas city, there were two cars moving at 9 cents; three cars at 13 cents, seven cars at 11 cents, nine cars at 12 cents, four cars at 13 cents, one car at 14 cents, three cars at 16 cents.

At Prescott 16 cars moved to Kansas City at 11 cents, one car at 12 cents; six cars at 13 cents; nine cars at 14 cents. The variance in the haul at 13 cents was from 445 miles to 633, and variance in rates for the same haul from 9 to 16 cents.

A 15-cent rate was found on four cars from Benton, 445 miles from Kansas City, and 11-cent rate on two cars from Alexandria, 812 miles away. Except for 24 miles from Benton to Little Rock, these cars traveled on the same track. Another instance is 20 cents from Texarkana, 665, as against 11 cents from Alexandria, 812 miles. These are typical of the 184 moving into Kansas City the first half of October. The waybill number, date and billing stations of all these movements were furnished. (R. pp. 1465-1468.)

A calculation of the differences in amount per car on these Kansas City shipments, taking an average car as standard, shows from $55.00 to $85.00 is the difference in revenue per car.

In addition to this movement into Kansas City, we find lumber moving from Smithton to Pueblo, 1,022 miles, at 16 cents, and other similar cars from Smithton to Kansas City at 16 cents, only 600 miles.

Movements of lumber from Hope, Arkansas, to St. Louis on Iron Mountain and then beyond St. Louis on some other road went on rates of 7½ cents, 11 cents, 11½ and 13 cents to the Iron Mountain and yet if the cars had stopped in St. Louis it would have been 18 cents. (R. p. 1468.)

The State put on one of the plaintiffs' chief witnesses, Mr. J. D. Watson, Assistant General Freight Agent of the St. Louis Southwestern Railway Company, and proved by him these rates prevailing on interstate movements in Arkansas during the period of our inquiry: Coal from Illinois points to Little Rock, $2.25 per ton; coal from same place to Grady, 50 miles south of Little Rock, $2.25; and coal from Illinois fields to Monroe, Louisiana, $2.00; Tullaloola, Louisiana, $2.00; Vidalia, Louisiana, $1.60; Rayville, Louisiana, $2.25; all these Louisiana shipments passing through Arkansas but not through Little Rock, ranging from 150 to 200 miles longer haul for the same, and, in most instances, less rate. (By other witnesses it was shown there was a large movement of coal into Arkansas and Louisiana from the Illinois fields under these rates.) (R. pp. 923-924.)

The rate on shoes and dry goods from St. Louis to Little Rock is $1.00 per hundred, to Alexandria, Louisiana, $1.25; and to New Orleans, 90 cents.

Packing house products, 31 cents from St. Louis to Little Rock; 44 cents to Alexandria and 30 cents to New Orleans.

Pianos from St. Louis to Little Rock 65 cents, and to New Orleans, 75 cents.

Soap, St. Louis to Little Rock, carload, 33 cents, L. C. L. 49 cents; to New Orleans, carload, 22 cents, L. C. L. 25 cents.

Beer, St. Louis to Little Rock, 27 cents; New Orleans, 21 cents. (R. pp. 924-927.)

When it is remembered that Little Rock is the basing point for practically all Arkansas on these interstate shipments, the effect of the Little Rock rate is as a stone cast into a pool—the ripples extend with lessening force to its extent.

Mr. Watson was given time to furnish further data, and was recalled.

Beer shipments from Milwaukee and St. Louis compared, the service identical; the haul from St. Louis to Little Rock. If the beer originated in St. Louis, 27; but if delivered in St. Louis, originating in Milwaukee, 23.7 cents. Packing house products, if originating in St. Louis, the rate is 31 cents; if in Chicago, for the same haul of the Iron Mountain, 30.2 cents (the only one nearly the same).

Farm wagons, if originating at St. Louis, 33 cents; if originating at Moline, Illinois, and attached to the other car originating at St. Louis, and each hauled to Little Rock, 3 cents per hundred difference.

Boots and shoes from St. Louis to Memphis, 65 cents, but if stopped at Paragould, some 75 miles from Memphis, 81 cents; the haul to Memphis passing through Paragould (quite a little city and junction point).

Packing house products, St. Louis to Memphis, 26 cents; stopped at Paragould, 43 cents; carload rate, Memphis, 21 cents; Paragould, 26 cents. (R. pp. 950-953.)

It is frequently stated throughout the evidence that lumber, grain and coal constitute the largest movements in the State. Two coal fields serve the State—the Illinois field and the Western Arkansas field; the latter on an intrastate zone rate from the coal field into Little Rock and distance scale out of Little Rock. This is the only zone rate in the Commission Tariff.

There are no reliable statistics in the record as to the proportion of each commodity. Mr. Roth, a statistician for the Iron Mountain, filed a table at page 1979, but it widely misses the mark. It gives for the year 1909 (two years after our period of inquiry) statement of freight traffic of the entire Missouri Pacific and Iron Mountain systems, a system in nine States, and the intrastate for 1909. If the data is properly compiled the intrastate statistics may have some value for this later period, but the system statistics are utterly useless for any purpose of our case. Cotton, for instance, is given as 2.43 per cent of the total traffic of the system, when practically all of it was raised in Arkansas. The Iron Mountain reaches with small mileage into the cotton belt of Louisiana and Oklahoma, but the bulk of its mileage in the cotton section is in Arkansas, and practically none of the Missouri Pacific States raise any cotton at all. Arkansas raises about a million bales annually, all of which is interstate. The same criticism is true of cotton seed products, 1.38 per cent of the system. Lumber and forest products is put down as 21 per cent of the system

and 40 per cent of the intrastate. Many of the Missouri Pacific States are barren of lumber. Several witnesses have estimated the lumber traffic of the Iron Mountain at 35 per cent of its total traffic in Arkansas; certainly 30 would be conservative. Next would doubtless come grain—all interstate. Mr. McPherson says lumber and grain were the dominating commodities. (R. p. 403.). It is proved by many to be a large amount. Coal is about, if not quite, as large a movement as grain. Cotton is probably 10 per cent of the total traffic, including the cotton seed and its products.

The Texas common point traffic is estimated by Mr. Perkins at 5 per cent to 10 per cent of the whole transstate, 51 per cent of all, say 3½ per cent the whole; the fruit of various kinds, traffic from California, would easily bring these two transstate movements to 5 per cent of the whole.

These deductions are not claimed to be accurate, but are given as A rough approximation based on the testimony:

| | Per Cent. |
|---|---|
| Lumber | 30 |
| Grain | 20 |
| Coal | 15 |
| Cotton and products | 10 |
| Texas common points and fruit movements | 5 |
| Other | 20 |
| | 100 |

Easily 80 per cent of the traffic is moving on zone rates, made regardless of distance. Much of the other, the high class, good pay merchandise traffic, is moving on competitive conditions that delivers shoes in Memphis for less than in Paragould, a city through which they pass *en route* to Memphis; and beer to New Orleans for less than to Little Rock, and farm wagons produce different revenue to the Iron Mountain for the same haul, depeudent on whether they are manufactured in Moline or St. Louis. Coal always has a zone rate in originating territory, but it is usually small. From any point in the Illinois fields coal is carried to Little Rock at $2.25 per ton and on through Arkansas to Louisiana cities for $2.00 per ton.

We insist that the foregoing evidence, not of isolated instances, but of the great movements in the State, demonstrate that voluntary interstate rates are not based on the cost of the service and the expense of the movement bears no relation whatever to the rate on which it moves.

Mr. Nay, the plaintiffs' chief witness on the theory of their case, says:

"Q. And when the rate does not represent the cost of the service it (the revenue basis) would not be of any value at all, would it?"

"A. Well, if there was such a rate, no, sir; it would not be." (R. p. 660.)

"Of course, if the rates are not based on the cost of the service, if there are such rates, that is one of the weaknesses of the revenue basis, which I freely admit. And the weakness would be simply to the extent of the relative amount of such business, as compared to the whole." (R. p. 662.)

*Division of Rates.*

Another subject forming part of the problem as to whether rates reflect the cost of the service, is the division of rates. Incidentally, in presenting the evidence preceding this, much of it has been presented, but it deserves further consideration. In order that there might be no controversy over the facts, when some question relating to plaintiffs' methods of dividing the revenue in the exhibits were put to Mr. Perkins on cross examination, Mr. Roth, one of the Iron Mountain statisticians who prepared much of the exhibits, testified that the interstate revenue was divided between Arkansas and the rest of the haul on a "straight track mileage." (R. pp. 1640-1642.) To illustrate: If a shipment moved 900 miles, of which 600 was on the Iron Mountain rails and 300 of that in Arkansas, the revenue received by the Iron Mountain would be divided on a track-mile basis; in this instance Arkansas would be credited with one-half. There is no fixed rule among railroads as to the apportionment of the rate among themselves as to what the Iron Mountain part of the haul would be.

Mr. Perkins says: "It is a varying rule. We have arrangements with each different line. They are made sometimes on actual mileage and sometimes on constructive mileage, and sometimes on an arbitrary basis." (R. p. 1643.)

Mr. Watson, of the St. Louis Southwestern Railway, thus explains it:

"Q. Your division sheets with the other roads will differ, too, will they not?

A. There is a competition in divisions just the same as in rates, you will understand.

Q. How is that division usually made?

A. That is a very difficult question, because they are not usually made on any fixed scale. There are just as many varying conditions that enter into fixing the divisions as enter into the fixing the rates.

Q. What are the usual bases for fixing the division?

A. I can name some of them to you:

Mileage pro rate; constructive mileage pro rate; rate pro rate; revenue of locals—I could name them to you by the hour.

Q. Those are the principal ones you have named?

A. Yes, sir.

Q. That will make differences as to what your transstate revenue amounts to, as the different basis is adopted for each rate?

A. That would indicate that you understood my former answer to mean that we had different bases for the same service between

different carriers offering the business at the same junction, which is not true.

Q. I did not mean that. I meant the whole body of your transstate business.

You have different bases to reach your transstate revenue and they will differ. That is what I mean.

A. It may differ as to service in different directions, but it does not materially differ for the same service, under the same conditions and on the same traffic. But if we were to take a shipment, as an example and to indicate why I am trying to differentiate—if a shipment was offered to us on a point on the Southern Pacific, we would be forced to allow a division that would compensate that line for turning it over to us.

If the same shipment were to originate on the I. & G. N., who have not this long line to New Orleans, the revenue for that line for this service would probably be somewhat less than we would have to allow the Southern Pacific.

Therefore, on the same traffic, from two different points, on two different lines, our revenue from the junction point to destination or as far as we would handle the traffic, would be different." (R. p. 1690.)

In cross examining Mr. Perkins, by taking many illustrations usually of transstate Texas movements, it was shown that the revenue accruing to the Iron Mountain under this track-mileage division, used in the exhibits of the railroads, gave a different revenue for identically the same service and on the same rates, dependent on the origin of the shipment, on the arrangement with the particular carriers from whom received and further dependent on the particular arrangement with the carrier to whom it was delivered; and further dependent on whether the shipment was north-bound or south-bound. (R. pp. 1642-1646.)

The transstate traffic is 51 per cent of the total; naturally the bulk of it is handled by the Iron Mountain as a connecting line. Whether hauling as a connecting carrier or as sole carrier, the revenue is cut off to Arkansas in proportion to the haul in the State compared with the haul on the system.

The service performed is in each instance identical, whether it is as connecting carrier or sole carrier. To illustrate: Lumber from Louisiana to St. Louis incurs exactly the same service and expense in Arkansas, and the revenue from it depends on the division made in Louisiana with the connecting carrier, which varies materially, and again varies if received from a shipper in Louisiana and not a carrier, yet the expense and service in Arkansas are unchanged by the agreements in Louisiana. The haul is the same through Arkansas and the revenue varying from 11 cents to 18 cents for each hundred pounds is respectively cut by the same division in Arkansas. One shipment produces $30 and another handled with it produces

$20; if the mileage in Arkansas was half the total haul on the Iron Mountain, for one the State is credited with $15, for the other $10, and has paid exactly the same expense for each car. If it goes beyond St. Louis, say to Chicago, still another shrinkage on the revenue for the same haul. Taking a shipment of shoes from a shoe house in St. Louis,, one car to Marshall, Texas, and another to San Antonio, the Iron Mountain hauls them together from St. Louis to Texarkana and turns them over to a connection there, and for the same haul receives 25 cents difference for each hundred pounds, although each car has cost it to the farthing the same. Grain from the Northwest to the Southeast passes through Arkansas over the expensive White River branch. Of this branch Judge Trieber said, in deciding this case: "On the other hand, the White River branch of that road was the most expensive road ever constructed in the State. Miles of it had to be cut out of rock, and tunnels cut through rock mountains. There are no large cities along its line, and the country but sparsely settled. Owing to the heavy grades and many curves, made necessary by the topography of the country, it can not possibly carry as many cars to a train and transport freight as economically as the main line." (R. p. 2606.) The service of handling this grain is identical whether to New Orleans for export or to the cotton and sugar plantations of Mississippi and Louisiana for mule consumption.

The cost on the Iron Mountain is the same, whether it originated at Kansas City, Omaha or Sioux City; and it matters not, so far as cost is concerned, whether it goes from New Orleans to Mobile, Alabama, or the Panama Canal, and yet all of these are factors to determine the revenue, whereas the cost in Arkansas for each of the cars, irrespective of origin or destination, is fixed when handled over this line. The evidence shows most of it is hauled over the White River branch, but still there is a large movement on the Central branch, which would be less expensive service, and that leaves another element of variance between cost and service. We are not questioning the wisdom or unwisdom of such rates and divisions; these are questions for the Interstate Commerce Commission, with which we are not the least interested, but when the revenue produced by these rates is submitted as the yardstick with which to measure cost of producing this revenue, then these inequalities become interesting and pertinent.

Mr. Perkins, in reply to questions as to differences in revenue received on lumber shipments to Kansas City, and on shipments there delivered to connecting lines, says the expenses are not the same, because the terminal expense at Kansas City would be heavier for delivering a shipment to an industry there than to a connecting carrier. His attention was called to the fact that the mileage pro rate of the rate would not take care of the Kansas City terminal expense, and, after a good deal of fencing, he finally admits that, taking the

lumber traffic as a whole, the track-mileage division of the revenue would be unfair to Arkansas, as the terminal expenses in Kansas City and other large cities are greater than the initial terminal expenses, where the traffic originates in Louisiana and Arkansas. (R. pp. 1652-1654.) He says the terminal expenses on grain would run about the same as on lumber. (R. p. 1657.)

Mr. Perkins makes an estimate (and it is the only one in the record) of the proportion of the lumber traffic originating south of the Arkansas State line from the lumber zone extending from the Arkansas River to the Gulf of Mexico. He estimates that from 10 per cent to 20 per cent originates in Arkansas and that from 80 per cent to 90 per cent originates south of the Arkansas State line. (R. p. 1659.) For facility, say 15 per cent originates in Arkansas and 85 per cent in Louisiana.

Mr. Perkins had previously testified that while the rates from Little Rock were high and from Lake Charles low, they were so adjusted as to give a fair profit on the entire lumber business, and that as a whole they were as high as conditions justified. (R. pp. 1621, 1622.) He admitted he knew nothing of a track-mile division of the revenue in this case, and did not have that in mind in giving said testimony. (R. p. 1660.)

Mr. Perkins says the average cost per ton per mile of all their traffic is between 5 and 6 mills; and the revenue per ton per mile on all lumber traffic about 6 mills, and from these two statistics he bases his statement that there is a small profit on the whole lumber traffic. (R. p. 1658.)

Alexandria is the southern point of the Iron Mountain that receives lumber. All the lines converging at Alexandria and carrying lumber to it receives 6 cents of the 18 cents, except one receives 7, so that the movement on the Iron Mountain from Alexandria to St. Louis—using St. Louis as an illustration; the same thing would apply to any of them—the Iron Mountain would receive 12 cents for all of that lumber from the southern part of the zone, for the haul from Alexandria to St. Louis.

That would be equal to four mills per ton per mile for the haul from Alexandria to St. Louis.

The lumber from Little Rock to St. Louis, on an 18-cent rate—or from any of these points where they get the maximum—would earn 10 mills per ton per mile.

In order to have any general average conditions, wherever you had one of the low rates, you would have to have one of the high rates. That is the only way you can make a general average of rates. Only 15 per cent of that movement is represented by the high rate of 10 mills per ton per mile.

If we would concede that all of the Arkansas lumber took that—the highest rate—and, of course, that is not true, because the evidence shows these numerous tap lines throughout the State divide up that

18-cent rate with the Iron Mountain—but assume, for the sake of the illustration, that all of the Arkansas lumber received the maximum of 18 cents, or 10 mills per ton per mile, and make a calculation on that; averaging those two rates, the highest and the lowest, the result is 7 mills.

But as only 15 per cent is represented by the high rate of 10 mills per ton per mile and 85 per cent is represented by the 4 mills rate, it works out that the average haul on the whole business earns 4.9 mills.

Mr. Perkins says that the average cost on the Iron Mountain, of all commodities, is between 5 and 6 mills.

The average revenue on lumber, he says, is about 6 mills.

So, by reason of the fact that the high rate in Arkansas represents only 15 per cent of the traffic, if you take these general average conditions to even that up you have that lumber traffic as it passes through Arkansas averaging less than 5 mills, a mill a mile less than cost.

As a matter of fact, the great body of this traffic in Arkansas does not move under the 18-cent rate, but it is divided among these tap lines, as developed in the evidence. The exact average would necessarily be much lower than the example given and much lower than the average cost of service.

But this is only a small part of the inequality. The divisions are inequal from connecting and tap lines, while the expenses, after receipt by the Iron Mountain, are identical.

The division sheets of the Iron Mountain with its connecting roads in Arkansas on the St. Louis rate of 18 cents were put in evidence. The division of each of these roads are given in detail. (R. pp. 1454, 1455.) For the first half of October there were 566 cars moved under these various division sheets. The rate to the tap line or connecting railroad ranged from 1 cent to 7 cents out of the 18-cent rate. There are 33 of these tap lines or connecting carriers.

One of the "connecting carriers" was a road one-half mile long.

To Cairo, the rate is 16 cents and the same division sheets apply, making the revenue from the haul to Cairo vary from 9 to 15 cents per hundred pounds. (R. p. 1456.)

Mr. C. W. Lewis, a shipper of lumber, and familiar with lumber rates, testified as to the actual movements of lumber from Southern points, being under the tariffs illustrated in exhibits 39 and 40. His testimony begins at page 906.

He says that in addition to the zones, there illustrated, that there is another zone rate from territory directly east of the producing territory there shown, composed of part of Louisiana and territory east of the river, and the rate from it to St. Louis is 16 cents, 10 cents lower.

Mr. Lewis says the lumber from Arkansas largely moves into the zones shown on the maps. He also explains the tap line divisions:

"Q. Now, what we are particularly trying to find out in this case, is the cost of service and the revenue producing the rate; I want to know what would be the difference in cost, say that a shipment originated in the woods on some tap line, and was carried to St. Louis at 18 cents, and another shipment originated at your mill, and you say you have no tap line—that goes into St. Louis, and suppose the tap line joined the main line just where your mill is, what difference would there be to the Iron Mountain Railroad, if you were on that road, in hauling two cars of lumber, one from your mill and one from the other mill?

A. I don't think there would be any difference in the cost of transportation, so far as the Iron Mountain is concerned.

Q. What would be the difference in revenue?

A. For the Iron Mountain, you mean?

Q. Yes, sir.

A. The difference in revenue would be whatever they would pay a tap line, whatever it might be; those tap-line divisions don't all run the same; some fellows are able to squeeze more out of them than the others are.

Q. There is a variation on the revenue of the amount paid to the tap line?

A. Yes, sir.

Q. Does this division principle also apply to different railroads; suppose that lumber was shipped into Alexandria on the Iron Mountain from some other road—

A. They publish a through tariff and divide it up; yes, the same rate is applied, the same as in going over three or four railroads.

Q. And suppose that there would be two cars of lumber shipped via the Iron Mountain from Alexandria to St. Louis, and they would get the 18-cent rate, as I understand it; one of those cars originated at Alexandria, and was delivered to it there; the other originated at some other point on some other railroad, and was delivered to it at Alexandria, and those two cars were hauled to St. Louis together; as far as you can say, would there be any difference in the cost of service in hauling those two cars?

A. No, sir.

Q. Would there be any difference in revenue?

A. Of course, if the Iron Mountain started the shipment and carried it all the way, there wouldn't have to be any division, they wouldn't have to divide it with anybody else.

Q. That is the illustration I gave you of one car, and the other car they would divide that with the road that brought it in?

A. Yes, sir; the one they hauled on their own line all the way, they wouldn't have to divide.

Q. Is there much lumber shipped that way on divisions?

A. Practically all the big mills, they get a division, as far as Arkansas is concerned; practically all the big mills have short lines

of railroad, that is owned and operated by the same people, but of course, it is a separate corporation and the sawmill does not get any rebate, but the railroad gets the division." (R. p. 909.)

Mr. Lewis states there is a rate from Louisiana into Little Rock of 22 cents as against 18 cents from Louisiana to St. Louis, in order to protect the territory near Little Rock. (R. p. 910.)

He says that some of the tap lines have their mills on their own lines, away from the junction point, and then they haul empties to the mill and return them loaded to the railroad; for that service and originating the traffic they get a division of the rate, but many of them have their mills at the junction point, and every cent paid the tap line "is that much over the other fellow that doesn't own the railroad." These tap lines run from 5 to 40 miles in length. (R. pp. 913-915.)

Another queer freak in division of rates is developed in the cotton rate and the California fruit rates. Each divide on the Mississippi River, and a fixed proportion goes to the carriers for the haul east and for the haul west. Cotton, for instance, is fixed at 35 cents for the haul east of the river, divided among many. From the Little Rock zone the rate is 80 cents, being 45 for the western division; from Fort Smith it is 85 cents, being 50 cents for the western division; and from Oklahoma (owing to ocean competition), is 70 cents, being 35 cents for western division, and that for a longer haul, than from either Little Rock or Fort Smith.

There is evidence that 50,000 bales are compressed at Fort Smith; probably half of it from Oklahoma; the other half from Arkansas, the service of the Iron Mountain the same, but on the cotton originating 20 miles west of Fort Smith, and hauled in there and compressed and shipped to Boston, the road participates in a 35-cent division; but if hauled from a point 20 miles east, and compressed and shipped to Boston, it participates in a 50-cent division.

## (3) THE RELATION OF THE INTERSTATE AND INTRASTATE RATES.

Necessarily, there will be some repetition in presenting the evidence on this subject, as it is so closely interwoven with the preceding subjects.

*Plaintiffs' Evidence.*

Mr. Flippen, General Freight Traffic Manager of the Iron Mountain, said: Q. "What is the practice of railroads usually in the observance of a relation between State and interstate rates, if there is any general practice? A. There is a very close relation. In fact, the making of rates have to do with the commercial conditions; the cost of service; the conditions generally; and where the earnings have not been, as we figure it, compensatory in respect to State traffic, the same is frequently true of interstate adjustments, because one is so very seriously affected by the other." (R. p. 239.)

This developed on cross examination:

"Q. When you say you have to have a proper relation between them, I would like to know just what you would consider a proper relation between interstate and State rates, taking the whole volume of your traffic into consideration?

* * * * * * * * *

A. I do not know without having figured it out exactly, because the conditions with respect to certain articles and commodities are so entirely different. You can not take the whole volume, as a traffic man, and say just to a fraction just what the relative percentage of adjustment would be. It is impossible to do that.

Q. I am not asking it just to a fraction. I am asking you to give just your best approximation on that.

A. I can not say as to that, unless I make some figures on it.

Q. When you put in the State rates on November 2, 1908, did you make figures then of the relation that one should bear to the other?

A. Yes, sir; I explained how we made them. That we made them with relation to commercial conditions, and the service, by comparison with the figures that prevailed in other States under similar circumstances and conditions; and that as a whole it fitted in.

I don't know that I could explain it any better. (R. p. 250.)

Q. You do not establish your rates, then, on the relation that the revenue from one rate would bear to that of another?

A. Oh, yes. Classification is made up that way.

Q. Classification is made up that way?

A. Yes, sir; and that is the way the rates are made, with respect to classification.

Certain articles are susceptible to damage; its bulkiness or lack of density, if you please; and the character of the equipment that is required to handle it; and the expedition that is sometimes required. All those things are factors that enter into that.

Q. Those are the factors that determine the rate so far as classification is concerned?

A. Yes, sir; one article compared with another. For instance, we would not haul feathers at the same rate we would pig-iron.

Q. You would fix a rate to compensate you for the difference in the weight, the difference in the liability, the difference in the cost of handling, and many other elements of that kind?

A. Yes, sir; according to our best judgment, having in mind that the total result is remunerative.

Q. Then the rate is more a relative proposition than it is one of cost of operation, isn't it?

A. No, sir; you can not say that. You must bear in mind the cost of *of* operation, or you would not be making the rate.

The rate is the price at which we sell transportation; and you must bear in mind, according to the best judgment and experience of men

who know, what it costs, otherwise we would not be making a rate. You would not last long if you made it without regard to that.

Q. That would be as to total rates. But I am speaking of the relation of one rate to another.

Take your illustration of iron and feathers: the relation of those would be determined very largely by those other factors rather than by the cost of operation?

A. Oh, yes; there are so many factors that enter into it that it is very difficult to differentiate to a nicety." (R. pp. 252-3.)

Then he says the Arkansas adjustment would not affect the transstate rates. (R. p. 253.)

As the transstate ton-mileage is 51 per cent of the whole, necessarily this relation is confined to the other 49 per cent, part of which is the intrastate itself.

Mr. McPherson advocates the revenue theory with an extended argument, but, when asked as to the cost of service as affecting it, declined to discuss rate matters owing to his unfamiliarity with them (R. p. 402); and when pressed further, said:

A. I don't understand the traffic well enough to say what the relation between intrastate and interstate rates is.

Q. Is not that a necessary factor in the development of your revenue theory?

A. Not necessarily; no. I must assume that it exists. I believe that it is generally assumed that it exists. If the State rates for any reason are lowered, the interstate rates are lowered, and that relation would doubtless continue under such circumstances. If the State rates are raised, I presume that the relation is still continued by a raise in the interstate rates." (R. p. 429.)

This is a queer situation, without sufficient knowledge of rates to know their relation to cost of service and of State to interstate, he assumes the latter exists and builds up his argument upon it.

Mr. Watson answered that such an example of the workings of the revenue theory, as shown in exhibit 23, was impossible, because the interstate rates must change with the State rates. (R. pp. 560-561.)

He explains that the railroads could not consistently let an increase of 33⅓ per cent in State rates exist without an increase in interstate. (R. p. 572.)

He says the intrastate rates base the interstate rates. (R. p. 582.)

Mr. Watson was put on in rebuttal, in answer to Mr. Bee's statement that there was no relation between State and interstate rates, because of the difference in the haul of the two classes of business, and said:

"The difference in the length of haul could not destroy the relation as between State and interstate rates for the reason that the State rate in Arkansas to a controlling extent bases the interstate rate.

In the case of the distance referred to in Mr. Bee's testimony, St.

Louis, 500 and some odd miles, as against 50 miles within the State, the relation was still there, but it would require a rate man to check that relation to show what the relation really was and how the one rate affected the other, or would affect the other, but the difference in the distance, as stated by Mr. Bee, would make it difficult for him to understand from the railroad's record just where the relation lies.

There is a very clear relation as between all State rates and all interstate rates operating into the same territory. That is pretty well shown in the testimony in regard to the sugar rate in Arkansas.

The sugar rate from Helena to various points in the State of Arkansas was fixed upon a maximum basis of 13 cents. That added to the rate to Helena from New Orleans, made the rate from New Orleans to the various points in Arkansas, the maximum rate being 25 cents, which was the exact Helena combination.

That is also shown to a very marked extent in all of the adjustments in the State of Arkansas.

Our adjustments in the territory south of Pine Bluff is probably one of the best examples of this." (R. p. 1673.)

On cross examination his position was fully brought out:

Q. When you have been referring in your testimony to relation between State and interstate rates, you are not referring to the cost relation of carrying those commodities, State and interstate, but you are referring, as I understand you, to the effect that the State rate has on the interstate rate; is not that true?

A. "This is true; yes. Both sections of the question are true.

Q. Both of them?

A. Yes. There is a cost relation always, regardless of what the scale rate may be.

Q. What is that cost relation?

A. That is brought about by the adjustment produced by the classification.

Q. Do you know the cost of carrying any commodity, Mr. Watson?

A. The actual cost of carrying any one commodity?

Q. Yes.

A. No. I don't think any one does.

Q. You can not very well adjust the cost relation without having any statistics?

A. Yes; that is what we prepare the classification for. That is exactly the object of the classification.

Q. The classification is the only cost relation that there is in fixing the adjustment between State and interstate, is it not?

A. I don't believe I quite catch the object of your question.

Q. Well, no matter what the object of it is, if you understand the question.

A. I only want to answer it properly. I can answer it two ways.

Q. Answer it both ways.

A. The cost relation as between State and interstate rates is the classification. That is the cost relation.

Now, there is another cost relation as between State and interstate rates and that is where your State rate becomes so low that the railroads do not feel they can meet that low rate and carry the traffic.

Q. Then they just go out of business?

A. Yes; as the Cotton Belt has done in quite a number of cases. There is quite a little business to Little Rock based on State rates, that they don't handle.

Q. The only way you can adjust any cost relation between State and interstate rates, so far as you know, is through the classification of the various commodities and classes?

A. That is the method of arriving at the cost relation.

Q. So far as you know, that is the only method?

A. It is the only method so far as the class rates are concerned, yes; but there is quite a large list of commodity rates.

Q. How do you adjust them?

A. Those are adjusted as near as we can do so.

Q. Just by intuition?

A. And judgment—"guess," I believe you call it.

Q. Mr. J. M. Johnson called it "guess." I did not call it that. You have the average cost per ton per mile on all your commodities, and then when you have that, in fixing rates you exercise your judgment (or, as Mr. J. M. Johnson says, exercise your guessing power) to determine what the rate ought to be?

A. No; not altogether. To determine what the minimum rate ought to be, but not what the rate ought to be, because there are a great many other conditions that fix that rate.

Q. But that is the only way you get a cost relation—the way in which I have indicated?

A. That is the only way you prevent yourself from handling traffic which you should not handle." (Tr. pp. 1681-2.)

Mr. C. E. Perkins, of the Iron Mountain, in answer to a question as to whether there was any relation or connection between State and interstate rates, said:

"There is a very close relation as between interstate rates and intrastate rates; not only is that true with reference to the interstate and intrastate rates in Arkansas, but in a great many of the other States, practically all States that fix the rates to and from the borders of that State.

"The advance in Arkansas intrastate rates which was made prompted a similar advance in our interstate rates. In other words, when the rates locally in the State of Arkansas were raised, from West Memphis or Bridge Junction, which is directly across the river from Memphis, our rates interstate from Memphis into Arkansas were readjusted, were raised. The raising of the Memphis rates practically affects all of our interstate rates to Arkansas. Cairo

is advanced differentially over Memphis; St. Louis is advanced differentially over Memphis. In other words, there is a relation as between the rates which we carry on interstate business from St. Louis to Arkansas as compared with the rates from Memphis.

"This is brought about by the fact that Memphis and St. Louis are large distributing centers and we are forced, in order to carry out a parity of rates which will allow the free distribution of business, to keep those points on a parity; that is, on a relative basis.

"That is true also of the business passing through those gateways coming from beyond.

"Now, when we have our St. Louis rates fixed, the rates from practically all parts of the United States from which through rates are carried into Arkansas, are fixed differentially as compared with the St. Louis rates. In other words, the rates from Kansas City bear a certain relation to the rates from St. Louis. The rates from all Kansas points are fixed with relation to the Kansas City rates. The rates from Chicago to Arkansas are fixed on a differential over St. Louis. The rates from Pittsburg, Pa., are fixed on a differential over St. Louis. The rates from what we call the Fox River District, which is Wisconsin, north of Chicago and Milwaukee, are fixed on a differential over St. Louis. The rates from New Orleans to points in Arkansas, Little Rock and South, are in practically all cases the same as St. Louis.

"So, when we change the rates from Memphis on account of the changes which are made in the intrastate rates in the State of Arkansas, we practically change the entire rate adjustment affecting interstate rates to and from Arkansas.

"This condition is not confined to the State of Arkansas, but it applies to practically all States.

"As an example, a short time ago the State rates in Kansas were changed, being reduced on grain locally within the State of Kansas. The change in those grain rates affected practically every rate on grain which we carried from Kansas to interstate points." (R. pp. 599, 600.)

In his cross examination this occurred:

Q. I want to know just what you meant by "close relation between interstate and intrastate rates?"

A. I mean by close relation, that the interstate rates or the intrastate rates, where not governed by State Commissions, bore a relation one to another and as a general proposition where one is changed the other must be.

Q. Now what relation should they bear one to the other?

A. There is no fixed relation. If you mean on percentage?

Q. I mean on the rates themselves. You have spoken of this parity of rates and the close relation of rates; now, I want to know just what that relation should be?

A. I can not give you any definite basis or any definite relation which they would bear. However, there is this relation, that when one changes the other is almost always bound to change. I will not say always, because there are lots of exceptions; but the general rate basis applicable into a given State depends very largely if not entirely on the State adjustment.

Our rates, as an example, into the State of Texas from interstate points, are based entirely on the rates as fixed by the Commission of the State of Texas.

Q. What are you going to do when your road crosses two States and there is a great difference in the rates in those two States? Take Arkansas and Louisiana: Louisiana, I believe, has the highest rate of any State east of the Rocky Mountains and west of the Mississippi River; and Arkansas has lower rates than Louisiana. You have a line running between those two States. When you come to adjust these relations between the two what are you going to do with your State rates?

A. They have to be graded from one to the other.

Q. How do you grade them? That is what I want to get at, the actual facts.

A. We sit down with paper and pencil and take all the conditions that enter into rate-making. There may be a dozen of them. And fix those rates. In other words, rates may be fixed by an altogether different road—for instance, the rates from Memphis into the State of Arkansas are not fixed by the Iron Mountain road to any very great extent.

Q. That is a commercial condition that is controlling and not the relation between State and interstate, isn't it?

A. It is the condition controlling our railroad.

Q. I understand that. You say now this close relation, this Siamese twins relation, between State and interstate—and I am trying to find out just what the bond of union between the two is as an actual fact?

A. The bond of union is this: As between Arkansas interstate rates and Arkansas intrastate rates, if you want me to take up that feature of it I will and explain it.

Q. I want you to explain what this relation is. How would you fix an interstate rate based on an intrastate rate or *vice versa?*

A. The rates fixed by the intrastate rate in Arkansas fixes necessarily the rate from the border points." (R. pp. 620, 621.)

Then he wanders into illustrations.

Mr. Perkins was recalled in rebuttal and said:

"Q. You have used the term 'relation between State and interstate rates' quite frequently in your testimony here, Mr. Perkins; I wish you would explain just what you mean by that.

A. By "relation between State and interstate rates" I mean that our interstate rates are dependent upon the rates as fixed on State traffic.

Q. I do not believe I quite catch that, Mr. Perkins; do you mean in all your remarks in your preceding testimony as to the relation between the State and interstate rates the effect that the State rate has upon the interstate rate?

A. By saying hat there is a relation between the State and interstate rates I mean that the State rates, as I have said, affect to a greater or smaller degree the interstate rates. In that way the relation exists.

Q. Just what is that relation?

A. That relation varies. It is the subject of practically all of the testimony I have just given with respect to our rates from Memphis to Arkansas points.

Q. As I understand your testimony on that, it was to the effect that the Arkansas Commission rates had, in a measure, controlled the interstate rates to and from Memphis; is that correct?

A. That is correct.

Q. You mean by "relation between State and interstate rates" the controlling effect of the State rate upon the interstate rate?

A. I mean by the relation between State and interstate rates, as an example, where the State rates are reduced it will invariably cause a reduction in our interstate rates, possibly not to exactly the same degree; and where they are advanced it will permit of a smaller advance in the interstate rates.

Q. You say 'probably not in the same degree;' to what degree would that advance be?

A. That would depend entirely upon conditions." (R. p. 1631.)

Again he said:

"Q. Mr. Perkins, I do not quite understand this statement in your testimony at page R 23:

"In case where the interstate rates are shown to be the same to the points mentioned in the chart, the Memphis to Little Rock rate has been applied as a minimum, these minimum figures applying only to the station directly south and west of Little Rock, which it will be seen were selected by the State to disprove our basis."

What do you mean by that?

A. I mean that you have selected a group of stations to which, on account of the conditions which I have mentioned we have in one or two cases a blanket basis of rates; and you picked out that as about the only place you could find in Arkansas to prove or disprove our general theory.

Q. What do you mean by your "general theory?"

A. The relation as between State and interstate rates.

Q. What relation? Cost relation, trade relation, or political relation?

A. The relation of the rates in and of themselves.

Q. What do you mean by the relation of the rates in and of themselves?

A. The relation as between State and interstate rates.

Q. Do you mean the proportion that one rate will bear to another one?

A. I mean the bearing which one rate has on another rate, as a matter of fact.

Q. Control, you would be more apt to say—the control of one rate over another one, rather than the relation?

A. Yes, sir.

Q. That is what you mean by that statement?

A. I think the word relation defines it better.

Q. You are discussing there the relation of the effect of one rate on another.

A. The effect of the relation of one rate to another naturally affects the two; yes.

Q. You take the rates in Arkansas that are less than the Commission's rates and what would you say as to that relation or control of the Commission's rate as to them?

A. The basis which I outlined yesterday as governing that part of our line as applied to State rates brought about that result at that time.

Q. That might bring it to the State level, but how could that bring it below the State level?

A. For the reason that in that particular case we used a minimum figure, which was the Memphis to Little Rock rate, 70 cents first class.

Q. On account of commercial conditions?

A. Yes.

Q. I believe Mr. Bragg gave instances of the Memphis interstate rate being less than the State rate to points on the White River branch and probably other points; do you recall that testimony?

A. Yes, sir.

Q. It was commercial conditions on that line that brought those rates down under the Commission's rates?

A. No, sir.

Q. What was it?

A. Competitive conditions." (R. pp. 1664, 1665.)

Mr. Frank Nay, Comptroller of the Rock Island System, testified:

A. "Well, for the revenue basis to be the proper measure, excluding in this consideration the addition of anything for increased cost, the State rates should be enough higher than the interstate rates to balance that excess of cost which operating men say exist in connection with State business over interstate business and if the State rates were not sufficient to produce that revenue, the revenue basis would be faulty to that extent. And if they were too high and so much higher than interstate rates of course it would be faulty the other way.

Q. The point of that testimony to which I have just called your attention, is this: There was not a proper relation between State and interstate rates during the period we have under inquiry (that is 1907), and if that is true then the revenue basis would not be a proper factor with which to apportion the expenses, would it?

A. Well, it would be an accurate factor, but being, in my judgment, the best that is known, it would be the proper one. I think in the first question you have the word "accurate;" it is not an accurate factor.

Q. It will fluctuate according to the fluctuation between State and interstate rates?

A. Yes, sir.

Q. And it will, of course, be inaccurate to the extent that the proper relation does not exist between State and interstate rates?

A. Yes, sir; I think that is true." (R. p. 660.)

Mr. Nay's evidence on the revenue theory, and in fact the plaintiffs' whole case, is summed up thus:

"Q. If there is a larger profit in the intrastate rate than in the interstate rate, owing to competition that largely controls the interstate rates, wouldn't that fact, the difference in the profits on the two rates make it unfair to use the revenue, intrastate and interstate, to measure the expenses of operation with?

A. Of course, in the first place it would depend on what basis was used in determining the profit was larger in one case than in the other. But if that could be absolutely determined beyond any question of a doubt, which is an impossibility, I think, then of course the revenue basis would be faulty to the extent that difference existed.

Going back to the same statement again, that the revenue basis is not a perfect basis, but is the best known basis at this time.

Q. It seems to have several faults, doesn't it, Mr. Nay?

A. These faults are really the same fault under different names, I think.

Q. Not under different names but under different circumstances; isn't that more nearly the case than under different names?

A. My idea in making the statement that they seem to be the same fault was that the two rates, intrastate and interstate, seem to be out of proportion to each other, and that is what produced this unfairness that is spoken of. If they were in exact proportion all the time, the revenue basis would be a perfect basis.

Q. And if it represented the cost of the service? You would have to have that also?

A. I presume if they were in proper relation to each other they would represent the relative cost of the service. When I say "in proper relation to each other" I mean in reference to the cost of the service.

Q. Some of these traffic men use that term in an entirely different sense. I think your use of it is correct, but you will see from

the testimony the others use it as having a proper adjustment to the commercial conditions. A just rate of one trade center with another trade center. That is the reason I was particular in calling your attention to it. You mean by it a proper relation of the cost of the service; isn't that right?

A. That is what I had in mind.

Q. That is what you had in mind in your testimony generally, I assume.

A. The proper relation?

Q. The proper relation of cost, you mean?

A. Yes, sir; the proper relation in regard to the cost." (R. p. 668.)

The foregoing, saving repetition, is practically the full evidence of the plaintiffs on this subject.

## (3) THE RELATION OF THE INTERSTATE AND INTRASTATE RATES.

*Defendants' Evidence.*

The intrastate revenue used as the factor with which to divide property and expenses for the period under inquiry was Standard Distance Freight Tariff No. 3, or, to be more accurate, the rates which in June, 1908, were republished under that style. With minor exceptions, the rates had been in force several years, and really the tariff in force during the period of inquiry was No. 2, although the witnesses all speak of No. 3 but it was only published in 1908, after this period of inquiry. As there were no substantial difference between No. 2 and No. 3, we will follow the witness and speak of it as No. 3.

Mr. Watson, Assistant General Freight Agent of the St. Louis Southwestern Railway, in his direct testimony, made frequent critical allusions to these rates, and on cross examination we developed fully his criticism of it as not being properly constructed. As his testimony deals in some very specific instances, it is quite tedious to follow:

Bar iron and baskets are favorite illustrations of traffic men as to the relation of rates and cost of service, and the difference in classification as controlling rates. Using these common illustrations, taking Commission rate for 225 miles, the average interstate haul, in order to get the relation in rates between the State and interstate.

Mr. Watson was asked to give these. Bar iron was found to be 16 cents and baskets, which take four times the first-class rate, was $3.08. Mr. Watson says this is not the proper relation; the bar iron ought to be 37½ cents instead of 16 cents.

"That relation in that particular tariff is not a regularly constructed one. The figures are not as near as should be; in other words, fourth-class ought to be somewhere in the neighborhood of 50 per cent of first-class, and the figures are not so constructed in that tariff."

Q. Then that tariff is not properly constructed so far as the relations go?

A. That is my understanding." (R. p. 566.)

This was irrespective of whether too high or too low; merely the relation. He says the undue relations in the Commission Tariff was one of the complaints against it, and was asked to give other instances. He says practically all the L. C. L. commodity rates, giving bagging and ties to illustrate, but he said it was a small movement. (R. p. 566.)

He was asked to give heavy movements, something that went to the revenue-producing feature, and in response instanced:

Wire and nails, 16 cents; should be 37½; sugar, rice and molasses, 23 cents; should be 37½; canned goods, 23 cents; should be 37½. These in L. C. L.

In carload rates, he says the conditions are worse: Cotton seed, 8 cents; should be 15.

Lime, outside of lumber, he says is about as large as any movement; and it is 8 cents, and should be 18 cents. Lumber is 8 cents and should be 18 cents. This for a distance of 225 miles; and he admits that it is also 18 cents from Lake Charles, Louisiana, to St. Louis, Missouri, a distance of four or five times that length.

"Q. I infer from your analysis of that, Mr. Watson, that you are not enamored of the Standard Distance Tariff No. 3, as a scientifically constructed tariff?

A. I don't believe the Standard Distance Tariff, No. 3, was ever represented as a properly constructed tariff. I never heard anybody so represent it.

Q. Do you think it represents the cost of the service?

A. I don't think so; no.

Q. Nor anywhere near it, I would infer from your answer?

A. The result from the application of it would indicate not.

Q. It would not be a very safe measure, then to use to determine the cost of service in the State of Arkansas?

A. I don't think you can use any tariff to determine the cost of service, Judge. I don't think you could use this one (indicating) to determine your revenue on a proper basis." (R. pp. 565-569.)

The lumber rate might be too low, the basket rate too high; these are not the present questions, but do the State rates bear such relation to the interstate that the respective revenues can be used to measure the respective expenses?

Taking the Iron Mountain interstate tariff as standard of relations of one rate with another for the average interstate haul, Mr. Watson is quite emphatic that the Commission Tariff rates are not in proper relation to each other, and necessarily not in proper relation to the interstate.

If the rates of themselves were low, it would assign less expense to the State than if high, but the revenue from these rates is upon

one road 98.18 per cent higher intrastate than interstate per ton per mile, and, upon the other, 141 per cent; and this is not a question of too high or too low, but one of relation, a necessary factor to give value to the revenue basis.

This testimony, exhibiting the actual relation of rates under which the traffic moves, can not be condensed, and must be given in full.

*Nonrelation Graphically Explained.*

(R. p. 1468.) "Q. Mr. Hamilton, there has been a great deal said in this testimony about the parity between the State and the interstate rates, the relation that exists between State and interstate rates. Have you made any examination as to that parity or relation, or whatever it may be called, existing between State rates and interstate rates?

A. Yes, sir.

Q. Give us the results of some of your illustrations?

A. Mr. Watson, and perhaps Mr. Perkins, or Mr. Flippen, one of the gentlemen from the Traffic Department of the railroad interested here, as I recall it, said that the Arkansas Distance Tariff issued by the Commission dominated the rate from Memphis into Arkansas points, and that the Memphis rate was the bridge toll higher. That is, to get a rate from Memphis to an Arkansas point, they added a bridge toll to the distance tariff from Bridge Junction on the west side of the river, opposite Memphis.

Taking that proposition first, I have made a graphic chart covering the rates from Memphis to the line of the Iron Mountain, extending south from Little Rock, some seventy miles, to Arkadelphia (actually to Gum Springs, the station beyond) and commenting upon the statement that Memphis rates were based on the Arkansas rates, plus a bridge toll—that they were made that way—I found that the first class rate ran level across the chart—

Q. That is interstate?

A. Yes, sir.

That is, that the rate is 70 cents from Memphis to each of these 27 stations, shown on this chart, which are 70 miles apart. That is, the most northerly one is 70 miles from the southern extremity of the route.

I found the Commission Distance Tariff beginning at 60 cents and mounting step by step until it reached 76 cents, a fluctuation of 16 cents.

Q. Owing to the distance?

A. Owing to the distance. It is graduated according to the distance. The rates are made in five-mile graduates.

The rates published by the railroads from Memphis to these points, on first class, are absolutely level. That is, the 70-cent rate applies to the entire group.

The distance tariff rate, which I have compared with the railroad interstate rate, is the rate from Bridge Junction, and would be,

according to Mr. Watson's statement, the railroad's rate less the bridge toll. The bridge toll does not fluctuate. There is no distance element in it. It is an arbitrary toll. So that if the interstate rates published by the railroads were based directly on this State rate, they also should fluctuate. As a matter of fact, the chart shows they do not.

The same is true of second class, which is absolutely level across the chart, on the interstate rate, and goes from 53 to 68 cents in the Standard Distance Tariff of State rates.

On third class, the interstate rate goes 37 miles before it begins to climb, and then climbs, the last time 33 miles, some six points; while the State rate begins at 45 cents and climbs in the direct relation to the first and second class State rates until it reaches 57 cents at the last station in the group.

The fourth class interstate rate runs 52 miles level before it begins to climb, although its predecessor, the third class rate, began to climb after 37 miles, and it ultimately climbs 4 cents; while the State fourth class rate, which is now, as it starts with the first station, a cent higher than the interstate fourth class, although the first, second and third class interstate rates begin on a higher level than similar State rates.

This State fourth-class rate climbs all the way and is graduated according to distance, starting at 37 and reaching 43.

Now, on Class A, which in these tariffs is higher than fifth class, and is therefore mentioned first, we find the interstate rate again absolutely level, although some rates between it and second class, which are absolutely level, have been graduated.

We find the State Class A rate graduated according to distance.

The same is true of the interstate fifth class rate. It is level, while the State fifth class rate is graduated according to distance.

The State Class B rate is graduated almost exactly, relatively, to the other State rates, while the interstate Class B rate goes some 37 miles before it begins to rise.

The State Class C rate is graduated, as is also the interstate Class C rate. There is some resemblance to the graduation on that one rate.

The same is true of the Class D, on the State, but not the interstate. It travels level for 59 miles before it begins to rise.

The two Class E rates are most relatively graduated.

I should say that it is apparent there that there is no relation in that set of rates, between the State rate and interstate rate, for the reason that while the interstate in most instances is level—that is, is the same to the first station as to the last station in a group, the extremes of which are 70 miles apart, the State rate is graduated according to distance.

Now, as to the other phase of it, as to there being an internal relation between the interstate rates·

Something has been said here, for instance, that the fourth class

should be a certain percentage of the first class, if rates were scientifically made—take these interstate rates: We found first-class absolutely level; second-class absolutely level; the third class graduated; the fourth class graduated; Class A absolutely level; fifth class absolutely level; Class B almost so, rising at the last two stations on the group.

If there is a relation between the level rates, there certainly can be none between them and the graduated rates.

I am speaking from the chart—in this chart we have shown the names of the stations to which the rates applied.

Q. Have you carried any commodities on that chart?

A. Nothing but class rates on this chart. Down the side we have shown the rates per hundred pounds, in cents; each square across the chart represents a station; the graduations are shown in that way—

Q. I wish you would attach that chart as an exhibit.

* * * * * * * * *

See exhibit "C-1."

Q. Have you made any comparisons of the relation to the St. Louis rates?

A. These are St. Louis rates that I have in this (indicating) chart.

On the other chart we have shown only class rates and have shown the State and interstate rates on the same chart; that is, on the same page of the chart.

Here we have shown both class and commodity rates and have shown the interstate rates on one side and the State rates on the other.

The St. Louis rates, of course, are interstate rates, and are for the whole distance from St. Louis to these points in Arkansas indicated on the head of the chart.

For purposes of comparison, we have set against them State rates which apply for the distance that these interstate rates would cover, in the State of Arkansas. That is:

Here is the rate from St. Louis to Arkadelphia. The haul in Arkansas on that is 226 miles. Against that I have set over here (indicating on chart) the 226-mile distance tariff rate.

Inasmuch as the division of the rate is not in question, but only its relation, and, further, inasmuch as the Iron Mountain, in dividing the revenue derived from these St. Louis rates, divided on a track mile basis, the comparison holds good for any mile that the freight travels over.

Q. Now, please explain what you have on that chart.

A. The first-class rate from St. Louis to station—from Asylum in Arkansas, which is the first station south of Little Rock, to and including Gum Springs, the first station south of Arkadelphia.

The first-class rate is $1 to all those stations from St. Louis.

Q. That is represented by a level line?

A. Yes, sir; and so marked on the chart.

The State rate for the same haul in Arkansas is set opposite that and graduates from 64 to 77 cents.

Q. Graduating according to distance?

A. Yes, sir.

The second-class rate from St. Louis to these points is 85 cents, to all of them—a level line across the chart.

The Distance Tariff State rate graduates.

The third-class rate, interstate, travels 37 miles before it is graduated.

The third-class rate, State, closely follows the first and second-class rates, State, graduated all the way.

* * * * * * * * * * *

Q. You mean interstate?

A. No; the interstate does not. The State rate preserves, in a measure, the relation, but the interstate does not—two of them are flat and the next one is graduated on the interstate.

The fourth-class interstate rate runs out a distance of 214 miles before it begins to rise.

The fourth-class State rate is graduated all the way, although not so markedly as its predecessors, the other three rates.

The fifth-class rate, interstate, is absolutely level.

The fifth-class rate, State, is graduated. Not as markedly as its predecessor, but graduated according to distance, nevertheless.

The Class A rate, interstate, parallels the fifth-class rate and is absolutely level.

The Class A rate, State, is graduated.

The Class B rate, interstate, does not begin to rise until it has traveled 37 miles.

The Class B rate, State, is graduated in the first eight miles and goes up—that is, the first ten-mile group.

The Class C rate, interstate, runs 40 miles before it begins to graduate.

The Class C rate, State, is graduated exactly as the Class B rate, beginning in the first ten miles.

These other rates speak for themselves, and show that while a great many of the class and commodity rates, interstate, are blanket rates or level rates, the State rates are all graduated, preserving a closer internal relation between the various State class and commodity rates than there is preserved between the interstate, and lacking a proper internal relation of each, I fail to see how there can be any relation between the two sets of rates.

* * * * * * * * * * *

Q. Have you some comomdity rates there?

A. The comodity rates are on agricultural implements, less than carload. That is an absolutely level rate, interstate. In fact, it is

really the second-class rate, although it is published as a commodity rate. The same rate, State, is graduated exactly; that is, the second-class rate follows it all the way, step by step.

Q. That is, a relation of a flat rate with a graduated rate?

A. Yes, sir.

The carload rate on agricultural implements, interstate, is graduated all the way, but the less than carload rate on these implements is a flat rate.

If the relation between carload and less than carload, interstate rate on implements, at the first station, was correct, then the relation at the last station is distorted, because there is not a level rate on the less than carload, while there is on the carload. To put that into figures:

The less than carload rate from St. Louis, on agricultural implements, say to Mabelvale, Arkansas, is 85 cents. The carload rate is 30 cents. Now we go to Arkadelphia, and we find the less than carload rate still 85 cents, but the carload rate has gone from 30 to 39 cents. In either one of those cases there is some distortion of relation.

Q. I expect there is a physical condition down there that makes the handling of carloads very much more expensive than less than carloads over that particular piece of track?

A. I should say that there was some commercial necessity for a lower carload rate to some of those points near Little Rock that there was further away. What it is, I do not know, but that may be the cause in the change of the relation.

Now, comparing carload and less than carload, and showing that this tariff is not related, the same statement holds good on "bagging and ties."

The carload rate is a level rate of 19 cents to each of these 27 stations, while the less than carload fluctuates from 39 to 46 cents.

If there is a definite relation, whatever it is, between that carload and less than carload "bagging and tie" rate, it is not apparent at just which of these two points that relation is." (R. pp. 1468-1872.)

He gives further illustration on canned goods, L. C. L. and C. L., and salt, C. L. and L. C. L. In this case a local rate C. L. and a fluctuating L. C. L. rate on the same. These are all shown in exhibit D-1, the tariff numbers all given. (R. p. 1473.)

The testimony of Mr. Perkins, that this territory was exceptional, has heretofore been copied.

To meet Mr. Perkins' statement, this subject was further investigated, and in surrebuttal this additional evidence, along the same line is adduced, commencing at page 2250:

Q. Mr. Hamilton, you put in evidence exhibit C-1, which is a chart showing and illustrating certain rates, State and interstate, on the line of road south of Little Rock. Mr. Perkins, in discussing that, at page 24, said, after explaining the rates set forth in your chart:

"In other words, the State has picked out a comparatively small territory in Arkansas where this condition exists, to try to prove there is no relation between our State and interstate rates; while, as a matter of fact that comparatively small territory is an exception to the rule; although in that territory there is the relation between State and interstate rates as I have explained."

I will ask you if that is a correct statement that you have picked out a small territory there to prove this fact, and that that small territory is the exception to this rule.

* * * * * * * * *

A. First, on the question of the section of the line covered by exhibit C-1, being the only portion of the line in Arkansas where the conditions illustrated in that chart were extant during the period of our inquiry, I would say that I have taken the same tariff naming the interstate rates from St. Louis to points in Arkansas, and have found that a similar condition exists on every section of the line which is covered by nine additional charts of similar character to exhibit C-1, which I have prepared.

Q. Explain those charts, Mr. Hamilton, so it may be understood.

A. The charts are numbered from one to nine, and, to indicate the extent of the territory covered by them, I have prepared as a recapitulation or summary of the charts an outline map of the Iron Mountain mileage in Arkansas, which appears first in the exhibit.

The portions of the Iron Mountain line colored in red are portions covered by the charts attached to the recapitulation.

The numbers shown opposite these red sections of the map are references to the charts which underlie it.

The mileage covered by the charts is 529 miles, including the territory covered by exhibit C-1, which itself covered seventy miles.

Those 529 miles are 39 per cent of the total Iron Mountain mileage in Arkansas.

The charts are similar in nature to exhibit C-1, but cover different territory.

Q. Explain the principle involved in this map and the charts.

A. Take one, for example. Take chart 5, attached to the exhibit, the stations to which the rates apply, cover 79 miles on the White River division, beginning at Fitzgerald, just north of Newport, and running to Cresswell. The red lines indicate the interstate rates from St. Louis to the various stations shown.

The graduated colored lines indicate the State Distance Tariff rates for the same mileage in Arkansas as would be covered on the haul from St. Louis on the through rate from St. Louis to these points.

It is not intended to compare the rates themselves in dollars and cents, but their relation one to the other.

To explain: First-class rate from St. Louis to Fitzgerald was 80 cents. First-class rate to Cresswell, 79 miles further distant (figur-

ing the short-line mileage via Diaz Junction) is also 80 cents. And the rate is 80 cents to all intermediate stations.

The first-class State rate from the Missouri State line to Fitzgerald is 43 cents. The first-class State rate to Cresswell, the most northerly station, is 56 cents, a variation of 19 cents, which is made gradually from station to station or in groups of five to ten miles.

The same is true of other State and other interstate rates.

On this particular chart all of the interstate rates with the exception of Class E, are the same to the first and the last station on the chart.

Class E runs at the 15-cent level for 44 miles and at 16 cents the rest of the distance, or 35 miles.

There is one chart to which I wish to call particular attention; that is No. 2, covering 80 miles on the Helena branch; the first station being Jolly, just south of Knobel, and the last station shown on the chart being Wynne, the junction of that line with the line from Bald Knob to Memphis, the distance between stations being 80 miles.

The first class interstate rates begin at 70 cents and is 70 cents to the first three stations shown on the chart.

The next station the rate is 71 cents.

To the next two it is 72 cents. And then to all except the last two stations on the chart, or a distance of 48 miles, it is 73 cents level, raising one cent to each of the last two stations.

The second and third class interstate rates are absolutely level, being the same to the first station as to the last.

That is all true of the fourth class rate.

Class A from St. Louis recedes.

That is, the rate to the seventh station south, or Paragould, has dropped one cent, although the distance has increased.

That is true of Class B, the rate has dropped two cents when it reaches that station.

And of Class C, which has dropped two cents. And Class D has dropped two cents. And Class E has dropped three cents.

That decrease in the rate remains effective for 19 miles, and then the rate resumes its former level and goes on on a parity with the first and second class rate.

On this same chart the State rates are graduated according to distance, the rates increasing in five or ten mile groups, according to the State Commission Tariff.

Q. This was based on the rates in effect during the last half of the year 1907?

A. This chart was based on the interstate rates in effect during the last half of 1907 and also on Standard Tariff No. 3.

The map, which is a recapitulation, bears a typewritten statement practically the same as what I have given here.

Q. The balance is made up practically in line with the explanation you have given?

A. Yes, sir.

* * * * * * * * *

The exhibit referred to is marked "Defendant's Exhibit L-1." Two of the charts are reduced in size and reproduced herewith and found on opposite page to illustrate this testimony.

* * * * * * * * *

Q. Mr. Hamilton, at page R-7, Mr. Perkins, in discussing the rates to Texas common points, in answer to some testimony of Mr. Ludlam and exhibits filed, uses this language:

"The rates to Texas common points are not made entirely from St. Louis. In many cases the rates are made from the territories east, and rates are then fixed from St. Louis on differentials under the rates so fixed from Eastern territory.

"This is due to the fact that the further east we go the more keenly do we feel the water competition of the Steamer Lines from New York to Galveston and Texas City. In adjusting our rates to Texas we attempt to arrive at a rate which will yield an average return. In other words, we do not figure on the rates to Paris, in the northern part of the State of Texas, nor on the rates to San Antonio, in the southern part of the State, but a rate which applied to the entire territory would yield an average return."

I wish you would state whether you have found that to be correct, and if you think it is incorrect, if you have prepared a chart illustrating how those rates are made different from the way Mr. Perkins understood it?

* * * * * * * * *

A. The rates are made in the way which Mr. Perkins says they are made. The tariffs show that.

But their division between the carriers hauling the freight results in greatly varying rates for the haul in Arkansas.

Q. You mean greatly varying revenue rather than rates, do you not?

A. Greatly varying revenue, assuming the business moves under the rates.

Q. What I am particularly calling attention to is the average of revenue. As I understand, that is made up by the rate and the division?

A. Yes, sir; that would be governed by the average movement of freight also.

Q. That is true. Now proceed with your explanation.

A. I have prepared a chart which covers the rates, or the Iron Mountain proportion of the rate in Arkansas on business from Chicago and Pittsburg and their surrounding territories, and St. Louis, to 15 stations taken at random from the map of Texas:

The stations named are shown as taking Texas Common Point rates and I have selected the first class rates, for purposes of illustration.

MR. PERKINS:

Q. Can you state what roads those stations are on, so we can follow that up?

A. I have Victoria on the Texas and New Orleans.

Brownwood on the Fort Worth & Rio Grande.

Wharton, Texas, on the G., H. & S. A.

Abilene on the Texas and Pacific.

San Antonio on several roads, among them the I. & G. N., and I have figured I. & G. N. divisions on this chart.

Eastline, Texas, on the Texas & Pacific.

Big Springs on the Texas & Pacific.

Austin on the I. & G. N. among other roads and I have used I. & G. N. divisions.

Corsicana on the Cotton Belt.

Waco on the Cotton Belt and I have used Cotton Belt divisions.

Palestine on the I. & G. N.

Fort Worth on the Texas & Pacific among other roads and I have used Texas & Pacific divisions.

New Boston on the Texas & Pacific.

Marshall on the Texas & Pacific.

Tyler on the I. & G. N. and Cotton Belt, and I have used Cotton Belt divisions.

The first class rate from Chicago to these points—that is, the proportion of it which Iron Mountain would earn in Arkansas, is indicated by a red line.

The Iron Mountain Arkansas proportion of the Pittsburg rate is indicated by a blue line.

And its proportion of the St. Louis rates is indicated by a green line.

In arriving at the proportion accruing to the Iron Mountain in Arkansas, I have applied the regular divisions on Chicago and Pittsburg business north and east of East St. Louis, as shown in the company's division sheets current in 1907; and the divisions south of Texarkana as shown in their division sheets with the Southern lines.

The remainder or the proportion of the rate between St. Louis and Texarkana I have divided between Missouri and Arkansas on a track-mileage basis, which is the railroad's method in this suit, of locating revenue to Arkansas.

The chart speaks for itself.

The proportion of the rates in cents per hundred pounds is shown in figures across the top.

The lines extend to a figure which indicates the rate accruing to the Iron Mountain on its haul in Arkansas for the business for each station from each point indicated.

The rate accruing to the Iron Mountain in Arkansas on business from Chicago to Victoria, Texas, was 31 cents.

From Chicago to Tyler, Texas, it was 59 cents.

Q. That would be exactly the same movement over the Iron Mountain tracks?

A. From the Missouri-Arkansas State line on the Iron Mountain rails to Texarkana.

MR. PERKINS:

Q. You are using the first class rate?

A. Yes; that is the only rate shown on the chart. The rate used is the first class rate arrived at by adding the established differentials to the St. Louis rate on the Chicago and Pittsburg basis. And the divisions were obtained from the percentage sheets on file in the office of the auditor of freight receipts of the Missouri Pacific Railway.

The two extremes of the chart are 31 cents on the business from Chicago to Victoria, Texas, and 66 cents on business from St. Louis to Tyler, Texas.

The others speak for themselves.

COL. MOORE:

Q. They vary between those two extremes?

A. Yes, sir.

* * * * * * * * * * *

Q. I think it is in the record but I wish it restated here for the purpose of clarifying a situation:

The rate you have put down here is the proportion accruing to the State of Arkansas?

A. Yes, sir; on the basis I have explained, track mile division of the proportion of the rate from St. Louis to Texarkana.

Q. What I want to get at is, that track mileage basis is the one used by the railroads here?

A. In locating earnings to Arkansas; yes, sir.

See exhibit M-1. (R. pp. 2250-2255.)

* * * * * * * * *

Mr. Bee, the Rate Expert of the Corporation Commission of Oklahoma, was questioned on this subject and said there was no relation between State and interstate rates other than the relation of enabling a jobber to do business, which is a commercial relation. (R. p. 1190.)

The testimony of Mr. Nay to the effect that there must be a proper relation—cost relation—between State and interstate rates in order to give value to the revenue theory, was quoted, and he was asked if there was any such cost relation and he stated it was impossible to have such a relation; that the difference in distance is so great that a rate made on one basis would not apply to the other, instancing the haul from St. Louis to Oklahoma is 600 miles and the average haul in the State 50 miles.

"If rates could be built entirely upon what we call a scientific mileage scale there would then be the chance to have each shipment pay its pro-rata part of the cost, but in the conditions existing, this freight from St. Louis comes in competition with Atlantic seaboard freight, which is handled via Galveston; it comes in competition with German and English-made goods handled in transstate steamers to Galveston, Texas, at a very low rate; practically brought over in cotton seasons as ballast in the boats.

The rates from Galveston are then made to points in Oklahoma.

The same conditions exist in New Orleans. Competition from St. Louis must meet that from Fort Smith and that from Texas centers.

The result is that the relation of the rates from St. Louis to Oklahoma do not take into consideration the local rates in Oklahoma, but the rates from the surrounding States and Territory that supply Oklahoma with the same commodities that the St. Louis rates apply to.

Q. That is sort of a trade balance?

A. Absolutely so; a necessary condition in order to market the product.

Q. Take an illustration and see if I get your idea clearly; you are familiar with the Arkansas Standard Distance Tariff?

A. I am.

Q. Take the lumber schedule that moves on a mileage distance rate, I believe, with a rough material rate into the sawmill:

Compare the rate for lumber moving from a sawmill in Southern Arkansas, moving first into a sawmill, probably from some tap line; then manufactured into lumber at the sawmill and shipped out to Little Rock, Fort Smith or any other intrastate point.

Compare that movement with a similar movement of lumber shipped from Lake Charles, Louisiana, on a 23-cent rate to Omaha.

What relation would there be between the revenue in the lumber shipment under the Arkansas Standard Distance Tariff and the relation of the revenue derived under this interstate tariff in that zone?

A. It is imposisble to make a comparison. There is no comparison there.

Q. Mr. Nay says that unless there is a proper relation based on the cost of the service between the two, the revenue theory would be of no value.

A. There is no possible chance to make a comparison between those two rates. They are not related to one another in any way. One does not depend upon the other. One is not taken into consideration in making the other. They are as unlike as black and white and no comparison can be drawn between them. A man would be foolish to try to draw a comparison between two sets of rates, because no two factors are entering into the rate that are the same except the proposition of the railroad handling the business.

The rate from Louisiana points to Omaha and all intermediate points, is 20 odd cents. At which point are you going to take it to compare it with the Arkansas rate to find the comparison? There are no two things entering into it that are comparable.

Q. Suppose we get something that can be compared:

It is in evidence here that lumber shipped from points in Northern Louisiana to St. Louis would carry an 18-cent rate, but if that were shipped from the same point into Little Rock, it would carry a 22-cent rate, going over the same track, originating at the same place, part company at Little Rock, get a 22-cent rate for the haul to Little Rock and 18 cents for the haul to St. Louis; and a similar shipment that happened to be within the State, the same length of haul, would have still a different rate fixed by the Standard Distance Tariff:

What relation would you figure out existed there?

A. I have worked rates a long time, but I fail to be able to find any relation between those rates. There is a competitive condition, Judge, that creates that 18-cent rate to St. Louis, which the railroad sees fit to meet. That was years ago. I understand from traffic men that it does not exist today, but the rate exists, and that competitive condition that did exist caused that 18-cent rate from Arkansas and 22-cent rate from Texas and Louisiana fields into St. Louis. There was not any State rate in Arkansas or Oklahoma that had anything to do with the making of that freight rate, and when they came along to make the Oklahoma and Arkansas rates I do not think they took that rate into consideration.

We find in Oklahoma, in some instances, there are six cents difference between the local rate in Oklahoma, between two given points, and the rate from Texas to that point.

In one place there would be 8 cents and in another place there would be 10 cents. There was no reason for any of that. There was not any mileage condition that could possibly bring around the exact differences or anywhere in the neighborhood of the differences, and I fail to see where a man can draw a comparison between a State rate and an interstate rate and say they are related to one another, and when built upon the other, there is a condition under which a man could compare a State rate and interstate rate, possibly, on a revenue basis, to see if one was paying its pro rata part of the cost as compared with the other.

Q. What would that be?

A. The traffic moving interstate on each different commodity would have to be of the same proportion as the traffic moved in the State on the same commodity, and then the rates would have to be so far apart as was found the difference between handling State traffic and interstate traffic and if each rate was built upon that exact factor then a man could take the revenue theory and so on that basis could be divided the expense, but I know of no other conditions under which the revenue theory could be taken.

Q. That is a condition that does not seem to be existent, as gathered from your testimony.

A. It not only does not exist, but it is impossible for it to exist." (R. pp. 1190-1193.)

To follow this further, illustrated with the lumber rate, there would have to be the same proportion of lumber hauled intrastate and interstate and the same rate per ton per mile plus the extra cost of one over the other, and, in addition to that, the same profit in each rate. Without these impossible and nonexistent conditions the revenue theory has no value. (R. p. 1194.)

Mr. Nay made a statement regarding the classification being preserved in both State and interstate, and Mr. Bee was questioned regarding it; both statements are given.

Mr. Nay's statement:

"A. Yes; but by examination of the two I find that practically the same relative cost of first, second and third classes in carloads existing with the Commission as with the interstate rates.

Q. You differ with lots of these witnesses, like Mr. Watson, very much, Mr. Nay.

A. His judgment is better than mine. I say practically the same. I have not compared individual rates. But what I mean, Judge Hill, is to say, for example, here is an Arkansas rate, a rate for first class 50 per cent more than the rate for fourth class. In the interstate rate tariff the rate for first class is double the rate for fourth class.

What I mean is that they have preserved a relation and fixed a higher charge for the commodities that are classed as first class in this classification than they have for those fixed as fourth class." (R. p. 1195.)

This question was put Mr. Bee and his answer follows:

"That is the point I want to call your attention to, as to whether as a practical matter, not as a theoretical one, whether this relative cost between first, second and third class exists between interstate rates and Commission rates.

A. I do not think they do. The rate from St. Louis to Little Rock, the fourth class rate, is 45 per cent of the first class rate.

What I understand is the average haul in Arkansas on State rates, the Standard Distance Tariff shows that the fourth class rate is 66.6 of the first class rate. In other words, there is 21.6 per cent variation between the two.

Q. That is the percentage of the relation between the two?

A. Exactly.

Q. It is just another factor in addition to the fluctuation in the rates that reaches to the revenue.

A. Exactly.

Q. You do not find Mr. Nay's theoretical illustration in practice?

A. No; I have worked it down to every possible point in the voluntary rates of the railroads in Oklahoma and the voluntary

interstate rates of the roads, and there is not a single instance I have ever found that they were the same.

I went into that theory to try to find out if they were built upon such a basis.

The Chicago-Guthrie rate is 58 per cent, fourth class of first; the Oklahoma rate on the Santa Fe is 53.44 per cent.

Q. Is that a voluntary rate?

A. Both are voluntary rates. I do not see where any adjustment comes in.

The Chicago-Missouri rate—I will call fourth as against first, as that seems to be the one Mr. Nay took up—that is 40 per cent; Chicago-Guthrie rate is 58 per cent; St. Louis-Kansas City rate is 45 per cent; St. Louis-Guthrie rate is 63 per cent; the Kansas City-Guthrie rate is 65.3 per cent." (R. p. 1195.)

Mr. Bee was cross examined in great detail as to these matters and all others upon which he testified, being subjected to the most rigid and detailed and lengthy cross examination of any witness on either side, but it only resulted in bringing out almost innumerable instances, examples and illustrations of the general statements made by him. To further develop the relations of the rates on re-direct examination, this occurs:

"Q. I want to submit to you an affidavit made by Mr. C. K. Vorhees, which was filed in this suit on motion to dissolve the innjunctions, before the Circuit Court of the United States at Little Rock, in the spring of 1909. I presume you know Mr. Vorhees?

A. Very well; he is general freight agent of the St. Louis & San Francisco Railroad.

Q. On page 3 he states:

"Affiant states that the representatives of the several lines discussed and considered the relations which should exist between the several class rates, and after much study and comparison with the rates in other States and with the class rates applied on interstate traffic in various portions of the territory west of the Mississippi River and other elements affecting the fixing of class rates, it was decided to recommend that the various classes should bear the following relation each to the other:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E | Classes. |
|---|---|---|---|---|---|---|---|---|---|---|
| 100 | 83⅓ | 66⅔ | 50 | 40 | 45 | 30 | 30 | 25 | 20 | Percentages |

Are you familiar with that which I presume is put forward by Mr. Vorhees as the ideal relation of one class to another?

A. That scale looks very much to me like what is known as the Minnesota scale, and which has stood the test of the Supreme Court of that State; I would not be absolutely positive, but it appears to me as very close to the Minnesota scale.

Q. That is presumably considered by those who made it, the ideal scale.

A. It is so considered at present, but I am sorry to say it is not in use anywhere except up there, that I know of.

Q. From page 4 of Mr. Vorhees' affidavit, I want to take what he gives as the rates that were applicable; these are all interstate rates applicable at the time of the injunction in this case; he first gives those from Memphis to Little Rock:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 70 | 60 | 45 | 36 | 27 | 29 | 22 | 18 | 15 | 12 |

Then the rates from Memphis to Fort Smith, distance of 302 miles:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 102 | 87 | 67 | 49 | 40 | 42 | 35 | 30 | 28 | 23 |

Then the rates from St. Louis to Little Rock, a distance of 345 miles was:

| 1st | 2nd | 3rd | 4th | 5th | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|
| 100 | 85 | 65 | 49 | 37 | 39 | 32 | 27 | 23 | 18 |

Now, with those before you, I will ask you if they illustrate the point that you were making in your cross examination, that there was no proper relation between the classes in the interstate tariffs with which you could compare or establish a relation with the State tariffs?

A. They are. I had all those percentages figured out, but they seem to have disappeared; I read them into the record this morning; I read all the interstate rates in, and I had the State rates figured out as to the percentages of those. I believe 40 miles is supposed to be the average haul in Arkansas.

Q. Forty-two, I think it is?

A. I have taken 40 miles; now, I will call four columns, the first column will be the Memphis to Little Rock rate, the second column will be the Memphis to Fort Smith rate, the third column will be the St. Louis to Little Rock rate, and the fourth column will be the Arkansas Standard Distance Tariff No. 3, for 40 miles:

| | M.-L. R. | M.-F. S. | St. L.-L. R. | A. S. D. T. No. 3. |
|---|---|---|---|---|
| 2nd | 86 | 85.3 | 85 | 90 |
| 3rd | 64 | 65.7 | 65 | 80 |
| 4th | 51.4 | 48 | 49 | 66.6 |
| 5th | 38.6 | 39.2 | 37 | 50 |
| "A" | 41.4 | 41.1 | 39 | 53.3 |
| "B" | 31.4 | 34.3 | 32 | 40 |
| "C" | 25.7 | 29.4 | 27 | 30 |
| "D" | 21.4 | 27.4 | 23 | 26.6 |
| "E" | 17 | 22.5 | 18 | 23.3 |

Those are the percentages of first class rate in each class. Now, that shows that the relation of the interstate rates to the State rates for the average haul in Arkansas, is not relative at all.

Q. There is not one of those interstate rates where you could make the relation so it would fit in with another?

A. No, sir.

* * * * * * * * *

Q. Are those the rates in force now?

A. No, sir; the ones in 1907, I understand.

* * * * * * * * *

Q. Were those rates Mr. Voorhees has been testifying about the interstate rates in force at the time of the injunction?

A. Yes, sir; these are the rates I took from that affidavit, and 40 miles distance rate in Arkansas." (R. pp. 1299-1301.)

Mr. Voorhees' affidavit is of record, pages 2576-2579.

Mr. Ludlam, in his cross examination, was questioned in regard to statements of traffic officials in regard to classification fixing a relation between rates, and gave this full exposition of the situation:

"A. Those same gentlemen, for instance, testified that in fixing the rates, the casualty risk was considered, and lost space was considered, and that all of the elements that would enter into the increased cost were considered, and yet I find in the actual movement of railroad traffic that that situation is not true. While it is true to a certain extent, in the great bulk of railroad movements the actual conditions do not accord with their theories.

For instance, taking the St. Louis, Iron Mountain & Southern Tariff No. 70, Texas Tariff No. 1-DD, which was issued by Mr. Cale, agent, in effect during the last six months of 1907, from St. Louis to Texas common points, a map of which is already in evidence in this case.

The Texas common points cover some 2,600 stations, I think, in Texas, and represent a movement that may vary as much as 400 miles in the length of the haul, and I find that that tariff shows that from St. Louis to Texas common points, the rate on beer in glass is 48 cents per hundred pounds, with a minimum weight of 30,000 pounds, and that the same tariff gives the rate on bar iron of 55 cents, a minimum weight of 36,000 pounds.

Now, the casualty risk on beer in glass would certainly be very much higher than it would be on bar iron, and yet beer in glass is hauled cheaper under that tariff from St. Louis to Texas Common Points than bar iron is hauled.

In addition to that, the beer rate provides for 6,000 pounds of free carriage of ice, sawdust, straw, etc., during the months of June, July, August and September, and in the other months 3,000 pounds.

In making that rate where they carry beer in glass for less than they do bar iron, they did not consider either the lost space or the casualty risk.

The same tariff quotes excelsior from St. Louis to Texas Common Points at 43 cents, with a minimum weight of 20,000, as compared with the rate already quoted of 55 cents for bar iron.

They certainly did not consider the space required in the car or the casualty risk. Excelsior would burn up very easily. Bar iron, if you had a fire, would not be an entire loss, at least.

The same tariff quotes potatoes: This is from St. Louis to Texas Common Points. The difference in every one of these hauls may exist of over 400 miles.

The tariff quotes potatoes at 54 cents, with minimum of 30,000 pounds.

It quotes horse and mule shoes at 62 cents, with a minimum of 35,000 pounds.

When I see tariffs actually made up on that basis, when the rate is actually less on potatoes than it is on horse and mule shoes, I know that consideration was not given to the casualty risk or the space required.

The same tariff shows poultry netting, 48 cents, with a minimum weight of 30,000 pounds, and iron and steel claims at 70 cents, with a minimum weight of 36,000 pounds, and when a traffic man testifies that they consider the space and the casualty risk, he is certainly not considering such items as these, and the tariffs upon which the great bulk of the business moves.

Certainly no man would claim that poultry netting required less space or that it had a less casualty risk than iron and steel chains.

The same tariff shows hollow building tile at 25 cents, minimum 40,000 pounds. Also pig iron at 33 cents, with a minimum of 50,000 pounds, and the tariff itself shows that they expect to load more pig iron in the car than they do hollow building tile, and yet the rate on hollow building tile is less than it is on pig iron.

The same tariff shows iron pipe coils for refrigerating machines at 42½ cents, as compared with bar iron already quoted at 55 cents.

The lesser rate is on the hollow and bulky stuff and the higher rate is for the more compact stuff.

These rates apply to 2,600 points in Texas from St. Louis, with a difference of over 400 miles in the possible length of the haul.

Here is sheet iron pipe, up to 30 inches in diameter, quoted at 55 cents, as compared with sheet iron flat at 62 cents.

When a traffic man testifies that they consider the weight and bulk and these things, does not imagine for a moment that they can put more sheet iron into a car when it is rolled into pipe 30 inches in diameter than they do when it lies flat?

Here is another one: Matches, from anywhere in St. Louis to any Texas Common Point, at 71½ cents. The rate on wooden toothpicks on the same tariff is 80 cents.

The casualty risk on matches, it seems to me, would be higher than it would on wooden toothpicks, notwithstanding what the learned gentleman say who have made those rates and studied these elements, and say they consider them when they can, but on the great bulk of railroad movement they don't apply them.

Here is wooden kegs, 80 cents, with a minimum of 14,000 pounds, as compared with saddlery and hardware in packages, 90 cents, with a minimum of 30,000 pounds.

The light and very bulky stuff—that is, wooden kegs, is quoted lower than the heavier and compact stuff.

Here is pickles and preserves in glass, 58 cents, with a minimum of 30,000 pounds, as compared again with saddlery and hardware at 90 cents.

Anybody, I imagine, to use the term you used a few minutes ago, that was sane, would not imagine that pickles and preserves in glass would take less space or be less liable to damage than hardware.

And that rate is from St. Louis to 2,600 points in Texas.

Here again, comparing pickles and preserves in glass, at 58 cents, with iron and steel chain at 70 cents, with a minimum of 30,000 pounds for pickles and preserves in glass, and 36,000 pounds for iron and steel chain; anybody knows that pickles and preserves in glasses are fragile and the casualty risk is greater and that they do not weigh as much, and yet the rate is lower.

Mr. Nay knows that, when he says that the expenses bear a direct relation to the revenue. What relation has the expense to the revenue, when they haul pickles and preserves in glass at a lower rate than they haul iron and steel chain, when they have to haul pickles and preserves in glass at 58 cents 400 miles further than they haul iron and steel chain for 70 cents? I might add some questions about sanity.

Another rate on baskets, talked about a great deal in this case, the rate from St. Louis to Texas points, is 80 cents. On pig lead it is 75 cents.

They may haul pig lead 400 miles less than they haul the baskets, and yet the variation in rate is 5 cents.

There has been a lot of talk about baskets and the rate taking those things into consideration; what is the consideration of a man worth that says the variation between baskets and pig leads should be only 5 cents? And in the tariff the minimum on baskets is 14,000 pounds, and the minimum on pig lead is 36,000 pounds. And, furthermore, under this tariff baskets may be hauled 400 miles further than pig lead.

Q. On the contrary, pig lead may be hauled 400 miles further than baskets?

A. Yes, sir; in either case the revenue has no relation to the expense. Here are a few samples:

From St. Louis to Atlanta, Texas—those are flat rates—apples 41 cents per hundred. This is the same tariff, No. 70, effective during the last six months of 1907—apples 41 cents, with a minimum of 24,000 pounds, as compared with wire rope, 60 cents, with a minimum of 36,000 pounds. That is, the rate on apples is only about two-thirds what it is on wire rope.

Surely nobody would say that the casualty risk would be greater on wire rope than it would on apples, and the minimum fixed by the railroad itself shows that the density of wire rope is greater, because the minimum of apples is 24,000 pounds and the minimum on wire rope is 36,000.

Again, beer in glass from St. Louis to Atlanta, Texas, is 48 cents, with a minimum of 30,000 pounds. The rate on crowbars is 62 cents, with a minimum of 36,000 pounds.

Certainly beer in glass has a greater casualty risk than crowbars, and it would seem to me that the density might enter into that question. They could hardly put as much weight into beer in glass as they could into crowbars, and the minimum shows they don't expect to.

Again, lamp chimneys are quoted at 61 cents, as compared with crowbars at 62. Whoever made that rate certainly did not give attention to the casualty risk. Any man must know that crowbars would not be more likely to get broken than lamp chimneys.

Here are a few more rates, St. Louis to Atlanta, Texas:

Common brick is 17½ cents and pig iron 32½ cents. The common brick rate carries the valuation of five dollars per thousand brick, which would indicate that the railroads themselves anticipate such a hazard of breakage and hazard of carrying bricks, but they do not expect any on pig iron, which is practically indestructible.

Pickles in glass, 39 cents, and shot in double sacks, 52 cents, with minimum on pickles in glass of 24,000 and shot of 36,000 pounds.

Here is a flat rate from St. Louis to Marshall, Texas, quite a long haul, everything the Iron Mountain hauled would come through Arkansas, as I understand it.

There is a flat rate of 80 cents, with a minimum of 14,000 pounds on any one of the following articles, either in straight carload or in mixed carload lots.

Baskets, shot, paper bags, blacking, blueing, bottles, brushes, lamp chimneys, coffee mills, crayons, galvanized iron tube, galvanized iron pails, ink, lamps, lead, cotton mops, oil cans, oil tanks, paper, pipes—smoking pipes—ropes and twine.

Now these are just a few samples. You can take almost any waybill of a railroad, take one waybill after another and compare it, and you will find the same condition existing, and when gentlemen sit on the stand and say they consider casualty risk and bulk and all those items, I know they do theoretically, but they don't in the practical application of their rates, and it is in the face of these violent fluctuations; in one case they carry baskets and shot at the same price, and in another case they carry lamp chimneys at less than crowbars—and that traffic fluctuates and necessarily fluctuates; when I give these examples, I am not criticising the rates. I do not mean they are not practical and possibly the best rates possible; that they are not compelled by competitive conditions and proper conditions, too,

but I do say there can be no relation between cost and revenue when those rates exist, and it seems to me it must be apparent to anybody, and when Mr. Nay, knowing that, being familiar with those rates, and it being his duty to check them and keep in touch with them, says you must determine your cost or how much more it costs to move State business than interstate business, on the total revenue, I say he builds up a snow man, which I think he knows is a snow man, and in the last few lines of his essay he proceeds to knock him down." (R. pp. 1353-1356.)

The record is full of much other evidence showing the nonrelation of State and interstate rates, but it is confidently submitted that what is here given completely disproves a cost—or any other relation—between State and interstate rates. This evidence proves that rates in one tariff are not consistent with another, the differences are radical and far-reaching; and there is no standard of rates or relation of one class to another or one commodity to another, so that there could be a relation of one set of rates to another. If a relation was shown with one movement, say the Texas Common Point movement, it would at once be disproved as to another similar movement, say the Memphis movement, as each are moving on rates bearing no relation to each other. If a relation was established in lumber from Louisiana to St. Louis, it would be disproved on the movement from Louisiana to Kansas City. If the relation was found on coal from Illinois fields, it would be disproved by the relation on coal from the Alabama fields.

Then what is to be done with the traffic which moves wholly interstate all the cotton and most of the grain? There is no corresponding or relative intrastate movement in these commodities.

If classification has fixed a relation, then when the commodities are controlled by the Texas classification or Louisiana classification or come from other classification territory, to which shall the Arkansas classification be fitted? There are substantial movements from all.

The relation theory falls to the ground when confronted with the concrete facts.

This completes our review of the revenue theory in all of its aspects; both sides have been presented, we think, with fairness, usually in the witnesses' own words.

It is respectfully insisted that the assignments of error based on the use of this theory should be sustained, because it is proved by a decided preponderance of the evidence to be worthless for the purposes used.

## EXTRA COST OF INTRASTATE TRAFFIC.

In opening the discussion of this subject, we quote with approval this excerpt from the brief of the learned counsel for the appellants in the Missouri Rate Case.

"The issue tendered by the complainant is that it costs more to handle State than interstate freight. The evidence offered in support of that issue is that a way freight train is more expensive than a through freight train. The record is crowded with—indeed, it is devoted to the recital of details, important and unimportant, substantial and trivial, real and fanciful, nothing within the range of the imagination being omitted, to show that the way train is more expensive than the through train. The evidence so offered can not be said to be irrelevant because it does bear upon the issue. But in and of itself it is not sufficient to maintain the issue tendered. * * * Hundreds of pages of this kind of evidence were introduced by the complainant as if it were decisive of the issue; just as if the real issue is (as it is not) between 'way train' and 'through train' instead of being (as it is) 'State freight' and 'interstate freight.' "

The same confusion of ideas prevailed with all, possibly except Mr. Doddridge, of the plaintiffs' witnesses. At the time they testified, as is shown, the State had not worked out the statistics on the Iron Mountain road of the proportion of freight carried on the trains respectively of State and interstate, and was handicapped by not being able to put the exact facts before them, but the relative situation had been worked out on the St. Louis Southwestern by its officials and put in evidence as the basis of much of the plaintiffs' testimony, and when the witnesses were confronted with it, several of them candidly admitted their testimony was inapplicable to such a situation. The showing on the Iron Mountain, when finally worked out, was a vastly stronger refutation of their theories than the then available statistics.

Stronger against their theories than either of these tests was the test of Mr. Whitenton on the Rock Island, put in by plaintiffs after their other evidence was closed.

*The Plaintiff's Evidence.*

On the extra cost of intrastate traffic, the plaintiffs introduced Mr. McPherson, Mr. Doddridge, Mr. Sewell, Mr. Rawn, Mr. Ward, Mr. McKee and Mr. Whittenten. Mr. McPherson did not discuss the local and through trains as representative of the two classes of traffic as do the other witnesses. He was the first witness, and gave a great mass of details as to railroad operations and railroad facilities and the use of each by each class of traffic, some of it pertinent and much irrelevant. He based his argument on the long haul and short haul, and two terminals of State as producing the extra expense of the intrastate. He constantly compares the intrastate with the transstate as representing the two extremes. He argues that the transstate is the cheapest of all traffic, and uses less of the facilities of the road. He is a very tedious witness, and his testimony long drawn out; it is believed that these two excerpts fairly state the substance of all of it on this issue:

"Q. As to intrastate, but I am now asking you as to a comparison of the three classes.

I understand the reason you gave as to burdening intrastate traffic with greater expense, but I am asking you now for a comparison of the three grades of traffic.

A. I should say that so far as expense in Arkansas is concerned, the relation would be something like this:

In the transstate traffic there is no charge in the exhibits here for operation, for stationary service.

In the interstate traffic there would be one charge for stationary service.

In the intrastate traffic there would be two charges, in the exhibits filed here, showing the operating expenses of the road.

Q. Are these the only reasons you have for so grading these classes of traffic, according to their expense?

A. Those are the principal reasons, and the other reasons I have given would, of course, influence me in my answer to that question.

Q. What other reasons would influence you?

A. I believe I have spoken of the length of haul and of the elements that would enter into the variety of traffic.

Q. I don't quite follow you about the variety.

A. Well, the consideration of the character, value, risk, bulk, and so forth, of the freight or commodity.

Q. Does not that apply equally to all those classes of traffic except as to the length of the haul and the terminal expenses?

A. Yes, sir.

Q. Your reasons reduce themselves to the terminal proposition and the length of the haul.

A. No, sir; I can not say that. I have analyzed my reasons thoroughly, and if I should have to repeat them now it would mean repeating my analysis. (R. p. 346.)

Q. You say there would be greater efficiency of car service in interstate than in intrastate, and less cost for maintenance of equipment. That comes back to the same proposition of the length of haul and the use of terminals, does it not?

A. I presume it would, fundamentally.

Q. Your reasoning, then, in its final analysis places the difference in these classes of traffic, intrastate, interstate and transstate, upon the difference in the length of haul and the use of the facilities—terminal facilities, I mean?

A. And the consequences.

Q. Well, that would be included in it, I take it.

There are no other factors now that have influenced your judgment in this matter?

A. Yes, there are many other factors that have influenced my judgment.

Q. I would like to have them.

A. I don't know that I can reduce them to figures. They are matters of observation.

Q. Is there any further answer you would like to give, Mr. McPherson, to that?

A. There are other matters that apply to the consideration of these questions, that might exist one month and might not another month.

There is the handling of empty cars. The traffic—State traffic, is not well balanced and requires more empty cars to be handled to provide for its loading than is the case with interstate traffic.

Q. Anything else?

A. As I said before, this would be one of the additional reasons that I would have in mind. There are others, but they don't occur to me just now.

Q. The fundamental and principal one are the terminals and the length of haul?

A. The added equipment and the maintenance; the various results that are dependant on those factors and results that work out." (R. p. 348.)

It was also established by record evidence from two opposite periods of the year that the transstate did largely use the stationary facilities of the road. It was also shown that cotton platforms, cattle pens and other facilities were exclusively for the interstate traffic.

Later, it was shown by him and other officers of his company that in the exhibits here the large interstate traffic in and out of Fort Smith and Memphis (the latter being placed constructively in Arkansas), was interstate, and two terminal expenses incurred by it in Arkansas and all the transstate traffic passing through those gateways incurred one terminal expense in Arkansas. Furthermore, it was later developed that cotton—all interstate—had three terminal handlings in the State, much of grain and lumber, also large interstate movements had two, and sometimes three, terminal handlings. As they are established, it is well to bear them in mind when considering Mr. McPherson's basis reasons above quoted.

Mr. W. B. Doddridge, who had at one time been general manager of both of the railroads now before the court, was the next witness on this subject. As there is much repetition in the testimony, it is well to set out in full one witness so that the Court can get the full benefit of the reasons given for the extra cost. Mr. Doddridge states it stronger, more logically and has better experience to judge of it than any other witness, and therefore, his testimony on this subject is given in full.

"Q. Is there any difference in your judgment in the cost of handling State and interstate traffic?

A. Yes, sir.

Q. I wish you would give your views as to that difference and the grounds upon which you base them?

A. The difference in cost can not be accurately determined. Relatively but few of the expenses can be identified as directly attributable exclusively to either class of traffic. Under normal conditions, the best that can be done is an approximation based upon a system of averages.

After ascertaining certain of the elements of cost, it can be approximated by applying the per cents of expense thus obtained to those items of expenses that are common to all classes of traffic.

Individual cases have but little bearing upon the subject as a whole.

In considering this question, State lines are artificial and have no effect other than in a technical sense.

Under equal conditions as the haul shortens, either in the freight or in the passenger service, the proportional cost increases.

As the density of an evenly balanced traffic increases within certain limits the ratio of cost decreases.

The reason for this is, that a large percentage of expenses is stationary and have nothing to do with the haul.

It is the circumstances and conditions under which the traffic is necessarily handled that affects its proportional cost.

Interstate freight is in two classes, each handled under somewhat dissimilar conditions.

That part of which is transported across the State, as upon a bridge, and that part which originates or has its destination within the State, and in that respect is local freight.

Transstate freight has a small percentage of terminal expense within the State; and the interstate freight has but one terminal expense.

But for economical reasons both classes of freight are sometimes rehandled at divisional or junction points.

The great bulk of intrastate freight is carried upon local or way freight trains, in common with such interstate freight as there may be for distribution or collection.

This train is run daily, except Sundays and holidays, as nearly as practicable in daylight only. It does the local switching along the line and any other local work that may be required. The train crew load and unload less than carload freight.

It is a special, arbitrary freight service, run without regard to the tonnage-load to be moved; and, therefore, as measured by its performance is a very expensive class of train.

Upon branch lines the local trains do all the business, as a rule.

The through trains are loaded with transstate, interstate, and a small percentage of State freight. They are started from massing points and are not usually run unless there is a tonnage-load, or run for the purpose of balancing the power.

The intrastate freight traffic is the shortest haul business handled by the railroads in Arkansas; and for that reason, if for no other, is the most expensive.

It is true that quite a large amount of interstate freight is carried upon local trains, but the proportion of that class of interstate freight to the total of interstate freight is very small.

Q. Can you state approximately what portion of the freight carried on local trains belong to each class of traffic; that is, intrastate and interstate?

A. I have no definite information upon that point; but, based upon my general knowledge and experience with railroads in Arkansas, I should judge that the greater proportion of the load of the local trains is interstate freight.

But, at the same time, the bulk of the State freight is carried upon local trains, and but a small proportion of the total interstate freight is carried on local trains.

Q. What proportion of the intrastate freight is carried in local trains; that is the question I want you to answer.

A. On the St. Louis Southwestern Railway 8 per cent of the interstate freight is carried upon local trains; and 92 per cent is carried upon through trains—as shown by their test made in October, 1908.

I can not state what the proportions are on the St. Louis, Iron Mountain & Southern Railway, but the exhibits filed by that company show that a little less than 20 per cent of the total tonnage is local or intrastate; and that something over 80 per cent is interstate.

It is also shown in evidence that 51 per cent of the traffic of that road in Arkansas is transstate.

It would, therefore, follow that a very small proportion of the interstate freight is carried on local trains, but I can not state what that per cent is.

Q. If it is true that a small proportion of the interstate freight is carried on local trains, does it not follow that a very large proportion of that class of traffic is not subjected to the local train expense that accrues against local traffic, and to the increased expense growing out of the difference between the long and the short haul?

A. That is true. Only a small percentage of the interstate traffic is subjected to the high cost of the local trains.

Q. In what manner does the terminal expense increase the expense of conducting local traffic?

A. All the terminal expenses are the same, without regard to the length of the haul; therefore, these expenses per ton per mile increase as the haul shortens.

What is meant by "terminal expense" is the point of shipment and point of delivery. The terminal expense includes labor at stations, supplies, and all the facilities used in the transaction of business, such as house tracks, team tracks, yard engines, switchmen, and the cost of the maintenance of these structures.

The average length of haul on the freight business handled by

the St. Louis Southwestern Railway in Arkansas, as shown, is, interstate 231 miles; intrastate 44 miles.

The average interstate haul is 5.3 times greater than the State haul.

The average length of haul on the freight business handled by the St. Louis, Iron Mountain & Southern Railway in Arkansas, as shown in the exhibits filed by that railway are interstate 224 miles; intrastate 70 miles.

The average interstate haul is 3.2 times greater than the intrastate.

Therefore, the terminal expense in the case of the St. Louis Southwestern Railway is 10.6 times greater than the terminal expense of the interstate freight.

In the case of the St. Louis, Iron Mountain & Southern Railway it is 6.4 times greater than the interstate freight carried by that company.

This estimate does not makes any allowance for the absence of terminals in the transstate freight by either company.

Q. Do the additional terminals involve a large element of additional expense in the transportation of the local or State freight?

A. Yes, sir. I am not advised of the exact percentage that the terminal expense bears to the whole expense of operating the railroads, but it is usually somewhere in the neighborhood of between 15 and 20 per cent." (R. pp. 457-460.)

Analyzing these principal statements one by him in the light of the exhibits and established facts:

(1) That part which is transported "as upon a bridge." This is the origin of the "bridge theory" of transstate freight and its lesser cost, which is so utterly overthrown by record evidence as to become ludicrous. It is presented at great length hereafter.

(2) He says: Transstate freight has but a small percentage of terminal expense, and the interstate but one. All transstate has an average of three divisional handlings in the State, which are almost, if not quite, equal to terminal handlings. Much interstate has two and three terminal handlings.

(3) He says: For economical reasons, both classes of freight are sometimes rehandled at divisional or junction points. The through freight divisions are on an average 98 miles, the haul through the State about 300 miles. The local freight divisions are on an average 74 miles. The average intrastate haul is 70 miles on one road and less on the other. The intrastate freight on an average can have no divisional handling, that having one or more is compensated by that having none. The transstate handlings have these and all the interstate—224—will average two.

(4) The great bulk of interstate freight is carried on local trains: The statistics show that on the St. Louis Southwestern Railway 22 per cent is carried on the through; and on the Iron Mountain 61 per cent is carried on the through.

(5) He says: The greater proportion of the load of the local trains is interstate, but the bulk of the State freight is carried on the local. Mr. Doddridge is the only witness for the plaintiffs who recognizes that a greater proportion of the load of the local is interstate, but he misses the other proposition almost as badly as the other witnesses for the plaintiffs, that the bulk of the State freight is carried on the local; he was correct as to the St. Louis Southwestern Railway, there being only 22 per cent of the State freight carried on the through, but on the Iron Mountain 61 per cent of the State freight was carried on the through.

(6) His calculation to show that the terminal expenses increase by average length of haul is an egregrious blunder. The reasoning, using the Iron Mountain figures, is, that the average interstate haul is 224 miles, and the intrastate 70; therefore, each ton of intrastate freight is hauled 3.2 times as far and handled 6.4 as much. But distance is not a factor in this handling; this is not moving, but stationary expense. The average length of the haul has nothing to do with this terminal handling, the State freight is handled twice—whether the haul is 10 miles or 100 miles—the interstate (saving many exceptions elsewhere mentioned), is handled once—whether hauled 100 or 300 miles. The character of freight—intrastate or interstate, fixes its amount of handling in the State and the character and movement fixes generally its handling. As soon as a shipment is determined as intrastate, it is at once apparent it has two terminal expenses in the State. As soon as it is determined as an interstate, one; unless transstate, then none, but numerous divisional handlings; much interstate and some transstate has three handlings, cotton from Louisiana or Oklahoma to Boston, compressed in Arkansas, while transstate, would have two terminal handlings in Arkansas. Wheat from the northwest going into an elevator at Little Rock and resold in the State would have three terminal handlings in the State although an interstate shipment. All the Fort Smith and Memphis traffic—all interstate—would have two terminals so far as expenses go in Arkansas. But aside from these physical facts changing the force of the statement, the proposition is *per se* wrong, even assuming all interstate one and all intrastate two. The terminal handling at origin and destination is a matter of handling tons and cars, not ton mileage. The State, in its plan of division of expenses puts station expenses—the item to which the instant kind of terminal expenses is applicable—upon a ton basis. It counts each intrastate ton twice, and each interstate ton once, and divides accordingly. This accurately divides this expense between the intrastate and interstate. When it takes three intrastate cars to equal one interstate, then to the intrastate six terminal charges accrue; when one intrastate car equals one interstate car, two accrue against one. If the average hauls are made up of three cars in each class of traffic, then the intrastate will stand two charges to one instead of six to one. If more it will accordingly

be charged with more. It is a question of tons—not miles. There is an absolute lack of relation between tonnage and average length of haul. Mr. McPherson used the same argument in piling up extra expense to intrastate. (R. p. 323-326.) He takes the same average hauls, but resolves the fraction against the intrastate, using four intrastate shipments to equal the mileage of one interstate. He takes one car of 20 tons moving from Texarkana, Texas, to Nuckells, Arkansas, 224 miles, and four cars of 20 tons each moving between Nuckells and Corning, 70 miles, and an intermediate movement to equalize distance. He explains the identity of the service and argues that it was repeated eight times in the State for the four cars of intrastate freight as against one such service for the one interstate. He takes the average mileage in interstate traffic and average mileage in intrastate traffic, and then increases the intrastate tonnage so as to bring the two classes together on an equal ton mileage. The ton-mileage has nothing to do with producing these expenses. Mileage does not produce nor affect them. At page 315, discussing the ton-mile basis, Mr. McPherson says:

"The ton-mile basis makes no provision for terminal expenses, because there are no ton-miles at terminals that represent the expense.

"It only attaches as a unit of measurement between two given points, the beginning and the end of the journey, but does not consider the expense at either end. It can not measure the expense at either end."

Yet, both he and Mr. Doddridge use the ton-mile basis here to work out extra expense against the intrastate. We have gone into this fully at this time as it is the first appropriate place to point out one of the errors of the trial judge. Doubtless misled by the plausibility of the argument of Messrs. Doddridge and McPherson, he rejected the State's plan of dividing station expenses (tons, multiplying the intrastate by two), and adopted the ton-mile, multiplying each intrastate on the Iron Mountain by six, representing three times the haul. (R. p. 2628.)

Elsewhere we have discussed the ton-mile as a possible factor to divide property; then it would be ultimately representative of the whole freight traffic—the result of use of the freight equipment and facilities. To use it as a factor to divide any expense except train expense when it may be used "as a unit of measurement between two given points"—has been so heartily condemned by Messrs. McPherson, Doddridge and Nay, that its use here to augment terminal expenses against the intrastate traffic is *contra bonos mores.* The State, probably giving too much weight to the testimony of these learned experts on the iniquities of the ton-mile as a basis to divide expenses, in its plan only used it "as a unit of measurement between two given points;" but it seems on further reflection that to some items it would be appropriate, certainly more so than the revenue; but its vital weakness is in applying it to terminal and station

expenses, as so forcibly pointed out by them and yet here is where they use it to point the tale against the intrastate.

Mr. Doddridge's evidence on the passenger side of the question, follows:

"Q. Is there any difference in the cost of transporting State and interstate passengers?

A. Yes, sir.

Q. What are the reasons that constitute or cause that difference?

A. The general principles affecting the ratio of extra cost, short haul freight traffic, applies to the short haul passenger traffic; but not in so pronounced a degree, as the elements of weight and time are absent.

The length of the journey of each State passenger upon the St. Louis Southwestern Railway, for the year ending June 30, 1908, was 23 miles.

The length of journey of each interstate passenger was 121 miles.

Therefore, to produce an equal number of passenger miles 5.3 State passengers were handled to one interstate passenger.

For the St. Louis Iron Mountain & Southern Railway, the average journey was for a State passenger 30 miles.

And for an interstate passenger 118 miles.

To produce an equal number of passenger miles, 3.9 State passengers were handled to one interstate passenger.

The use of two terminals for each State passenger, which includes ticket sellers, baggage handlers, the maintenance of depots, yard service, light, heat, and in some cases extra daily train service upon the main line, run especially to accommodate local traffic, increases the cost of train service arising from the frequency of stops to receive and discharge the short haul passengers and baggage; which includes the wear and tear of equipment, and the increased road speed to make scheduled time; the constitutional requirements providing for separate depot accommodations in coaches.

The increased casualty cost arising from the increased number of passengers boarding and alighting from trains at stations.

The carrying of passengers upon mixed trains.

Q. Those are all elements which you think enter into this increased cost?

A. Those are all elements upon which the extra cost is based.

Q. Are there any other elements that cause extra cost in the carriage of intrastate passengers, such as stations, yard service and things of that sort?

A. I have referred to those elements in a general way.

Q. What do you think is the difference in cost, Mr. Doddridge?

A. In my opinion the proportional extra cost in Arkansas will range from 20 to 30 per cent." (R. p. 464.)

On cross examination, Mr. Doddridge modifies this statement as to ticket sellers at two terminals, and as to yard service, and as to separate coach laws. (R. pp. 487-490.)

(1) He attempts to use the passenger-mile basis here to show extra cost of intrastate as he does the ton-mile on the freight side.

(2) On the St. Louis Southwestern Railway, there are no through trains, and on the Iron Mountain only 8 out of 56 are through trains. The local passenger train, carrying indiscriminately interstate and intrastate, is not a factor of extra expense to the intrastate here as it attaches alike to both.

(3) Owing to the large passenger traffic in and out of Fort Smith and Memphis charged with two terminal handlings, and the undisputed evidence of Maurice Wright explaining the handling of interstate and transstate passengers at Little Rock and other junction points, it is established that little, if any, extra expense can attach on that score. In the State's plan of separating expenses, it, however, charges itself with two terminal handlings to one for the interstate; an allowance which will manifestly more than take care of all extra cost.

Mr. I. G. Rawn, President of Chicago, Indianapolis & Louisville Railway Company (Monon Route), testified for the plaintiffs, his testimony beginning at page 672.

He was asked the difference in cost of operating local freight trains and through freight trains, and explains at length and in detail the greater expense incident to the operation of the local freight train (R. pp. 673-676.) Briefly, they are: The greater time on the road of the local between given points, due to stopping for local work at stations, incurring greater time for the employees; rate of pay is higher; greater consumption of fuel and supplies; additional switching at local stations; greater capital invested in locomotives and cars for local service on the road; larger station forces consequent upon local business; the train load of the local much less than in the through; through trains run only for a load while the local run is scheduled irrespective of load; even if local is loaded full its full load is not equal to full load of through; consequently less efficiency for the locomotive; he considers no additional maintenance of way expense of the local over the through, but an additional expense for maintenance of locomotives; additional sidetracks and cost of maintenance for local traffic, but expense of passing tracks for the through would equalize this.

It will be later seen that every item mentioned by him is properly cared for in dividing costs between local and through trains. After he finished his dissertion on extra cost of local trains, he was asked what relation, if any, there is between local and through traffic, and State and interstate, and answered:

"A. For the purpose of determining the cost of operation of transportation, the question of State and interstate traffic is not the method of consideration. The method is that of through and local business.

I would consider, however, that the relation (if it may be termed so), between through and local business, and State and interstate business, would be that State business might be termed a local business, and interstate business a through business.

I would not consider those lines as accurately drawn, but State business is of necessity limited in territory and extent, and so is local business. So that I presume, to a very great extent, on railroads throughout the country, the local freight trains as a rule would be confined to within States, although that would not wholly apply, and railroads do not run their local freight trains with a view to confining them within State lines. But to my mind, there would be a relation between State and interstate business, and through and local business, in that State business would very nearly conform to what we term local business, and interstate business would ordinarily conform to through business; if that answers your question.

Q. I wish you would state, taking into consideration the direct train expense and other expenses, such as terminal at stations, the difference in the cost of maintenance, either of way or equipment, and all the elements that have been mentioned by you, what difference you estimate there is in the expense of conducting local as against through business?

A. That subject has been a matter of very great consideration on all railroads for a long period, for many reasons and many purposes, and my own deduction and investigation leads me to say that I have regarded—and it has been universally regarded—that the operation of local freight trains—the direct cost of operation of local freight trains, as compared with through freight trains, is a minimum of 3½ times more.

That has been a generally well accepted basis, I think I am safe in saying, excepting further, that there are a number of elements entering into the cost of local freight trains, as compared with through freight trains, that increases that difference."

He sums up the full difference, adding station expenses, capital, etc., as five times. (R. p. 676-8.) On cross examination the proved facts in regard to lumber, grain and cotton—interstate movements—largely handled on the local trains were stated to him, and he was asked if, in view of these facts he regarded a close relation as existing between the local train and intrastate traffic and answered:

"A. I stated a moment ago, or intended to state, in answer to your question, that while there is more or less interstate business moving on local trains, as you say, I give it as my opinion that the great preponderance of freight moved on local freight trains, is State freight and not interstate. That is my best judgment. The question of territorial boundaries of local freight trains has never been, as I said be-

fore, regarded as between State borders; but I think that investigation throughout the country will show that perhaps more largely confined to within State borders.

Q. I understood your general proposition, but I was calling your attention to what was in evidence in this case, as to conditions in Arkansas, and asking you—assuming these conditions that I have stated, to be true—if that would not disturb somewhat the relation which you have given of interstate to local, as you generally find it?

A. Well, I should think if it is shown to be a fact that the local freight trains in the State of Arkansas actually handle the preponderance of interstate freight, that is one thing, but I would have to say that in the first place, I have no knowledge of Arkansas, and in the second place, the statement you make with reference to local freight trains in Arkansas has not been my experience during my time.

Q. That is what I supposed, and the reason I was stating to you what we conceive to be the facts that have been developed here, and ask you to give your views, assuming the facts I stated to you are correct.

I take it those are not what you have generally found to be the case?

A. No, and therefore it seems to me that I am not competent to discuss a matter with which I am not at all familiar.

Q. I would not think of questioning your competency to discuss these propositions.

A. I thank you very much, but I question my own competency, because I have no knowledge of them.

Q. Then, if the situation in Arkansas is about as I have outlined in these questions, you would not consider yourself competent to discuss the relation of the local to the through?

A. No, because it is at variance with my experience. (R. pp. 681, 682.)

W. J. McKee, General Superintendent of the Missouri Pacific, formerly division superintendent in Arkansas, next testified, beginning at page 687.

He was questioned as to local and through trains, and character of freight carried on each, and says the freight on through trains is mostly interstate, very little intrastate carried on it. (R. p. 689.)

The local train he says largely consists of "less than carload freight" (L. C. L.) (R. p. 690.)

He repeats practically the same reasons given by Mr. Rawn for the greater expense of local and through trains, running in the additional theory that the greater expense of L. C. L. freight on it than the through. (R. p. 690, 691.) In fact, he regards the local as principally a vehicle for L. C. L. freight. It is in evidence that taking the two test months and calculating from their statistics as was done by Mr. Nay, there is proportionally more L. C. L. interstate than State (R. p. 2059), and if the local train is the vehicle of the

L. C. L., it is more for the interstate than the intrastate. Moreover, the only statistics in the case giving amount of L. C. L. on through and local trains is the St. Louis Southwestern Railway test month statistics, exhibits 19, 20. It is seen therefrom (R. p. 2377), that the through train carriers 80 per cent of the L. C. L. and local 20 per cent of it.

Mr. McKee also testifies that the local passenger train is the more expensive and gives his reasons therefor. (694.) As there are only eight through passenger trains on both these roads, that point is not worth considering in this case. It is, however, rather amusing to see that the General Superintendent of this system regards the passenger traveling on local passenger trains as synonymous with intrastate passenger. (R. p. 695.) If he is correct, the interstate passenger traffic is certainly a negligible quantity.

He says the interstate freight carried on local trains "is so small it is hardly a mathematical problem." (R. p. 701.)

The tests show 72 per cent on Iron Mountain of the load of the local is interstate, a pretty fair "mathematical problem." Another case of theory v. fact.

Mr. Edmund D. Sewell, assistant to the President of the Chicago, Milwaukee & St. Paul, and vice president of Chicago, Milwaukee & Puget Sound Railway Company next testified, page 703:

Over objection, questions were put to Mr. Sewell as to the difference in manner of conducting State and interstate business as if there was separate trains for each class, but he answered them as if he understood all local freight loads were intrastate and all through loads interstate. (R. p. 704-710.)

"Q. Now, all your testimony that has been given heretofore, has not been in relation to State and interstate, but has been in relation to through and local?

A. No, sir; in connection with State and interstate.

Q. Let us get that clear now: I understand these expenses that you put there as four times, was on local trains as against through; is that right?

A. Yes, sir.

Q. You are treating that as synonymous with State as against interstate?

A. Yes, sir.

Q. That is, you are disregarding the amount of interstate traffic of the local train, and disregarding the amount of intrastate traffic of the through train?

A. Yes, sir.

Q. I believe you stated a while ago that you did not know the conditions in Arkansas?

A. I did." (R. p. 711.)

A summary of some of the established facts regarding the situation in Arkansas together with the statistics of the railroad in exhibits 19 and 20 (R. p. 2375-2377), were put to Mr. Sewell and he said:

"A. If the conditions in Arkansas are such as you have described, and as the evidence states (which, of course, I do not question), and there is no other situation which would offset that to any considerable extent, the testimony I have given would not apply to the conditions in Arkansas.

Q. What would you say, in view of what I have stated to you to be what I understand is the testimony here, and in view of these statistics of the railroad company, of this four times as much to operate State as interstate freight?

A. I could not tell at all without having their traffic figures and knowing what their traffic was as a whole." (R. p. 715.)

Mr. Frank E. Ward, General Manager of the Burlington line east of the Mississippi River, was the next witness. He was one of the railroad's principal witnesses both in chief and in rebuttal. His testimony in chief begins at page 722.

Mr. Ward very intelligently and fully discusses operation of local and through trains and greater expense of the local and the reasons therefor. Then this occurs in his testimony:

"Q. Do the local trains carry any interstate freight and do the through trains carry State or local freight?

A. Yes, sir; I think ordinarily there is some interstate freight in local trains; and some State freight in a good many through trains. But I should say, as a rule there is very little State freight in through trains." (R. p. 725.)

In view of 61 per cent on the Iron Mountain of intrastate freight on the through train, his testimony loses force.

Then he discusses the greater expense of short haul (intrastate), compared with long haul (interstate), and difference in terminal expenses.

He says that interstate freight never has more than one terminal handling, and transstate none. (R. p. 728.) He badly misses the mark on that so far as Arkansas is concerned. He estimates State freight as costing five times the interstate. (R. p. 729.)

Then he takes up the passenger side of the problem. He stresses the expensive local passenger train running only in daylight. (R. p. 729.) Then he discusses the added expense of short haul against the long haul. He concludes with an expression of opinion of 40 per cent to 50 per cent extra cost for intrastate passenger. (R. p. 730.)

On cross examination, this occurs:

"In speaking of these five times more cost for handling State freight, you mean by that freight which is carried on the local, don't you?"

A. Well, I took that into account as the principal item going to make up the total of State freight; and meant it in the broad sense

that it does cost in my opinion five times as much to carry State as interstate, taking that element into consideration.

Q. Basing that principally upon the proposition that you think the local train carries largely State freight?

A. Yes, sir.

Q. And the extra cost is the extra cost of operating the local train?

A. Well, yes; the local train and all the freight that is carried on that local train.

Q. There is no difference in the cost of freight, State or interstate, *per se?*

A. No, sir; it is because of the different character; State being short haul and interstate being long haul." (R. p. 731.)

Mr. W. M. Whitenton, General Manager of the Rock Island line in Arkansas, Oklahoma and Louisiana, was the last witness on this subject. His testimony begins at page 749.

Mr. Whitenton gives a more detailed and exhaustive analysis of the extra cost of the local freight over the through freight than any of the witnesses. (R. p. 751-754.) He gives 13 separate items. On the passenger side he gives seven separate items. (R. p. 755.) His testimony forcibly brings to mind the quotation with which this chapter opens:

"The record is crowded with—indeed, it is devoted to the recital of details, important and unimportant, substantial and trivial, real and fanciful, nothing within the range of the imagination being omitted to show that the way train is more expensive than the through train."

As applied to the established fact that 61 per cent of the intrastate freight is carried on the through trains, and 72 per cent of the load of the local is interstate, on the Iron Mountain, the whole force of Mr. Whitenton's testimony is broken when it is seen to be based on a radically different thought of it.

"Q. Mr. Whitenton, is there any difference between State and interstate traffic, in the handling of it?

A. Judge, I don't know that I just get your meaning.

Q. Does not State and interstate traffic move in the same cars, by the same men, and pulled by the same engine?

A. Yes, sir; that is true.

Q. In both the questions and answers in your testimony there seems to be an interchange in the word local as compared to State, and through as compared to interstate; do you mean it that way?

A. I mean this: That in my belief the State business is largely a short haul business, and for that reason it is naturally handled on the local freight trains. That is the only distinction I make between the handling of State and interstate.

Q. The length of the haul?

A. Yes, sir.

Q. And owing to the length of haul, would more probably be handled on local trains?

A. Yes, the short haul business more naturally falls to the local freight train in the conduct of the business. (R. p. 758.)

Mr. Whitenton says cotton has three terminal handlings in Arkansas before it leaves the State. (R. p. 763.)

Grain in intrastate traffic, he says, is negligible, and that the movement into the State is very large, and it usually goes to Little Rock into an elevator, unloaded, reloaded and shipped out again, three terminal holdings in the State. The great majority of lumber goes out of the State, and in its movement, it first is carried to a mill, there unloaded, planed and reloaded and shipped into other States, three terminal handlings. (R. p. 763.)

Mr. Whitenton's test of the loads of local and through on his line is set out in another connection.

This completes a summary of all the plaintiff's case regarding extra cost.

## EXTRA COST OF INTRASTATE.

*State's Opinion Evidence.*

The State did not rely upon opinion evidence on this proposition, and, as will be seen, developed the actual situation and presented facts against theories, but it was not without opinion evidence on the subject, and from men better posted as to actual conditions than the presidents, vice presidents and general managers of other roads whose testimony has just been summarized.

Mr. James C. Lincoln, Traffic Commissioner of the St. Louis Merchants' Exchange, was put on the stand by the State as to rate matters, but plaintiffs cross examined him at length as to operating questions, and as he had had a long and varied railroad experience, he was a thoroughly qualified expert. In his cross examination, he was asked if there was not a very large increased expense in operating a local as distinguished from a through freight train, and says:

"A. There is a larger expense in handling local as compared with through trains.

Q. I would like you to state, in a general way, what produces that increased expense in the operation of local trains?

A. The increased expense in connection with the operation of local trains is the constant service that is required at the local points as they go along, in stopping trains and starting trains, as well as the switching service. There is also some additional expense attached to the conduct of the trains in the way of expense of employees' overtime, usually. (R. p. 967.)

* * * * * * * * * * * * *

Q. You would say then, that there is very considerable increase of expense in the operation of local freight trains over through trains, would you not, Mr. Lincoln?

A. No, I would not say it was so considerable. When I say that, Judge, I do not want to be misunderstood in it.

Q. And I do not want to frame my question so as to mislead you.

A. I do not want to be misunderstood in connection with the operation of the local trains. The local train is handling interstate and State business at the same time; the expense goes to both.

Q. I am not speaking now of expense as applied to State and interstate. I am speaking of operating local—

A. The expense of operating the local trains is greater than the expense of operating the through trains.

Q. Is it not very considerably greater?

A. I don't think it is, but I am not competent to testify on the measure of it." (R. p. 968.)

The various items making up the extra expense of the local train of which he was cross examined in detail, and the double terminals for intrastate, the consequent greater expense of the short haul, the lighter loading of short haul traffic, and those various other matters, he had in mind when he testified that the higher intrastate revenue representing the short haul more than compensated for the extra cost. (R. p. 915.) He also testifies that the cotton movement in Arkansas is very large, and that there are three terminal handlings of it, and the first movement is always L. C. L., and the whole traffic is interstate. Most of the grain also has three terminal expenses, and it is handled on transit rates, and is interstate. (R. p. 984.)

Mr. Willmering, Auditor of the Oklahoma Corporation Commission, was cross examined in regard to all the items in the State's plan of separating expenses, and gives this pointed testimony, which is pertinent to this issue:

"Q. I observe that you make no allowance on account of local service in your division, you divide it straight:

In exhibit K, filed by Mr. Wharton, he adds 50 per cent to local engine mileage for station switching.

A. Yes, that is an arbitrary allowance and it is favorable to the interstate business. It is following the theory advanced by the railroad experts and it is unfair to the State.

Q. Why.

A. Because it is both, foolishness. The idea of wanting to charge additional maintenance for switching expense to local freight trains! Any one that has been in the railroad service and observed these things daily would know that it is humbug.

Q. You think there is no more station switching on local than on through?

A. Certainly; but the local trains are doing switching for the through trains in reality, under existing conditions—

Q. What do you mean?

A. A through train sets out—a carload of interstate freight. That through train don't stop there to spot that car at an industry

track, or spot it for unloading or loading at the team track or the industry located at that station; but the way freight train, which is the workshop of a railroad, it goes along, follows that through train and performs that switching service—

Q. You think an extra charge ought to be made the other way?

A. I believe there ought to be some plan devised where the time employed by the local train crew to that particular character of switching—which ought to be ascertained and could be, for the future; for the past there has been no record kept of it.

Q. In your view, it should be charged to the through instead of the local train?

A. The through train should be charged in reality for whatever service was performed by the work train.

It is a misnomer, calling a way freight train a local train and trying to confine it exclusively to State traffic, which, by inference, a great many railroad experts have tried to either mislead the layman; it is unfair on the part of the railroad experts by inference to assign all this extra cost to a local freight train, and by inference allow some one to believe—who is not familiar with the real conditions—that this local train performs exclusively service for State business. It is a wrong inference for those railroad experts, and it is unfair for them to assume anything of that kind." (R. p. 1141.)

In redirect, Mr. Willmering stated succinctly his views on this subject as follows:

"Q. I don't know that I quite understand your position on the local and through service, and I will state what I gather, and ask you if it is right and if not, wherein it is wrong; that you don't think it right to charge these additional sums which have been called arbitraries, like 50 per cent local train for extra switching, and others, because you regard the local train and the through train as both doing State and interstate traffic, one helping the other one, and that the difference, if any, in the expense of local over the through, should not be recorded in the final division between State and interstate?

A. That is the position I have taken, yes, sir; that the services are largely reciprocal; there is a sort of reciprocity, and at division points where they employ yard engine service, it is true that the yard engine performs the switching for the local trains as well as the through trains, but all the switching that is performed for through trains as a rule, with very few exceptions—as a rule all switching performed for through trains, interstate business, is completed by local way trains, at way stations." (R. p. 1159.)

Mr. Bee was asked how much of the switching is done for the through train by the local, and says:

"A Virtually all of it. All cotton is picked up and carried to a division point, at least. The through train sets out cars at a terminal point and the local train takes them out to their destination.

The local train sets the empties for the grain and for all of that movement and brings it back into the terminal and gives it to the other train. But for a local train, it would be impossible to run through trains. There is no question about that. They might run through trains in Arkansas—in Missouri, without a local train in Missouri, but if they did they would have to have them in Arkansas. They might cut them out of one State, but they could not operate through freight trains unless they had local freight trains.

Q. I will call your attention to another matter that is in evidence, and ask you if you know anything about that; that is the lumber traffic:

It is in evidence here that logs are hauled to a sawmill in the local train. They are to be manufactured and shipped out to St. Louis and outside of the State. They are carried sometimes to the nearest division point on local trains, and sometimes on the local train directly to the sawmill point; are you familiar with that situation?

A. I am. The through train handles nothing except freight that originates for it at big towns, unless in exceptional instances if there is a carload of perishable merchandise for some small jerk-water station. The through train may get instructions to stop there and get that; it has been set out—what we call "first out" at the end of the track; they have to make one cut; they pick it up and then go ahead. That, however, is exceptional.

The local train is supposed to clear up its division and get everything into the terminal, north or south or west, whatever direction.

Q. The local train is clearing up the way for the through train to go out without any interruption?

A. Yes, the local train lays on the side until the through train gets through. The through train has a time-card right which the local train has to regard and has to observe. She starts from one station to another and finds a little more work at a siding than she expected; her time is up; she can not make the next station. The result is she goes into a "hole" and stays there for one, two or three hours, waiting for the through train to come along, sometimes having a man walk to the next station to telegraph—

Q. It is sort of a "beast of burden?"

A. Yes, and it is the one that you can never put the last straw on the camel's back and break it.

Q. Is it serving State and interstate, both?

A. So inseparably that you can not find it.

Q. I would infer from some of this testimony that it did not serve the interstate?

A. The man who testified to that either did not know or was not fair.

Q. Of course he was fair. He was going on a theory, probably." (R. p. 1199, 1200.)

Regarding L. C. L. freight, he explains at length that much of it has three terminal handlings in the State. The summary of his statement is this:

"Q. In comparing the terminal handlings of State and interstate L. C. L. freight, you attribute two terminal handlings to State freight, and what number to interstate?

A. Some of it will have one, some will have three; I went into that largely this morning.

Q. You base your assumption of three handlings upon the proposition that you described here this morning, it was loaded, came in, unloaded, and perhaps back-hauled?

A. Yes, sir; and the further condition of traffic from Fort Smith and Memphis which I did not take into consideration this morning." (R. p. 1305.)

## THE "BRIDGE THEORY" OF TRANSSTATE TRAFFIC.

One of the basic proposition in the plaintiff's case is, that transstate freight passes through the State "as on a bridge." The conclusion reached therefore that no terminal and little station expense attaches to it; comparatively few of the facilities of the railroad are called into play in handling it, and it is by far the least expensive freight hauled. The transstate being 51 per cent of the Iron Mountain traffic, and it moving through the State on a bridge leaves the great mass of the expense to attach to the strict interstate and the intrastate, and principally to the latter.

Mr. Doddridge is the father of the bridge theory in expression, and Mr. McPherson in statistics.

The State met this testimony with an examination of the records of the transstate movement on the Iron Mountain road.

The data gathered is not disputed and is conclusive on this question, and also furnishes proper bases for distribution of yard expenses and station expenses.

The testimony of Mr. McPherson on this subject, and of Mr. Doddridge is found at page 1432—where it is repeated—and then this testimony was adduced from Mr. Hamilton, who got his facts from the records of the company. It may be explained here that under orders of Court, the State's accountants had full access to the records and books of the road:

"I will ask you if you have made any investigation of the records of the facts in regard to this theory upon which these gentlemen have spoken, as to transstate business passing through the State as upon a bridge, and if you can, give us the results of your investigation upon the facts, as opposed to the theory upon that subject."

A. I have here a record of about 3,000 cars, 1,454 in October, 1907, and the balance, 1,560 in March, 1907, a spring month and fall month.

Q. Describe how you got at that movement and the result of it?

A. In endeavoring to see just how long it took this transstate freight go through Arkansas, and how long it was on the company's rails, in Arkansas, in completing its journey across the State, and how long it remained inside of the State, we had recourse to the waybills for what we thought were typical movements of that character of freight. That is, we took in the October month, billing from Texas roads, going to the Iron Mountain at Texarkana, and moving via Little Rock and Van Buren, and on out into Oklahoma and beyond, destined to Kansas City points, in that territory or beyond.

We took the movement from Louisiana, crossing the State line some distance below McGehee, and leaving the State line five miles above Van Buren, destined to Kansas City and points in that territory.

We took the movement from Memphis, via the Memphis division, main line and the White River division, the last terminal in the State being Cotter, going to Kansas City and points in adjacent territory.

We took the movement from beyond Texarkana, straight up the main line into Missouri, the last terminal in Arkansas being Hoxie.

We took the movement originating in Louisaina and moving via McGehee, Little Rock, Hoxie and into Missouri, and the movement originating at Memphis or beyond, moving via Bald Knob, Little Rock and Van Buren, and so out of the State to Kansas City and adjacent points. By the way, that movement from Texarkana to Hoxie, if I said that was headed to Kansas City, that was in error; it was to St. Louis.

We took the movement southbound from the White River division, main line, Little Rock, and out into Louisiana by the way of McGehee, that being the last terminal.

The movement from Van Buren, coming from beyond, and going out into Louisiana through McGehee.

The movement coming down the main line from Missouri and going off into Texas at Texarkana.

The movement from Missouri and beyond over the White River division, main line and Memphis branch, to Memphis and beyond.

We went to the billing without knowing where we were going to find the movement of the cars, abstracted all the cars for a period of fifteen days, then traced the cars into the first terminal in Arkansas, and out of the last terminal in Arkansas, most of them being very close to the border, because the only record we could get was at the last terminal.

The record we have of their movement is actual, it is taken from the wheel reports, showing the movement in trains into the first terminal, and the movement out of the last terminal; the intermediate time was spent in Arkansas.

All those cars, on the movement from Texarkana through Van Buren, a distance of 298 miles, the schedule time for which move-

ment, linking up the through freight schedules, without any terminal delay, is 28 hours.

Q. Where did you get that?

A. From the company's official time cards for the ordinary freight. The company classifies its trains between Red Ball, Green Ball and ordinary, and this is the slow time.

On that movement, there were 100 cars, which consumed in total, 1,477 days, or an average of 14.7 each; some of the cars might have gone through quicker, some took a longer time; in fact, our detail shows it did; it amounts to the same thing whether one car spent 14 days or one hundred cars spent 1,400 days. The lost usage of cars is there just the same.

Q. What was the excess over the 25 hours which the cars visited in the State of Arkansas?

A. Fourteen days—about 12 days, lacking four hours.

Q. They found the climate inviting down there on their transstate flight?

A. I don't know as to that; this is what the wheel reports show on the movement through Louisiana and McGehee and Van Buren, a distance of 256 miles, the schedule time for which, on the same basis as I mentioned, was 26 hours; a movement of 28 hours consumed in total 340 days, an average of 12 days per car.

* * * * * * * * * * * * * *

Q. You don't catch the point I want; one would be delayed two days, and one 20 days, something of that kind, just give us a few instances of the two extremes, the longest and shortest, and then give us the average, I don't want too much of the detail, but I want some of it.

A. One car got through in three days, and seven cars got through in four days.

MR. MOORE:

Q. Can you give us the number of the cars as you go along, so they can be identified?

A. That detail is available; I can not give it right now; I can get the car number, if you desire, the time, date and the hour in and out of the State and the train numbers; I have it but I haven't it with me.

I found one car consuming three days, seven cars four days, three cars taking nine days; four cars taking 25 days, one car 43 days.

Q. Just give us a few illustrations, I just want to see how they were running?

A. That is the movement between McGehee and Van Buren, which were the first and last terminals; the movement from Memphis and beyond, going out of the State through Cotter on the White River Division, a distance of 240 miles, the schedule time for an ordinary freight train, the entire distance, is 23 hours.

I find 134 cars consumed 772 days, an average of five days per car.

Q. Against what is the schedule?

A. A little less than one day, 23 hours; we have one car that got through in one day, 28 cars that got through in three days, 12 cars in 9 days, six cars that took 14 days, one car that took 22; there were other cars.

Q. That is the division—we had some testimony that those grain trains went through like greased streaks of lightning.

A. Yes, sir. I might say in that connection, in locating the billing for the White River Division, that is the division we speak of, for October, 1907, and on some of their local trains in the State, we found a great deal of that wheat moving on local trains—I say a good deal, I haven't the number of cars, but it is obtainable from our memoranda.

Q. When that export wheat came through on local trains, it didn't go through like a greased streak?

A. No, sir; it couldn't when it got on that local run.

Moving from Texas, through Texarkana, and up the main line through Hoxie into Missouri, a distance of 264 miles, I am giving the distances between the first and last terminals in the State, and not from State line to State line.

Q. Some of those cars might have gotten lost after leaving the terminal?

A. Yes, sir, but these are pretty close to the State line, and I suppose they got across.

Two hundred and sixty-four miles, Texarkana to Hoxie, schedule time for ordinary freight trains, 27 hours, movement of 166 cars, consumed 932 days, five days per car, and between Texarkana and Hoxie are but two through freight divisions, through freight trains should run, Texarkana to Little Rock, and Little Rock to Hoxie. That would indicate to my mind that the schedule time of 27 hours for two through freight divisions, where five days were consumed by this number of cars, that they must have been in a yard some place, or a passing track.

Q. They would hardly be on the main track during those five days?

A. Not if they ran any other trains.

Q. I understand the main track was about all this transstate freight needed?

A. The figures speak for themselves.

The movement from McGehee, by Little Rock, and through Hoxie into Missouri, a distance of 221 miles between McGehee and Hoxie, schedule time for ordinary freights, 35 hours; 98 cars consumed 635 days, an average of 6 days per car. McGehee to Little Rock is one through freight division, and Little Rock to Hoxie is another; the same remarks would apply there as on the Texarkana-Hoxie movement.

Q. Add a few of the shortest and longest movements as you go along?

A. From Texarkana to Hoxie, where the average was 5 days per car for 166 cars, I found one that made it on the schedule, got through in time.

Q. That was one of Mr. McCutcheon's onions?

A. I don't know the contents of the car now; I found 46 cars that got through in 2 days, 20 cars in 4 days, and 43 in 3 days, 14 that took 5 days, 3 that took 23, 2 that took 25, and 1 in 66 days—that car must have been in bad order.

On the movement from McGehee to Hoxie, 98 cars an average of 6 days apiece, I find 10 cars made that run in 2 days, 27 in 3 days, 18 in 4 days, 2 of them in 14 days, and the maximum is one car which consumed 56 days, and the one immediately proceding that, being 1 car in 34 days. The movement from Memphis to Van Buren, a distance of 305 miles, via Bald Knob and Argenta, schedule time 31 hours, 25 cars 195 days, average of 7 days per car; I find that out of those cars, that 5 took 4 days; that is the minimum, 4 took 5 days, 5 took 6 days in transit; the maximum was 1 car 16 days; ranging from 4 to 16 days or an average of 7 days.

I might say, in stating those averages, that we dropped the fractions; that really figures 7.8 to split hairs on the proportion; it might really be called eight.

Moving in the opposite direction, from north of the Missouri-Arkansas line, via the White River Division, via Bald Knob and Wynne and McGehee out into Louisiana, and beyond, a distance of 281 miles from Cotter to McGehee, the schedule time for ordinary freights is 39 hours; I find 138 cars consuming 930 days, or an average of 6 days per car.

Q. That is the greased streak of lightning road I believe?

A. That was the way export grain you refer to was handled, that is if it was off the White River Division.

Q. I think there was some testimony that that was the route it used.

A. I find the minimum was 4 days, 8 cars consuming that much time; 32 cars, 5 days; 38 cars, 6 days; 31 cars, 7 days; 9 cars, 9 days; 1 car took 23 days, moving southbound between Van Buren and McGehee, originating beyond Van Buren in Oklahoma or beyond and destined to Louisiana, a distance of 256 miles, schedule time 22 hours, I find 291 cars consumed 2004 days, an average of 6 days per car.

Q. That is on October?

A. Yes, sir, still on October; the minimum on that movement was two days, between Van Buren and McGehee, 2 cars consuming that much time; 28 cars 3 days, 73 cars 4, 41 cars 5 days, 45 cars, 6 days, going up, 21 cars 9 days, 13 cars 11 days, runs on up to 12, 14 days, up to the maximum of 32 days consumed by one car.

The movement from Hoxie to Texarkana, originating in Missouri, destined to Texas a distance of 264 miles straight main line over two through freight divisions, schedule time in that direction 24 hours; 216 cars consumed 670 days, or an average of three days per car, or exactly three times the schedule time—24 hours. In that movement, is included 14 cars that got through on schedule time, 86 cars took twice the schedule time, 76 that took three times, and 22 cars that took four times, speaking in round numbers; the maximum was one car consuming 19 days; that car was perhaps in bad order.

From Missouri and beyond, via White River Division to Memphis and points beyond, that should come from Cotter to Newport, on the White River Division down the main line to Bald Knob, across to Memphis, a distance of 240 miles, schedule time 24 hours; 258 cars consumed 823 days, an average of three days per car; in that movement, we find 55 cars that got through on schedule time, out of 258; 76 cars took twice the schedule time, 45 cars took three times the schedule time, 37 cars took four times, and the maximum time consumed was 15 days by one car; that is the October movement.

Q. Have you a summary of the October movement there?

A. Yes, sir, totaling it all, 1,454 cars, averaging 6.03 days, in round figures six days; the schedule time averaging it all, would have been 1.1 days per car; it consumed almost five days in excess of the schedule on the average."

In tracing these car movements, the accountants took the transstate billing for the territories named and took every transstate car. There was no selection of cars, but all for the first half of October, 1907. Then they took the first half of March, 1907, a spring month, to compare with a fall month, and in similar manner traced all the transstate cars; omitting the detail, which is similar to that of October, the result was: Total schedule time for the movement of the 1,560 cars traced, average a little over one day per car, the actual time taken a small fraction over four days per car. (R. pp. 1437, 1438.)

As to the transstate cars going through divisions unbroken, the records were again examined to find the truth of it.

"Q. There has been a good deal said in this record, about the division handling of cars; there seems to be quite a marked theoretical difference between the handling of transstate, interstate and intrastate; have you investigated the question of handling of cars at terminals?

A. Yes, sir.

Q. Have you got any data worked out as against these theories, about the handling of them there?

A. We have made an investigation; I have the result of it here.

Q. State generally the methods that you have pursued, and what you have there, and then we will take it up somewhat in detail.

A. I have a set of figures here, representing the conditions of affairs that we found at all the through freight division terminals in

Arkansas for five days in the month of October, 1907; the first five days—we stopped at the fifth day because it was an immense task; the cars were standing around the terminals so long it was a superhuman task to find some of them going out, and we didn't attempt to get more than the five days; I say all the terminals; I discovered this morning that the Little Rock figures had not been recapitulated, although they had been compiled; that is being done now, and I will have to omit that for the present, and will get it for you a little later." (R. p. 1439.)

Then he gives each of the division terminals in the State, and what lines they served.

"Q. Give us the result of your investigation; take them up by division points?

A. We got at our figures in this way, taking Hoxie as an example; I can explain it by reference to a particular terminal better than I can by an abstract example.

We took all the trains shown on the dispatchers' sheets, as through trains, moving into Hoxie from the North; we listed each train, showing all the car numbers, the hour and date of their arrival at Hoxie, and as a little further guide, what the conductor said was the final destination of the car, in some cases the contents; having listed all the train as it came into the terminal, by car number and initial, we proceeded to trace those cars leaving the terminal, our plan being to find them going out in another train; that information being derived from the wheel report of the train that took them out of that terminal, and of course, when the cars were not in the care of the train crew going into the terminal or going out of the yard, they were charged up as being in the yard.

Q. May be they were out on the main line if they were transstate; did you find whether passenger traffic had been interrupted by storing them on the main line?

A. Of course, that wouldn't be good railroading to leave the main line blocked.

Q. So you have assumed that they didn't leave that transstate freight on the main line?

A. No, sir; there is no question but what they were put away; stored somewhere.

Q. Then what did you do?

A. Deducting the hour and date of arrival in the terminal, from the hour and date of departure of the cars, the lapse of time was the time the same was in the terminal, or the time in which the car remained in that terminal.

Q. From that dispatcher's sheet, you got the time it went into the terminal and the time it went out?

A. From the dispatchers' sheets we located all the through trains that went into the terminals, and then we took the conductors' wheel reports of those trains and the car numbers, and the hour and date

of arrival of the train, and the hour and date of departure in other trains.

Q. From what the dispatchers' sheets or what the wheel reports showed?

A. From the wheel reports; we used the dispatchers' sheets as an index to what through trains came in that terminal, so we might know whether we got them all.

Q. Go ahead and explain what you have found?

A. Taking the Hoxie terminal—these figures cover all trains for the first five days of October, 1907, into Hoxie from the North, during that period, there were 23 through trains, hauling a total of 842 cars, 830 loads and 12 empties; the caboose is excluded from all these figures; it is a service car and is necessarily taken off at the division terminal.

Of those 842 cars, there remained in the Hoxie yard quite a long time—I will state the average first; I found that those 842 cars, the cars in that individual train went south from Hoxie in from two to seven other trains, and remained in the Hoxie yard from one hour and twenty minutes to two hundred and twenty-five hours and fifteen minutes.

Q. That is a nice place up there at Hoxie.

A. We found seven cars that stayed there 121 hours and 20 minutes; seven cars that stayed there 6 hours and 5 minutes; 2 cars, 52 hours; 2, 45 hours; four cars, 36 hours; 10, 34 hours; 35, 19 hours; 14, 22 hours.

Q. Was there any discrimination between the visitation at Hoxie, of transstate, interstate and intrastate cars?

A. The only information we have on that is what the conductor said was the destination of the freight, and that is not very good, because we found they were not reliable on that; we didn't go to the waybills.

Q. You just took the wheel reports?

A. Yes, sir; he might have said it was going to Texarkana, and it would stop at Little Rock.

Q. You used whatever might be indicated on the wheel reports for whatever probative force it was worth; is it indiscriminate between the classes of traffic?

A. In the case of these trains coming from Hoxie from the north, through Missouri Division trains running all the way from Piedmont, most of them, as we understand, are through trains; they may make some pick-ups and set-outs, but with the exception of that, all of it was interstate; I wouldn't say all of it was, but the major portion of it was.

Q. It would be necessarily all interstate except what might be picked up between the State line and Hoxie?

A. Yes, sir; some sixty miles of road.

Q. I believe you stated you haven't the Little Rock figures here?

A. Yes, sir.

That was stuff from the north into Hoxie which we traced out southbound; of the trains from the south into Hoxie, we found 13 trains, carrying 572 loads and 78 empties, total 650. Those cars went out in from three to seven other trains, remaining in the yard a period varying from 1 hour and 20 minutes to 103 hours and 40 minutes; we found 14 cars that stayed there 1 hour and 20 minutes, and 40 cars, 12 hours; 27 cars, 16½ hours; 34, 11 hours, and there are some cars that stayed there but two hours—19 of them.

Q. Did you get the averages of that?

A. They went out in form two to seven other trains; I have no average here in days; they can be figured from this data.

Q. Going out on the different trains was what I was asking you about; it was from two to seven?

A. Yes, sir; that is, they consist of any one train, went out in not less than two trains and some went out in seven trains; I mean the cars carried by the train.

Q. You mean that of the cars coming into Hoxie on those known trains, instead of going through on a bridge, they would go out on from two to seven trains?

A. Yes, sir; one train going into the terminal, the cars in that train going out in perhaps two trains, perhaps seven, that is the widest range, none less than two and none more than seven.

Q. You didn't find the unbroken train there?

A. Not at that terminal. (R. p. 1439-1441.)

Omitting the detail of the other divisions, this has been given in full to show the reliability of the methods employed to ascertain the data.

On the White River Division, one train got through without a break, the cars in the other trains went out in from two to three other trains; in the reverse direction, no train went through, and cars in each went out in from three to six other trains.

At Newport, one train of twelve cars got through, others went out in from one to four other trains.

At Van Buren, they went out in from two to nine other trains; on the reverse movement, three trains got through and the others went out in from two to eight other trains.

The other divisions are followed through, and will not be further detailed. In the whole movement of a good many thousand cars, four trains went through a division unbroken. The hours and minutes of the stay in each division yard, origin, and number of trains the cars went out in are given.

The Little Rock Division, the largest in the State, is fairly typical of all: Coming south, there were 822 cars in 18 trains and went out in various directions in from three to eleven other trains, and none of them went through unbroken. The time spent in the yards varied from 3 hours and 40 minutes to 189 hours. On the reverse move-

ment for the same period, there were 15 trains containing 444 cars. They went out in from two to seven trains, no train went through unbroken. Time in the yard varied from 2 hours and 30 minutes to 104 hours and 55 minutes, one car only consumed minimum. (R. p. 1441-1451.)

The State also proved from the records that physical reasons prevented the "bridge theory" of transstate freight being true:

"Q. Mr. Ludlam, there has been a great deal said in this case, about the transstate business and the cheapness of transportation of freight on transstate trains:

I want to read you a statement of Mr. McPherson (vol. 1, page 326):

"The railway company establishes by accurate test, the hauling capacity of each locomotive, over a particular district or division to which it is assigned, and this establishes a measure that we designate as the 'potential capacity' of the locomotive, and the number of tons the locomotive draws from day to day is recorded, to determine whether the operating officers in charge of the various divisions or districts, are securing the full measure of the efficiency of the power."

In handling transstate freight through Arkansas, say into Louisiana, it would have about these routes to follow:

The main line from St. Louis to Tearkana, what you might call the eastern Illinois line down the east side of the river, over this Paragould leased track that has been referred to, of the Cotton Belt; or, from the Northwest over the White River branch down to the connection of the main line at Diaz, close to Newport—just north of Newport; and west over the Little Rock & Fort Smith line; starting in at the State line at Van Buren and then going from Little Rock towards Louisiana, it would go to Alexandria, passing through Pine Bluff; then from Memphis, coming in from the east via Bald Knob and then south to Little Rock. Then, of course, the reverse movement, taking in those routes from the north, east or west, as the case may be.

Now, if you have any data to show the potential capacity of the locomotives on those routes I wish you would put it in evidence.

A. We have prepared an exhibit showing the tonnage capacity of engines on the St. Louis, Iron Mountain & Southern Railway Company in freight service, as shown by official timecards, issued for the government of employees only, effective during the last half of 1907, compared on the various operating districts over which so-called "transstate" trains would pass through the State of Arkansas. As various classes of engines with varying tonnage ratings are in service on the different districts, the maximum rating on each district has been used below as the basis of comparison. (See exhibit "W," R. p. 2563.)

* * * * * * * * * * * * *

Q. What would be the direct effect of this upon these so-called "transstate" trains moving through the State like they are on a bridge, Mr. Ludlam?

A. It shows that such a train would be an impossibility.

Q. Suppose there was a train of transstate freight made up at St. Louis, going south; that would have one of two routes to take: One on the main line via Poplar Bluff and those hills north of that—I have forgotten the name—and the other using this leased line that they lease from the Cotton Belt track:

What would be the effect of the operation of a train of that kind?

A. The official time table, number 16, of the St. Louis, Iron Mountain & Southern, taking effect July 4, 1909, shows that any one of the engines, from number 1 to number 100, could haul 1,900 tons from St. Louis to De Soto, but that any one of those same engines could only haul 900 tons from De Soto to Piedmont. That is, the train would have to be more than divided in two when it got to De Soto.

When it got to Piedmont it could haul from Piedmont to Hoxie 2,300 tons. In order to run through from St. Louis to Hoxie the train would have to have 1,000 tons less than the capacity of the engine between St. Louis and De Soto, and it would have to have 1,400 tons less than the capacity of the engine between Piedmont and Hoxie. That is, the engine would be working about one-half its capacity a large part of the distance—one-half or less than one-half of its capacity.

Q. Of course that would necessarily mean the breaking up of the train?

A. Yes, sir.

Q. Now, supposing instead of taking that route they took this other low grade route; I don't care about going into rating on that, but just call attention to this, that it is a low grade line:

That would be more economical to operate, I presume, than this other?

A. If it is a low grade line it undoubtedyl would be.

Q. And this transstate matter either must take the expensive operation on the main line, or else go to the expense of hiring another track on another railroad, to take care of it?

A. In order to operate more economically—in order to handle it cheaper; yes, sir.

Q. Where does the benefit to the State of Arkansas come in on that sort of economical management of these transstate trains through Missouri and over these leased lines, or out here in Missouri and eastern Arkansas?

A. Arkansas would not be interested in the economical operation of transstate freight."

Mr. Bee also explains the practical workings of this rating of the locomotives (he has had experience in the motive power department, and is familiar with it):

"Q. This morning Mr. Moore was asking you some questions about the carrying capacity of trains, and gave you an illustration of the rating of locomotives; I hand you a list showing the capacity of different classes of engines, used there on the Arkansas Division, and here is the capacity of different classes on the White River Division. I wish you would look over those, I don't suppose you have had an opportunity to see them.

A. These seems to vary from 350 tons to 2,400 tons per engine on different divisions and different engines.

Q. Take a movement through from Hoxie to Texarkana, one of those bridge movements, where the cars go through on a bridge, show the ratings of the engines here, and what effect that would have on your train?

A. These districts read straight down, do they? Hoxie is first, Little Rock second, and Pine Bluff third?

Q. Pine Bluff would be on a branch; Hoxie, Little Rock and then Texarkana would be on the main line?

A. Hoxie, Argenta, and Argenta to Texarkana, that would be the main line would it?

Q. Yes, Argenta is the yards across the river from Little Rock.

A. If a Red Ball train came out of Hoxie or otherwise, if it has its full tonnage, it would have to set part of those cars out when it got to Argenta.

Q. Why?

A. Because it carries 1,500 tons up to Argenta, and from there south, it could only carry 1,200. so it would have to set out 300 tons, and if you figure the average cars at 33 1/3 tons—that is a little light, but it will make the figures even—to handle three cars would be 100 tons; that would mean setting out six cars off the train.

Q. Take the White River right before you; you see one represents the haul north and the other south?

A. Take a train starting out of Carthage, Mo., moving to Crane, any engine between 851 and 893 would carry 975 tons to Crane; between Crane and Cotter, it would reduce its tonnage 375 tons, and then from Cotter to Batesville, it would reduce its tonnage 800 tons. From Batesville, if it was going back in the back direction from Batesville to Cotter, it would carry 1,200 tons, but going on south, the shipment has been raised from Cotter to Batesville to 800 tons; then from Batesville to Newport, the train would have to reduce 700 tons.

Q. Then from Newport to Argenta, is that shown on that, or would that be on the other sheet?

A. Yes, sir.

Q. There wouldn't be very much bridge movement on transstate freight with that kind of capacity of the engine?

A. Not unless they started with an under-tonnage train; a very light train; an engine would be losing the value of its capacity if it was making a bridge movement.

Q. I am just using the expression of Mr. Doddridge which was emphasized by Mr. McPherson?

A. I simply meant, going through that picking up or setting out, it would lose its character." (R. pp. 1294, 1295.)

Mr. Bee explains in detail how the transstate traffic use more facilities than other traffic.

The fast freight necessitates other freight being sidetracked and giving way to it; breaking up trains in division points to put the fast cars together for a fast train. If a transtate train was run through the division would have to be cleared for its use; the transstate train is inspected as other trains and everything delayed in the yard while it is standing there; a bad order car is cut out with usual use of facilities attaching to it. Cotton in Oklahoma is taken to Arkansas for compression, and uses the terminals at Fort Smith; and at all other junction points use the terminals; all freight has to be scaled at the first scale, transstate freight from near the border use the facilities in Arkansas; the large lumber movement from Louisiana north would use the scales at the McGehee yards in Arkansas; the same is true of the Louisiana cotton. If it were not for the transstate traffic, Arkansas would not have to maintain the large terminals it has, and their heavy expenses would be materially reduced if not for the transstate service. (R. p. 1200-1203.)

Some other witness, probably Mr. Hamilton, explained the number of cattle pens and chutes in the State, and the cotton platforms were explained, probably by Mr. Bee or Mr. Bragg; all of these facilities are for interstate traffic.

Coming to the practical operation of transstate trains, the best explanations is given by a man who was for years a switchman in the Argenta yards at Little Rock, the largest yards in the State:

His name is Thos. McCutcheon. His testimony begins at page 930. These excerpts on from pages 931 and 932:

"Q. I wish you would explain what is done with a through freight train coming in from St. Louis, say, and what would it largely be composed of; how would you handle it, explain it in your own way?

A. It is broken up, just as I told you; I never saw a through train that came in that didn't have to be broken up.

Q. What do you mean by being broken up?

A. There were different cars that didn't go through with that same train, cars for different points in it; I never did see a through train for the South from the North go straight through.

Q. Some of these gentlemen high up in the operating department of the roads have compared their through trains to a bridge running through the State. Is there anything like that?

A. No, sir.

Q. You did not discover the bridge?

A. No, sir.

Q. What difference is there between the bridge and the actual facts?

A. Now, I have seen a fruit train come, that there would not be anything done to it, but to change the caboose.

Q. That would be from the South?

A. Yes, sir.

Q. Have you seen many of those?

A. No, sir.

Q. Have you seen anything else but a fruit train now and then?

A. A vegetable train, onion train.

Q. Some onion train from Southern Texas?

A. Yes, sir.

Q. You have found a few of those?

A. Yes, sir.

Q. They are the only bridges you discovered?

A. That is all.

Q. The bridge only worked occasionally in going from Texas through to the North; the bridge didn't work from the North when it came down South?

A. No, sir.

Q. What do you do with the cars in the train as they come in, you speak of breaking them up; that is a technical term that you understand, but we don't; just explain that operation?

A. There is different tracks designated for different cars for different points; all cars that would go to the Valley, there is a track they go on; also, we set North and South cars for different tracks.

Q. And with the exception of these few onion and fruit trains, that come in here, every train you handled was broken up in that way?

A. Yes, sir.

Q. And new trains made out of those trains that had been broken up in that way?

A. Yes, sir.

Q. Was there any difference in handling the carloads that would come in, say from St. Louis, than there would be handling carloads that were delivered to the railroad here, say from the brick plant or cotton seed plant, or any other industry in Little Rock, after it was delivered to the railroad, would there be any difference in the handling of that than there would be in this train from St. Louis?

A. No, sir; they would be all handled in the same way.

Q. Of course, before it was delivered to the road, a car would be set out to the industry's switch, and loaded there, and then delivered to the road?

A. Yes, sir.

Q. The same would be true in St. Louis, or wherever the car originated, that same service would be performed elsewhere?

A. Yes, sir.

Q. After it is delivered to the road, the handling of the car originating locally would be the same as a car originating in St. Louis or Chicago?

A. Yes, sir.

Q. Suppose a car came down from the Fort Smith branch, or came up from Pine Bluff; how could it be handled?

A. The same way as the other; if it came from Fort Smith, it is switched in the Fort Smith yard, and it is set out on the track; if it was going north, it would be set on the north track, where they kept the north cars, and if south, it would be on the south track, and then another engine comes up and gets it and switches it out again, down below the south end?

Q. To the main line track?

A. Yes, sir.

Q. As I understand you, all the trains, the freight cars are brought into Little Rock, they are broken up, and new trains made out, and they are sent out to their destination in that way?

A. Yes, sir."

He was cross examined at length, but the more he went into the subject the more fully he proved the statements above made.

The plaintiffs made Mr. Lincoln a witness on movements of trains and on this point he testified at the instance of the plaintiffs:

"A. I don't think there is a great deal of difference between that in the handling of interstate or transstate carload business, because it is simply a switching service. Now, that expense is smaller at some division points than at other division points. Take a division point like Little Rock: Trains have to be broken up more there than at Poplar Bluff, or Hoxie—I think that is the division point now. There is more breaking of trains at Kansas City than at Sedalia.

Q. What would be done at Hoxie, for instance, I mean in the transstate?

A. With a through train going to Hoxie?

Q. Yes, going to Texas?

A. Well, a through train starting from St. Louis to Texas pulls out of here as a solid train, we will say, to Hoxie. There the crew taking it releases that train. There is a new engine and a new crew to take it out. That train is broken up to some extent at Hoxie in order to take care of the through freight which may accumulate, and go in that train and set out some that is not time freight.

Q. Please explain that.

A. There are three classes of freight in the train, red ball, green ball, and the third class on which the time does not cut a figure. When they break up at Hoxie, they will put in red ball there and take out some unclassified freight.

I stated that at a point like Hoxie the service of breaking up the train and switching will not be as great as a point like Little Rock. There they will probably have to break the train up very largely because the contents of that train out of St. Louis to Little Rock is distributed over other divisions. It is not all going to Texas, but some may go to Fort Smith or Monroe or Shreveport, or Pine Bluff; so it requires the breaking up of that train and the making up of a new train at Little Rock.

Q. Let me see if I understand you: At Hoxie there was a car that was not to go on: With that the work would be to set that car off?

A. I would say that if you start the train out of St. Louis to Hoxie, and Hoxie will have cars coming in there from Cairo and from Thebes. Trains break at Hoxie.

Now, if there was some red ball freight, the time freight, in the trains out of Thebes and Cairo, it would be put in the train going south from Hoxie.

Q. Assume that that is transstate tonnage.

A. Yes, transstate, all of that is, or interstate tonnage, not necessarily transstate—Poplar Bluff or Texarkana or El Dorado.

Now they take out of that train the slow freight and put in the red ball so as to have that train take care of the red ball south of Hoxie. There would not be very much changing of the contents of that train at Hoxie, but there would be at Little Rock and there would be at Kansas City.

Q. If there were five cars on that train going to Texas, when it reached Hoxie—I mean in its orginal condition as it left St. Louis—there are two cars that come in from Cairo which you want to put into that train to take to Texas, you simply hook those two cars on to the through train to Texas?

A. That is hardly the situation. I will try and explain a little better than I have.

We will assume—I don't know what the tonnage is of the engine that takes that train out of St. Louis to Hoxie—that is one division, there is a division in between—that the engine is rated to carry 1,500 tons:

It has in the train 700 tons of red ball. It has in the train five hundred tons of green ball, that is 1,200 tons.

Q. What is green ball?

A. That is next to the preferred freight. Green ball comes next to red ball.

Then it has in the train 300 tons unclassified freight on which time is not an object. Now, it arrives at Hoxie. These trains that came in from Cairo and Thebes have red ball freight in them. They will take out at Hoxie—by the way, Hoxie is on the main line, no branches there—in the train that carries 1,500 tons there at Hoxie, they take out at Hoxie green ball freight—or they first take out the

nonclassified, the slow freight, and if necessary, take out of it some of the green ball freight and put in the red ball, the time freight, to expedite the movement of that freight through.

Q. They take out the unclassified freight?

A. Yes, first.

Q. And put in the higher grade for the purpose of giving the latter the benefit of the quicker movement?

A. That is predicated on the power in and out being the same.

Q. I understand. What do they do with the train when they have hooked on that additional green ball?

A. When they make up their tonnage for the train south of Hoxie that has to go on and what is left—

Q. The train goes right along?

A. Another train.

Q. What do they do with the unclassified traffic that is on there?

A. Leave it there to fill out the next train or carry it forward on a local train; or they may accumulate sufficient freight by reason of three divisions to take care of that and run an extra train; or, they may be able to handle on the train south of Hoxie if there are a greater number of tons to the engine than into Hoxie.

Q. That is yard service?

A. Switching and yard.

Q. For the purpose of expediting the more important freight with reference to the movement?

A. Yes, sir.

Q. And it consists in taking out of a train certain freight and putting in certain freight which can not be delayed?

A. It requires a switching service, yes.

Q. Now, we will go to Little Rock: What do they do at Little Rock, tell me in detail.

A. The train going into there would be broken. It would be broken to a greater extent than at Hoxie because of the various branches—suppose there is a carload each going to Camden, Hope, Texarkana, Fort Smith or Galveston, or maybe to Pine Bluff: Now, there are three lines branching out there. If the red ball freight going in different directions, that requires another breaking up of that train." (R. pp. 986-990.)

On re-direct examination, he further explained the handling of transstate freight:

"Q. Mr. Moore referred to through trains that would have ten cars of transstate, and probably ten other cars would be set out at Little Rock, and asked you, if I understood him correctly, whether this switching or breaking up of a train was not necessary so far as regards the ten cars that were going on through. I will ask you if this switching was not done, and other cars hitched onto those ten cars, if that would not make the transstate freight a very expensive proposition?

A. I think I catch the idea is this; if the ten cars of transstate traffic were allowed to go on through as a continuous movement, without putting other cars into that train to bring it up to its tonnage that the engine can haul and the crew can hadle, that it increases the expense of handling the transstate freight—undoubtedly.

Q. Well, that would be true if it started from St. Louis that way?

A. Anywhere.

Q. It is economy of the transstate business, as well as general economy, if you break up these trains at these division points or distributing points, as you have indicated has been done?

A. It is economy to all of the traffic handled to make each engine haul full tonnage and not having light trains, whether it is one class of freight or another.

Q. Then it is good economy to set out these through trains at Hoxie or Little Rock, whatever the point, and wait for a train to be made up to carry them?

A. It is economy to wait at a division point and fill out your trains.

Q. In reference to various services performed at the division points, you generally have an inspection? Isn't that a service performed at these division points?

A. Inspection of what?

Q. Inspection of the cars?

A. I assume the cars are inspected at the division points. I hadn't thought of that.

Q. The wheels, boxings, and everything of that kind?

A. That is what is usually done at division points, is to attend to equipment.

Q. That is a cost of service, of course, that would apply—

A. To all.

Q. Apply to all alike?

A. Yes, sir." (R. p. 996.)

More testimony is adduced on both sides as to the switching services at division yards in connection with the State's plan of dividing these expenses, but it is largely detail. The general service is fully explained by Mr. McCutcheon and Mr. Lincoln, each thoroughly familiar with it; one introduced by the State and the other, on this subject, by the railroads.

Mr. Willmering had some positive opinions on the bridge theory, and thus expressed them:

"I found from actual experience, and I can testify from my own knowledge, that the interstate, both carload and less than carload, is actually handled at division terminals, and this theory that has been advanced in this case and applied by Mr. Doddridge—this bridge theory—that this transstate business going over a State as though it were on a bridge, does not in reality exist.

"There are too many cripples sidetracked or ditched in these supposed solid through trains, and I have not given that any consideration at all, because it don't exist. I know from my own knowledge that cars of lumber handled from points in Louisiana and points on the Iron Mountain in Louisiana—I recall some moving to points in Oklahoma, that have been delayed in transit from 60 to 90 days, and have been weighed four or five times in transit; the waybill itself showed that this bridge theory is an absurdity. It is nonsense and it don't exist in reality. It occurs to me Mr. Doddridge and McPherson tried to apply the ideal theories in railroading for the most economic management possible, but they have not accomplished their ideals and never will, I don't think.

"So for that reason and owing to the fact that these interstate cars both less than carload and carload are handled at the division terminals if the length of haul is greater than 100 miles—that also double the tons handled in order to ascertain the ratio." (R. p. 1151.)

The conclusion from this testimony is irresistible that the "bridge theory" of transporting transstate freight is nonsense. Freight moves from division point to division point and at each division point, each car goes into other trains with rare exceptions, like the onion train from Texas; one train may go through one division, but the engine ratings forbid any train loaded to its engine capacity (and all through trains should be), going from one division to another without breaking into several parts. The usual rule is for the train to go into the division yards and other trains made up, and the cars coming in in one train will go out in from two to eleven other trains. It is sheer nonsense to say that the transstate cars do not use the facilities like other cars, and do not incur the same expense in the yards car for car. The records show that of 1,500 transstate cars passing through the State in October, each staid on an average five days over schedule time, and in March, 1,500 cars stand four days over their respective schedule time. During that interval they are using every facility of the road, division yards, passing tracks, switch tracks as well as main line; they are handled by switchmen, inspectors, weighmen, trainmasters, train dispatchers, and every other class of employees. They are, while spending their time, necessarily switched and shunted around much more than a car which is switched to an industry track and returned loaded.

The basic principle of the plaintiffs' case that the cheap freight is the transstate freight, cheap because carried through the State "as if on a bridge," is proved to be a mere theory, not a condition..

## AS TO EXTRA INTRASTATE PASSENGER TRAFFIC.

The situation of extra expense of intrastate passenger traffic has been brought into the preceding discussion, but there are some phases of it which call for separate consideration.

The character of the passenger trains on the Iron Mountain were definitely fixed by Mr. McPherson, Assistant to the General Manager of that road, who filed exhibit 46 (R. p. 2412), in which he lists the through trains and their runs and stops, and the local trains, their runs and stops. The situation was discussed fully with Mr. Ward, one of plaintiffs' witnesses in rebuttal, where the exhibit was analyzed and some additional facts brought out; (R. p. 1884-1888 and 1891.) also at page 2066-2068. There were eight through trains, one a fast mail, carrying one sleeper and no other coaches. There were 48 local trains running daily, including Sunday. Two of these made the same runs that were made by six of the through trains. Thirteen of the local trains carried sleepers, one of them three sleepers, and all of the through carried sleepers. It was testified by Mr. Maurice Wright, and later sustained by some statistics of a test that it is undisputed that of the passengers riding in Pullmans, 18 per cent were intrastate and 82 per cent interstate. (R. p. 2287, 2288.) It is undisputed that all the trains on the St. Louis Southwestern Railway are local. It carried no through trains. (R. p. 2285.) Mr. Wright, called in rebuttal, testified as to handling transstate and interstate passengers at Little Rock: Transstate passengers from Texas to Memphis would change cars at Little Rock, on one train making close connection, on the other waiting one hour and 20 minutes. Coming from Memphis to Texas points, they would change at Little Rock on one train and go through on the other, on the fast train they would have to change. Passengers from Louisiana going to St. Louis or any other transstate point, would have to change at Little Rock; on one train they would make close connection, on another spend one hour and 20 minutes, and on another spend a night. All passengers from the central division, the Fort Smith road, going to St. Louis or Memphis, or anywhere out of the State would change at Little Rock. Going out of the State on the White River branch, all the transstate passengers from Louisiana or Texas or Tennessee, would have to change at Little Rock, or Newport or Bald Knob; all passengers from Fort Smith territory (165 miles long through the heart of the State), going north, east or south would have to change at Little Rock to get out of the State. Interstate passengers from north, east or south of Little Rock going west on the Fort Smith road, and all transstate passengers from the north, east or south going west over Fort Smith branch would change at Little Rock. (R. p. 2265-2267.)

It has heretofore been explained that the tracks of the Iron Mountain run into Oklahoma before reaching Fort Smith, and all freight traffic on that road into and out of Fort Smith is interstate. The Iron Mountain has a contract with the 'Frisco road to use its bridge in getting into Fort Smith, and runs two passenger trains across it. Memphis has been placed by the plaintiffs as constructively in Arkan-

sas. When Mr. Nay was on the stand in rebuttal in behalf of the railroads, this situation was put to him, and his testimony follows:

"Q. While on that subject let me tell you about some of the evidence in this case:

Memphis is treated as an Arkansas point in this case. The expense is all charged up to Arkansas. Of course, all the travel is interstate and from Memphis to Texas would be called transstate.

A. From Memphis to Little Rock is interstate.

Q. Yes, and the expenses of Memphis are treated as if incurred in Arkansas.

A. That is by some arrangement between you?

Q. No, sir. I have been kicking against it and am still kicking. It is by "force of arms" that that is in here in that way. But those are the facts, there is no dispute on that point, and that the traffic from that point in interstate traffic.

The same thing is true of Fort Smith, but to a lesser extent. Two passenger trains, run over the bridge which makes it intrastate. All of the freight traffic is interstate as they do not use the bridge at all for the freight, but only for the two passenger trains.

So far as the Cotton Belt is concerned, I believe the yards in Texarkana are in Texas; isn't that true, Mr. Kimbell?

MR. KIMBELL: Yes, sir.

Q. You know the travel out of Texarkana on the Cotton Belt and out of Fort Smith and Memphis on the Iron Mountain would be a large volume of traffic.

COL. MOORE: You mean transstate?

JUDGE HILL: I am speaking of the traffic. It would be all interstate or transstate and as to all of it there would be two terminals in Arkansas, and on transstate there would be one, out of each of these points.

Would not those facts modify to some degree at least your objection to this method?

A. Yes, sir, that would modify it to a degree. But what I had in mind when I spoke of transstate—I did not have in mind particularly Fort Smith or Memphis or Texarkana, but passengers from St. Louis to Texas points.

Q. I understand that. And that is why I call your attention to the local conditions and ask you if those local conditions would not modify your position?

A. Yes, sir, but there would still be certain transstate passengers in these 145,000; say passengers from St. Louis to San Antonio or from the Southeast going into Oklahoma.

Q. Of course there would be some, but in these there would be the interstate passengers from Fort Smith and Memphis to Little Rock that would have two handlings under this method of accounting and they are only charged with one.

A. Possibly those might offset each other so the difference would be 'negligible.'" (R.p p. 2063, 2064.)

One of the chief items of extra expense assigned to intrastate passengers traffic by Mr. Doddridge (R. p. 464), and other witnesses is the increased casualty risk arising from increased number of passengers boarding and alighting from cars at stations. Taking the transstate passengers going through Arkansas, except on eighttrains, and there are as many alighting and boarding trains as the short haul State passengers, who would rarely have but two. The longer haul interstate would have as many, and in many instances more than the intrastate.

Transstate passengers using Memphis and Fort Smith would have in this case double the casualty risks charged up to them that the interstate passengers have. The rest of Mr. Doddridge's testimony is largely inapplicable to the traffic in Arkansas, is upon conditions not existing, due to the absence in this case of the intrastate carried solely on the local and the interstate on the through.

The trial Court, in his opinion, stated there was no extra cost of intrastate passenger traffic on the Southwestern, but that there was an increased cost of 10 per cent on the Iron Mountain. Where he made the difference under this evidence, we are unable to see unless it be that the Iron Mountain carried eight through trains which were largely patronized by interstate traffic. Doddridge admits that the local train is a feeder for the through, and it is not right to charge all its stops and all its expense to the traffic carried by it, for much of it is done to enable the through train to make time, deliver and take up mail and express. (R. p. 488, 489.)

Mr. Doddridge admits that the casualty risk is greater on the fast train than on the local, and that they cause more wrecks than the local. (R. p. 490.) But, he says the casualty risk he referred to in his extra cost items against the intrastate, was that of getting off and on the trains. (R. p. 490.) This other casualty risk was not enumerated; but as shown by the conditions in Arkansas, the interstate is receiving as much or more casualty risk in getting on and off the trains than the intrastate.

In the face of the conditions shown to exist in Arkansas and the inapplicability of the reasons assigned for attributing extra expense to intrastate passenger, it can hardly be seriously urged by the plaintiffs that they have made out any appreciable extra expense. The action of these plaintiffs since obtaining the injunction against the two-cent passenger fare is pretty conclusive evidence that they had no cause of complaint against it.

Mr. H. C. Halverson, chief clerk to the assistant general passenger agent of the Iron Mountain, was called as a witness by the State.

He came to Little Rock in March, 1910, and is familiar with prices of transportation sold by the Iron Mountain in that year.

The Iron Mountain is a member of the Southwestern Passenger Association, which sells a mileage credential book in Arkansas for 2,000 miles at 2 cents per mile, plus $1.00. His road sells a mileage book of 500 miles for $12.50, and in Kansas sells the same book for $10.00, 2 cents a mile. The books are good anywhere in the State, and are on sale in all stations. At all competitive points in the State, they are selling tickets at 2½ cents per mile to meet competition with Rock Island and other roads having 2½-cent rate. (R. p. 928.) According to the allegations of the complaint, the 2-cent passenger rate was confiscation. At that time the interstate revenue per passenger mile through Arkansas (exhibit No. 5, R. 2327, 2328) was less than 2 cents, to be exact, 1.865 (the intrastate was 1.903). Having a free hand in fixing the rate, it is raised to three cents, and then voluntarily reduced it by the sale of books to all comers and at all places for the confiscatory rate of 2 cents a mile, if they travel to 2,000 miles; at 2½ cents if they travel 500 miles, and at competitive points a general rate of 2½ cents prevails. The exhibits worked out by the State's accountants on their plan of separating expenses, on the passenger side between mail, express and passengers, and then between intrastate and interstate passengers on the passenger mile basis after charging the intrastate with two terminals to one interstate, shows the intrastate is making larger return upon the property invested than the interstate.

Having so completely failed on proving extra cost and the State revenue even under the despised 2-cent act being higher than the interstate, naturally the net earnings on intrastate should show better, as they do, over the interstate.

This concludes the plaintiffs' case on extra cost, and the evidence against it, except the chief evidence of the State on the extra cost proposition which is shown in the result of the State's plan of dividing the expenses. It is impossible to present that evidence disconnected from the bases of division, but briefly stated, it may be said:

The State accepted every item of extra expense claimed—terminals, local trains and their attendant extra expense, and allocated it on bases supported by a preponderance of the testimony as sound and approximately accurate, and under such division, the intrastate traffic was shown to be earning a compensatory return.

Before reaching that subject, however, there are other subjects to be discussed which further weaken, if not destroy, the plaintiffs' case.

Before passing from this review of the evidence on the extra cost, attention is again called to the rule that the invalidating facts must be clearly and decisively proved, and when that touchstone is applied to the evidence in this record of extra cost of intrastate traffic in Arkansas, we are entitled to the Scotch verdict.

## TRAIN-MILE DIVISION OF MAINTENANCE-OF-WAY BETWEEN PASSENGER AND FREIGHT TRAFFIC.

The plaintiffs in their exhibits use the revenue basis to apportion expenses and property between intrastate and interstate traffic and adduce much opinion evidence as to that being the best known basis. They depart, however, from that basis in dividing the expenses of maintenance-of-way and other common expenses between the freight and passenger traffic, and it is to that subject your attention is now invited.

The adoption of the revenue basis for dividing this expense will result in showing a compensatory return on intrastate property, on the straight revenue basis as against a return that is on the border line between confiscation and compensation, towit: 4.70 per cent.

The adoption of the car-mile basis, which will be shown to be far more reliable than the train mile, will result in a return far above any cavil as to the rate being compensatory.

The railroads' exhibits contain three fundamental errors: (1) Division of property on revenue basis; (2) division of maintenance-of-way expenses between freight and passenger on train mileage basis; (3) division of expenses on revenue basis.

The State, in order to meet the great mass of testimony as to the extra cost of intrastate freight and passenger traffic over interstate, attempted to make a division of expenses on practical lines and to allocate approximately each item of extra expense, thereby to demonstrate (a) that it was unnecessary and wrong to use an arbitrary basis to divide expenses between State and interstate, and (b) to demonstrate from actual facts—as opposed to theories—that after making maximum allowances for all these items of extra expense, most of them attributed to the local train and double terminals, that the higher expense of intrastate traffic was less than the higher revenue of intrastate traffic, and therefore if the road as a whole was making a compensatory return on all its traffic in Arkansas, necessarily it was making a compensatory return on its intrastate traffic.

The fundamental error of using the revenue as a factor is elsewhere discussed and this chapter is devoted to the single error of using the train mileage as the factor to divide maintenance-of-way expenses between freight and passenger traffic.

The State in its exhibits used the divisions as made of the property on the revenue basis and the freight and passenger expenses on the train-mile basis by the railroads, for the purpose of testing out the error of using the revenue to divide expenses and left untouched the other two errors. The State never conceded the correctness of either of these bases and only took them as starting points to demonstrate the fallacy of using the revenue to divide expenses. Both of these bases work harshly against the State; how the revenue basis attributes to State traffic 13 per cent of the property devoted

to State freight while the State freight's use of the property represented in ton miles was only 7 per cent, has elsewhere been discussed.

Judge Trieber, while rejecting the revenue theory for dividing expenses (although he uses the rejected theory to divide many of the largest items of expense), accepts it as sound for the division of property between State and intrastate, and the soundness of his conclusion is elsewhere discussed, but will be accepted here to direct attention solely to the train-mile division between passenger and freight. We desire for the nonce to dismiss all of the debated questions and drive solely at the train mileage division between freight and pasenger of the maintenance-of-way expenses:

Mr. Parker, engineer of the Texas Railroad Commission, a witness introduced by the State, testified that 90 per cent of the expenses of maintenance-of-way was due to the elements and natural decay and only 10 per cent from the result of use. Mr. Byers, chief engineer of maintenance-of-way of the Iron Mountain road, placed as low as 75 per cent as due to the elements and natural decay; the fact is established by competent witnesses on both sides, that a percentage varying from 10 to 25 per cent of these expenses only is attributable to the use of the way by the passage of locomotives and cars; the remainder due to natural causes.

Two of the large items of expense are maintenance-of-way and maintenance-of-equipment. In Arkansas for the six months' period in suit they were, respectively, $1,054,676.51 and $1,035,566.07, on the Iron Mountain, according to its exhibit No. 3 (R. p. 2293.)

Excepting minor matters, with which this discussion will not be burdened, the maintenance-of-equipment expenses are from their nature definitely located to freight and passenger, respectively, but the maintenance-of-way, from its nature, and especially in view of the much greater part of it being due to natural causes, is not susceptible of definite location between freight and passenger, and therefore some factor bearing the nearest relation to the subject must be used in order to separate maintenance-of-way expenses between freight and passenger traffic. The railroads in their exhibits used the number of train miles in each class of service as the basis to divide maintenance-of-way expenses between freight and passenger traffic. (R. p. 2316.) The mileage of passenger trains and the mileage of freight trains, irrespective of the weight, number of cars in the train and class of cars in train, is the adopted factor.

Does that factor bear such a relation to the subject that it may be safely used to apportion a million dollars of expense? Judge Trieber, after referring to the established fact that from 75 per cent to 90 per cent of the expense is due to deterioration and action of the elements, regardless of the operation of trains, says:

> "In view of these facts, any attempt to apportion this item of expense on the ton, car or *train mileage* (italics ours) would be an injustice to the roads. The court is of the opinion that the

straight revenue basis will get more accurate results. The difference in intrastate and interstate rates will be taken care of by proper allowance to be made on the final calculations of the entire cost." (R. p. 2623.)

Passing for the moment the proper allowance to be made as to the excessive charge to the State on account of the higher intrastate revenue which will result in injustice to the State as pointed out by Judge Trieber, and examine which basis is more favorable to the railroads, the train mileage or the revenue, even with the revenue burdend with the excess.

Exhibit 5 (R. pp. 2327, 2328) shows intrastate freight revenue 13.41 per cent and interstate freight revenue 86.59 per cent of the total freight revenue and intrastate passenger revenue 59.54 per cent and interstate passenger revenue 40.46 per cent of the total passenger revenue. These are the factors used to apportion the expenses between these classes of traffic by the plaintiffs in their exhibits where they use the revenue basis.

Exhibit 3, par. A (R. p. 2292), shows 73.35 per cent of the revenue is from the freight traffic and 26.65 per cent from the passenger traffic. Naturally one would think from reading the evidence of the plaintiffs' witnesses that when the freight and passenger expenses of maintenance-of-way were to be apportioned that the revenue basis would be used. Had it been done, then 26.65 per cent of maintenance-of-way would have been apportioned to passengers and 73.35 per cent to freight. But the basis for this division is the number of train miles in each class of service. (R. p. 2310.)

The actual apportionment in dollars and cents is $553,395.11 to freight and $501,281.40 to passenger. (R. p. 2293.) That is 47.53 per cent apportioned to passenger against 26.65 per cent if the revenue basis had been used, and 52.47 per cent to freight as against 73.35 per cent if the revenue basis had been used.

If the proportion between intrastate freight and interstate freight were the same as the proportion between intrastate passenger and interstate passenger the difference in apportionment of freight and passenger expenses would make no difference, for the test is finally as to whether the combined revenue from the two classes of intrastate traffic produces a compensatory return, but where the proportions are different the final result is correspondingly different.

The difference works out as follows:

The greater apportionment to passenger traffic from use of train-mile basis instead of revenue basis is $220,216.46. It results from apportioning to passenger traffic 47.53 per cent of this item instead of 26.65 per cent of it. As 59.54 per cent of passenger expense is, under the revenue basis, charged to intrastate as against 40.46 per cent charged to interstate, the greater the sum apportioned to passenger traffic the greater the sum apportioned to intrastate passenger; on the other hand, as the freight traffic as apportioned on the

revenue basis is 13.41 per cent to intrastate and 86.59 per cent to interstate, the less the sum apportioned to freight traffic the less will be the sum apportioned to interstate freight traffic and more to the total intrastate passenger and freight traffic. This difference of $220,216.46 more assigned to passenger and less to freight under the train-mile basis than would be under the revenue basis, according to the above-named percentages, assigns more expenses to the intrastate passenger than its just share under the revenue basis and less expense to the interstate freight than its just share, and works out a let loss to the intrastate traffic of $101,582.92 and a net gain to the interstate traffic of $101,582.92 by adopting the train-mile instead of the revenue basis to divide maintenance-of-way expenses between freight and passenger, as seen by this calculation:

APPORTIONMENT OF MAINTENANCE-OF-WAY EXPENSES ON TRAIN-MILE BASIS.

| | | *Total.* | | *Intrastate.* | | *Interstate.* |
|---|---|---|---|---|---|---|
| Freight | (52.47%) | $ 553,395.11 | (13.41%) | $ 74,210.28 | (86.59%) | $479,184.83 |
| Passenger | (47.53%) | 501,281.40 | (59.54%) | 298,462.95 | (40.46%) | 202,818.45 |
| Total | | $1,054,676.51 | | $372,673.23 | | $682,003.28 |

APPORTIONMENT OF MAINTENANCE-OF-WAY EXPENSES ON REVENUE BASIS.

| | | *Total.* | | *Intrastate.* | | *Interstate.* |
|---|---|---|---|---|---|---|
| Freight | (73.35%) | $ 773,605.22 | (13.41%) | $103,740.46 | (86.59%) | $669,864.76 |
| Passenger | (26.65%) | 281,071.29 | (59.54%) | 167,349.85 | (40.46%) | 113,721.44 |
| Total | | $1,054,676.51 | | $271,090.31 | | $783,586.20 |

SUMMARY.

| | |
|---|---|
| On train-mile basis | $372,673.23 |
| On revenue basis | 271,090.31 |
| Excess of train-mile basis over revenue basis | $101,582.92 |

The value of property assigned to total intrastate traffic, under the revenue basis adopted by Iron Mountain, exhibit 3-A (correcting an error in exhibit 3) (R. p. 2318) is $4,424,048.46. The net revenue, after deducting expenses, taxes and rentals, according to Iron Mountain showing on all intrastate traffic, is $208,032.21. (R. p. 2295.) This produces return of 4.66 per cent on the property (R. p. 2296), after correcting error in property assessment, a return of 4.70 per cent on the intrastate property. (R. p. 2319.) Unless the argument on rate of return to the effect that a rate yielding as much as the rate of interest paid on the securities of this road, 4.50 per cent, is accepted as sound, this would be a confiscatory return, as being less than the legal rate in Arkansas, 6 per cent, which under some of the cases is *prima facie* the test.

If the revenue basis, instead of the train-mile, had been used to divide maintenance-of-way expenses, this $101,582.92 would be added to the net return shown on intrastate property, making the net income $309,614.13, instead of $208,631.21, and a net return on the property of 7.04 per cent, instead of 4.70 per cent. If the 4.70 per cent be held confiscatory, certainly 7.04 per cent will not be held confiscatory.

It will be said that this return of 7.04 per cent is upon the straight revenue basis before the extra cost of intrastate traffic is added to bear down the intrastate return, and that is true, and also true that it is upon the straight revenue basis throughout only discarding the unfair train-mile basis where it is and substituting what Mr. Nay calls "the best known measure" (R. p. 662) for it, and without allowance for the higher intrastate revenue, 98.18 per cent on freight and 3.48 per cent on passenger. That the whole evidence establishes that the intrastate freight traffic cost less than 98.18 per cent, more than interstate freight, is thoroughly established by preponderance of the evidence; in fact, the only evidence against it is the opinion evidence of operating officials where cross examination proved that they were giving opinions on general conditions, which were shown not to exist in this case, and which several of them candidly admitted rendered their testimony inapplicable to this case.

The State's exhibits made up with the unfair train-mile division of passenger and freight maintenance-of-way expenses and an unfair revenue basis for apportionment of the property and making maximum allowances for all items of extra cost showed the intrastate freight only 86 per cent more expensive per ton per mile than interstate, as against the higher interstate revenue of 98.18 per cent per ton per mile.

The correction of this basis makes the intrastate return 7.04 per cent and extra cost is absorbed in the higher percentage. The State's exhibit allowing for all extra cost and using rational bases, but still retaining the train mile factor, which worked harshly against it as explained, shows a return of 7.69 per cent on the face of it, and after

correcting the error as to Pullman mileage, a return of 7.09 per cent. This strongly corroborates this showing and plainly indicates that more than 7 per cent is the minimum return the intrastate property is yielding. In fact, the return is much greater. All these examples are made up with concessions against the State to work out with less controversy the actual facts, contrasting them with the theories of plaintiffs.

It must be borne in mind that the correction of this erroneous basis lifts the intrastate return from 4.70 per cent to 7.04 per cent; it correspondingly decreases the interstate, but as the combined return is 7.50 per cent (R. p. 2318), neither traffic is suffering from confiscatory rates.

Really the whole Arkansas traffic is earning much more than that. Its expense is loaded with the Memphis expenses, and unfair methods of apportioning repairs of tools, fines for violating the criminal laws and other matters hereafter explained, and its revenues depleted by improvident contracts, to use an euphemistic expression, for them. But if this train-mile basis for dividing maintenance-of-way is right, it should be used, notwithstanding the burden of it to the intrastate traffic. As to whether it is right, we invite your attention to the testimony of the witnesses, particularly the plaintiffs' witnesses, and the utterances of courts which have considered it.

Mr. McPherson, in his direct examination, thus gives his views of the train-mile basis:

*Plaintiffs' Evidence.*

"The 'train-mile' measure being divided between freight and passenger service, may be followed in dividing the common expenses as between freight and passenger traffic. That is, the expenses that are common to both, but it must be discarded in any consideration of division between intrastate and interstate traffic, for various reasons, among which are, that it represents trains carrying both classes of traffic, and it also represents empty cars, the ultimate assignment of which can not be determined, and which, in themselves, yield no revenue.

"Then again, in conditions where the traffic of a railroad is not balanced in both directions, it may represent trains making no earnings whatever. That is, an engine and caboose, run from one end of the division to the other, to take a train or return a train.

"It does serve in railway operation as one of the factors in determining operating efficiency, in showing the average train haul, and tons per train mile, as all of the freight train mileage must be taken into consideration in any statistics that are prepared for comparative purposes, or for the study of railway operation.

"It is further useful in other statistics that the railway uses; in testing the efficiency of various divisions, or its operation generally." (R. p. 305.)

Mr. Doddridge, in re-direct examination, was asked in regard to the uses of the various statistics of the railroad companies on cost of traffic, and this was said:

"A. The train mile is also used.

Q. What is that used for?

A. For the apportionment of expenses, sometimes; the division of certain accounts where it is applicable.

None of these units are perfect. They are more or less of an arbitrary character and represent the conditions." (R. p. 534.)

Mr. Carl R. Gray, Senior Vice President, formerly General Manager, of the St. Louis & San Francisco Railway Company, was one of the railroads' chief witnesses in rebuttal. His testimony begins at page 1894, where an autobiography of his railroad service is found.

In direct examination Mr. Gray said:

"I believe there is in railroad practice only one more unreliable factor than a car mile, and that is a train mile." (R. p. 1897.)

On cross examination he said that it is perhaps a fair basis between passenger and freight on account of the fact that while one subjects the track to greater use it does not require the same degree of maintenance, and they come more nearly compensating, but he does not think it would be a satisfactory basis, but least obnoxious when used to divide passenger and freight than by other items.

Referring to this exact point is this:

"Q. But that would not properly represent the relation between freight and passenger when you are seeking to divide the expenses between State and interstate, as I understand your testimony?

A. That is my view." (R. pp. 1939, 1940.)

Mr. M. L. Byers, Chief Engineer of maintenance-of-way of the Missouri Pacific and Iron Mountain systems, testified for plaintiffs in rebuttal, his testimony beginning at page 1695.

He says that maintenance-of-way expenses should be divided as general expenses are divided, but that he does not know what would be a proper factor to divide general expenses, and he says he thinks the train mile as a basis for dividing maintenance-of-way between passenger and freight "is somewhat less in error than the use of the car mile statistics would be for the same purpose." (R. p. 1706.)

He admits that many criticisms he makes of the car mile would be applicable to the train mile or revenue basis. (R. pp. 1706-8.)

It was with him simply a degree of error in the various bases suggested. (R. 1708.)

Mr. Frank E. Ward, General Manager of the Burlington System, when testifying in rebuttal for the plaintiffs, said on this subject:

"Q. Coming to the division between freight and passenger, what do you think of the train mile as a proper factor to determine that?

A. I don't think that is proper. It would depend a good deal on the purpose for which we are undertaking to make the division. It may be for the purpose of simply making a comparison of a superintendent's performance of work on his own division, from month to month or year to year. On the other hand, it might be on a matter as important as the making of rates for freight and passen-

ger. And if for the latter, a great deal more care would be needed to be exercised in order to make a fair division.

Q. The latter is the object to which this litigation reaches, of course, to ascertaining whether the intrastate rates are compensatory. With that object in view and approaching the problem in this first step, maintenance-of-way, is it proper to divide that on the basis of train mile, as representing the use of the way?

A. My opinion is that it is not.

Of course, my opinion differs so materially from those of the accountants for the State in this respect, that I do not think the use of any of these factors, or any method that has been proposed heretofore, can really satisfactorily solve the problem. I wish it could, but I do not see that it can.

Q. Taking this as a basis, I want to ask if I correctly understand your position:

"Maintenance-of-way and structures: This account includes all repairs due to maintenance-of-way and track, bridges, trestles, fences, culverts, etc., also material and supplies used in repairing same and supervision. This expense is practically all localized and is charged to the State in which the expense is incurred. The total charge to maintenance-of-way and structures is divided between freight and passengers upon the basis of the number of train miles in each class of service."

Q. What do you think of that method of division?

A. That, as I understand it, is a method of division prescribed by the Interstate Commerce Commission. Speaking as an operating man, I would hesitate very much to accept that as a basis upon which to determine the question we have under discussion now—that is, the cost of handling State versus interstate business.

I think it omits a good many items that should be considered in trying to solve that particular problem. I do not think that division had in mind any such proposition as that we are discussing now.

Q. If that is used as a basis here to start a division of expenses, you consider it unsound?

A. Yes, sir." (R. pp. 1875, 1876.)

We can not assume that the force of Mr. Ward's condemnation of the train-mile basis to divide maintenance-of-way expenses between freight and passenger would have been lessened by the fact that he thought its use for this purpose was an invention of the State's accountants. The basis read to him in the foregoing question is taken from Iron Mountain exhibit 3, statement 5. (R. p. 2310.)

Mr. Nay, in his rebuttal testimony, says that train mileage division between passenger and freight for maintenance-of-way expenses is the best unit found for comparative purposes.

"These statistics are compiled for comparative purposes. They do not purport to cover the actual separation between freight and passenger of those common expenses. By using the same unit from

month to month we are able to make comparisons of one month with another." (R. p. 2034.)

Mr. Nay admits that much of his criticism of the car mile division of maintenance-of-way expenses in the State's plan would apply to any other basis, but he thinks not with the same force against the revenue basis. (R. p. 2042.)

In re-direct of Mr. Nay this occurs:

"Q. You stated on cross examination that the revenue does not represent the expense of maintenance-of-way, any more than the car miles.

Do you mean by that to say that that expense is not represented by either?

A. Yes, sir; I mean that neither one causes the expense.

Q. That class of expense is shown by the evidence in this case to grow largely out of causes other than operation. The testimony shows that 75 to 90 per cent of it is caused by the elements and other independent causes.

Now, in that view there is no connection or relation between that and car miles to the extent that it is not caused by operations.

That is true, is it not?

A. Yes, sir.

Q. You have already stated that?

A. Yes, sir.

Q. If it is true, it is more or less of an overhead expense rather than direct expense of transportation, is it not?

A. Yes, sir; I should think it might very fairly be treated as an overhead expense.

Q. If you had to divide it on some other basis I believe you stated it is your view it should be divided on the revenue basis?

A. Yes, sir.

Q. But if you had to plan some other basis than the revenue, what basis would you take? How would you treat it?

A. My second choice would be to treat it as an overhead expense and divide it on the basis of the direct expense." (R. pp. 2074-5.)

Mr. F. P. Johnson, who had charge of the accounts for the Iron Mountain in this case, testified, in rebuttal, and criticised the State's plan of dividing maintenance-of-way expenses between local and through trains on the car-mile basis and said: "The larger the proportion of that expense that is due to the elements the less accurate would any unit, either of car miles or train miles become, as has been stated by other witnesses, neither the train miles nor the car miles would have any effect upon that class of expense." He says it is more of a general expense than any other item in the operating department. (R. p. 1986.)

Mr. Wharton, who prepared the State's exhibits, testified in cross examination that he made no division of his own between freight and passenger for maintenance-of-way expenses; he simply took the division of the railway company of it, and considered it good enough for the purpose he used it. He was asked if he regarded it as a proper basis and said: "As between freight and passenger, it was probably good enough for the purposes of this case. I would not care to pass a personal opinion on that, because I have not studied it sufficiently to form an opinion as between freight and passenger." (R. p. 1031.)

*Defendants' Evidence.*

He says that while it was necessary to have this division correctly made in order to obtain correct results, and after he used it the only study necessary was as to a division of freight expenses between local and through and passenger expenses of the various classes. He was asked why he departed from the train mile and adopted the car mile between local and through and said because the car mile would more nearly represent the differences in cost. (R. p. 1032.)

Mr. Ludlam testified that his firm (Haskins & Sells) had prepared a statement which he thinks reflects pretty closely the cost of the intrastate and interstate in Arkansas, and in preparing that statement they had not gone back of the statement prepared by the railroad in dividing maintenance-of-way expense between passenger and freight. (R. p. 1321.)

We call especial attention to the testimony of Mr. Conway W. Hillman on this subject. Mr. Hillman is an expert railroad accountant and represented the State of Minnesota in its accounting matters in its rate case. He was a witness for the State in this case. He testified generally as to the various bases adopted by the State's accountants in this case, and on cross examination this testimony was given on this subject:

"Q. The expense between passenger and freight in these exhibits filed by the State, is divided on the train mile, isn't it?

A. I don't know, sir.

Q. That is the train mile made by each class of train?

A. That is whatever the loads had done, I don't follow that.

Q. Which would you regard as the better method of division?

A. Which two, do you mean?

A. The train mileage or car mileage?

A. Neither of them.

Q. Give me your views upon that subject?

A. My views on that subject would be that the expense of maintenance-of-way and structures should be divided upon the basis of the train weights in lieu of train mileage.

Q. Explain to me what you mean by train weights?

A. I mean that a passenger train will weigh approximately 250 tons, and a freight train will weigh approximately 900 tons, engine

and tender included. The division should be made upon a gross ton-mile basis.

Q. You would adopt that instead of the train-mile basis?

A. Yes, sir.

Q. When you say trains, you speak of the weight without regard to the contents, do you?

A. No, sir; I mean the weight of the engine and the tender, and the weight of each car, what you call light weight of each car, that is the weight of the car without any load on it, and to that, I add the number of tons which are loaded on those cars, so it would be the weight of the motive power, the weight of the rolling stock and the weight of the live load and also the weight of the caboose.

Q. That is freight?

A. Yes, sir.

Q. On the passenger, you adopt the same method?

A. Yes, sir; the weight of the engine and tender, the weight of the equipment, the rolling stock, the average passenger miles, taken at the basis of 150 pounds each, an allowance for 50 pounds of baggage per person, and the express, varying according to the amount of express which the road carries, light or heavy; mail the same way, the load of your cars." (R. pp. 1509, 1510.)

On re-direct he said if this data was not obtainable (and it was shown it was not in this case) he would take the train weights and obtain the percentage which exists in the train mile and take the car mile and that percentage and add the two together and divide by two and use that, putting the car mile on the train mile. (R. pp. 1521, 1522.)

Judge Sanborn, in his opinion in the Minnesota Rate Case, referred to Mr. Hillman's testimony, which was evidently to the same effect as here given, and said that no other witness came to support him, and, on the other hand, a number of witnesses of long experience in operating railroads had favored the revenue basis, as we understand the opinion, for the division of maintenance-of-way expenses between passenger and freight; and that was the basis adopted by the master and confirmed by Judge Sanborn.

Shepard v. Northern Pac. Ry. Co., 184 Fed. Rep. 765, on pp. 812, 813.

Mr. Wilmering thus expressed his views on the subject:

A. But the basis I have suggested here, in my judgment, is a fair basis—an equitable and a just basis, for the reason that the expense of "maintenance-of-way" is common to all classes and characters of traffic. It is not caused by any particular class of traffic, and the expense or outgo for "maintenance-of-way" is caused by the acts of Providence, acts of God, whether a washout, deterioration of ties owing to weather conditions. In all truth and in all logic, the car mile ought to be accepted for the basis of division between local and through.

Q. If that is true, why should it not also be used as a basis of division between passenger and freight trains?

A. Well, we have made a concession to the railroad companies in that respect and have accepted the theory advanced by the railroad officials themselves.

They were first to advance train-mileage for a division between passenger and freight business, and where the charges could not actually be located, in a great many of the instances, between passenger and freight, might be assigned directly to passenger and freight traffic accounts.

One of the principal reasons why we have accepted the revenue train mileage basis for a division between freight and passenger, where the expenses can not be located, is just a concession to the majority of the accounting officials. It is accepting the railroad's own theory." (R. p. 1139.)

The defendants introduced a vast amount of testimony tending to prove that the car mile was the proper factor with which to divide maintenance-of-way expenses. It was introduced to sustain the State's plan of dividing maintenance-of-way expenses between local and through freight trains on the one hand and mail and express cars and passenger coaches on the other hand. It took wide scope and goes to the general proposition that the car mile is the factor reaching nearest actual results. The train mile is incidentally brought into the discussion, but most of it is explaining why the car mile is the appropriate factor for this item of expense. Its consideration is necessary in the connection given, but attention is called to it here as it strongly reinforces the objection to the train mile in furnishing a better and more reliable factor.

But other testimony should not be needed. The plaintiffs have predicated their case on the revenue basis as the one offering the best solution of this whole problem and Mr. Gray criticises the State plan severely for using different factors with which to divide different items. (R. pp. 1907-1909.)

The use of different factors by the State is consistent with its plan, seeking in each instance the factor nearest applicable, but it is wholly inconsistent with the railroads' plan, which offers the revenue theory as the best unit yet found.

Certainly it should not be departed from unless good cause is shown in the selection of a factor more nearly accurate for the particular item than the revenue. Have they found it in the train mile? No witness for either side commends it—many condemn it.

Mr. McPherson says it will do between freight and passenger but must be discarded when a division between interstate and intrastate is made. Certainly when its use ultimately is for the latter purpose all the reasons he assigns against it for a division of intrastate and interstate must apply.

Mr. Doddridge, Mr. Nay and Mr. McPherson tell of the use of

the train mile for comparative purposes and evidently confine its use to such. Mr. Nay advocates the revenue basis of dividing maintenance-of-way and next to it the overhead plan.

Mr. Johnson advocates the latter and so does Mr. Byers. The fallacy of the overhead plan, however, is thoroughly explained in Mr. Ludlam's surrebuttal testimony. Mr. Byers condemns the train mile but considers it less erroneous than the car mile.

Mr. Gray considers it more unreliable than the car mile, and that it is too unreliable to be used to divide maintenance-of-way expenses between freight and passenger when seeking a division between State and interstate.

Mr. Ward's condemnation of it for the exact purpose used by the railroads in this case is emphatic and positive. He supposed the quotation from exhibit 3 was a formula of the Interstate Commerce Commission for same report and says for the purposes of this suit this basis omits a good many items that should be considered and for the purposes of this suit is unsound.

The train-mile basis attributes an unreasonable share to passenger traffic. Turn to the following account:

Maintenance-of-equipment, $723,431.33, is assigned to freight and $312,134.74 is assigned to passenger (exhibit 3, R. p. 2293).

The expenses of repairs to freight and passenger cars are compiled separately and only expense of a common nature divided between freight and passenger on a train mile (exhibit 3, statement 5, R. p. 2310). Turning to the detail of this account and getting to the actual facts when the train mile is not used but where a separation is made, actually between the two classes of service, and it is found: Repairs of passenger cars, $132,100.40, whole line; repairs of freight cars, $748,317.08, whole line. (R. p. 2304.) Just 15 per cent of the actual expenses is attributable to passenger cars when the expenses are located. Next is found the respective freight car repairs in Arkansas, $398,992.36, and passenger car repairs in Arkansas, $77,775.19, less than 15 per cent actually allocated to passenger cars. When the train mile is used 47.53 per cent is attributed to passenger traffic.

In station expenses the wages of employees handling both freight and passenger are divided 75 per cent freight and 25 per cent passenger. (R. p. 2310.) The railroads made an arbitrary division of this expense on above percentages, which are within one per cent of the proportion had the revenue been used. This arbitrary division was not complained of by the State, as it is one in frequent use, and is referred to in Smyth v. Ames. But why not use that arbitrary division for maintenance-of-way? If correct in one it would be in the other; but instead of taking a factor commonly used, they use the train mile and assign 47.53 per cent to passenger.

The mixed train expense is also divided between passenger and freight on arbitrary percentages of 75 and 25 (R. p. 2311) and it was

explained in the testimony that the Interstate Commerce Commission recognized this as a proper arbitrary.

The total amount of taxes paid in each State is divided by the railroads between freight and passenger on the revenue basis. (R. p. 2312.)

Why train mileage is the factor to divide the expenses of maintaining the way and the revenue the factor to divide the taxes on the way is an incomprehensible distinction.

Rentals for use of track—both debits and credits—are divided on revenue basis (R. p. 2312), and yet the upkeep of the tracks divided on a train-mile division.

There is an unaccountable and unaccounted-for change of base from the revenue to the train mileage and the effect of it on the railroads' own showing, as to one of these items only, is to reduce the rate of return on the property (before the extra expense is added) from 7.04 per cent to 4.7 per cent. If the revenue basis was substituted for train miles as to all other items where train mile is used, it is apparent that the return on the intrastate would far exceed 7.04 per cent. So far as our investigation goes, wherever the revenue theory has been accepted it has been applied to the division between freight and passenger.

*Decisions on the Train-mile Basis.*

In the Missouri Rate Case we are not sufficiently familiar with the record to state how the railroads divided it in their exhibits, but Judge McPherson had the accountants on each side to assist him in compiling the divisions according to his judgment, and it is found from this quotation from the statement of the case that he divided maintenance-of-way between freight and passenger on the revenue basis. St. L. & I. R. Ry. Co. v. Hadly, 168 Fed. Rep. 317, on page 322. "For reasons stated in an opinion herein filed, the revenue basis has been and is adopted as the only logical basis to use in arriving at a correct conclusion. The one basis or the other as a whole must be adopted. Either side can make a better showing by adopting the one basis in part of the accounting, and the other basis for the other. Neither should be and is allowed to do this."

In the opinion he says:

"The State earnings are made known to a certainty, concerning which the experts on both sides agree. And whether in earning them the company gains a profit, or sustains a loss, is dependent upon the expense in making such earnings. Some of these expenses can be definitely specified, but others, like maintenance-of-way, salaries of all officers, including ticket agents, handlers of freight, terminal expenses, compensation of many laborers, and other things, are all occasioned for carrying both freights and passengers, State and interstate, and miscellaneous of each. And herein is the problem how to make the apportionment.

"The track mile, or train or car mile, does not furnish the solution,

because every one agrees that neither of those methods will do, and no one of the experts or counsel on either side asks for such a solution."

*Id.*, on page 348.

In deciding the Oklahoma Rate Case, Judge Hook says:

"Having the total value of the railroad property in the State, the gross revenue from all operations therein, the gross revenue from each class of business, interstate and local, freight and passenger and mail, express and miscellaneous, and the proportionate property value devoted thereto respectively, there must then be ascertained the net revenues from the local freight and passenger business so that their relation to the value of the property employed in producing them may be disclosed and the ultimate question answered, towit, whether the rates from which the net revenues come are reasonably compensatory. At this point arises the principal controversy. A substantial part of the expense of railroad operation is incurred indiscriminately in all its business. For example, the maintenance-of-way and structures in a State, which makes one of the most important general expense accounts, is almost entirely for the common benefit of all traffic, interstate and local, freight and passenger. As between freight and passenger traffic a large part of the expenses may be directly located and distributed, and it is the custom to apportion the remainder by various rules not necessary to mention here; but generally speaking it is impracticable in railroad business to separate expenses into the interstate and local, and the minor and incidental operations. From the very nature of the case, therefore, some rule must be adopted for charging to each of them their fair and equitable proportion of the common expense. Of necessity it must proceed upon average conditions commonly known or shown to exist, and it argues nothing to say that it does not fully apply to this or that exceptional instance. A general rule based on experienced observation is fair, and what is lost by its application in one place is doubtless gained in another, and an equitable equilibrium maintained. Of those suggested the revenue basis appears to be much more uniform in its adaptability, and much less subject to substantial objection. It has been frequently employed (citing cases). It is the one to which the mind naturally turns in every problem involving the charging of common expense to different departments of a business. When a general or common expense can not be located, what is more obviously reasonable than to say in the first place the different branches or departments shall bear it according to the value of their products or their gross earnings, and then make due allowance for exceptional conditions if any are perceived. That seems at the start to satisfy the mind intent on equity. It is a working basis for the distribution of all expense incident to a railroad business among its revenue yielding operations of every character."

M., K. & T. Ry. Co. v. Love, 177 Fed. Rep. 493.

This case, being on the issuance of a temporary injunction, was carried to the Circuit Court of Appeals and there affirmed. The opinion was rendered by Judge Sanborn, who upon this subject said:

"In order to ascertain the net return from the intrastate passenger business and from the intrastate freight business of each of these companies, it was necessary for the Circuit Court to find and deduct from the gross earnings of each of these classes of business the cost of doing that particular business. There were many items of cost of doing all the business of the company in Oklahoma that disclosed the class of business on account of which they were incurred, and these are called 'allocated items.' But there was a large percentage of the cost of doing all the business of each of the companies in Oklahoma, like the cost of the maintenance-of-way and structures, which was incurred for the common benefit of its interstate business and its intrastate business, and there is no method of dividing these items of common cost between these classes of business which is sure to be mathematically accurate. Many methods have been and still are suggested. The question was: Which was the most equitable, the most likely to produce a fair and just division? And upon this subject there was much testimony of many witnesses, whose long experience in the practical operation of railroads, exceptional opportunities for extensive observation, and peculiar knowledge qualified them to form and express opinions. The Circuit Court examined all this evidence, considered the arguments of counsel, and adopted the revenue basis, and assigned these items of common cost to the classes of business in proportion to the gross earnings of these respective classes.

"Counsel now argue that there were other available methods, more likely to be fair and just, which they insist the court should have preferred. They now suggest (1) the ton-mile and passenger-mile basis; (2) the division of the items of common cost in the same proportion that the allocated items assigned themselves; (3) the subtraction of the aggregate of the items of common cost from the gross earnings of all the business, the division of the balance between the various classes of business according to their respective gross earnings, and the subtraction therefrom of the items respectively allocated to these classes. There is no basis of division that is free from objection and criticism. But the decisive preponderance of the evidence is that the revenue basis is the most likely to be just and fair. Much that has been said concerning the use of this basis for the apportionment of the value of the property is applicable to its employment for the division of items of common cost. No reasons for the use of either of the other bases that seem to us so cogent and persuasive as those given by Judge Hook at pages 498, 499, of 177 Fed. Reporter, for his adoption of the revenue basis have been called to our attention or occur to us. The use of that basis is sustained by many decisions, and it can not be held to be erroneous or mistaken."

Love v. Atchison, T. & S. F. Ry. Co., 185 Fed. Rep., on 330. We have heretofore referred to Judge Sanborn's opinion in the Minnesota Rate Case, rejecting the basis advanced by Mr. Hillman—the train weight. Not being familiar with the Minnesota record, we can only gather the facts from the opinion, and it seems that the revenue basis was applied by the master to both a division of property and expenses between passenger and freight, and the master's finding approved by Judge Sanborn. It is certain that Judge Sanborn accepted the revenue basis as a sound factor for application both to property and expense. While we radically differ with that opinion, and think the evidence in this record is convincing that that basis is of no value for either, certainly if used for the other items it should be used for the common ones. The revenue bases has been adopted, after consideration, so far as our investigation has gone, in only three cases, Minnesota, Oklahoma and Arkansas, where it was tried out. Judge VanDeventer adopted it in this case, on the preliminary hearing, but on the final hearing, when the facts were fully developed, Judge Trieber declared it "clearly wrong." Judges Hook, McPherson, Sanborn and Trieber each declare the revenue basis the proper division of maintenance-of-way, and so does the Circuit Court of Appeals of the Eighth Circuit. Doubtless due to oversight in preparing his calculations, Judge Trieber overlooked that both sides had in their exhibits used the train mile division between passenger and freight, the railroads as the foundation for separating freight and passenger before each were separated into intrastate and interstate, and the State solely to take the railroads' assignment to each class of traffic the respective expenses and test out their method of apportioning such items between intrastate and interstate. We do not for a moment advocate the revenue basis for dividing maintenance-of-way expenses between passenger and freight as right in principle, but do say that if the revenue basis is to be used to divide the property between freight and passenger and between State and interstate and the expenses between State and interstate, then it must also be used to divide the maintenance-of-way and other common expenses between freight and passenger; and, furthermore, that the factor here used, the train mile, set apart to passenger traffic an unreasonable and undue amount of expense and to an extent clearly not attributable to the passenger traffic.

As seen when actual expenses are divided on repairs of cars only 15 per cent goes to passenger, and, when the revenue is used, only 26 per cent goes to passenger. We have used maintenance-of-way to illustrate the error of using train mile to divide common expenses. As is seen in the statement of plaintiffs' bases (R. p. 2310), it is used to divide other common expenses between passenger and freight. In maintenance-of-equipment common expenses not definitely located to freight cars or passenger cars are so divided; water and other supplies in engine service and engine house expense are so divided

between passenger and freight; "other transportation expenses," not definitely located, are so divided. The extent of this erroneous basis can not be ascertained from the exhibits as they stand. As to maintenance-of-way alone, it amounts to over $101,000, a sum sufficient to more than absorb the extra expense of intrastate traffic and change what on the face of the railroad exhibits might be a confiscatory return into one which is unquestionably a compensatory return upon the property.

As explained in the evidence (R. pp. 2286-2289), the State's accountants made an error in their exhibits in regard to Pullman mileage; the railroads in their exhibit 56 attempted to correct it and also made an error, but both errors were carefully worked out. The railroads filed a supplemental exhibit, 56-A. (R. p. 2471.) The amount of error against the interstate is, in dollars, $29,705.71; a difference in return on property of about six-tenths of one per cent. It reduces the return on property shown on State's exhibit "O" (put in at pp. 2540, 2541), from 7.69 per cent to about 7.09 per cent.

In exhibits made part of this brief this correction is made.

Judge Trieber says in his opinion, referring to maintenance-of-way expense:

"In view of these facts, any attempt to apportion this item of expense on the ton, car or train mileage would be an injustice to the roads. The court is of the opinion that the straight revenue basis will get more accurate results. The difference in intrastate and interstate rates will be taken care of by proper allowance to be made on the final calculations of the entire cost." (R. p. 2623.)

Again he says at page 2608: "The train basis is conceded by all as the least accurate."

Elsewhere in the opinion for reasons given he finds the intrastate freight rates are 50 per cent higher than interstate and passenger rates 3.48 per cent higher intrastate than interstate. (R. p. 2619.)

The railroads' statistics are that freight intrastate revenue is 98.18 per cent higher than interstate and passenger 3.48 per cent; but the learned Judge, taking into account all the various elements of extra cost of intrastate freight traffic, concluded that for the reasons given by him that 50 per cent was the proper allowance to be made for the difference in intrastate freight revenue or rates.

We have requested Messrs. Haskins & Sells to prepare an exhibit to this brief, in order to illustrate the difference in returns, had Judge Trieber discarded the train-mile basis for dividing maintenance-of-way expenses between freight and passenger and adopted the revenue basis, which he said should be adopted with the aforesaid allowances. It also adds two small items of omitted earnings, according to Judge Trieber's opinion erroneously omitted. (R. pp. 2599, 2600.) The exhibits follow the State's exhibits in other respects.

The exhibits are as follows:

## COMMENTS REGARDING EXHIBIT "AA" EXHIBIT "BB," EXHIBIT "CC."

The total maintenance-of-way and structure expenses have been divided between "freight" and "passenger" on the basis of the revenue derived from each class of service, as shown by exhibit No. 3. The proportion thereof so applicable to freight has been divided between "local" and "through" trains on the basis of the engine and car miles of these trains, as shown by page 1 of exhibit "K." The proportion thereof so applicable to "passenger" has been divided between the various classes of cars hauled in passenger trains on the basis of the car miles to each class during October, 1907.

The value of property has been divided between "freight" and "passenger" on the basis of the revenue derived from each class of service, as shown by exhibit No. 3. The proportion thereof so applicable to "freight" has been divided between State and interstate on the basis of the revenue derived from each class of service after equalizing such revenue by eliminating from the State revenue the excess of State revenue over interstate revenue on the 50 per cent basis stated by Judge Trieber. The proportion so applicable to "passenger" has been divided between mail, express, State and interstate, on the revenue basis after equalizing such revenue by eliminating from the State revenue the excess of State revenue over interstate revenue on the 3.48 per cent basis, stated by Judge Trieber.

All expenses, other than those of maintenance of way and structure, have been distributed in the same manner as in exhibits "J," "L" and "N," with corrections made covering passengers carried in Pullman cars.

## STATE OF ARKANSAS—RATE MATTER

### ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY

Statement of Freight Operating Expenses in Arkansas—For the Six Months Ended December 31, 1907—Divided Between Local and Through Train Service and Between Intrastate and Interstate Business.

| | TRAIN COSTS | | OTHER COSTS | | |
|---|---|---|---|---|---|
| | Local (1) | Through (2) | State (3) | Interstate (4) | Total (5) |
| 1—MAINTENANCE OF WAY AND STRUCTURES | $131,358.17 | $ 642,247.05 | ..... | ..... | $ 773,605.22 |
| 2—MAINTENANCE OF EQUIPMENT: | | | | | |
| (a) Locomotives: | | | | | |
| (1) Yard, | $ 13,453.83 | $ 55,681.97 | ..... | ..... | $ 69,135.80 |
| (2) Road, | 43,733.35 | 70,807.25 | ..... | ..... | 114,540.60 |
| (b) Freight Cars, | 107,288.53 | 370,607.11 | ..... | ..... | 477,895.64 |
| (c) Supervision and General, | 15,378.22 | 46,481.07 | ..... | ..... | 61,859.29 |
| Total Maintenance of Equipment | $179,853.93 | $ 543,577.40 | ..... | ..... | $ 723,431.33 |
| 3—TRAFFIC EXPENSES, | ..... | ..... | $ 11,899.29 | $ 76,835.13 | $ 88,734.42 |
| 4—TRANSPORTATION EXPENSES: | | | | | |
| (a) Station Expenses. | ..... | ..... | $ 77,821.13 | $ 155,805.81 | $ 233,626.94 |
| (b) Yard and Terminal Expenses, | $ 57,085.42 | $ 236,262.07 | ..... | ..... | 293,347.49 |
| (c) Fuel and Locomotive Expenses, | 59,301.61 | 162,303.79 | ..... | ..... | 221,605.40 |
| (d) Enginehouse Expenses, | 15,194.55 | 38,439.58 | ..... | ..... | 53,634.13 |
| (e) Road Enginemen and Trainmen, | 165,866.65 | 301,758.52 | ..... | ..... | 467,625.17 |
| (f) Other Train Expenses, | 34,957.06 | 97,355.81 | ..... | ..... | 132,312.87 |
| (g) Loss and Damage—Freight, | ..... | ..... | $ 30,972.03 | $ 96,537.35 | 127,509.38 |
| (1) Supervision and General, | 10,083.35 | 25,363.84 | 3,299.25 | 7,656.48 | 46,402.92 |
| Total Transportation Expenses, | $342,488.64 | $ 861,483.61 | $112,092.41 | $ 259,999.64 | $1,576,064.30 |
| 5—GENERAL EXPENSES, | $ 27,342.73 | $ 85,611.31 | $ 5,182.96 | $ 14,081.24 | $ 132,218.24 |
| 6—TOTAL OPERATING EXPENSES, | $681,043.47 | $2,132,919.37 | $129,174.66 | $ 350,916.01 | $3,294,053.51 |
| 7—DIVISION OF TRAIN COSTS BETWEEN INTRASTATE AND INTERSTATE BUSINESS: | | | | | |
| (a) Local Trains: | | | | | |
| (1) Intrastate Freight—26.00% of Total, | *$177,071.30 | ..... | $177,071.30 | ..... | ..... |
| (2) Interstate Freight—74.00% of Total, | *503,972.17 | ..... | ..... | $ 503,972.17 | ..... |
| (b) Through Trains: | | | | | |
| (1) Intrastate Freight—4.96% of total, | ..... | $ *105,792.80 | 105,792.80 | ..... | ..... |
| (2) Interstate Freight—95.04% of total, | ..... | *2,027,126.57 | ..... | 2,027,126.57 | ..... |
| 8—TOTAL COST OF INTRASTATE AND INTERSTATE BUSINESS, | ..... | ..... | $412,038.76 | $2,882,014.75 | $3,294,053.51 |

*In Red Ink on Original Exhibit.

EXHIBIT "AA"

DARK PAGE BLEED THRU

## STATE OF ARKANSAS—RATE MATTER

### ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY

Statement of Passenger Operating Expenses in Arkansas—For the Six Months Ended December 31, 1907—Divided Between Train and Other Costs, and Between Intrastate, Interstate, Mail, and Express Business.

| | TRAIN COSTS | | | OTHER COSTS | | TRAIN AND OTHER COSTS. | | |
|---|---|---|---|---|---|---|---|---|
| | Baggage, Diner, and Cafe-Observation (1) | Coach (2) | Pullman (3) | Intrastate (4) | Interstate (5) | Mail (6) | Express (7) | Total (8) |
| 1—MAINTENANCE OF WAY AND STRUCTURES, | $ 37,579.23 | $121,984.94 | $ 59,446.58 | ..... | ..... | $ 33,025.88 | $ 29,034.66 | $ 281,071.29 |
| 2—MAINTENANCE OF EQUIPMENT: | | | | | | | | |
| (a) Locomotives, | $ 22,254.81 | $ 72,245.45 | $ 35,206.63 | ..... | ..... | $ 19,559.24 | $ 17,195.48 | $ 166,461.61 |
| (b) Passenger Train Cars, | 14,768.53 | 47,942.86 | ..... | ..... | ..... | 12,969.06 | 11,418.70 | 87,099.15 |
| (c) Supervision and General, | 8,553.77 | 27,767.96 | 8,130.07 | ..... | ..... | 7,509.18 | 6,613.00 | 58,573.98 |
| Total Maintenance of Equipment, | $ 45,577.11 | $147,956.27 | $ 43,336.70 | ..... | ..... | $ 40,037.48 | $ 35,227.18 | $ 312,134.74 |
| 3—TRAFFIC EXPENSES, | ..... | ..... | ..... | $ 25,588.50 | $ 17,389.31 | $ 6,196.01 | $ 4,102.26 | $ 53,276.08 |
| 4—TRANSPORTATION EXPENSES: | | | | | | | | |
| (a) Station Expenses, | ..... | ..... | ..... | $ 52,377.81 | $ 4,678.63 | $ 2,325.00 | ..... | $ 59,381.44 |
| (b) Yard and Train Expenses, | $ 73,406.98 | $238,299.92 | $116,128.25 | ..... | ..... | 64,515.70 | $ 56,718.91 | 549,069.76 |
| (c) Loss and Damage—Baggage, | ..... | ..... | ..... | 984.39 | 668.92 | ..... | ..... | 1,653.31 |
| (d) Supervision and General, | 4,869.95 | 15,809.27 | 7,702.59 | 3,541.66 | 356.19 | 4,432.13 | 3,764.27 | 40,476.06 |
| Total Transportation Expenses, | $ 78,276.93 | $254,109.19 | $123,830.84 | $ 56,903.86 | $ 5,703.74 | $ 71,272.83 | $ 60,483.18 | $ 650,580.57 |
| 5—GENERAL EXPENSES, | $ 20,015.52 | $ 64,949.94 | $ 28,086.03 | $ 10,224.79 | $ 2,861.66 | $ 18,665.07 | $ 15,964.18 | $ 160,767.19 |
| 6—TOTAL OPERATING EXPENSES, | $181,448.79 | $589,000.34 | $254,700.15 | $ 92,717.15 | $ 25,954.71 | $169,197.27 | $144,811.46 | $1,457,829.87 |
| 7—DIVISION OF BAGGAGE, DINER, AND CAFE-OBSERVATION COSTS BETWEEN COACH AND PULLMAN PASSENGERS: | | | | | | | | |
| (a) Passenger miles in Pullman—15.41% of total | $ *27,961.26 | ..... | $ 27,961.26 | ..... | ..... | ..... | ..... | ..... |
| (b) Passenger miles in Coaches—84.59% of total | $*153,487.53 | $153,487.53 | ..... | ..... | ..... | ..... | ..... | ..... |
| | ..... | $742,487.87 | $282,661.41 | ..... | ..... | ..... | ..... | ..... |
| 8—DIVISION OF COACH AND PULLMAN COSTS BETWEEN INTRASTATE AND INTERSTATE BUSINESS: | | | | | | | | |
| (a) Coach: | | | | | | | | |
| (1) Intrastate—66.13% of total, | ..... | *$491,007.23 | ..... | $491,007.23 | ..... | ..... | ..... | ..... |
| (2) Interstate—33.87% of total, | ..... | *251,480.64 | ..... | ..... | $251,480.64 | ..... | ..... | ..... |
| (b) Pullman: | | | | | | | | |
| (1) Intrastate—18.00% of total, | ..... | ..... | $ *50,879.05 | 50,879.05 | ..... | ..... | ..... | ..... |
| (2) Interstate—82.00% of total, | ..... | ..... | *231,782.36 | ..... | 231,782.36 | ..... | ..... | ..... |
| 9—TOTAL COST OF INTRASTATE, INTERSTATE, MAIL AND EXPRESS BUSINESS, | ..... | ..... | ..... | $634,603.43 | $509,217.71 | $169,197.27 | $144,811.46 | $1,457,829.87 |

*In Red Ink on Original Exhibit.

EXHIBIT "BB"

DARK PAGE BLEED THRU

## STATE OF ARKANSAS—RATE MATTER

### ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY

Statement of Revenue, Expenses, Net Earnings and Return upon the Value of the Property in Arkansas—For the Six Months Ended December 31, 1907—With Miscellaneous Earnings, Taxes, Rentals Hire of Equipment, Dining Car Deficit, and Value of Property Divided Between the Various Classes of Business on a Gross Revenue Basis.

| | FREIGHT | | | PASSENGER | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Intrastate | Interstate | Total | Intrastate | Interstate | Mail | Express | Total | Total Business |
| 1—REVENUE: | | | | | | | | | |
| (a) Freight, Passenger, Mail and Exp. | $ 640,248.17 | $ 4,133,210.33 | $ 4,773,458.50 | $ 836,542.20 | $ 568,476.21 | $202,637.71 | $133,910.82 | $1,741,566.94 | $ 6,515,025.44 |
| (b) Miscellaneous, | 16,469.41 | 106,345.00 | 122,814.41 | 22,170.87 | 15,066.07 | ..... | ..... | 37,236.94 | 160,051.35 |
| Total Revenue, | $ 656,717.58 | $ 4,239,555.33 | $ 4,896,272.91 | $ 858,713.07 | $ 583,542.28 | $202,637.71 | $133,910.82 | $1,778,803.88 | $ 6,675,076.79 |
| —EXPENSES: | | | | | | | | | |
| (a) Operating Expenses (See Exhibits "DD" and "EE"), | $ 412,038.76 | $ 2,882,014.75 | $ 3,294,053.51 | $ 634,603.43 | $ 509,217.71 | $169,197.27 | $144,811.46 | $1,457,829.87 | $ 4,751,883.38 |
| (b) Taxes, | 21,851.02 | 141,094.67 | 162,945.69 | 128,582.96 | 19,418.42 | 16,743.16 | 4,457.95 | 59,202.49 | 222,148.18 |
| (c) Rentals, | 2,156.94 | 13,927.62 | 16,084.56 | 2,821.46 | 1,916.81 | 665.63 | 440.05 | 5,843.95 | 21,928.51 |
| (d) Hire of Equipment, | 24,029.57 | 155,161.89 | 179,191.46 | *499.21 | *339.15 | *117.77 | *77.86 | *1,033.99 | 178,157.47 |
| (e) Dining Car Deficit, | ..... | ..... | ..... | 704.89 | 479.01 | ..... | ..... | 1,183.90 | 1,183.90 |
| Total Expenses, | $ 460,076.29 | $ 3,192,198.93 | $ 3,652,275.22 | $ 666,213.53 | $ 530,692.80 | $176,488.29 | $149,631.60 | $1,523,026.22 | $ 5,175,301.44 |
| 3—NET EARNINGS, | $ 196,641.29 | $ 1,047,356.40 | $ 1,243,997.69 | $ 192,499.54 | $ 52,849.48 | $ 26,149.42 | $ *15,720.78 | $ 255,777.66 | $ 1,499,775.35 |
| 4—ASSESSED VALUATION OF PROPERTY, DOUBLED, | $1,372,650.77 | $13,292,421.58 | $14,665,072.35 | $2,526,637.02 | $1,776,957.92 | $617,006.68 | $407,608.03 | $5,328,209.65 | $19,993,282.00 |
| 5—PERCENTAGE OF NET EARNINGS TO VALUATION, | 14.33% | 7.88% | 8.48% | 7.62% | 2.97% | 4.23% | *3.86% | 4.80% | 7.50% |

### SUMMARY OF ABOVE

| | TOTAL INTRASTATE BUSINESS | TOTAL INTERSTATE BUSINESS | TOTAL MAIL AND EXPRESS BUSINESS |
|---|---|---|---|
| NET EARNINGS: | | | |
| Freight, | $ 196,641.29 | $ 1,047,356.40 | ..... |
| Passenger, | 192,499.54 | 52,849.48 | $ 10,428.64 |
| Total, | $ 389,140.83 | $ 1,100,205.88 | $ 10,428.64 |
| ADD—PER JUDGE TRIEBER'S DECISION: (R. pp. 2599, 2600) | | | |
| Dividend from Pacific Express Company, | ..... | ..... | $ 15,984.00 |
| Rents from Passenger Station at Little Rock, | $ 2,100.00 | ..... | ..... |
| Total, | $ 391,240.83 | $ 1,100,205.88 | $ 26,412.64 |
| ASSESSED VALUE OF PROPERTY, DOUBLED: | | | |
| Freight | $1,372,650.77 | $13,292,421.58 | ..... |
| Passenger, | 2,526,637.02 | 1,776,957.92 | $1,024,614.71 |
| Total, | $3,899,287.79 | $15,069,379.50 | $1,024,614.71 |
| PERCENTAGE OF NET EARNINGS TO VALUATION, | 10.03% | 7.30% | 2.58% |

*In Red Ink on Original Exhibit.

EXHIBIT "CC"

DARK PAGE BLEED THRU

Thus it is seen that adopting the State's exhibits, which are in the main followed by the trial court except on maintenance-of-way and the proportion on local and through trains, which will be discussed at length, the return on the property is far above a confiscatory rate.

Exhibit "O" gives the total intrastate return 7.69 per cent, which should be reduced to 7.09 per cent; whereas, following Judge Trieber in the matters mentioned, gives a return of 10.03 per cent on the property used in the total intrastate traffic.

We think when the whole evidence is analyzed that the court will be convinced that the car mile is the proper factor for maintenance-of-way expenses, not only for local and through trains but for freight and passenger. The expert opinion from leaders of thought in railroad operation is practically unanimous for the car mile or "wheelage" basis as the factor to apportion maintenance-of-way expenses. and it has met the approval of this court. What is stronger than opinion evidence is the admitted fact that it is the accepted basis, when railroads contract with each other for the use of ways. Even these two plaintiff roads here have a contract between themselves apportioning maintenance-of-way expenses between themselves for a leased track on the car-mile basis.

Whatever opinion the Court may reach as the proper one—revenue or car mile—certainly in face of their own testimony the plaintiffs are not justified in using the train mile between passenger and freight, and, if it be rejected, then their case falls, without going into the defendants' evidence or its plan of division, which even under the harsh divisions made before they attempted allocation show a compensatory return.

## OTHER ERRORS IN PLAINTIFFS EXHIBITS.

There are other errors in plaintiffs exhibits to which attention is next called.

None of the errors here referred to were eliminated in the State's exhibits because it would have involved a world of confusion to have changed this or that item to conform to what we believed the evidence justified; so that the State's exhibits contain all the errors herein complained of. All mathematical errors in plaintiffs' exhibits were corrected. The Iron Mountain, finding they had duplicated a bridge on their property, revised their exhibits and took it out, and the Southwestern, finding it had erroneously computed extra cost, filed revised exhibits, but the errors herein referred to are errors of method, not of figures. They must be adjusted by determining the correctness of the method; then the figures can be made, if the data has been produced.

The State's exhibits contain the matters herein referred to, which we contend should be corrected, and invite your attention to them prior to considering the State's exhibits.

The first item to which your attention is called under this head is charging to the Arkansas expenses all the expenses at Memphis. Tennessee. Mr. F. P. Johnson introduced the exhibits for the Iron Mountain and testified regarding exhibit 2 (R. p. 2291), where it shows 1 mile and 1.07 miles, "Arkansas Division Terminals in Memphis, Tenn.," the property is not in the Arkansas assessment, being situated in Tennessee, but the earnings and expenses of that piece of road in Tennessee are all charged in the exhibits to Arkansas. (R. p. 116.)

*Memphis Expenses Charged to Arkansas.*

He further explains that this represents a trackage arrangement across the bridge over the Mississippi River at Memphis and their line in Memphis, the latter being 1 mile. (R. p. 120.)

As we understand it, there is one mile owned in Tennessee, and 1.07 miles leased, being from center line of bridge into the city of Memphis, connecting with the owned track.

Mr. McPherson testified that the Memphis terminals are treated as in Arkansas for this reason:

"As to Memphis, there are substantially no earnings on the freight business in Tennessee that the Iron Mountain receives, and so far as the accident of location is concerned, it would be the same to the railway company whether delivery was made to it on the east side or the west side of the river." (R. p. 349.)

Mr. McPherson says the traffic from Memphis into Arkansas is "undoubtedly a heavy traffic." (R. p. 428.)

Mr. McPherson also testifies as to the number of trains in and out of Memphis:

There were five passenger trains and four freight trains in each direction—18 trains daily. There was one local freight each way and the others were through, and all the passenger trains were local except one. (R. p. 375.)

This would necessarily incur heavy expense for division and terminals and the expenses of Memphis must be a large item. Not only the division and terminal expenses are charged to Arkansas, but all other expenses, even the salary of counsel for the State of Tennessee, $200 per month—is charged to Arkansas. (R. p. 184.)

Certainly a business requiring this amount of regular legal service is of considerable moment.

It may be that the extent of the Memphis expenses can be hereafter segregated and substracted; the burden is upon the plaintiffs to do so, and they have so far failed. The Fort Smith terminal expenses can not be now ascertained as will be seen later. Where improper or doubtful sums go to make up the plaintiffs' case, the defendants do not have to prove the extent or amount of them when they prove them to exist or likely to exist, the plaintiffs have failed. A similar situation was presented in Railroad Commission of Louisi-

ana v. Cumberland Telegraph & Telephone Co., 217 U. S. 414, and what was said by the Court is applicable here:

"In the course of the trial various questions were argued as to the manner of conducting such a business as this, with regard to extensions, earnings, and disbursements, as well as questions of depreciation of plant and how to treat the amount collected therefor, and other questions of that nature. Exactly how the money which resulted from the rates in actual operation was used was not, in all cases, shown in detail, either from the books or by oral testimony. Something was left in doubt and to conjecture. In the course of the opinion of the circuit court, the following was said: 'It is urged by the commission that, included in the Louisiana investment of complainant, is a sum earned from Louisiana business, set aside in the reserve fund, and then used in extending the system in Louisiana, and now treated as a part of the Louisiana investment of the stockholders. This may be so to some extent—it is certainly possible. But it is impossible for me to determine, from the figures in the record, to what extent, if at all, it is a fact. Counsel for defendant have not themselves undertaken to indicate what, even in round figures, they consider is the sum thus earned in the business and reinvested in the business, without having been distributed to the shareholders in dividends. It will be time to consider the legal results from such a state of facts when it shall have been shown to exist in a definite sum, and not in a purely conjectural amount.' And again: 'Counsel for the Commission argued that the complainant's property in Louisiana was not all paid for with complainant's capital, but was partly paid for out of a surplus or reserve, or depreciation fund, which was accumulated by complainant from the receipts of its Louisiana business, and was then reinvested, not in repairs or maintenance, but in extensions and additions to the property. This may be a fact, but it is not shown to be a fact. The Commission has power, if it wishes to do so, to direct the books of complainant to be so kept as to show such use of receipts. In the present state of the books, this seems to be impossible. And the floating debt of the complainant would seem to be much greater than any sum which could possibly have been used from the reserve, or surplus, or depreciation fund for extensions and additions, after paying for maintenance and repairs." (156 Fed. 831, 832.)

"If the onus rested upon the Commission to show these facts, it is evident that the obligation has not been fulfilled; but it is just here that the difficulty lies. It was obligatory upon the complainant to show that no part of the money raised to pay for depreciation was added to capital, upon which a return was to be made to stockholders in the way of dividends for the future. It can not be left to conjecture, but the burden rests with the complainant to show it. It certainly was not proper for the complainant to take the money, or any portion of it, which it received as a result of the rates under

which it was operating, and so to use it, or any part of it, as to permit the company to add it to its capital account, upon which it was paying dividends to shareholders. If that were allowable, it would be collecting money to pay for depreciation of the property, and, having collected it, to use it in another way, upon which the complainant would obtain a return and distribute it to its stockholders. That it was right to raise more money to pay for depreciation than was actually disbursed for the particular year there can be no doubt, for a reserve is necessary in any business of this kind, and so it might accumulate; but to raise more than money enough for the purpose, and place the balance to the credit of capital upon which to pay dividends, can not be proper treatment. The court below said it was impossible to find out from the books how much of this had been done, and it treated the fact as one to be explained by the Commission, and not by the complainant. In other words, while this fact was a material one, the onus was placed upon the Commission, and not the complainant, to show it. We think, on the contrary, that the obligation was upon the complainant. Now, although the books, it is said, do not show how much money collected for depreciation has been, in fact, used to increase the capital of the complainant, upon which dividends were paid to stockholders, yet, still, even if the books do not show accurately, or even at all, what disposition was made of these moneys, at any rate the officers of the complainant must be able to make up some reasonable approximation of the amount, even if it be impossible to state it with entire accuracy; and this duty rests with the complainant, in order that it may discharge the duty devolving upon it to prove that the rates were not unreasonably high under order No. 488, or, in other words, that they were unreasonably low under order No. 552. It may be that the sum, if any, thus used, was not enough to affect the claim that the rates under discussion were unreasonably low. The evidence is insufficient to show clearly that which complainant is under obligations to show."

All of the traffic—passenger and freight—leaving or entering Memphis, is necessarily interstate, and so carried in these accounts. The local trains, two freight and four passenger, after leaving Memphis, undoubtedly would do a little intrastate business before reaching the end of their division and a small part of the expense of such traffic, housing engines, etc., might fairly be attributed to intrastate business, but it is so small, it could not be found in the mass, and is easily compensated by similar items for which the intrastate gets no credit. The through passenger train from St. Louis to Hot Springs picks up some intrastate passengers, particularly from Little Rock to Hot Springs, but the plaintiffs do not attempt to charge any part of similar expenses incurred in St. Louis to those intrastate passengers.

The passenger train moving wholly in the State will pick up passengers who are interstate and carry them to Little Rock or other

junction points where they will take a train carrying them without the State and no part of their expense—being classed as interstate—would appear against the intrastate.

These divisions of expense can not be mathematically exact, but the give and take will equalize each other, and because trains doing some little intrastate traffic are housed in Memphis, is not a fair reason for throwing all of that expense into the Arkansas account just as the Little Rock terminals are thrown into the common mass and divided between State and interstate on the revenue basis.

Certainly an application of the injustice of the revenue theory is found here; from its nature, as shown from the preceding testimony the intrastate traffic picked up by these 18 trains after leaving Memphis and before reaching the next division point, would be negligible compared with the large volume of interstate traffic hauled in and out of Memphis on these 18 trains, and yet it ascribes to intrastate traffic the same share of the expense which the intrastate bears of the expenses of the Little Rock terminals. This argues to the error of the revenue theory, but the whole principle of including terminal or other expenses incurred out of the State is wrong. There is a part of this railroad in Tennessee. It is true that it is only 2.07 miles long and it is the eastern terminus of the road. That does not affect the proposition the least. It is the eastern terminus for Oklahoma and Missouri and Louisiana as well as Arkansas; and if all the expenses are to be termed "terminal expenses," why should they be charged to Arkansas any more than to Oklahoma? If nearness in geographicical location is the reason the half of the Fort Smith terminal expenses should be charged to Oklahoma. Should all the Kansas City terminal expenses of a road moving through Kansas from California into Kansas City be charged up to Kansas because it is nearer the terminus than Colorado, Utah and California?

Terminal expenses are spread over the whole haul of either passengers or freight, and properly so.

Mr. Doddridge testified that the terminal expenses per car were no greater in large terminals like St. Louis and Kansas City than in small country towns. (R. p. 524.)

Other witnesses stated that the greater density of the traffic in the large terminals reduced the terminal cost per ton as low or lower than the terminal cost at small stations. Be that as it may, there are terminal expenses on every shipment and every passenger and these are necessarily spread through the journey and the rates made accordingly. The longer the journey the thinner the terminal expense, and therefore the lesser rates for the long haul than the short. That is a constant theme of the plaintiffs' rate witnesses. While the theory is not carried out—for commercial and competitive reasons—there is no reason for not spreading the cost of terminals throughout the haul, whether the rate is properly or improperly made. In contradiction of that policy of rate making, the Memphis termi-

nal expenses are all charged into the Arkansas expenses and borne by the initial part of the haul, or the final part, instead of being borne by the whole haul.

Mr. McPherson says: "The expense of bridge transportation and of the interchange of cars, with other railroads at Memphis, is not an operating expense; it is an expense that traffic bears directly." But here it is made both. The bridge toll is absorbed in the rates as the rate men testify, and the traffic bears terminal expense throughout its haul in the rates fixed for the long and short haul, and in addition to that, this method charges solely against the Arkansas traffic all the expenses of an expensive terminal, both expenses strictly terminal and general, as attorney's salaries, and we presume, taxes and rentals paid in Tennessee, as Mr. Johnson says all expense is charged to Arkansas. Terminals in cases like Memphis are expensive to operate, and represent large investment of capital. The State charged with the heavy expenses of terminals which affects its rates obtains some compensation in taxes on the large investment, but in this instance Arkansas is charged with these large expenses without the compensating return in taxes to assist its citizens to bear the rates so much the higher to meet the heavy expenses of the terminal.

*The Fort Smith Terminals All Charged to Arkansas.*

On the opposite side of the State are the Fort Smith terminals situated on the Oklahoma border and serving both Oklahoma and Arkansas. The census shows Fort Smith to have a population of 23,985, and the evidence shows it is a large manufacturing and jobbing point and that about 50,000 bales of cotton, about equally from Arkansas and Oklahoma are compressed there. Mr. Johnson was called upon to give information as to the Fort Smith terminals and put in evidence exhibit J-1. This statement shows mileage of the terminals, their assessed value and also other terminal property not assessed with right-of-way and blueprint of the terminals in the city. (R. p. 1611.) Counsel stipulated for the exclusion from printing all pictorial matter, and the stipulation (R. p. 2661), provides for not printing the blueprint, but it was construed as omitting the entire exhibit. However, under section 5 of the stipulation, we are entitled to use this evidence, and call attention to it briefly; there are 8.71 miles in the city, and the total property in the city is assessed at $76,257, which, according to stipulation as to value (R. p. 653), should be doubled to get the value.

This is only important in an argumentative way to show that these terminals are not a "negligible quantity."

Mr. Johnson testified that he prepared the exhibits of his road in the Oklahoma Rate Case, and did not include any of the Fort Smith terminal expenses in them. (R. p. 1611.)

A statement of the physical situation may not be out of place. It is fully brought out here and there in the record. A large branch

of the Iron Mountain is from Little Rock west to Coffeyville, Kansas. It is the former Little Rock and Fort Smith road and Kansas and Arkansas Valley road, each now part of the Iron Mountain. Van Buren is a mile or two from the Oklahoma line. About five miles west of Van Buren is Greenwood Junction, where a line follows the Arkansas River into Fort Smith over its own bridge at that city. The distance is nine miles. The Iron Mountain has trackage arrangements with the Frisco road which has a bridge at Van Buren by which it sends two passenger trains a day over it; the distance to Fort Smith by this route is five miles.

All the other traffic, both from Arkansas and Oklahoma, goes by Greenwood Junction into and out of Fort Smith. Van Buren is the freight division terminal, there being large freight yards there. The train movement at Greenwood Junction is daily, 14 trains each way—28 trains, and six switch movements each day. (R. p. 422.)

Judge Trieber held it was proper to charge Memphis expenses to Arkansas, but says: "This also applies to the Fort Smith terminals, in so far as Arkansas business is concerned, the Oklahoma business being charged to that State with its proportion of expense." (R. p. 2602.)

We can not understand how the learned Judge made this error, unless it occurred in this way:

It was in testimony that the general attorney for Oklahoma and Western Arkansas lived in Fort Smith, and his expenses were divided between Arkansas and Oklahoma (R. p. 149), but that has nothing to do with the terminal expenses of Fort Smith The uncontradicted testimony of the railroad's accountant is as follows:

"Q. I would like a statement of the amount of property owned there for terminal purposes, at the same time. You will furnish us with this, will you? (This was later furnished, exhibit J-1.)

A. Yes, sir.

Q. Now, Mr. Johnson, how do you charge the expense of the Fort Smith terminal? To what accounts does that go?

A. What expense accounts?

Q. Yes, I mean geographically, where is it charged?

A. The State of Arkansas. Now the train service that passes through Fort Smith and Van Buren is divided on a mileage basis, but the station and yard service is charged to the State of Arkansas at Fort Smith.

Q. That is what I am referring to—the exhibit in your testimony—it is charged to the State of Arkansas?

A. Yes, sir.

Q. Have you in your office any separation of the terminals expenses of Fort Smith from other expenses?

A. No, sir.

Q. Is there any way that that could be ascertained from the books kept in your office?

A. I don't believe that the entire expense of the Fort Smith terminals could be determined now over that period. There are certain items that could be, but others that come from labor and repairs—the same conditions prevails at Kansas City during the Missouri Rate Cases. We were unable to get that information during the entire period. These operating expenses are maintained by accounting districts.

Q. What accounting districts would cover these Fort Smith terminals?

A. All mileage from the Oklahoma State line to Argenta, or Fort Smith crossing at Little Rock, that is the central accounting district, the central division.

Q. These operating expenses would be swallowed up in the expense of about 165 miles?

A. Yes, sir; a hundred and sixty-five miles." (R. p. 858.)

According to Judge Trieber, Oklahoma should share part of the expenses of the Fort Smith terminals, and Arkansas to bear all of Memphis, but as a matter of fact, Arkansas is bearing all of Fort Smith terminal expenses and taxes on the terminal property as well as all of Memphis.

This is wrong. Either Arkansas ought to be relieved of Memphis or Oklahoma share Fort Smith.

It is impossible for the railroads to blow hot and cold on these two border terminals.

The plaintiffs are in the attitude of having large items in their accounts improperly charged—either Fort Smith or Memphis.

In our view it is Memphis, but necessarily one or the other, and for the purposes of this case, it makes no difference which is proper, as one is clearly wrong—both can not stand.

Exhibit 2 shows that the Iron Mountain leases from the St. Louis Southwestern Railway Company, 34.05 miles of track. (R. p. 2291.)

*The Paragould Trackage.*

This is called the Paragould trackage in the evidence.

Mr. McPherson thus explains it:

"Taking the most important one of those items you mention, the road from the Missouri State line to Paragould, the railway company found from the enormous volume of traffic between Bald Knob and the State line, that it must make further provision to handle it expeditiously. There were two things that might be done; one was to build a double track and the other to ascertain if the track already existing could not be secured at a reasonable cost, to relieve the situation. And such an arrangement was made.

"No local business is done on that line between Paragould and the State line. It is merely a through line.

"After this arrangement had been completed, it was found as a practical business proposition that it would be better to use it for interstate traffic, and that is the present practice." (R. p. 285.)

It is in evidence from Mr. Hamilton that the rent and expenses of this track for the six months' period is $36,000 in round numbers.

Mr. McPherson and Mr. Doddridge have said a great deal about the transstate freight using so little of the facilities of the road compared with the intrastate.

If proper to consider that as an element of difference in cost, which they do, how about the other side of the story?

This piece of track is used exclusively for interstate freight traffic. It is claimed to relieve the main line and serve as a double track.

It is admitted by Mr. McPherson that there are steep grades on the main line between the Arkansas State line and St. Louis, and that this leased track furnishes a low grade line from St. Louis and avoids the heavy grades about Gad's Hill and Tip Top, Missouri, and that there is greater efficiency in service of using it and that is one of the reasons, the other to benefit the whole traffic for using this leased line. (R. p. 337.)

The Arkansas interstate traffic can not benefit a farthing by this arrangement and attendant expense.

It was doubtless good management to secure this low grade line and we are not questioning for a moment the wisdom of it, but only the injustice of making Arkansas intrastate bear any part of it when it is used exclusively for interstate freight traffic, a facility in which it does not participate, but in the expenses of which it does.

*The Bunch Elevator.*

The facts regarding the Bunch elevator are these, as given by Mr. Johnson: "Q. I see an item in your 'rental account' that has been analyzed showing the buildings and elevator at Little Rock as leased to Mr. Bunch for $1.00 per year. Is that right? A. That is my understanding. That is 'miscellaneous rental account' No. 18. * * *

Q. The Bunch elevator is on the right-of-way, is it not?

A. Yes, sir; I believe it is, and that is the rental for it."

The assessment of it was inquired into, but Mr. Johnson had no information on that subject, and did not know whether it was assessed as outside property (that is property not included with right-of-way, track, etc.), or as part of the right-of-way. (R. p. 207.)

His is the only testimony in the record upon it except that of Mr. R. T. Brooke, as follows:

After stating name, residence, and familiarity with grain elevators and their values:

"Q. Do you know the elevator situated in Little Rock, commonly known as the Bunch Elevator?

A. In Argenta?

Q. Yes.

A. I do; it is a mill and elevator.

Q. Do you know about its value?

A. The value today would be about $186,000, that is, the mill, elevator and warehouse.

Q. Do you know about its value in 1907, say, the last half of 1907?

A. It is about the same; I don't think there was very much difference in machinery at that time.

Q. Do you know whether that was a public elevator, during the last half of 1907?

A. It was a private elevator.

Q. I wish you would state your opinion of the rental value of that elevator property, taking the entire property?

A. The mill, elevator and warehouse rental value, reasonable rental value, would be about $20,000 a year.

Q. In 1907, what would it have been?

A. Same thing.

Cross examination by MR. MOORE:

Q. How long have you been engaged in business in Little Rock?

A. About four years and a half, since October 1, 1905.

Q. And where did you do business before you came here?

A. Oklahoma.

Q. What was your business there?

A. Grain business, and interested in a mill; elevator business and mill business.

Q. Did you rent an elevator there?

A. No, I had one of my own.

Q. Did you ever rent one?

A. No, I didn't rent an elevator.

Q. Never rented one as lessor or lessee?

A. No, sir.

Q. Have you any knowledge of the cost of the elevator in Argenta?

A. Only the knowledge which I acquired during a suit which I had against the Iron Mountain, the actual cost as shown in that suit; the cost of that elevator came out in that law suit.

Q. Was it as much as you have estimated the value here?

A. Pretty close to it; let's see; it was $106,821.76, and there were additions made since that time; a drier was put in, corn drier put in, amounting to about $50,000 odd dollars." (R. pp. 905, 906.)

Judge Trieber refused to allow credit for the fair rental of the elevator, saying the proof was not sufficient to show that the elevator was the sole property of the railroad company at that time, and that it is not shown whether the dollar a year was paid for the use of the right-of-way upon which it stood or for the elevator itself. (R. p. 2601.)

But he overlooked Mr. Johnson's statement, who referred to the company's rental account which showed "the *buildings and elevator* at Little Rock leased to Mr. Bunch for one dollar per year;" and said such was the fact as he understood it.

Further, it was shown that it was situated on the right-of-way.

The presumption of title in the railroad would arise from its location on its ground. It was found in this account of rentals submitted to the State for examination.

The matter was opened in this way in an earlier part of Mr. Johnson's testimony.

"Q. Referring to the question of rentals, the St. Louis, Iron Mountain & Southern Railway has a controversy down at Little Rock with the Bunch elevator; I don't care about going into that controversy, but I just want to know whether that elevator property would be included in your rentals?

A. Any rentals we would receive from Mr. Bunch would be included in "rentals." (R. p. 151.)

Mr. Johnson stated that he and the accountants from the State had been analyzing the miscellaneous rental accounts together. (R. p. 182.)

It was after this joint analysis and in reference to it that Mr. Johnson stated that "miscellaneous rental account No. 18" showed the *buildings and elevator* rented for $1.00 per year.

The Judge refers to another case pending before him wherein the railroad purchased the elevator from Bunch for $93,665, but states that that fact was not put in evidence in this case. Even this outside evidence in another case is not entirely inconsistent with Mr. Brooke, who testified that in a suit with the Iron Mountain it was proved to have cost $106,000, and then $50,000 more added to it, and it might be that Bunch did the latter, and the railroad purchased his interest. But we can not try one law suit on evidence in another.

There is no contradiction of Mr. Brooke's statement that the elevator was a private one and not a public one. Certainly the railroad could not operate a private elevator.

The plaintiffs did not put in any evidence on this subject, and let the situation stand in regard to the elevator as they did as to the Pratt Hotel, another item found in the same miscellaneous rental account, and developed in the same way as the elevator property.

Judge Trieber sustains the State's objection to this item. A hotel, lunch rooms, saloon and other privileges known as Pratt's Hotel, at the station in Little Rock were owned by the railway company and maintained by it and leased to Pratt for $1.00 a year. The evidence showed $4,200—a fair rental for it. (Opinion, p. 2600.)

*Pratt Hotel Rental.*

Judge Trieber also sustained the State's objection to not receiving a share of the express company's dividends. The express company gave the Missouri Pacific 40 per cent of its capital stock for the exclusive privilege of doing the express business on its lines. The Missouri Pacific owns all the stock of the Iron Mountain and put this express company on the Iron Mountain lines as part of

*Express Company Dividends.*

its system under this contract. The Missouri Pacific has for 20 years regularly drawn $144,000 a year from the dividends on this stock, and not a penny has gone to the Iron Mountain.

Judge Trieber held that a proportion should be credited the Iron Mountain earnings for the six months period, amounting to $15,984. (R. p. 2599, 2600.)

This is clearly right, but what becomes of the $15,984 which should have been paid for the last 20 years? A sum of over $300,000 has been withheld from the Arkansas earnings of the Iron Mountain under this decision, and it is confidently submitted that no other decision can be rightly reached on the facts. This sum would help out in lean years for which a surplus ought to be provided. Merely giving credit for $15,984 for a six months' period does not square this account. It ought to be treated as surplus or in some other way do equity to the Arkansas business. A fine of $10,000 was imposed on the Iron Mountain.

*The Fine of $10,000.*

Here are all the facts, elicited from books of the company, and proved by Mr. Johnson: "Q. In the month of November, 1907, I find that you have paid judgments, in the case of the State of Arkansas v. the St. Louis, Iron Mountain & Southern Railway in fines, for a violation of the law against furnishing free transportation to Legislators, of something over $10,000—or, $10,000 plus the court costs; that is correct, isn't it?

A. Yes, sir.

Q. That was for a violation of the statutes, to which the railroad company pleaded guilty, wasn't it?

A. Yes, sir; that is the way the account reads." (R. p. 184.)

This is the only other reference to it:

"Q. Mr. Johnson, there was one question I should have asked you before and I forgot it.

Do you think that fine of $10,000.00 in those cases of violating the law is a proper charge against operating expenses?

A. I don't know where else it would go. It is an incidental expense and I know of no other place you could put it.

Q. Do you think that is an operating expense?

A. It is an expense that is undoubtedly incurred in the operation of the railroad. You can not charge it to "capital account" and I don't know where else you would put it.

Q. Ought not it be charged against surplus or profit and loss account?

A. I hardly think so.

Q. Your judgment as an accountant would be that a fine against a railroad for violating the law should properly go into operating expenses?

A. Yes, sir." (R. p. 199.)

Mr. Justice Brewer, speaking for this Court, said:

"Surely, before the courts are called upon to adjudge an act of the Legislature fixing the maximum passenger rates for railroad companies to be unconstitutional, on the ground that its enforcement would prevent the stockholders from receiving any dividends on their investments, or the bondholders any interest on their loans, they should be fully advised as to what is done with the receipts and earnings of the company; for if so advised, it might clearly appear that a prudent and honest management would, within the rates prescribed, secure to the bondholders their interest, and to the stockholders reasonable dividends. While the protection of vested rights of property is a supreme duty of the courts, it has not come to this, that the legislative power rests subservient to the discretion of any railroad corporation which may, by exorbitant and unreasonable salaries, or in some other improper way, transfer its earnings into what it is pleased to call 'operating expenses.'"

Chicago, etc., Ry. Co. v. Wellman, 143 U. S. 345.

Is not this an "improper way" in which the earnings of the railroad company have been transferred to "operating expenses" within the meaning of that opinion?

Judge Trieber says the evidence fails to show whether the free passes were given to members of the Legislature with the knowledge and approval of the higher officials of the company, or by some inferior officials for whose conduct the company would be liable.

But the burden rested on the plaintiffs to show that the higher officials did not know of it—if that makes a difference.

Passes can only be issued by an officer clothed by the company with that power. If he violates the laws of the land in the performance of his duties, and in furtherance of the purposes of his principal, his principal is bound.

The plea of guilty fixes the responsibility of issuing free passes on responsible shoulders.

*Salaries To Lobbyists.*

The State contended that salaries paid W. H. Phelps and J. M. Seibert in Missouri, parts of which were distributed against the Iron Mountain in Arkansas and T. L. Cox in Arkansas were not proved to be legitimate expenses. Seibert was carried on the rolls as "commissioner of statistics," and witness after witness connected with the road, was asked what statistics he kept, and none knew. None of the vast array of statistics produced in this case emanated from the "commissioner of statistics," none of these gentlemen compiling the statistics ever obtained statistics from him or knew his duties. (R. p. 425.)

He was paid $250 per month, of which $110.33 was charged to Arkansas.

W. H. Phelps was carried as assistant to the vice president at a salary of $500 a month, of which $128.22 was charged to Arkansas.

T. L. Cox was paid "for services rendered to the law department," the sum of $200 per month. (R. pp. 184, 185.)

It is true, as stated by Judge Trieber (R. p. 2602), that the State failed to prove these salaries were paid to these parties as lobbyists. The lack of duties of a "commissioner of statistics" in a case involving the statistics of his road for years; the absolute lack of knowledge of the assistant to the general manager and other officials of the road of his duties and of the statistics compiled by him was certainly sufficient to require the railroad to explain this item and especially why any part of it should be charged to Arkansas. No one questioned could account for the services rendered by Phelps to the Iron Mountain in Arkansas.

No evidence was necessary in regard to Thos. L. Cox. He is part of the history of Arkansas, of which all courts may take cognizance. " 'Tis true, 'tis pity; and pity 'tis, 'tis true."

A graphic sketch of him and "his services rendered to the law department" is found in Butt v. State, 81 Ark. p. 17, and another chapter is found in State v. DuLaney, 87 Ark. p. 17.

These were prosecutions of legislators for bribery.

*The Van Buren Bridge.*

Another instance of improvident contract is the one with the Frisco road, just referred to, for use of the bridge between Van Buren and Fort Smith. It saves four miles of distance, and is used by one passenger daily each way. Exhibit 46 shows these trains are "slow trains in Arkansas," stopping every five miles. Hence, the saving of four miles is not an economy in a slow train. There is no excuse of congested traffic or the need of a double track, for Mr. McPherson testifies that from Van Buren to the junction by which all the other traffic moves there are 34 movements including a switch movement in 24 hours. (R. p. 412.)

For running these two trains per day, a rent is paid so much for each car and each engine with a minimum payment of $1,000 per month. This luxury of two slow trains using this bridge instead of the company's own track costs $12,000 a year. It is not strange that the ratio of expenses is so high.

In Group 8, the average cost is $64.34 for every $100 revenue. On the Iron Mountain in Arkansas, $74.24 for every $100 of revenue. (R. p. 139.)

*Erroneous Division of Expenses.*

Exhibit 3, statement 4 (R. p. 2303, 2304), shows division of operating expenses between Arkansas and the rest of the Iron Mountain road. The track-mileage is 52 per cent in Arkansas, and the average of the expenses apportioned to Arkansas is 55 per cent maintenance of equipment. Many of these items will vary from month to month and year to year and generally, the plan adopted is fair, as a heavier expense of one month in Arkansas will be compensated next month in Missouri, but where there are local conditions pre-

venting this, then it is unfair, and that is manifestly true of item 40.

"Tools and machinery, repairs of—total $63,288.35; amount chargeable to Arkansas, $48,671.67—77 per cent."

Mr. Johnson thus explains it:

"A. This account for repairs to tools and shop machinery and heating and lighting, are charged to an operating division, or, rather, they are charged to the jurisdiction of each master mechanic. In Arkansas, of course, our principal master mechanic is at Little Rock, which perhaps entails a heavier expense than it does at any other division point.

Q. Why?

A. Because it is larger than any other division point.

Q. Why?

A. Because it is larger than any other division point on the St. Louis, Iron Mountain & Southern Railway.

Q. Aren't those shop expenses apportioned over the entire Missouri Pacific system?

A. No, sir; not miscellaneous shop expenses, such as that item.

Q. What shop expenses are apportioned over the entire system?

A. The repair account is apportioned over the entire system. But the repairs to tools and shop machinery are localized to the particular division.

Q. Isn't this a repair account?

A. When I speak of a repair account I mean cost of repairing equipment, such as locomotives and cars.

Q. Why do you make a distinction between repairing those cars and locomotives and repairing the tools and shop machinery?

A. The only reason that I can give for that is that we have never thought it proper to pool the miscellaneous shop accounts. We localized them to the division where they occurred. If we pooled them perhaps Arkansas would be compelled to stand a proportion of the other shop accounts.

Q. It does stand that on repairs to cars and locomotives?

A. Yes, sir.

Q. Well, then, why should not it also stand it on repairs to tools and shop machinery?

A. The only reason is that the amount is too small to handle that way.

Q. It is a pretty considerable item here. I see it is $63,000.00.

A. Yes, out of one million dollars.

Q. That grows out of the Baring Cross shops?

A. The $48,000.00 does, yes.

Q. I believe this is $63,000.00.

A. It is $63,000.00 on the St. Louis, Iron Mountain & Southern Railway.

Q. And $48,000.00 on the Baring Cross shops, which runs up the percentage for Arkansas to 77.

A. Yes, sir.

Q. Does that uniformly run that high, assigning that account to Arkansas?

A. You mean the proportion chargeable to Arkansas?

Q. Yes.

A. I would say that is a normal amount. I do not believe it fluctuates to any great extent, and the basis for apportioning it has always been the same. Whatever the charge is on the St. Louis, Iron Mountain & Southern Railway, proportionately 77 per cent would be charged to Arkansas." (R. pp. 141, 142.)

Owing to the location of the master mechanic in Little Rock and the Baring Cross shops there, the company localizes this item of expense current to the entire Missouri Pacific system instead of apportioning it as all other items are apportioned throughout the system on the car-mile basis. The only reason assigned is that it has never been done.

It is fair to assume that if this item had been distributed as the others, Arkansas would not have had to have stood more than the average, 55 per cent. In fact, this 77 per cent lifts the average above what it should be.

Charging Arkansas with 55 per cent instead of 77 per cent would make a difference of $13,863 for the six months or an annual difference of $27,726, and this going on for years—another reason that the operating ratio is overhigh.

The St. Louis Southwestern Railway does not pursue this course in their exhibit, and distribute fairly this item.

There are other items questioned, like paying lawyers in Texas for law suits there, and distributing parts of it over the intrastate traffic in Arkansas (R. p. 182, 183), but they are small, and we will not burden this discussion with further detail.

Summarizing: We submit, that the account of the railroads should be purged of this $13,863 excess expense erroneously charged the State, and a good part if not all the $12,000 per annum improvidently paid the Frisco road, and $2,631 paid Cox, Phelps and the "commissioner of statistics," and the $10,000 fine for violating the criminal laws in giving free passes to members of the Legislature, and the $36,000 paid for the Paragould track, exclusively devoted to interstate service, a total of $58,631 for the six months' period, and in addition the large expenses of the Memphis terminal and of the legal and other departments of that road in Tennessee, the amount of which is not shown; on the other hand, they should be charged with the Pratt Hotel reasonable rental, $2,100 for six months, and of the Bunch elevator, $10,000 for the six months, and the Pacific Express Company dividends, $15,984 for the six months, $28,084, a difference of $86,715 from the account as it now stands, and with the exclusion of the Memphis expenses, it would doubtless make a difference of near, if not quite, $200,000.

## THE TEST MONTHS.

We have assumed in some preceding discussion the accuracy and reliability of using the statistics of the two test months—both put in evidence by the plaintiffs—and will now proceed to prove, principally by the plaintiffs' witnesses, reinforced by undisputed statistics, that they are a fair test of the six months' period on which the plaintiffs seek to try their cases.

We do not concede that a six-months period is a fair test of the operation of rates, especially this six months where the panic of 1907 began to be felt in the revenues of the roads, at least in November. But that is another subject; our text is now, if the six-months period fairly represents the business of a series of years demonstrating the effect of a system of rates, that the test months fairly represent the period in detail. The final stand of the plaintiffs amounted to saying that at large the six months represents a series of years, but the test months do not represent the details of the six months.

In their case in chief their position was that six months fairly represent conditions for a series of years and the test months represented the six months in detail, especially as to the respective movements, revenue and expenses of interstate and intrastate traffic. But when these months' statistics destroyed their carefully built-up theory of extra cost, and the facts in them at war with the alleged facts upon which the extra cost theory was based, they bring on another set of witnesses to impugn their force and the later witnesses combat their own testimony in chief.

Before the later developments, however, their witnesses in chief had used the statistics of the test months upon which to bottom their arguments and point their moral and adorn their tale.

We contend that even if the later witnesses are correct that the plaintiffs are morally and equitably estopped to question the force of the test month's statistics. We have pointed out many reasons, independent of any consideration of these test months, why the plaintiffs have failed to make their case; and, independent of all other reasons, if the result of either of these test months is accepted as representative of the interstate and intrastate traffic, the plaintiffs by it alone fail. In the St. Louis Southwestern Railroad (commonly called the Cotton Belt) test the load of the local train is 68 per cent interstate and on the Iron Mountain 72 per cent. With the much greater cost of the local freight train assigned 68 per cent or 72 per cent to the interstate traffic, instead of it being the vehicle for intrastate traffic almost exclusively as the plaintiffs' witnesses would have it, the claim of 100 and more per cent of extra cost is destroyed. Charge all the extra terminals to the State that they seek, disregarding the extra interstate terminal handling of cotton, grain and lumber, as well as the Fort Smith and Memphis double interstate handlings, and with the 98.18 per cent extra intrastate revenue on the one railroad, 141 per cent on the other, per ton per

mile, all extra cost is absorbed. If the Iron Mountain test of 61 per cent of the intrastate freight on the through train is accepted it is apparent that the intrastate traffic is the cheaper, and if the 22 per cent of intrastate freight of the Southwestern on through train is accepted, their higher revenue of 141 per cent per ton per mile will equalize, if not overcome, all other items of extra cost where the interstate is bearing 68 per cent of the expenses of the local train.

The importance of this subject is great for two reasons—first, the one given—the destruction of the plaintiffs' claim of extra cost based on opinion evidence radically at variance with these facts; and, secondly, they are used as the basis of the State's plan of dividing expense.

The plan if found sound—even if the statistics are not—should of itself be a destruction of the plaintiffs' case, as proving that by proper tests and detail their expenses can be properly allocated and not left to arbitrary bases, supported by opinion evidence solely; and if the statistics are correct, the extra cost is demonstrated, even after using the revenue basis to apportion the property and the train mile to apportion common expenses between freight and passenger—to be less than the higher intrastate revenue for the same service performed. These months are not used for the passenger traffic. In truth, two facts destroyed any appreciable claim for extra cost on passenger traffic: (1) That all the St. Louis Southwestern Railway trains were local, and all except eight of the Iron Mountain's were local; and (2) that the two terminal expenses in and out of Memphis and Fort Smith charged to interstate and the system of transferring interstate passengers at Little Rock and other junction points, put as much or more terminal handling and casualty risks in getting on and getting off trains by the interstate as by the intrastate. Hence, the passenger side may be dismissed and attention solely directed to the freight where the extravagant claims of extra cost are atributed, especially as Judge Trieber found no extra pasesnger cost on one road and only 10 per cent on the other.

At the expense of tediousness, but not thoroughness, we will put before you fully the evidence as to the test months.

*The St. L. S. W. Railway Test Month.*

Mr. R. E. Kimbell, Assistant Auditor of the St. Louis Southwestern Railway Company, introduced the exhibits of his road upon which it sought to make out its case. After introducing the exhibits of revenue, operating expenses, division of expenses, etc., on his direct examination in chief, this testimony was given:

"Q. Mr. Kimbell, did the operating officers of the St. Louis Southwestern Railway Company make a test at any time after this litigation was instituted, for the purpose of ascertaining the relative cost of conducting State and interstate transportation? If so, I wish you would state what was done in that respect.

A. A test of that kind was made under my direction.

Q. What period did it cover?

A. The month of October, 1908. The temporary injunction was granted in St. Paul on September 3, and the month of October was selected for the purpose of this test, on account of it being the first full month following the injunction. October is rather a heavy month, but for a test of this kind, in my judgment, it fairly represents the general conditions.

Q. Would it represent, fairly, a year's business?

A. I should say so. It would represent relatively the difference between the two classes of traffic.

Q. I wish you would describe in what way that test was made.

A. We employed special men to ride on every local freight train running in the State of Arkansas, during the month of October; and also stationed men at terminal points; all of these men being provided with special forms on which they were required to make an abstract showing way-bill, reference points from and to, and weight of all freight handled on their train These reports were accumulated in our Superintendent's office by a representative stationed there, and sent to my office, where the ton miles and other data required, was figured out.

Q. Did they also obtain the weight of the car?

A. They also obtained the tare weight of all cars, loaded and empty; cabooses; gross weight of locomotives in each train. The fuel consumed on each run was reported by each engineer, which was the way we figured it could be most accurately obtained.

Q. Was there any record kept of the cost of labor?

A. The wages of train and engine men were obtained from the time slips of each train, and therefore are very accurate.

Q. All the various elements, then, that entered into the cost of moving freight on those trains was ascertained, was it?

A. I think it was; yes.

Q. Have you prepared any statement showing the result of that test?

A. Yes, sir.

Q. If you have, I would be glad to have you file such statement as you have, as exhibit 19.

The paper referred to is marked "R. E. Kimbell, Exhibit 19."

Said paper is in the words and figures following, towit:

For exhibit 19 (R. p. 2375).

Q. Have you prepared any additional statement of statistics that have a bearing upon the information obtained in that test?

A. I have prepared a statement of miscellaneous statistics, in connection with that, which I file as exhibit 20.

The paper referred to is marked "R. E. Kimbell, Exhibit 20."

Said paper is in the words and figures following, towit:

For exhibit 20 (R. p. 2377).

Q. Did that test enable you to ascertain, with exactness, the commercial ton miles made by the different trains, the through and local trains?

A. Yes, sir; it did.

Q. And did it give you also the ton miles of dead weight, including the locomotive and caboose, and all cars, including empties, on all trains?

A. It did.

Q. Did it enable you to determine with exactness the cost, wages and fuel?

A. Yes, sir.

Q. Mr. Kimbell, I wish you would state what result was shown. State it in your own language." (R. pp. 156, 157.)

Then Mr. Kimbell summed up, in his testimony, the statistics given in full in exhibits 19 and 20.

He concluded his statement regarding it as follows:

"Q. Was that test made with care and caution, and are you satisfied that the information as obtained was correct and accurate?

A. It was made under my personal direction and every possible care was taken to have it correct." (R. p. 159.)

In cross examination it was shown that the conclusions drawn by Mr. Kimbell in his preceding testimony were made by applying the revenue basis to the actual conditions found in his test; while that affected the conclusions reached, it did not reflect upon or question the actual results obtained and shown in exhibits 19 and 20. (R. p. 159.)

On cross examination, after explaining that the test was made of October, 1908, and not of the passenger traffic, but of the freight alone, and while the Commission Tariff was in force, this testimony was given:

"Q. Then on your freight test, it was all under the Commission Tariff?

A. Yes, sir.

Q. Do you think that one month would fairly represent the business of your line for a year?

A. I think for the purpose of a test of that kind, determining the relative difference between the two classes of freight, that one month is perhaps as good as another.

Q. Why did you select October?

A. As explained, it was the first full month after Judge VanDeventer granted the injunction. He granted it in September, September 3; we wanted to make this test as soon as possible, so we selected the first full month.

Q. In your judgment, a test of this kind, made for the month of October, would fairly represent the operation for a year, or for a series of years?

A. I should say so.

Q. Well, do you think that would be affected by the fact that this was after the panic, when the normal condition of affairs was not fairly resumed?

A. I don't understand that the month of October was after the panic.

Q. That was when the panic began.

A. Right along in there we began to feel it.

Q. This was the year after the panic begun.

A. Exactly.

Q. Well, do you think that matters had fairly resumed themselves, so that you could make a fair test of that year?

A. I think so. I believe that under almost any conditions, good times or bad, the relative difference between the two classes of freight would travel uniformly. In other words, if we have poor business, it is going to affect both classes of traffic.

Q. And you think that any one month completely worked up, would fairly represent those conditions?

A. I do; yes, sir." (R. p. 163.)

On re-direct examination this was said relating to the panic and when it was felt:

"Q. Mr. Kimbell, when did the panic of 1907-8 begin to have its effect on the railroads?

A. I should say in November, 1907.

Q. Well, when did the effect of the panic—when was it fully felt by the railroads?

A. It began to be felt during the month of November, and I should say it increased in its intensity from month to month and was felt very severely in February or March.

Q. Was it not at its height in the spring, in March?

A. I think so.

Q. It began, then, in November?

A. Yes, sir.

Q. Is it true that the effect of it was felt severely in November, or did it come on later, the severity of it?

A. I can only testify from memory of the situation, and not from—

Q. I want your best impression in regard to that; whether it was felt severely in November, or began to be felt in the spring.

A. My impression is that it did not begin to be seriously felt until the early part of 1908.

Q. The reason I ask you is, Judge Hill asked you if it was severely felt in November, and you stated it was, and I wanted to know, whether you understood his question.

A. I expect I should have qualified that, because I think that is where it commenced, in November.

Q. And it became severely felt and was perhaps at its height later on, in the spring of the next year?



PAGES

A. Yes, sir." (R. pp. 168, 169.)

In cross examination Mr. Kimbell had been presented with an annual report of his road, showing that, beginning with November, 1907, the volume of traffic decreased and the gain previously made had been lost. (R. p. 161.) Evidently to show the six-months' period was normal, he put in the gross earnings for each six months for four years, and he also gives comparative monthly earnings for several years. (R. pp. 169, 170.) The trend of this testimony was to prove the six-months period normal and one month fairly representative of the whole. We will not burden the discussion with the statistics given.

To further reinforce the test, this was brought out in Mr. Kimbell's re-direct by the plaintiffs' counsel:

"Q. Mr. Kimbell, speaking of the test you made for October, 1908, did I understand you to state that that test was based upon an ascertainment of the relative cost in the various percentages of service that was involved in transacting the two classes of business—that is, it was intrastate and interstate?

A. That is freight only.

Q. I said nothing about passenger. I say the two classes of business, interstate and intrastate freight.

A. Yes, sir.

Q. That, then, developed the actual expenses of each one and therefore the relative expense as between them?

A. I think so.

Q. Now, would the ratio be affected or changed, by a change in the prosperity of the business of the road; would it depend upon whether the business was light or whether it was large?

A. I would say that the relative proportion of State and interstate traffic would travel uniformly, whether business was up or down." (R. p. 171.)

After the change of base by the plaintiffs in their attitude to the test movements, it is gratifying to read Mr. Kimbell's testimony, given at the close of the plaintiffs' case in rebuttal.

As will be seen in reading the evidence, whenever the plaintiffs put on a witness to impeach the reliability of the October tests, the State read him these excerpts from Mr. Kimbell and called for a statement as to his agreement therewith. After this, Mr. Kimbell thus epitomized his testimony previously given:

"Q. Counsel for the State has called your attention to a statement made in your evidence to the effect that October, 1908, the month in which a test was made on your line, would represent relatively the difference between interstate and intrastate traffic: You recall the reference to this which counsel made? Do you wish to make any statement in connection with that?

A. The testimony I gave in direct and cross examination concerning the test made on this road in 1908 has been frequently quoted

by the State in connection with its action in using the figures for October, 1908, in apportioning expenses for a six months' period.

I do not know whether I have been misunderstood in this matter or not, but I would like to make my position plain.

This test was made for the purpose of determining the cost of the labor and fuel on local and through trains and the relative handling of State and interstate business on each class of train.

As I stated in my direct and also on cross examination, it was a very laborious task to make this test, and to cover a period of more than one month would be almost prohibitive, on account of the labor and expense required to do the work.

I testified in direct examination that so far as this test was concerned, it would represent relatively the difference between the two classes of traffic. I also testified on cross examination that I thought for the purpose of a test of that kind, to determine the relative difference between the two classes of freight, one month was perhaps as good as another. And that under almost any conditions, good times or bad times, the relative difference between the two classes of freight would travel uniformly. In other words, if we are going to have poor business it is going to affect both classes of traffic.

I did not intend to convey the impression, nor do I think the testimony indicates that I did, that the month of October or any other month would fairly represent the character and volume of business for the period of six months or a year.

One month may reasonably be taken as a guide in determining the relative amount of State and interstate freight handled by the two classes of trains. And for that purpose it would seem, perhaps, that one month is as good as another.

The results of this test are embraced in exhibits 19 and 20, as illustrating the relative cost per ton per mile, intrastate and interstate, for wages and fuel, and are not used in any of the other computations included in other exhibits filed by this company.

Q. You ascertained the actual amount of freight carried on each class of train?

A. Yes, sir.

Q. You did not arrive at the tonnage hauled by the through trains in the manner used in the exhibits prepared by the State?

A. This test was the actual tonnage handled on both classes of trains, local and through, from the first day of the month to the last, irrespective of the dates of the waybills." (R. pp. 2081, 2082.)

The State used it in its exhibits for the actual facts as to results found by him as to these items of expenses, applying them to the intrastate and interstate in the relation actually found by him carried on the local and through trains respectively. It was used for the exact purpose he here repeats it was useful for; the relation of the two classes of traffic on the two classes of trains; and that relation as found destroyed the theories about it.

Mr. W. B. Doddridge had been General Manager of both of these plaintiff roads. (R. p. 452.) He was employed as an expert by the Missouri Pacific Railway in the Missouri Rate Case. In that case he attended the sessions and consulted with the witnesses, and in that case and in this case he acted, so he testified, in an advisory capacity to the counsel for the railroads. (R. pp. 466, 467.)

In direct examination he was asked if he had knowledge of the test on the St. Louis Southwestern Railway "for the purpose of ascertaining the difference in the cost of conducting the two kinds of traffic under consideration," and said that he had. (R. p. 459.)

Then he quotes at length the statistics shown and draws similar deductions, using the revenue basis applied to actual results to work out extra cost. (See cross examination, where he admits that both he and Mr. Kimbell used the revenue per ton per mile even after he got the actual facts to make their calculations of extra cost. (R. p. 508.)

In cross examination this occurred:

"Q. You say you made a test on the Cotton Belt—in October, 1908, was it?

A. The Cotton Belt Company made a test.

Q. Under your direction?

A. Well, no; under Mr. Kimbell's direction.

Q. You had a hand in it, didn't you?

A. Yes, sir; I had something to do with it; I wanted the test made.

MR. MOORE:

Q. What did you have to do with it?

A. I say, I simply wanted it made to determine—

Q. You mean you suggested it?

A. Yes.

MR. HILL:

Q. Do you think the test of one month's operation would be fairly representative of the entire year?

A. I think in this case that it would be representative as to the relative proportions of the different kinds of business, for the reason that the month of October, 1908, was one of the heaviest months of the year, and considerably above the average twelve months, probably.

The main purpose in making this test was to determine the average relation that one class of business bore to the other, and if the business of the road was lighter in a subsequent month, the chances would be more than likely in favor that the relative proportions would remain pretty near the same." (R. p. 476.)

Mr. Doddridge uses the statistics of these two exhibits fully and in detail, working up to his extra cost of intrastate freight. (R. pp. 459-461.)

The Iron Mountain exhibit 26 was thus brought into evidence by the plaintiffs in their case in chief: Hubert Roth, recalled, testified as follows: Direct examination. Q. I hand you a paper which is marked "statement of transstate, interstate and intrastate freight, handled during the month of October, 1907:" Was that statement compiled by you, or under your directions?

*The Iron Mountain Test Month.*

A. Yes, sir.

Q. And is it a correct statement of the operations represented on the statement, during that period?

A. Yes, sir; I think it is as correct as figures of that kind can possibly be. It is correct with the exception of possibly clerical errors.

Q. Will you file that statement as exhibit 26 to your testimony?

A. Yes, sir.

The paper referred to is marked "Hubert Roth, Exhibit 26."

Said exhibit is in the words and figures following, towit:

For exhibit 26 (R. p. 2391).

CROSS EXAMINATION.

"Q. You compiled this statement yourself?

A. It was compiled under my direction.

Q. Will you vouch for it as being absolutely correct?

A. No, sir. It is reasonably correct.

Q. What do you mean by that?

A. I mean that I can not vouch for clerical errors. Every care was taken to have those figures correct.

Q. Did you have a competent force under you?

A. Yes, sir; I had a competent force, men accustomed to that class of work.

Q. And you gave that work your careful, personal supervision?

A. Yes, sir.

Q. You are thoroughly satisfied it is correct?

A. I am satisfied it is correct.

Q. In every particular?

A. Yes, sir." (R. p. 279.)

As will be seen hereafter, the statistics in exhibit 26 were repeatedly used by plaintiffs' witnesses throughout the case in chief and the first time, so the record shows, that any question of their force was raised was in the cross examination of Frank E. Ward, when the history of this exhibit was thus given:

"Q. The statistics on the Iron Mountain Railway were put in by the Iron Mountain, but I do not believe they had been analyzed as between local and through, as they were on the Cotton Belt:

The State's accountants have analyzed them substantially as was done with the Cotton Belt statistics.

MR. MOORE (the plaintiffs' counsel): The statistics contained in exhibit 26 in this case, to which counsel refers, which gives the total amount of State and interstate tonnage taken in the Auditor's accounts from the waybills, was prepared at the request of the State's counsel in a conference held in the Judge's chambers during the progress of this case.

I state this in order that there may be no misunderstanding as to how that came into the record.

JUDGE HILL (the State's counsel): I did not so understand that. I remember it was given to us as the result of such a conference, but I understood it had already been prepared by the railroads and certainly the State's counsel did not ask for it to be introduced. Isn't that correct, Mr. Johnson?

MR. MOORE: Some of the data was prepared, but that data was prepared as the result of a conference in Judge Trieber's chambers.

MR. JOHNSON (the accountant of the Iron Mountain): In the Missouri case such a statement as that was called for by the railroads and it was our understanding that it would be required in the Arkansas case; and we worked it up for that purpose.

In Judge Trieber's chamber, at a conference between yourself and Colonel Moore, when Mr. Wharton was present, Mr. Wharton asked for three months of these figures and we told him we had prepared them for one month for his convenience and did not feel we should be called upon to prepare them for three months. Judge Trieber then said we should not be required to prepare those figures.

Mr. Wharton finally agreed that the figures for one month would answer the purpose.

For our own purpose, in presenting this case, we would have no use for that exhibit. We believed that rather than check over the State exhibit it would be better for us to work that up ourselves, because it took us a considerable time to check their statement in the Missouri case.

JUDGE HILL: You did prepare these and had them prepared before Mr. Wharton ever requested them, did you not?

MR. JOHNSON: That is right.

JUDGE HILL: And you introduced them yourself, and not at our request?

MR. JOHNSON: Only to this extent: that it was the statement compiled for this case and if we had not introduced it we felt you would call for it, just as was done in the Cotton Belt case.

JUDGE HILL: But we did not call for them?

MR. JOHNSON: It was not necessary, because we had filed it. And in the meantime we had turned over a copy to the State expert." (R. pp. 1878, 1879.)

In the cross examination of Carl R. Gray, a witness for the plaintiffs in rebuttal, the above history of the preparation of exhibit 26 was repeated and this evidence added:

"Q. You took it as typical?

MR. JOHNSON: We took it for one month, because we could not work up any more, and we took October because it was the largest business of that period.

JUDGE HILL: You took it as a typical month?

MR. JOHNSON: We took it as representing the largest movement of freight.

I want to say that the freight in that exhibit is not freight handled on the trains. It is made up by the auditor from the auditor's accounts. The only purpose that that statement was used for by our witnesses was to show the relative proportion of the transstate, State and interstate freight carried into the accounts.

JUDGE HILL: And the length of the haul?

MR. JOHNSON: And the length of haul.

JUDGE HILL: State and interstate?

MR. JOHNSON: Of each class.

JUDGE HILL: Now, Mr. Johnson, you selected that month of October to work up these statistics, did you not?

MR. JOHNSON: Yes, sir.

JUDGE HILL: And when the State asked you for a three months' statement you said you were not willing to work that up, but you had the figures for one month already worked up, which you were willing to give them?

MR. JOHNSON: I said in Judge Trieber's office that we had those figures worked up in anticipation of their request, which we would give them and preferred to give them that, rather than check up figures which they might make.

JUDGE HILL: You were asked at that time whether that one month was fairly representative of the six months' period?

MR. JOHNSON: I said it was, so far as volume of business and the revenue was concerned.

JUDGE HILL: Didn't you say it was fairly representative of the six months?

MR. JOHNSON: So far as volume of business handled and the revenue." (R. pp. 1929, 1930.)

During the examination by the State of Mr. Swaim, rate clerk of the Commission, a question of statistics came up, and, as frequently happened, Mr. Johnson, the Iron Mountain accountant, was called up to furnish the information, and his view of October, 1907, as a representative month was thus shown:

"Q. This is an L. C. L. movement; do you know what the percentage of L. C. L. intrastate movement is to the entire movement?

A. No, sir; I do not; I have heard it variously estimated. I think it is a very small part of the carload.

Q. Mr. Johnson, do you remember the statistics of your road, as to the percentage of the L. C. L. movement?

A. Yes; I remember it for one month, October, 1907, which I consider a fairly representative month, of the total movement, and it is 4½ per cent, but I do not know that it is an exact apportionment between carload and less than carload.)" (R. p. 774.)

Up to the point where Mr. Wharton introduced the State's exhibit, using the test months as the basis to work up a division of expenses between local and through trains, and consequently interstate and intrastate, there seemed, from no side, any question but what these statistics in every detail fairly represented the six months' period.

Shortly before Mr. Wharton introduced the exhibits the counsel for plaintiffs, in cross examining Mr. Lincoln, gave him the statistics of exhibit 26, and asked him, with that as a basis, what proportion of the entire interstate business would be conducted on through trains rather than local. (R. p. 967.)

The statistics found therein were constantly used as showing the conditions indicated by the statistics quoted, and it would be too tedious to follow it in detail. To illustrate: Exhibit 26 furnishes the only separation of traffic into transstate, interstate and intrastate. It shows that the transstae is 51.16 per cent of the ton miles of all the traffic and 33.61 of the tons. Mr. McPherson's argument of extra cost of interstate was largely predicated on the fact that 51.16 per cent of the whole traffic was transstate, which had "straightaway movement" through the State, utilizing fewer of the facilities of the railroad, less labor and less station force. He draws comparisons between the classes of traffic, comparative expense and economy of each, assuming throughout the proportions found in exhibit 26, from which he freely quoted in this argument. (R. pp. 321-323.)

Mr. Doddridge uses the same table to show the volume of traffic which "is transported across the State, as upon a bridge." (R. pp. 457, 458.) He also uses them to show proportion of traffic on local train. (R. p. 458.)

Mr. McPherson also used these statistics as to the transstate traffic taken from exhibit 26 in his argument against the ton-mile basis of dividing expenses. (R. pp. 316, 317.)

In discussing the extra cost of intrastate transportation from a physical standpoint, Mr. McPherson again uses exhibit 26 as giving percentages of the relative classes of traffic. (R. p. 307). And again in the same connection he appealed to exhibit 26, at page 441, to illustrate his argument.

In cross examination he uses the statistics in exhibit 26 as to length of transstate haul with which to confound the State. (R. p. 448.)

Exhibits 26 and 19 (the test months) are the only exhibits which separate carload and less than carload freight, and throughout the

course of the evidence the relative C. L. and L. C. L. freight, intrastate and interstate, was referred to as affecting extra cost.

Another act of acceptance of the statistics of these months and their representative character is found in questions by the State's counsel to plaintiffs' witnesses, which were not challenged. To illustrate:

The tonnage of intrastate and interstate freight on local and through trains, as found in exhibit 19, was given to Mr. Ward with this statement:

"And it is in the testimony by the railroad witnesses that that month would fairly represent the business of that company." (R. p. 731.)

The statistics in exhibit 26, as to L. C. L., State and interstate, was also given him with the statement it was "a month which they (the plaintiffs') took as representing their traffic" (R. p. 736), and he was fully cross examined on these unchallenged statements of the plaintiffs' position, that these statistics fairly represented the condition of these roads; and in re-direct was further examined upon them. (R. pp. 737-8.) In truth, the record shows their constant use by both sides (to illustrate, see page 583), without question as representing undisputed facts during both the plaintiffs' case in chief and defendants' case in chief. The question of their representative character and value was first raised in plaintiffs' rebuttal. For that reason it is apparent why, in their case, the defendants had no evidence on the subject; they were no more questioned than the maps of the roads were questioned. Before proceeding to the attack upon them, some further testimony of plaintiffs' witnesses have a bearing on this issue:

Mr. McPherson gave this testimony in direct examination of the plaintiffs' case in chief:

*Plaintiffs' Evidence of Normality of Period.*

"Q. Mr. McPherson, from an operating standpoint, what do you think of the year 1907 as a representative period for the purpose of testing and determining the reasonableness or unreasonableness of the rates that are in controversy in this case? A. In my opinion the year 1907 was a fairly representative year. Q. You have spoken in your previous examination of certain increases in the cost of labor and material in and during the year 1907; did those increases in any way affect that period as a representative period for the purpose of testing the rates referred to?

A. Not in the ratio of the increase they represent because they will continue in the future. They are permanent in their character and would affect in the same way the operation of subsequent years.

Q. Did those increases change in any way the relation as between the rates or the earnings of the property during the year 1907 in your judgment?

A. I do not understand your question.

Q. Did the increase in the cost of labor and material which occurred in 1907 affect the relation as between the conduct or the cost of the interstate and intrastate traffic?

A. They are burdens on the whole traffic.

Q. Did they affect all of the traffic alike?

A. They would affect all of the traffic alike.

Q. When did the panic of 1907 first begin to be felt in the operating department of the railroad?

A. The operating department felt it in December of 1907.

Q. When did it reach its height in its effect upon the operation of the Iron Mountain railroad?

A. In the following summer I should say, from April to June it reached the high water mark of effect.

Q. How long did the conditions brought about by the panic continue?

A. Well, they continued all through the fiscal year of 1909." (R. p. 332.)

Mr. Johnson gave this testimony on cross examination during plaintiffs' case in chief:

"Q. Do you consider the last half of 1907, especially in view of the question you have just answered, to be a fair and normal test of operations on the St. Louis, Iron Mountain & Southern Railway in Arkansas?

A. I do, under the two-cent rate.

Q. I am asking more broadly than that. I am asking you is that a fair test, whether on a two-cent rate or not?

A. I believe it would be.

Q. I would ask you separately as to the different classes of freight, but I am asking you now as an entirety.

A. I believe the six months ending December 31 will be a reasonable period and a fair test of the result of operations on our line.

Q. A fair test for what period of a year?

A. A fair test for any period, to show the returns upon the property, or of the earnings to the road.

Q. Do you think that would be a fair, representative period of your earnings and expenses?

A. Yes, sir." (R. pp. 134, 135.)

Mr. Johnson says the panic begun in October, 1907, but did not affect the earnings of the line to any great extent in October, but begun to be felt in November. (R. p. 136.)

Mr. Johnson was questioned at some length on the percentages of the various expenses apportioned to Arkansas and summed up his evidence on that subject as follows:

"The average charge upon all those accounts to the State of Arkansas for the six months is a fairly normal charge." (R p. 193.)

Mr. C. E. Perkins' opinions on traffic and rate conditions were exhaustively given at the instance of plaintiffs. In his rebuttal evidence this occurs on cross examination:

*A Traffic Opinion of Using One Month To Test Intrastate and Interstate.*

"Q. You have heard a great deal of testimony here, I presume, from witnesses largely on the railroads' side in this case, that State and interstate traffic moves hand in hand, that they move together, haven't you? A. I do not know that I recall that testimony.

Q. You know that to be a fact, whether or not you heard that testimony, don't you?

A. I would say, generally, yes; that is true.

Q. If you take a given month, or a given six months' period, or a given year, and you take all the revenue, State and interstate, for that given period, wouldn't it ordinarily reflect the same movement of the same classes of freight, State and interstate?

A. For a given time?

Q. Yes.

A. As between State and interstate, I should say it ought to. (R. pp. 1631-1632.)

The last witness of the plaintiffs in their case in chief was Mr. W. M. Whitenton, Manager of the Rock Island lines in Arkansas, Oklahoma and Louisiana. The two test months' statistics previously put in were of all the freight traffic for the month, but Mr. Whitenton's test was for part only of the trains for a month, but he considered it sufficient. The testimony covering it is as follows:

*Whitenton's Test Month.*

"Q. Have you made any special investigation or test for the purpose of determining in any way the relative efficiency of the service applicable to State and interstate traffic, either freight traffic or passenger?

A. We made some tests on freight traffic in Arkansas.

I think from about November 22 to about December 21, 1908; that is about the date those tests were made.

Q. Will you state what the test was and what was developed through it?

A. The tests were made by putting men on trains and seeing just what each train handled, with regard to State and interstate business.

We did not work up all of that data, but we did take ten local freight trains and ten through freight trains, and worked up some data as to the per cent of State and interstate business on those trains.

Q. Who had that done; was it under your supervision?

A. It was partially done under my supervision. I outlined many of the methods used and went over a great deal of the information at the time it was compiled; that is, at the time that the men would make their test on the train. It all came to my office and I personally handled a great deal of it. The actual figures taken from these

reports on the ten local freight trains and eight through freight trains, were compiled by some of our accounting officers from these reports and worked by the men we had on the train.

Q. What did that show, as to any bearing in regard to the matters that you have been testifying about?

A. On the ten local trains, the per cent of State freight to the total freight handled, was 17.9 per cent. In other words, approximately 18 per cent of the total was State freight, and 82 per cent was interstate freight on those ten local trains.

That 17.9 per cent of State freight handled on those ten local trains represents about 60 per cent of the total State freight handled on the 18 trains that was worked up.

The L. C. L. or less than carload State, to the total State handled on the ten local trains was 11.2 per cent.

The less than carload interstate to the total interstate handled on these ten local trains was 4.6 per cent.

(He gives other statistics, car-mile haul, dead weights, etc.)

* * * * * * * * *

On the eight through freight trains, the percent of State freight handled on those trains, to the total freight handled, was 5.1 per cent. or, you might say, that of the total freight handled by those eight trains, 95 per cent of it was interstate freight and 5 per cent was intrastate freight.

Of the 18 trains combined, the through freight trains and the local freight trains, the per cent of State freight handled to all was 9.2 per cent. In other words, of those 18 trains, we will say 91 per cent was interstate and 9 per cent State freight." (R. pp. 755, 756.)

On cross examination it was shown that his road tried to cover everything for a month, but only worked up statistics of 18 of the trains; and gives routes of the trains worked up, and his examination continues:

"Q. How many freight trains does your road run a year in Arkansas?

A. I do not know.

Q. How many a day, then?

A. Oh, I could figure that out, of course—

Q. I would like to know somewhat within the range of what it is; I could not expect you to give an absolutely accurate answer, but you ought to know, generally speaking, how many freight trains you run in the State in a day.

A. I can figure up now about two scheduled freight trains which we have in the State of Arkansas.

Q. By schedule do you mean local?

A. Local and through, both; they are both scheduled.

Q. That is 32 per day?

A. Yes, sir.

Q. These 18 that you referred to were taken out of a period of ten days?

A. November 22 to December 21.

Q. A period of about thirty days. In that thirty days it would be 960 scheduled trains that you would run in that period?

A. If that is what it figures out, that is what it would be about.

Q. Within that period you would have some extra trains run, would you not?

A. Yes, sir.

Q. In round numbers it would be something like 1,000 trains run in that period?

A. I expect so.

Q. And you have given us the benefit of 18 out of 1,000?

A. That is what we have taken; whatever that would be.

Q. Do you think that would fairly represent the percentages of your traffic as you have given them in those 18 trains?

A. I think that would be fairly representative; that is my opinion about it.

Q. Do you know that there are about 1,300 trains in Arkansas, on the Iron Mountain alone, in one month?

A. I don't know anything about that.

Q. But you think these 18 trains out of 1,000 would be fairly representative of the percentages as you have given them here?

A. Yes; I think it would, because in taking that we represent all of the territory; practically all of the territory." (R. pp. 760, 761.)

The vigor with which it is contended that local trains are composed of intrastate traffic almost entirely was all in the record before Mr. Whitenton's test was introduced. The subsequent attack on the statistics showing 68 per cent on Cotton Belt and 72 per cent on the Iron Mountain of the local train was interstate freight becomes amusing in view of Mr. Whitenton's test on the Rock Island in the same country, handling the same commodities and in a subsequent month and shows 82 per cent of the freight on the local trains was interstate.

Mr. Whitenton shows 5 per cent of the through trains' load was interstate, and that the intrastate traffic was divided 60 per cent on the local and 40 per cent on the through, *i. e.*, 18 per cent of the local load was interstate, but that composed 60 per cent of the intrastate traffic, while the 5 per cent on through composed 40 per cent of it. Exhibit "I," worked up from exhibit 26, shows also 5 per cent of the interstate on the local train, but in this case it constituted 60 per cent of the interstate traffic.

This representative test of the traffic on 18 trains is another refutation, by facts, of theories; *i. e.*, that intrastate traffic is enormously expensive on account of the expenses of the "beast of burden"—the local train—when 82 per cent of that expense on the Rock Island is attributed to interstate freight, a different face is put on the problem.

## THE ATTACK ON THE VALUE OF TEST MONTHS.

The testimony of plaintiffs in rebuttal on the value of the test months was of three classes: (a) Opinion evidence that one month, especially October, was not representative of six months' business, thereby coming in direct conflict with Kimbell, Doddridge and Whitenton and Johnson. (b) That there was a congestion of traffic in October, 1907, on account of which the local train carried more interstate traffic than in normal times. (c) That exhibit 26 was made up from the auditor's books and not from actual movements on the road, and it would not therefore represent the actual movement; and, moreover, that the State in working up the performance of the local trains took actual movements, and the result of those substracted from results shown on the books would not be accurate, due to the lapovers. (d) The other atack is two insignificant for extended notice, and that is as to the accuracy of exhibit "I," prepared by the State from exhibit 26 of the Iron Mountain.

It will be noted that only the first of these grounds reach to the Cotton Belt test, all the others reaching to Iron Mountain exhibit 26 and State's exhibit "I," based on it.

## THE USE OF ONE MONTH'S TEST.

*Attack on Using One Month.*

(a) The witnesses on this proposition were Mr. Frank Nay, Comptroller of the Rock Island; Mr. Frank E. Ward, Manager of the Burlington road, and Mr. Carl R. Gray, Vice President of the Frisco road. Mr. Nay says: "I should say that no month is representative of any six months, or any twelve months, and, certainly, if I would choose a representative month, I would not choose the heaviest month in the year.

An average month might be more representative than either the heaviest or the lightest month, but I think when actual results are desired, no one month should be taken as representing a period." (R. p. 1822.)

In cross examination this occurred:

"You have objected a good deal in your direct examination to the use of one month as a representation of a six months' period, or a year's period, as testing State and interstate results. You do not believe it is fairly representative for that purpose, as I understand you?

No, sir; I do not." (R. p. 2024.)

Then the testimony of Messrs. Kimbell and Doddridge, heretofore quoted, was read to him, and he was asked as to his agreement with them, and he disagreed. (R. pp. 2024-2026.)

Then this occurs in his cross examination:

"Q. In view of the testimony of these two very distinguished gentlemen, who are so thoroughly familiar with these two roads, do you think the State is subject to criticism for taking one month's business as representative of six months?

A. That is an embarrassing question, the way you have put it to me, but my judgment is they are.

Q. Notwithstanding Dr. Kimbell and Dr. Doddridge differ with you?

A. You press it so it makes it rather embarrassing to answer.

Q. That is a fact?

A. I think I have stated it before. I would like to agree with everybody but I can not.

Q. There is another question I think would be fair to ask you, Dr. Nay:

You have spoken a good deal in your testimony of the consistency of our position: What do you think of the consistency of the railroads here, proving by these distinguished witnesses in their case in chief that one month was fairly representative of a year's business; and then proving by an equally distinguished gentleman, who is now on the stand, that in his opinion it is not:

Is not there some degree of inconsistency in that?

A. The testimony shows that the witnesses do not agree in every point. In fact, if witnesses agreed on every point it might look as if they had all been coached and told what to say, in advance.

Q. Certainly. But isn't there an inconsistency in the positions I have stated to you?

A. I don't understand just what you mean. There is a difference of opinion.

Q. The proposition is just this: In making its case in chief the railroads put on these two distinguished gentlemen thoroughly familiar with affairs on those roads and proved by them that honestly in their judgment one month was representative of six months or of a year's period, or of a series of years, as between State and interstate traffic; and now they put on another distinguished gentleman, honest in his opinion, to prove that is not the case:

Is not that an inconsistency?

A. I think it is a difference of opinion, because I think each man has been consistent throughout.

When I spoke of inconsistency I spoke of the same man using one method in one division of expenses and then switching to a different method for a division of a similar expense.

Now, I do not understand that that is the case in the question you are asking?

Q. I am removing the personal equation and putting it as to the railroads:

Both these gentlemen are entirely consistent and so are you. But here is the railroad proving by one set of gentlemen, who are con-

sistent, who held one view, and then in their rebuttal testimony they are proving by another consistent gentleman another opinion, on the same point in the case.

A. I do not think I should be asked to pass upon the position of the railroad. I think the court can do that.

Q. I think the question rather answers itself, anyway."—(R. pp. 2026, 2027.)

Mr. Nay admitted that in a recent hearing before the Interstate Commerce Commission on the application of Western roads for an advance of rates, he had presented the statistics of one month completely worked up, supplemented by the revenue of three weeks, "as the best index we had." (R. p. 2029.)

It seems he was questioned as to whether he regarded one month and three weeks as a fair index of the volume of traffic or earnings or expenses for the year compared with a prior year, and he said it was the only index he had. He admits he put it in as an index, and gave his opinion and judgment of the future based on that index.

One month's detail of traffic, earnings and expenses, supplemented with three weeks' revenue, is thought to furnish an index of business entitling his road to an advance of rates, but one month, selected by another road and used by the State after it was selected as representative of volume of business and the relation of transstate, interstate and intrastate is quite faulty. It takes a mental gymnast to entertain both views.

Mr. Frank E. Ward, in rebuttal, said:

"In the first place, the taking of any one month would not, in my opinion, be safe for determining so important a thing as the cost of performing service, when it is to be used for determining the revenue of the company.

The months vary very greatly, one from the other. The month of October, on most railroads in the West, is a month of very heavy business, by reason of the difference in the method of taking record of the tonnage, part of it being taken from billing, and part from the date of receipt, there would be a very great opportunity for tonnage to be omitted that was actually carried in that month. Or, on the other hand, there might be a great deal of tonnage included in the figures which would not move at all on the rails of the company during that month. Therefore, the great uncertainty as to the accuracy of the tonnage would make the first grave doubt as to the accuracy of the method for computing the cost.

* * * * * * * * *

I do not believe that any one month should be taken or could be taken as a basis upon which to determine an accurate computation. Any month might be a high one or it might be a low one; and if it should happen to be correct in any given case it would be so purely by accident and not by reason of the inherent accuracy of the theory. No short period of a day, a week, or a month, would be safe. They

would all give opportunity for variations sufficient to destroy the value of the method as a means of determining the separation of cost." (R. pp. 1854, 1855.)

In cross examination, Mr. Ward was read the testimony of Messrs. Doddridge and Kimbell heretofore quoted, and admitted he was not familiar with these roads, but he would not accept the test, saying, "It is a thing that can not be measured out by figures and facts, even though you put men on the trains to watch every movement."

He positively disagrees with Doddridge and Kimbell that one month could fairly represent six months or a year, or a series of years so far as the relation of interstate and intrastate traffic is concerned. (R. p. 1876-1879.)

Mr. Carl R. Gray, Vice President of the Frisco road, testified on this subject as follows:

Q. Mr. Gray, I want in that connection to have you state your views as to whether October, or any one month out of six months, say of the last half of 1907—is that month of October, in your judgment, to be used arbitrarily as representative of the six months, with reference to that class of expense?

A. From my knowledge of the conditions on all Southwestern railroads in October, 1907, I would say that in my opinion for a comparison of this kind it would have been difficult to have selected a month in which the results would have been more misleading as applied to a longer period, for the reason that the congestion reached its flood during that month, and the conditions which were distorted by reason of the efforts of the operating department to move this unprecedented tonnage would reflect themselves through all of the remaining months, and the proportion of tonnage included which really did not move in that month, and the proportion of tonnage excluded which did move in that month, due to the Auditor's method of keeping his ton miles, would equally distort, and perhaps distort more greatly, all of the other months." (R. p. 1898.)

In his cross examination, the history of the Iron Mountain exhibit was brought out, as hereinbefore set out. He disagreed entirely with the testimony of Messrs. Doddridge and Kimbell, and finally said he did not believe a test could be made at all. (R. pp. 1927, 1928.)

Then this occurs, to which especial attention is invited:

*Gray Estops Plaintiffs in Their Attack on Test Months.*

"Q. Mr. Gray, my question is, after this statement was put in evidence, and after it was compiled by the railroads in the way you have heard stated, and after the railroad witnesses used that statement for various purposes, to illustrate their position in regard to the statistics, contained therein, was not the State justified in using that exhibit as a basis to illustrate those same conditions?

COLONEL MOORE: That is objected to because that is calling on the witness to make a statement about a

matter which should be determined by the court and should be determined only by the court and not by the witness.

JUDGE HILL: I think the witness has passed upon questions similar to that, in answer to your questions yesterday, and I think I am entitled to ask his opinion about it.

A. My answer to that would be that if a month's statistical data has been testified to by the competent officials of that company as being a representative month and safe to apply to a period of six months, the State would be justified in assuming that for the basis for that six months.

COLONEL MOORE:

Q. You mean for the purpose for which it is being used here by the State? If the railroad accountant represented it was a proper basis for the use that has been made of it here.

A. I meant to say, if that had been testified to by the competent officials of the railroad, which would include the accounting and include the operating officials, as being one which was safe to use for a basis for six months' business, then the State would be justified in so using it.

Q. You mean if they testified it was safe for the purposes for which they used it?

A. Yes, sir.

Q. And not safe for other purposes?

A. I mean it is reasonable for them to think it was safe to use it for the purposes for which they used it.

Q. Suppose the railroad officials testified that would be properly representative of six months for one purpose, and the accountants for the State used it for another and different purpose.

A. My answer must be considered as meaning that there should have been (to be of value) unanimity of opinion among the competent officers of that company, that that was a safe month to use as illustrative of an entire period.

Q. For the purpose for which the exhibit you criticise was used, for ascertaining the relative amount of tonnage carried by local and through trains in the month of October, 1907?

A. Yes, sir; that is right.

I want to add this to that answer: That the amount of tonnage carried on local and through trains is not the only deduction which the State made from these October statistics and that my criticism extended to all of that in the same proportion." (R. pp. 1930, 1931.)

The fairness of the State's position so appealed to Mr. Gray that in the above straightforward manner he justifies the State fully in the use of the test months, although in his direct testimony his criticism of using one month was both severe and caustic. But when the facts are developed, like any fair-minded man, he says the State was fully justified in using one month as a basis for the six months.

In truth, a system of rates ought not to be tested on the six months' statistics, but when the plaintiff stood on the six months, their officials testified it was a normal period and fairly represented a series of years, necessarily, the State had then to ascertain all facts possible regarding that six months. It asked for three months' statistics of the Iron Mountain, and the road declined to compile them, but offered one month which it had selected as representative and had worked up in anticipation of such request. If the State had worked up every detail of the six months as it did this month, the treasury would be empty and the case not yet ready for trial. We have no evidence of the length of time it took the plaintiff's road to compile exhibit 26, which represented the movement of all freight on all trains and all the expenses and all the revenue.

Using it as a basis, it took a force of trained accountants six months to work the local trains' movement, expenses and revenue and tonnage, and it represented probably one-fifth of the tonnage.

The Interstate Commerce Commission has designated March and October as two months to serve as an index of a year's business.

Mr. Nay testified:

"I have talked with one of the representatives. I forget, now, who it was, but, I think it was Mr. Lutz, who is assistant to Professor Adams, and he picked those out as being perhaps average months—not being the largest months nor the smallest months." (R. p. 2032.)

That is exactly what is needed—an average month, not the largest, not the smallest.

When the plaintiffs only test out their case with six months, certainly the State is justified in using the average of them, even if it had selected it and worked it up, instead of which, the plaintiff selects it, introduces it, uses it and then when it results in their overthrow, seek to reject it.

(b) Was there a congestion of traffic in October, 1907. In view of the selection of this month as normal and representative, and its use by the plaintiffs to make their case, it ought to be wholly immaterial whether it was congested or not. They are entirely dependent upon it for their transstate traffic, and if congested, the transstate statistics are wholly unreliable, and without the transstate traffic going through the State "as if on a bridge," with a "straightaway movement," where would the 100-plus per cent of extra cost be?

*Was October, 1907, a Congested Month?*

The evidence of this was opinion evidence of Mr. Gray, already quoted, and Mr. Ward, who said October, 1907, was an exceedingly heavy month; in fact, in the entire West, business was heavier that month than in any previous month in the history of railroading (R. p. 1857), and also the opinion of Mr. Nay.

It is easy to express general opinions on these subjects, but unsafe.

Mr. Nay expressed an opinion as to the first half of 1907, compared with last half, and was confronted with the statistics and found he was mistaken, and then said that the first half of 1908 (the worst part of the panic, as all admit), would be as fair to compare with as to take last half of 1907, and compare with first half of the calendar year, 1907, because the panic began the latter part of October, 1907, and the "slump" showed up in November. (R. p. 2015.)

If Mr. Nay is right, the plaintiffs can not maintain this bill based on conditions of the last half of 1907. The answer raises exactly the point he makes—it was a period of panic and distress, and not a normal period with which to test a system of rates in vogue for the past eight years.

The plaintiffs introduced testimony to overcome these allegations; they said the revenue and expenses were normal, and it was a fairly representative period.

The State dug into the details of that period as it was its duty, and found intrastate traffic making as much return as interstate, and both compensatory.

To overcome the State's evidence, the basis used is attacked as a congested month, and Mr. Nay attacks the whole period as abnormal and suffering from a panic.

But it makes little difference whether congested or depleted, the consensus of opinion of practically all the witnesses on both sides is that interstate and intrastate traffic respectively moves uniformly.

The only evidence of any importance bearing on the congestion is that of Moore, Cannon and Brown.

Mr. B. W. Moore was night yardmaster in the Little Rock terminals in October, 1907.

He says there was a general congestion of traffic during that month, owing to the heavy movement.

That such congested condition made them add to their local trains probably 500 to 600 tons in order to move as many cars out of the terminals as quickly as possible.

He says the superintendent issued orders to utilize all the power of the local trains, which had light engines of 1,200 tons' capacity, and not to exceed 1,000 tons on each division.

The through trains, he says, at all times, carried full capacity of the engine, and that is not true of the local, and the excess of cars in the terminals from St. Louis, Kansas City and New Orleans, Alexandria and Memphis, and under orders of the superintendent, these excess cars were added to the local trains; ordinarily, the local trains only handle local cars and L. C. L. freight on the local divisions.

He says local trains came in from other division points with additional cars, using the full capacity of the locomotives, and says it was mostly freight from without the State. (R. pp. 1777-1779.)

In cross examination, he says the congestion continued into Janu-

ary, 1908, but in March, 1908, the movement was normal. (R. p. 1783.)

Mr. John Cannon was Superintendent at Little Rock in fall of 1907.

He says in that fall they departed from the usual practice of loading local trains, owing to the heavy movement. In normal times, the local freight handled nothing but L. C. L., and short loads for its own territory.

During the fall of 1907, in addition to that class of loading, the locals were filled to nearly their maximum tonnage, though loads, loads that went the entire division.

The excess tonnage ran from 300 to 800 tons per day—gross tons, the car and its load; and the excess tonnage was mostly interstate.

In his opinion, the local train in October, handled 75 per cent interstate, and in normal times, 25 per cent. (R. pp. 1797, 1798.)

On cross examination, he said this was only his opinion; he had no statistics on it. To know definitely would require scrutiny of the waybills, which he did not make, and never before had he had occasion to study the problem of how much interstate freight was carried on the locals.

Mr. H. V. Brown was terminal clerk (R. pp. 1798, 1799), in Little Rock in October, 1907.

He says the congestion of traffic in October increased the tonnage of the local trains.

He says in normal times the local handles about 70 per cent of State freight, and not to exceed 30 per cent of interstate freight. But during October, the proportion of interstate freight on the local was 60 per cent. (R. pp. 1805, 1806.)

On cross examination, he admitted he thought all the Fort Smith traffic was intrastate; it is a heavy traffic, and especially heavy in October, 1907. (R. p. 1807.) (The undisputed fact is, that it is all interstate.)

His attention was never called in the performance of his duties, as to whether freight was State or interstate, and he only saw the waybills of four local trains, and that is the extent of his observation of the movement of freight in October, based on four local trains out of Little Rock. (R. pp. 1807, 1808.)

An analysis of this evidence is important, except the last witness, whose observation was so limited that it is of no moment.

Cannon says:

"During the Fall of 1907, in addition to that class of loading the locals were filled up to nearly the maximum tonnage with through loads, loads that went an entire distance over the district the local was run on. That excess tonnage ran all the way from 300 to 800 tons per day." (R. p. 1798.)

Moore says:

"A. We added to our local movements and added tonnage of probably 500 to 600 tons.

Q. To the train?

A. Yes, sir; to the train. (R. p. 1777.)

Exhibit I (R. p. 2518), shows loading of revenue cars averaged 18.6; on through freights, 19.2 tons.

Taking 600 tons as the average of Cannon and Moore of additional tonnage put on local trains, and see the effect. It was stated by Mr. Bee, in a calculation which seemed to have been accepted, that 35 tons was an average car and load (R. pp. 1282, 1283); considering the average load, as above found, we presume this is sufficiently accurate to use.

Six hundred tons of gross weight would therefore represent 17 cars. Exhibit I shows local trains averaged 16.6 cars, and through trains 33.2 cars.

If Mr. Moore's version is correct, that 600 tons were added to each local train, then, more was added than the whole local train, and it started with nothing but engine and caboose, and its whole load added. If Cannon's version is accepted as 300 to 800 tons added daily to all the trains, then these 17 cars would be lost in the totals.

Mr. Roth and Mr. Hamilton agreed that there were 46 trains by number, but about 1,400 individual local trains running during that month. (R. p. 1974.)

We assume there were 46 regular locals running for the month, would make nearly 1,400.

Not quite three cars would be added to each local according to this version of the excess tonnage. Less than three cars per day on the locals changes the complexion of its freight from 25 per cent interstate to 75 per cent interstate!

Exhibit 26 (R. p. 2391), shows the number of tons moved in Arkansas for October, 1907, was 643,404; this would be an average daily movement of 20,755 tons per day. Six hundred gross tons, approximately 400 tons daily, do not cut much figure in a daily movement of 20,755.

As the through trains have double and a little over (16-6 to 33.2), cars to the train, and the loading of through cars is four tons heavier than the local, and the number of local trains run is less than the through (R. p. 2518), it is apparent that, roughly speaking, at least four-fifths of the total tons was carried on through trains.

This conforms, roughly, with the relation in ton-mileage shown in exhibit "I," page 2516. The local ton-mileage is 11.17 per cent, and through, 88.82 per cent. As the local run is shorter, and it carries much more short haul—intrastate and interstate—freight than do through, necessarily the proportion in tons would be greater than in ton-mileage.

For instance, the oft-quoted 51 per cent transstate is in ton-mileage, while in tons it is only 33.61 per cent. (R. p. 2391.) Therefore, we think we can safely assume that 20 per cent of the daily movement of 20,755 tons would be ordinarily carried on the local train as a daily movement on local of 4,151 tons—an addition to that movement of from 300 to 800 gross tons daily, say 600, or only 400 tons of actual freight, and it is seen that excess movement represents less than 10 per cent increase to the load of the local, and yet, Cannon, on account of it, changes the complexion of the local from 25 per cent interstate to 75 per cent interstate—another case of Theory v. Fact.

But really, it is useless to pursue this class of testimony as the undisputed statistics absolutely disprove the Cannon-Moore-Brown theory, and establish beyond controversy that October was a normal month of the six months' period so far as operation of the trains are concerned.

## STATISTICS DEMONSTRATE OCTOBER NORMAL.

Some uncontroverted statistics prepared by Mr. Hamilton and calculations of data in the railroad statistics demonstrate that October was a normal part of the six months' period:

"Q. One of the witnesses for the Iron Mountain, in rebuttal, Mr. Cannon, I believe it was, testified that during October, owing to a congestion of the business, that there was a shifting of through business on to the local trains in Arkansas—probably other witnesses expressed opinions along that line, but I remember that one in particular:

Have you investigated that question and prepared any statistics on that subject?

A. Yes, sir.

Q. I wish you would give us the benefit of it.

A. Exhibit "I" filed by the State, covering the month of October, 1907, shows the average number of cars per local train to have been 16.6.

As I recall what Mr. Cannon said, he stated that to relieve through trains during the month of October—which he said was a more or less congested period—they had burdened the local with more than it would ordinarily haul of freight which went from one end to the other of its run. That is, it carried some of the burden of the through train during that period, and that that would reflect itself in any ton mileage figures that might be made as to the local trains' performance.

As I recall it, he stated that that would result in putting more than a normal amount of interstate ton mileage on the local trains.

Q. That is the substance of it.

A. I have had in the last week or two weeks, the wheel reports for all of the local trains on the Iron Mountain in Arkansas, for the month of March, 1907, a spring month of the same year.

I find that the average cars per local train, for that month, were 16.7.

Q. What was it in October, 1907?

A. Sixteen and six-tenths.

COLONEL MOORE: I do not think it is proper for you to go back—

JUDGE HILL: You are the one that brought that in in rebuttal. We took your testimony to begin with, that October was normal. We did not introduce testimony on that, and then in rebuttal you took this testimony of Cannon and others, to show it was not.

COLONEL MOORE: This is objected to because it is a reopening of a matter that has been gone into before by the State.

A. The figures that I have just quoted were obtained from the wheel reports and the car-mile calculations shown in the wheel reports by the statistician in the car accountant's office.

Those figures which we have abstracted for the local trains were an integral part of the total car mileage figures made by them for that month for the information of the operating officers of the company and other statistical purposes.

The method followed was to abstract the car miles made by the local and the train miles made by the local, and dividing the car miles by the train miles to get the average number of cars in the train each mile, which is exactly the process followed in compiling exhibit "I" for October.

Q. You just matched March, 1907, with October, 1907?

A. Yes, sir.

Q. And found on the second decimal a difference of one point?

A. On the first decimal a difference of one-tenth of a car more in March than it was in October.

Q. Have you any other statistics on that point?

A. Do you mean as to the normality of October, from a transportation standpoint?

Q. Yes.

A. Yes, sir. I have made a comparison of the October movement with the six months which covers the period of our inquiry in this case, the last six months of 1907.

I find that the freight train miles made in Arkansas on the Iron Mountain in October, 1907, were an exact one-sixth of the freight train miles made in the six months ending December 31, 1907—16.63 per cent, an exact one-sixth.

I find that the freight car miles made in October, 1907, were also one-sixth of the freight car miles made in Arkansas during the latter one-half of 1907; they were 16.57 per cent, virtually one-sixth.

Q. You mean per cent of what; of the total train miles made?

A. No. The October car miles were one-sixth of the freight car miles made in the six months' period.

Q. Ending December 31, 1907?

A. Yes, sir; the period of our inquiry here.
Q. Anything further?
A. No, sir." (R. pp. 2260-2262.)

The Interstate Commerce Commission has selected March and October as the two average months to work out this class of problems when representative periods must perforce be taken. (R. p. 2032.) We find in October, the local trains carried an average of 16.6 cars, but according to the Cannon-Moore-Brown theory, these local trains had from 300 to 800 gross tons a day (or on each train), in them, over ordinary movement, and therefore, it is unreliable and abnormal; but, in March, 1907, when there was no charge of abnormality, the local trains averaged 16.7 cars per train.

Mr. Roth testifies that there is a heavy cotton movement in Arkansas in October, the effect of which would be to load the local with an increased percentage of interstate traffic—as cotton is all interstate. (R. p. 1975.)

But in March, there is no heavy cotton movement, and yet the local train has as many cars then as in October.

Mr. Gray testified that on roads in the Southwest in October, 1907, the congestion reached its flood and conditions were distorted, owing to efforts of the operating department to move their unprecedented tonnage, and any comparison based on that month would be misleading. (R. p. 1898.)

A mathematical calculation demonstrates that the freight train miles made in October, 1907, on the Iron Mountain were 16.63 per cent of the freight train miles for the six months ending December 31, an exact one-sixth.

When the number of miles made by all the fregiht trains for that month were exactly a representation of the six months, it seems that the conditions were not badly disturbed so that operating comparisons with it would be misleading. According to the Cannon-Moore-Brown theory, however, additional cars were put on the local, the through at all times running to its engine potentiality, and the train miles would not detect the excess loading of the local, but the next mathematical calculation demolishes that also.

The freight car miles, taking the individual cars run, not the train's run, were 16.57 per cent of the freight car miles of the six months period, a trifle less than one-sixth.

It is true that the ton mileage for October was more than a sixth, and also true that the revenue was more than a sixth, but neither of these facts affect the operation of the traffic, the revenue varying according to commodities—in both classes—moving according to the season, and in this instance, the State and interstate keeping apace with each other, and the ton mileage also varying by length of haul and amount of tonnage, but where the train movement and car movement are normal, the variance in ton mileage and revenue would not

affect the expenses at all, and it is expenses with which we are dealing.

Judge Trieber finds indications of abnormality of October in the greater ton mileage and greater revenue (R. p. 2622), but he overlooked the fact, the pivotal fact of this inquiry, that the relative movement of intrastate and interstate was normal nothwithstanding a larger total ton-mileage than the average.

Exhibit 5 of the Iron Mountain (R. p. 2327), gives the tons and ton-miles, intrastate and interstate, for the six months' period and their percentages.

The intrastate ton mile for the six months is 7.25 per cent of the total, and interstate, 92.75 per cent. Exhibit 26, giving the same data for October; intrastate, 8.15 per cent; interstate, 91.84 per cent. (R. p. 2301.) What boots it if the ton mileage is 20 per cent greater in October over one-sixth of the period if it is so nicely represented in the relative movement of the two classes of traffic?

While this difference is slight, nine-tenths of one per cent, it is significant that that small difference is in favor of a larger intrastate movement for the test month than for the six months' period. The gist of the attack on October is that congestion had put an extra amount of interstate traffic moving on local trains; more cotton than normal was moving, etc., and yet here the Iron Mountain's own figures show the movement for October relatively between the two classes of traffic practically identical, what little difference in favor of the interstate, just the opposite of all this testimony attacking the normality of October.

The revenue relation was likewise practically identical for the test month, and the six months; exhibit 5 gives revenue per ton per mile, in mills, intrastate, 13,377, interstate, 6,750.

Exhibit 26 shows for October, revenue per ton per mile, in mills, intrastate, 12,826, interstate, 8.15. Just half a mill difference in revenue per ton per mile intrastate for the six months compared with the test months, and that difference in less revenue per ton per mile in the test month. The interstate is not quite a mill and a half difference between the six months and the test month, and that difference in favor of greater revenue for the interstate for the test month. These statistics absolutely destroy any significance to be attached to larger ton-mileage and larger revenue for October than one-sixth of the period; they show that the ton-mileage is increased, but exactly in the same proportion that it held in the six months' period with slight variance in favor of intrastate, enough to destroy the theory of congestion of interstate over intrastate.

Revenue is always fluctuating and has little significance, but in this instance, the intrastate revenue is nearly constant with itself; indicative of no abnormal movements at least. The interstate is not quite as constant with itself as the intrastate and reverses the relative proportions of increase from the intrastate; the intrastate, October,

being a half-mill less per ton per mile than for the period while the interstate for October is a mill and a half greater than for the period.

After reading the way rates are made, and exist, anything may be expected in revenue statistics.

However, the revenue statistics are of no moment here, other than indication that no violent changes are occurring in October contrasted with the six months, as this is a question of expense, not revenue, under consideration.

The evidence is full of variations from shifting of commodities, due to seasons and trade conditions, but all agree that the commodities and seasons affect State and interstate alike.

The way rates are built up, resulting in the patchwork interstate rate system in existence may account for any sort of revenue charges in interstate traffic, owing to whether the freight originates or is destined to different points, the favor of the tap lines participating in hauls, etc.

But we are dealing now with expenses, not revenue.

Judge Trieber quotes the ton-mile statistics from exhibit 54, giving intrastate ton mileage only.

We have given you the ton mileage of both intrastate and interstate from the railroad's own exhibits, and shown that the increased ton mileage in October over one-sixth of the period accrued alike to intrastate and interstate, and therefore could not affect the problem before us, to find the relative cost of the two classes of traffic.

The ton mileage would not increase cost unless it increased train or car mileage, and as shown in this month, it did not; with the same train and car mile as the period the road achieved greater ton mileage and greater revenue, and no additional expenses could attach for it, and if it did, it attached alike, as their increased ton mileage continued like Siamese twins, as some witness expressed the movement of State and interstate traffic.

*The Lapovers.*

(c) The next attack on exhibit 26 is that there were "lapovers" from October into November which would not be accounted for in the methods pursued. The exhibit was made up from the Auditor's books, which show all freight billed in October, but in the latter part of the month some would not move or complete the movement until November, but would appear as October business. The State's accountants worked up all the local trains from the wheel reports and waybills, and got all the actual movement in the month, and substracted the total local freight from all freight shown on the books. There would necessarily be some inaccuracy in this. Mr. Nay, Mr. Ward and others contending a serious inaccuracy, Mr. Ludlam, Mr. Hamilton and others on the other side, contending it would be negligible and that the lapovers from September into October, which would go into their statistics, would compensate for the lapovers from October into November, which would not go into their statistics. Moreover, the State con-

tended that for the purposes of this case, it would not be important whether the lapovers equalized each other or not, because all the witnesses agreed, and the statistics proved, that intrastate and interstate moved alike, and whatever inaccuracy there might be in this system, would not affect the relative cost, as there would be proportionately as much lapover in one class of traffic as the other.

There is a great deal of evidence on both sides as to this, which was directed to the State's plan of dividing expense, and that is the appropriate place for the consideration of its detail—if it be considered worth while.

Mr. Roth introduced some statistics on it, to which attention is called.

He analyzed one-third of the local trains, as worked up by the State's accountants, and said it would have taken a year to have analyzed all the trains. He says in these analyses that 30.5 per cent of transstate was not included in October, that 15.5 per cent of interstate was not included in October, and 6 per cent of intrastate was not included. (R. p. 1974.)

Mr. Roth was sick and could not be cross examined (R. p. 2250), and we have no information other than the facts stated, but he does not state the other side of it. Considering the movement of the traffic being uniform, if he had examined the same trains for the September lapovers, there would doubtless have been the same relative amount, as there is absolutely no reason why one should not offset the other. Moreover, many of the trains analyzed by him run near the borders where the interstate lapovers would be greater, as he admits. He should have taken all trains, and not selected some, in order to get fair results.

A queer thing is that he found transstate freight on local trains. He does not give the amount of it, but shows a large percentage of it in lapovers.

How Mr. Doddridge's transstate freight, moving through the State "as if on a bridge," could get on a local train is a mystery; or how this transstate freight which only has "a straightaway" movement (McPherson), could stray away on a local is not explained. Whether it was a large quantity or a negligible quantity, only large in percentage of lapovers, is unknown.

The Cannon-Moore-Brown theory will not explain it, for they say the extra interstate was put on local to be carried on that division instead of the through, and this would not apply to transstate.

But such statistics, without giving the corresponding lapover, on the same trains of September in each class of traffic add nothing to the solution of the problem.

Mr. Johnson admits in cross examination that the lapovers only apply to the tons and not the car miles, and to the other percentages used by the State in its plan of dividing expenses. (R. p. 2231.)

A lapover exists in all going concerns. No period can be taken without it. The six months' period has its lapovers. There are lapovers in revenue as well as expense, but when a normal representative month or period is taken, they will equalize themselves.

(d) The accuracy of exhibit "I" is the next, and smallest attack. The plan of making up exhibit "I," a deduction from exhibit 26 has been explained. Mr. Hamilton and a force of trained railroad accountants compiled it and turned over their worksheets to the railroad for verification, and a force under Mr. Roth, spent months checking it over. Mr. Hamilton was cross examined at great length regarding his plan of work, etc., and finally examined as to the detail of many cars, their weights, classification, etc., mistakes being assumed as to each of them concerning which he was questioned. (R. pp. 1553-1570.) He was given time to investigate the alleged mistakes and this was the end of the matter:

*The Accuracy of Exhibit "I."*

"Q. Mr. Hamilton, when you were on the stand before you were cross examined as to various cars you traced up that were put before you in the October movement, exhibit 'I,' I believe it was. Re-direct examination on that was deferred until you had time to look into the matter.

I will ask you if you have gone through that thoroughly and found out the extent of the errors upon which you were questioned in your cross examination?

A. Yes, I have gone over our worksheets since that time. By 'worksheets' I mean the sheets on which we worked up our figures which are condensed into exhibit 'I;' and have given particular attention to the cars referred to by Colonel Moore in cross examination on the subject heretofore. I found there were thirty cars involved which were referred to as making 68 different moves. That is, as appearing 68 times on our sheets. I do not mean that each of the cars appeared 68 times, but the 30 cars represented 68 movements in the local trains.

I found that our weight as shown in tons in our classification as between State and interstate was correct on seven of these movements. I found that we had omitted to locate weights for 43 cars in our statement, which cover some 20,835 cars.

I found that the 61 moves or 61 appearances of cars on our worksheets where we had made errors in ascertaining the weights or in classifying the weights when ascertained, would, when boiled down and applied to paragraph seven on page eight of exhibit K, result in taking $257.68 from the cost of intrastate business and adding that amount to the cost of interstate business.

That would be the net result of making the correction in our figures.

Q. Your error worked out against the State, then, to that extent?

A. Yes, sir.

Q. What percentage of error would that be? Have you ever figured that out?

A. If the changes I have indicated were made in exhibit 'I,' the percentage shown in that exhibit would read in this way:

Intrastate freight on local trains 39.02 per cent instead of 39.10 per cent.

Intrastate freight on through trains (I am speaking of ton mileage now) would read 60.98 per cent instead of 60.90 per cent.

Total revenue freight on local trains would read 11.17 per cent instead of 11.18 per cent.

Total revenue freight on through trains would read 88.83 per cent instead of 88.82 per cent.

Following that in exhibit 'K' it results in the change in dollars and cents to which I have already referred.

COLONEL MOORE: What cars does that result you have just now mentioned apply to?

A. It applies to the car numbers—

Q. To which I called your attention?

A. Yes, sir." (R. pp. 2555, 2556.)

After months of toil on both sides, the result of working the actual movement, freight carried, weights, classification, etc., of 20,835 cars there are errors amounting to $257.68, and that against the intrastate. The overworked term, in this case, "negligible quantity" needs service again.

From every viewpoint, the integrity of the test months should be sustained. Good faith requires it of the railroads which offered them and based their arguments upon them; their accuracy is established; their representative character for the period is proved; the relation of the classes of traffic for the month compared with the period, is indisputably proved; the attack upon them is disproved and the facts contained therein should be considered as proof.

These months, if accepted as representative, serve the purpose of affording a basis in giving details, which has never before been worked out, of the operation of local and through trains, and the respective traffic carried on each, and though that the ascertainment of the cost of traffic carried on local trains and of traffic carried on through trains.

When the cost of each train is ascertained, then the train costs are attributed to each in proportion to the traffic carried of each class, and in this way, the cost of transportation may be worked out, leaving maintenance-of-way, maintenance-of-equipment, traffic and general expenses to be solved.

But when a practical plan of solving transportation expenses is found, the most difficult part of the problem is finished.

This method of division on this basis will naturally follow, but before it is taken up, we want to again call attention to the facts that the actual movement of freight in Arkansas, according to these

test months and the Whitenton test is so radically at variance with the conditions which plaintiffs' extra cost witnesses rested upon that the foundation is gone and the Court is at sea as to what, if anything, under these conditions is the extra cost.

It is absolutely certain that in the face of the 72 per cent of the load of the local train being interstate, and 61 per cent of the intrastate carried on the through trains, that any of this extra cost evidence based on little, if any, interstate on the local, and little, if any, intrastate on the through, is applicable.

When the case is cleared of these inapplicable opinions, then the mind naturally asks what is the extra cost, and how will it be reached?

## THE STATE'S PLAN OF DIVIDING EXPENSES.

As foreshadowed in the preceding discussion, the State worked out a plan of dividing the expenses between intrastate and interstate. To restrict the controverted area the State limited its plan to expenses after the apportionment had been made to passenger and freight by the railroads and applied the return to the property apportioned to intrastate traffic by the railroads and used the railroads' apportionment of these and also used the railroads' figures without change of the many matters heretofore discussed wherein they contained errors and omissions, like the inclusion of both Memphis and Fort Smith terminal expenses, the expenses of the Paragould trackage, etc., and omissions of the Express Company dividends, rental of Pratt's Hotel and Bunch Elevator, etc.

The effort was to drive solely to a plan of apportioning expenses between intrastate and interstate, accepting for the purpose the railroads' amounts as starting points to demonstrate (1) that the expenses could be fairly apportioned, and therefore it was wrong to accept arbitrary bases for apportionment of them when they could be really and practically allocated with approximate accuracy; and (2) to allow for all items of extra cost of intrastate traffic in proper distribution of the costs of each traffic and then ascertain what the actual intrastate extra expense really was instead of accepting opinion evidence of it based on conditions shown to be not existing in the Arkansas traffic, whatever they may be elsewhere.

Mr. Wharton, a certified public accountant, a member of the firm of Haskins & Sells, and manager of their St. Louis office, prepared the plan. His firm is one of the great accounting firms of this country and of England.

Their business is to devise cost accounting systems for large business concerns and to audit accounts. They audit the accounts for many of the largest railroad corporations in the United States and their audits are published as guides to investors and for the information of stockholders.

Mr. Wharton has had no railroad experience. He applied his accounting knowledge, skill and experience to the railroad accounts

just as he would apply them to a packing house plant, automobile factory, a traction company or a great department store.

He had the benefit of the counsel and advice of Mr. Hamilton, one of his staff, an experienced railroad accountant, who had had 10 or 15 years' experience in various minor railroad positions before he was put to work on railroad accounts in the Missouri rate litigation. He had three years' experience in examining railroad accounts and statistics in that case before he undertook the statistical and investigating work of this case. Judge Trieber, in his opinion, says:

"Mr. Hamilton, who was present at the protracted hearing of this case and explained to the court many of the items in the statement filed as exhibits for the State, impressed the court as a man of ability, a fine accountant and a fair witness." (R. p. 2620.)

Mr. Wharton also had the benefit of the advice and opinions of Mr. Charles S. Ludlam, another member of the firm of Haskins & Sells, who is in charge of the railroad audits for his firm. Mr. Ludlam was a witness in this case, his biography is given and his railroad experience shown. He had many years' experience in railroad accounting in various positions in railroad service before he begun his work in the wider and broader field of public accounting. His years of labor devoted to examination, verification and clarification of railroad accounts splendidly equipped him for this work.

Mr. Wharton testified that in addition to assistance from these gentlemen, he gathered information on the subject from other experienced railroad men and made a study of the evidence in the Missouri Rate Case.

He thus explained the point of view with which he approached these problems:

"Q. Did you give that question study, thought and investigation?

A. Yes, sir.

Q. How long were you engaged on the Missouri Rate Case, Mr. Wharton?

A. I believe we started our work on that in June, 1906, and we were engaged on that, I believe, for almost three years. I am not sure as to the exact time, but it was something like that.

Q. During that time were you closely in touch with the issues in the case?

A. Yes, sir; all the time.

Q. And you are familiar with the methods of operation and expenses adopted by the railroads and adopted by the State in that case?

A. Yes, sir.

Q. Was your firm employed by the State of Arkansas in this case?

A. Yes, sir.

Q. State the purpose of your employment by the State of Arkansas in this case?

A. The purpose of our employment was to assist the State in getting at the facts in the case as near as possible, in determining the cost of State and interstate business as near as it could be determined.

Q. When did your firm begin to work for the State in this case?

A. In August, 1908, we were employed by the Traffic Bureau at Little Rock to assist the State in its efforts to resist the granting of the preliminary injunction.

Later we were employed by the State itself to do the work.

Q. By the Railroad Commission acting for the State?

A. Yes, sir.

Q. Do you recall about what time you were employed by the Railroad Commission to undertake this work that you have been continuously engaged in since?

A. I think about last June, May or June, was the time.

Q. Now, Mr. Wharton, begin at that point when you were employed by the State to begin this investigation and state the history and methods pursued by you, giving the reasons for the methods that you did pursue?

A. In our first consultations with the Railroad Commission and with the counsel for the State we discussed at considerable length the plans that had been followed in the Missouri Rate Case, and the plans that we thought might be worked out in this case.

The Railroad Commission and its counsel both desired to get at the actual facts, if possible, without the use of any theories of any kind and we went to work with that in view, from the reading of the testimony in the Missouri case and from—

* * * * * * * * *

From the reading of the testimony in the Missouri case and my understanding of the purport of that testimony, it appeared all the time that the differences in the cost of State and interstate business were mainly the differences in the cost of local and through trains.

The witnesses all seemed to testify that way and we determined that if it was possible we would work up statements showing the cost of local and through business and after getting that cost, we would ascertain in the best manner possible the cost of State and interstate business carried in the two classes of service; in that way getting away from any question of theory, but getting down to an application of the facts and of the testimony given in that case, and subsequently given in this case." (R. pp. 1002, 1003.)

Then Mr. Wharton explains generally the plan pursued, but before going to that we desire to call your attention to the evidence of the plaintiffs' witnesses which furnish authority for the primary bases of the State's plan.

As will be noticed in the croes examination of McPherson, Johnson and Kimbell and other witnesses for the plaintiffs, the State endeavored to obtain from them items susceptible of actual allocation, and, when not susceptible, to obtain some plan by which the particular

item could be approximately allocated between State and interstate. For instance, Messrs. Johnson and Kimbell were required to go over various items of revenue and expense and point out wherein they were capable of actual separation between interstate and intrastate, and numerous of them were found susceptible. (R. pp. 124-128, 164-168.)

But in the main these witnesses were hopeless as to a plan of actual separation other than the arbitrary revenue basis. Messrs. Doddridge and Rawn gave methods and factors which were afterwards used as the primary bases for reaching an actual separation of interstate and intrastate traffic and a method of ascertaining the extra cost was worked out; and to that testimony your attention is invited:

In Mr. Doddridge's cross examination this testimony was given:

"Take the St. Louis, Iron Mountain & Southern Railway alone; is not the traffic on that road the same kind of traffic, whether it is intrastate or interstate?

A. Yes, sir; it is the same kind of traffic.

Q. And take it on the Cotton Belt road; the traffic on that is the same whether it is interstate or intrastate; there is no difference in the traffic made by passing the State lines, is there?

A. Not a bit.

Q. That is the point.

A. That is correct.

Q. Your analysis of the different classes of freight, interstate and intrastate, is based on your experience and knowledge of the operation of the different kinds of trains, local and through, and the proportion of intrastate traffic carried on each, isn't it?

A. Well, the local train is simply one of the incidents of the extra cost. It is not the whole reason. It is one of the circumstances and conditions of the handling of the short haul business of the railroads.

Q. I think I have allowed for that in this question, if you will consider it more fully.

Previous question is here read.

A. Yes, sir.

Q. So we will understand terms correctly, Mr. Doddridge, in talking to each other, I will ask you if there is any such thing as an intrastate train; that is, an intrastate train which carries exclusively intrastate traffic?

A. There is no such train that I have ever heard of.

Q. There may be an intrastate train, but for the purposes of our inquiry it carries interstate traffic, and has to be considered relatively as to the traffic that is upon it.

A. It carries all kinds of business.

Q. That is true also of all trains, isn't it?

A. Yes, sir.

Q. Intrastate or interstate or transstate?
A. Yes, sir.
Q. It is a question of the proportion upon each?
A. It is a question of the proportion upon each.

* * * * * * * * *

Q. I call your attention to this testimony in the Missouri case, which is right in line with that:

'In view of the complicated situation as between through and way points and division points and State lines as they run, isn't it almost necessary to have the judgment of somebody who has practically operated the property itself and is familiar with it?

A. It would seem to me to be necessary to have that kind of judgment to get at anything like a close approximation.'

A. I endorse that.

Q. Is not the only difference in cost of the intrastate and interstate freight carried on the same train, the one of the extra terminals?

A. There is no difference in the cost of one kind of freight or another kind of freight, arising from a distinction in the terms 'State' or 'interstate.'

If the conditions are the same there would be no difference in the cost.

Q. Take freight carried on the same train?

A. Well, I say, if the conditions are the same; that is, the kind of freight, and all of the other elements that enter into it, there would be no difference arising from the terms 'State' or 'interstate.'

But the conditions must be the same to say that there would be no difference in the cost, because there might be a difference in the conditions. The character of the freight, the weight, and other things.

Q. Take it, the same kind of freight and of the same character, carried on the same train, where is the difference, except in the terminals.

A. There would be no difference in the train cost.

Q. I want to read you your testimony in the Frisco case: I wish to read this statement made in answer to a question:

'So far as the particular freight is concerned, carried on those particular trains, there would be no greater cost in transportation for interstate freight than State freight, except the terminal charge.

In order to ascertain the results correctly, you would have to take into consideration the amount of State freight that is carried upon that train, as applied to the total State freight carried on the other train.

In other words, what I mean to say is, we have to take into consideration all the trains and find out what relation the State freight bears to the whole.' That is a correct analysis, isn't it?

A. Yes, sir; I think so." (R. pp. 484-486.)

Mr. Doddridge also worked out a method for ascertaining terminal expenses, both passenger and freight, between intrastate and interstate:

He says after testifying in the Missouri case he made further investigation and study of the problem and obtained further data from the Cotton Belt test, and decided that the best method would be to take the number of intrastate passengers for a given period and double them to compensate for the two station handlings and take the number of interstate passengers counted once, and, dividing the terminal expense in dollars and cents, it is an easy matter to arrive at extra cost per passenger or class of passengers. He says this would be somewhat more than fair to the State as some of the interstate passengers—the transstate—would have no terminal expense in the State, but this is the best method he knows. (R. p. 506.)

The unfairness to the interstate referred to would not exist in Arkansas on account of the large passenger traffic out and in Memphis and Fort Smith, charged with two terminal expenses; these, added to the many changes shown at Little Rock and other junction points of transstate and interstate passengers, would more than overcome the slight unfairness indicated by Mr. Doddridge to the interstate. On the freight side of the problem Mr. Doddridge says that the same method should be used to apportion terminal expenses between intrastate and interstate, using the ton as the unit instead of the passenger. The method is to double the intrastate tons and count the intersate once, and having all the terminal expenses in the State, then divide them in these proportions. (R. pp. 508-510.) He applies this formula for terminal expenses to the expenses of terminal buildings, fixtures, grounds and all terminal facilities. (R. p. 519.)

Mr. Doddridge, in applying his principles in illustration of extra cost of short-haul business, uses ton miles and passenger miles as a factor to measure terminal expenses, again making the same error heretofore pointed out in another connection. That, however, does not trench upon the principle he applies to terminal expenses.

The principle is thoroughly sound. The station expense is not increased or affected by length of haul—passenger or freight, or class of traffic—as the same kind of tons are uniformly found in interstate and intrastate traffic. These expenses are stationary, and result from handling the pound, the ton or the car at its origin and its destination, and therefore the expense should be apportioned in proportion that each ton has been handled. The State adopted this plan of Mr. Doddridge and much criticism was made of it on account of charging the transstate with one station handling as well as the interstate. The ton-mileage of the transstate is 51.16 per cent of all, but the transstate tons are one 33.61 per cent. (Exhibit 26, R. p. 2391). The double terminals increased on interstate in and out of Fort Smith and Memphis and the double and often treble terminal handling of interstate cotton, grain, lumber, etc., would more than

compensate for the 33.61 per cent of transstate, which received none according to plaintiffs' testimony. These elements offset the only injustice indicated by Mr. Doddridge as existed against his plan, which he presents as the best thought on the subject, and better than a plan he presented in the Missouri case (R. p. 506), and which he declares is a method of determining it "with fair accuracy." (R. p. 510.)

On maintenance-of-equipment Mr. Doddridge works out a method, practically, in principle, the same as that adopted by the State increasing the expenses by number of times the car is handled, length of haul, amount of terminal handling, etc. This is a car mile basis with allowances for extra switching and terminal handling. (R. pp. 510-514.) The details of this will be noted later.

Thus it is seen Mr. Doddridge furnishes a plan for train costs, terminal handlings and maintenance-of-equipment. Considering his great operating experience, his past service with these two roads and his advisory capacity to counsel in this and the Missouri case, his testimony on these lines should have great weight. It had great weight with the State's accountants, who used the bases indicated by him were the fair ones for these large items.

He evolved the "bridge theory" in this case, which the facts made ridiculous, but it was doubtless an ideal condition which he imagined exists because he thought it ought to exist, and he confounds ton miles and passenger miles with terminal expenses in arguing extra cost of intrastate. He finds from his bridge theory and this error of figuring extra cost, inflated ideas of extra intrastate cost; but when it comes to considering pure facts of operation and result of operation his views are worthy of the fullest consideration, and far above those of any other operating official who appeared in the case on account of his knowledge of these roads and his study of these problems.

Certainly it lies not with the plaintiffs to question their soundness.

In his direct examination Mr. Rawn, President of Chicago, Indianapolis & Louisville Railway, one of plaintiffs' witnesses, said:

"For the purpose of determining the cost of operation of transportation, the question of State and interstate is not the method of consideration. The method is that of the through and local business." (R. p. 676.)

In cross examination he explained somewhat in detail his method: Transportation cost, wages, fuel, supplies, etc., he says may be accurately ascertained from the books as to the cost of local and through trains. That these could be determined between the trains on the ton miles which is an absolutely accurate measure as between trains. This may be used on maintenance-of-way and maintenance-of-equipment, and between passenger and freight the train mile. (We believe he is the only witness on either side who advocated train mile division between freight and passenger although the railroads used it—to the

disadvantage of the State, as hereinbefore pointed out.) Station expenses he would divide in proportion to the traffic at each station between local and through trains. To illustrate, if 50 per cent was local and 50 per cent through at the given station, he would divide it in those proportions. (R. pp. 684, 685.)

Other than the revenue theory, the plaintiffs presented no method of dividing the expenses between State and interstate, but the foregoing testimony, giving practical lines for such division was developed from the plaintiffs' witnesses, and it alone should be sufficient to show that a better plan than the revenue theory was available, and until that better plan is adopted, the railroads have not made out their case by that clear and decisive proof which this court requires in order to procure an invalidation of State legislation.

The various factors used by the State, excepting their plan for general expenses, are factors in common use by the railroads in their every-day operation and accounting, and are each, as we believe, applied to the particular purpose for which that factor is designed. These are tons, at stations, ton miles to apportion the cost of each train between intrastate and interstate, after the train costs of the train carrying it are found; the train mile to apportion expenses particularly applicable to the train as a unit, such as injuries to persons on track, signalmen, etc.; car miles to apportion expense of equipment between cars and also maintenance-of-way; passenger miles to serve the same office on passenger trains that ton miles do on freight trains. The uses of these factors in railroad operation and accounting is discussed at length by Mr. McPherson (R. pp. 305-307) and Mr. Doddridge to some extent (R. p. 534).

In applying these factors it may be useful to consider the classification of expense accounts as used in these exhibits; this brief statement is taken from a treatise on the subject:

"The operating expenses of almost all the railroads in the United States are classified according to rules prescribed by the Interstate Commerce Commission. The primary accounts are all embodied under five general accounts, as follows:

1. Maintenance-of-Way and Structures.
2. Maintenance-of-Equipment.
3. Traffic Expenses (*a new account*).
4. Transportation Expenses.
5. General Expenses.

1. Under Maintenance-of-Way and Structures fall expenses for the repairs and renewals of machinery and tools, for repairs of roadway and track, for ballasting, for repairs and renewals of switches, frogs, ties, fences, bridges, culverts, stations, shops, buildings, etc.

2. Under Maintenance-of-Equipment fall expenses for the repairs and renewals of locomotives, passenger cars, freight and other cars and of steamboats and for the maintenance of shop machinery, etc.

3. Under Traffic Expenses fall wages of officers directly in charge of traffic, freight, passenger, baggage and other agents, expenses of outside agencies, advertising, fast freight lines, etc.

4. Under Transportation Expenses fall wages of station employees, clerks, yardmen, flagmen, watchmen, enginemen and trainmen, expenses for telegraph and station service, cost of fuel and supplies for locomotives, expenses for water supply, loss and damage, etc.

5. Under General Expenses fall salaries of general officers and office clerks, expenses for legal service, insurance, etc."

The State decided to pursue the methods pronounced as the best thought on the subject by Mr. Doddridge, as they had this high authority and they accorded with the accountants' best judgment on the subject, and find the expenses of the local trains and the respective amount of intrastate and interstate freight carired on them and the expenses of the through trains and the amount of intrastate and interstate freight respectively carried on them, and, in so doing, properly charge the local train with all the extra cost which the plaintiffs' evidence showed it should be charged with; that is, accepting the established items of extra cost, like extra switching service, etc., and find a basis for reaching the extent of it, and other established items, like higher wages, to ascertain the actual wages, and in this way find the exact cost of each train and the exact amount of each class of traffic on it. The idea was simply this: to bring it down to a single example to illustrate the whole.

*The Forming of Exhibit "I."*

A local train carries carload and L. C. L. from one end of its division to the other; it stops at every station; it makes various switch movements in dropping and picking up cars, both for itself and for the through; it handles at each station L. C. L. freight in packages. It is longer on the road, incurs greater wages to its crew; and its frequent stops and starts are fruitful sources of injury to equipment; switching is likewise a fruitful source of injury to equipment. The through train, under ideal operation, goes over the division without stops, save for water, passing trains and orders, and does not incur the switching movements. The through train carries on an average 33 cars and the local 16 cars and the former have an average of 4½ more tons to the car. (R. p. 2516.)

It is apparent that the freight carried over this division on the local has cost more than that carried over it on the through train. It is equally apparent that the intrastate freight on the local has cost, for train expenses only, exactly the same as an equal amount of intrastate handled the same distance. The intrastate freight on the through train has cost exactly as much and no more for train costs as the interstate on it for the same number of tons and miles. Hence the expenses of each train must be ascertained and then those expenses apportioned between the freight carried on the train whose expense has been determined.

When the wages, fuel and supplies are actually ascertained on this local train, as was done by Mr. Kimbell on the Cotton Belt test and by Mr. Hamilton on the Iron Mountain test, then to it must be added the extra mileage it has made in switching, the injury to the way caused by the extra use of it by the locomotive, the attendant injuries from starting and stopping, switching and terminal work, to the equipment, and when all these elements are found, then the actual expense is found and its load must be ascertained and the expense assigned to it according as it has served the intrastate and interstate; and so similarly proceed with the through, but its total expense is simple and not complicated with those expenses peculiar to the local. The basis for dividing the costs of a given train between intrastate and interstate after they are found is necessarily the tons of each and the miles the tons of each class were carried by it.

Mr. McPherson says of the ton-mile basis: "It only attaches as a unit of measurement between two given points, the beginning and the end of the journey, but does not consider the expenses at either end of the road. It can not measure the expense at either end." (R. p. 315.)

But it can and does measure the expense of the journey—the train costs. For that purpose and that alone it is used. Say 50 per cent of the ton mileage of this train was interstate and 50 per cent intrastate; then so far as the cost of moving it is concerned, no one would question that these train costs ought to be equally divided between interstate and intrastate. Even Mr. Whitenton, who puts the extra cost of the local over the through and intrastate over the interstate in the superlative degree, admits that. (R. pp. 759, 760.) Mr. Doddridge says there is no difference in train costs. (R. p. 486.) Mr. Ward admits it. (R. p. 731.) Mr. Rawn says the ton miles would measure it with absolute accuracy. (R. pp. 684, 685.)

Instead of one local train and one through train to be thus simply worked out, the problem here, for one month only, was 1,116 local trains and 2,758 through trains. (R. p. 2518.) The total freight train costs for six months are nearly $2,000,000 (R. p. 2531) out of a total of $4,600,000. (R. p. 2307.)

It was therefore necessary to find the train costs of the local and through trains and the traffic of each class carried on each.

The Iron Mountain put in no statistics containing a separation of expenses of local and through trains nor a separation of the traffic carried on them. The Southwestern put in exhibits 19 and 20, containing results of their test month, October, 1908, which furnished the necessary data for that month and for the period if it be taken as representative of it. It became necessary to have similar data for the Iron Mountain. As heretofore shown, it was requested to furnish such statistics for a three-months' period, but declined, and stated they had prepared statistics of one month, which was a typical month and selected by it as such, and these statistics were fur-

nished and later introduced into evidence as exhibit 26. It was a statement of transstate, interstate and intrastate freight hauled during October, 1907; and that separated into carload and L. C. L. of each class; the revenue, the tons, the ton miles, length of haul, etc.

Mr. Wharton thus explains the necessity of further data and how it was obtained:

"Q. How did you proceed to carry out those plans?

A. The first thing that was necessary was to ascertain the movement of freight on local and through trains; also the car miles, engine miles, the train miles, and all such statistics in reference to the movement of freight on local and through trains, in order that the expense could be properly apportioned between the local and the through service and in order that the cost of that service might be apportioned between the State and interstate business moved in the two classes of service.

The Cotton Belt road had prepared statistics of that kind in a test they made in the month of October, 1908.

On the Iron Mountain it was necessary for us to prepare most of our own figures in that particular. The railroad company had prepared a statement showing in full detail the movement of freight during the month of October, 1907, and we—

Q. I want to identify that now, Mr. Wharton.

It is marked exhibit 26.

A. We did not work up the entire movement of all freight on all trains during that month but we worked up the movement of all freight on all of the local trains on the Iron Mountain during that month, and having that and the total movement of freight, the difference between the two was the movement on the through trains during that month.

Q. As I understand you, then, you accepted the Iron Mountain figures as to the total movement of the freight during the month of October, 1907, as shown in their exhibit No. 26?

A. Yes, sir.

Q. And started with that as your beginning point and then segregated the two classes of traffic by ascertaining the actual movement on all the local trains in the State of Arkansas during that month; was that it?

A. Yes, sir; that is correct.

Q. Do you mean the Iron Mountain in Arkansas and not the entire system?

A. Yes, sir; the Iron Mountain in Arkansas.

Q. Mr. Wharton, explain the method of working up that, without going into detail. I understand Mr. Hamilton knows that better than you do, but explain the plan and how it was carried out.

A. The detail I am not familiar with.

The plan of the work was to take the wheel reports, list of the car numbers, and get the waybills, I believe, showing the freight moving in those cars.

Q. You mean from the records of the Iron Mountain Company?

A. Yes, sir; it was all worked up from the records of the Iron Mountain Company.

Q. Just explain what records and where you found that?

A. I would rather have Mr. Hamilton do that. I made up the plan.

Q. That plan was carried out by others, under your general direction and co-operation?

A. Yes, sir.

Q. Now, Mr. Wharton, have you that statement as worked up?

A. Yes, sir.

Q. I wish you would present it and file it as exhibit "I." (R. p. 2516.)

Q. Mr. Wharton, please take that exhibit 'I' and explain it?

A. The first column in exhibit 'I,' the one marked 'local trains,' contains the statistics worked up by us under Mr. Hamilton's personal direction. The last column marked 'total' contains the total statistics shown in exhibit 26 and in some of the other exhibits filed in this case—I will take the last part of that out—some of these are not shown in the exhibits in the case.

All of the figures in the 'total' column were obtained from the books and records of the St. Louis, Iron Mountain & Southern Railway Company, except the percentages and averages worked out.

Q. The totals there of ton miles were taken from exhibit 26?

A. Yes, sir; from exhibit 26, the mileage statistics as to car miles, caboose, engine and train miles, were taken from the records of the railway company for that month.

Q. Now proceed with your explanation of it.

A. The second column marked 'through trains' is the difference between the column marked 'local trains' and the one marked 'total,' with the exception, of course, of the percentages and averages, which were worked out from the figures in those columns.

The first section of the statement shows the ton miles of freight carried during the month of October, 1907, divided between local trains and through trains.

Following that we have the ton mileage of each class of freight expressed in percentages.

Following that are mileage statistics and other statistics as to train movement and car movement.

Q. Mr. Wharton, I wish you would state what you found in that test of the loading of the local trains as between State and interstate, expressed in percentages?

A. We found from that that the loading of the local trains was 71.49 per cent interstate, and 28.51 per cent State, based on the ton miles carried.

Q. What was the loading of the through trains?

A. The through trains were loaded 94.41 per cent interstate and 5.59 per cent State.

Q. What did you do with the company freight in that case?

A. We originally worked up some statistics on the company freight but finally excluded them from this statement.

Q. This is the revenue freight?

A. This is simply revenue freight. My recollection of the company freight is that a larger proportion, in proportion to the total freight handled, is handled on local trains than on through trains.

Q. I see you have here 'Number of cars handled in and out of terminals where yard engines are maintained;' I wish you would explain those figures?

A. The instructions in relation to working up the cars handled in and out of terminals by local and through trains were that the wheel reports were to be taken and the total cars shown by that wheel report as going into the terminal were to be accounted as going in and the total going out of that terminal was to be accounted as going out. The figures are made up in that way, classifying the wheel reports as between local and through." (R. pp. 1004, 1005.)

Mr. Hamilton explains at great length and in detail how he and a force under him worked up the detail comprising exhibit "I." (R. pp. 1408-1425.) It was a herculean task of tracing 20,835 cars, ascertaining the tonnage of each, the waybill for each, and all data concerning the contents and movement and expense of each of these 20,835 cars, but it was so well done that after months of investigation by Mr. Roth and a force under him, errors were found amounting to $257.68, and that in favor of the interstate. (R. p. 2256.)

In this way exhibit "I" was brought into the case, used and tested and found accurate.

*Passenger Traffic.*

There were no records kept by which it could be ascertained whether a passenger traveled on a local or through train, and hence it was impossible to have divided expenses between the interstate and intrastate by trains, even if it had been the proper course, but in this case that would not have been worth while, even if possible.

On the St. Louis Southwestern Railway Company all the passenger trains in Arkansas are local trains (R. p. 167, and time card exhibit 25). On the Iron Mountain there are 48 local passenger trains and 8 through passenger trains. (Exhibit 46, R. pp. 2412-2430.)

It has heretofore been shown that many of the locals carry Pullmans and one of the through trains is a fast mail, carrying one Pullman and no other passenger equipment. The primary division and essential division on the passenger side is that between passenger traffic and mail and express. The principles applied in the freight side, so far as applicable, are used to separate the passenger from the mail and express, and when that is done, then to divide train costs on passenger mile basis and then divide terminal expenses on the passengers of each class, doubling the number of intrastate pas-

senger so as to charge the intrastate passenger traffic with two terminals to one of the interstate.

## THE DETAIL OF THE STATE'S PLAN.

The following explanation of the detail of the State's plan of dividing expenses are practically the same as those found in the exhibits, but are, in some instances, amplified, and are given without the figures and calculations, and it is hoped in that way the plan may be presented in a more connected way than in following it through the exhibits, which are necessarily encumbered with the amount of each item given, and the result of the calculations and percentages used, etc.:

## STATEMENT "A"—FREIGHT.

### I—MAINTENANCE-OF-WAY AND STRUCTURES.

The proportion of these expenses applicable to the freight business, as shown by the statements in this case, submitted by the company, has been divided between local and through train service on the basis of the total engine and car miles of each class (see exhibit "I") during the month of October, 1907, that month being considered representative of the business for the six months ended December 31, 1907.

The car miles and engine miles (with engine miles reduced to a car-mile basis, as explained hereinafter) have been used as factors on which to divide these expenses between local and through freight trains, because they are the factors which most nearly represent the actual use made of the way and structures that these expenses are incurred to maintain.

The engine mileage shown in exhibit "1" is the actual road mileage, exclusive of switching at stations where no special engines are maintained for switching service. The local freight train engine performs the switching service at such stations and the mileage made by it in such switching adds 50 per cent to its straight road mileage. Therefore, in order to charge each class of freight train engine, local and through, with the actual use made by it of the track, expressed in miles run over the track, 50 per cent has been added to the road mileage of local freight train engines shown in exhibit "I."

It has been assumed that the average freight engine mile is the equivalent of 2½ freight car miles in its effect upon maintenance-of-way expenses, and in order to arrive at a common unit for a division between local and through trains, of these expenses, the engine miles of each class of trains, ascertained as stated in the foregoing paragraph, have been multiplied by 2½, thus reducing them to the basis of car miles.

II—MAINTENANCE-OF-EQUIPMENT.

A. Locomotives.

The expenses under this head are divided between yard and local and through road locomotives on the basis of the locomotive mileage of each class during the month of October, 1907.

Fifty per cent has been added to the mileage made by yard switching locomotives to provide for the extra maintenance expense resulting from the character of the service in which such locomotives are employed, as compared with the service rendered by road locomotives in pulling trains between stations.

The local freight train locomotives perform the switching service at stations where no yard locomotives are maintained and the mileage made in this switching service adds 50 per cent to their straight road mileage. This switching mileage is service of the same character as that performed by yard locomotives and entails 50 per cent additional maintenance expense per mile as in the case of yard engines. Therefore, to cover the switching mileage of local freight train locomotives, 75 per cent has been added to the straight road mileage of such locomotives shown in exhibit "I."

It has been assumed that through freight train locomotives perform no switching service.

The mileage of the three classes of locomotive service having been equalized by the addition to yard and local freight train service of percentages representative of the extra maintenance expense of each, the mileage figures so obtained have been used as factors on which to apportion the total expense of locomotive maintenance charged to freight service.

Yard locomotives render service to local and through freight trains, assembling and distributing cars, received at or forwarded from the various terminals in both classes of trains and accordingly the expense of yard locomotive maintenance ascertained, as stated above, has been divided between local and through trains on basis of the number of cars hauled into and out of terminals by each class of train.

II—MAINTENANCE-OF-EQUIPMENT.

B. Freight Cars.

The total amount of expense for maintenance of freight cars is $477,895.64. This amount is apportioned to Arkansas by the railway company on a car-mileage basis.

The total amount of expense for maintenance of freight cars apportioned to Arkansas by the railway company on a car-mileage basis. In dividing this expense between local and through service, however, we have taken into consideration the element of repairs due to the stopping and starting of trains at way stations, and repairs due to

extra terminal handling of cars in local service. Mr. A. M. Wellington, in his work on "Railway Location" (page 203) says that the stopping and starting at way stations is the cause of approximately 21.5 per cent of the repair expenses of freight cars, and that the terminal handling is the cause of approximately 13.5 per cent of the repair expenses. Taking these elements into consideration, the maintenance expenses may be divided first into starting and stopping 21.5 per cent, terminal handling 13.5 per cent, and other 65 per cent.

In dividing the expense chargeable to "stopping and starting," between local and through trains, it has been considered that the local train stops every five miles and the through train every 20 miles, and that therefore the cars in the local train would receive four times as much damage per mile run, from this cause, as the cars in the through train. Accordingly, the actual car mileage of local trains has been multiplied by four and the resultant figure used as one factor in dividing this portion of the expense, the other factor used being the actual car mileage of the through trains.

In dividing the expense chargeable to terminal handling consideration has been given to the greater number of such handlings received by cars in local trains as compared with cars in through trains. On the St. Louis, Iron Mountain & Southern Railway in Arkansas the average run of a local freight train very closely approximates the average run of a through freight train and it has been assumed that a local train would set out during its run all the cars it had taken out of its originating terminal and pick up a car for every car it set out, making two handlings between terminals for every car in the local train as against no such handling for cars in the through train. Multiplying the car miles in local trains by two results in a figure which, when used with the actual car miles of through trains as the other factor, produces percentages which exactly represent the proportion chargeable to each class of train, of the total number of terminal handlings received by freight cars.

The expense of freight car maintenance, due to all causes other than stopping and starting and terminal handling, is divided between local and through trains in proportion to the number of car miles in each class of train.

### II—MAINTENANCE-OF-EQUIPMENT.

### (C)—Supervision.

This expense is incurred in supervising the expenditure of the amounts apportioned between local and through trains under the heads of Maintenance-of-Locomotives and Maintenance-of-Freight Cars, and has been divided between local and through freight trains on basis of the results of the apportionment, of the direct charges for maintenance-of-equipment.

III—TRAFFIC EXPENSES.

These expenses are incurred in securing and looking after traffic, and have been divided on a gross revenue basis, although this unduly burdens the intrastate business, owing to the fact that a considerable portion of the traffic expense is incurred in the effort to secure competitive business, while the intrastate business is largely noncompetitive.

IV—TRANSPORTATION.

(A)—Station Expenses.

These expenses can not be divided between the two classes of train service, as they are not train expenses. They have been divided directly between intrastate and interstate business on the basis of the number of tons of each class of traffic handled in the State, assuming, however, that each intrastate ton was handled twice and each interstate (including transstate) ton once.

IV—TRANSPORTATION EXPENSES.

(B)—Yard and Terminal Expenses.

Yard and terminal expenses are incurred in assembling and distributing cars received at or forwarded from the various terminals in both local and through trains, and expenses have been divided between the two classes of trains on basis of the number of cars hauled into and out of terminals by each class.

IV—TRANSPORTATION EXPENSES.

(C)—Fuel and Locomotive Expenses; Road.

According to a test made on the St. Louis Southwestern Railway in Arkansas during the month of October, 1908, the local engines consumed 3½ per cent more fuel per engine mile than the through engines. Assuming that the same conditions would prevail on the St. Louis, Iron Mountain & Southern Railway, during October, 1907, the fuel and the miscellaneous locomotive expenses would be divided between local and through service.

IV—TRANSPORTATION EXPENSES.

(D)—Engine House Expenses; Road.

The average run per trip of an engine in through freight service being approximately 12 per cent longer than the average run per trip of a local freight train engine on the Iron Mountain in Arkansas, the local engine would get into the engine house more times, *per mile run*, than the through engine. It has been assumed in dividing this expense that the local engine gets the same attention in the engine house each trip as the through engine, and to equalize the

disparity in engine house service (due to the shorter run of the local engine and its consequent more frequent use of the engine house *per mile run*), 12 per cent has been added to the mileage actually made by the local engines in October, 1907. The figure thus obtained and the actual mileage of through train engines have been used as factors to divide the engine house expense for the six months' period between the two classes of trains.

IV—TRANSPORTATION EXPENSES.

(E)—Road Enginemen and Trainmen.

An actual division of these expenses for the month of October, 1907, was made from the company's time books.

IV—TRANSPORTATION EXPENSES.

(F)—Other Train Expenses.

These expenses are all of those not included in the preceding classifications which are incident to or caused by the operation of trains, such as the expense incurred for watching crossings, signaling, clearing wrecks, stock killed on right-of-way, etc. They have been divided between local and through trains in proportion to the train miles of each class of service, during the month of October, 1907.

IV—TRANSPORTATION.

(G)—Loss and Damage—Freight.

The expenses under this head are divided between intrastate and interstate business on the basis of the actual claims paid during the month of October, 1907.

IV—TRANSPORTATION EXPENSES.

(H)—Supervision.

These expenses are incurred in superintending the operations of the transportation department of the railway, and the direct expense of such operations is the best measure of the supervision necessary for each. Accordingly, the expenses of supervision have been divided between local and through trains and intrastate and interstate business, on basis of the apportionment, to each, of all the other expenses of transportation.

V—GENERAL EXPENSES.

The business of a railroad consists of the production and sale of transportation. The expenses incurred in the general supervision of such production and sale and the accounting therefor are classified as general expenses. They necessarily bear a direct relation to the expenses of production and sale and should be apportioned to the various classes of traffic in proportion to the direct cost thereof.

VI—TOTAL OPERATING EXPENSES.

Total operating expenses are divided between local and through train service, and intrastate and interstate traffic.

The train costs include everything relating to the direct cost of the *movement* of freight trains, with all expenses incident to such movement. Station expenses and other items which do not affect the expense of train *movement* are divided between intrastate and interstate business direct.

VII—METHOD OF DIVIDING TRAIN COSTS.

During the month of October, 1907, 39.10 per cent of all intrastate ton miles and 8.70 per cent of all interstate ton miles of freight were handled on local trains; and 60.90 per cent of all intrastate and 91.30 per cent of all interstate ton miles were handled on through trains. Assuming that these same relative conditions would exist during the six months ended December 31, 1907, the total ton miles of intrastate and interstate freight handled during that period would have been divided between local and through service.

Train costs are divided between intrastate and interstate business in proportion to the volume of traffic of each kind handled in each class of service.

## STATEMENT "B"—PASSENGER.

As nearly all passenger trains on the St. Louis, Iron Mountain & Southern Railway in Arkansas do a local business, no division of expenses has been made on the statement as between local and through trains. The statement divides expenses between, coach service and Pullman service, their auxiliary car service (baggage, diner and cafe observation), and intrastate, interstate, mail and express business. The expense of baggage, diner and cafe observation car service, operated for the use of both coach and Pullman passengers, is subdivided on the statement between coach and Pullman service on basis of the passengers carried one mile in coaches and Pullman cars. The statement divides the total cost of the coach and Pullman service between intrastate and interstate business on basis of passengers carried one mile in coaches and Pullman cars, respectively, and adding the results of this division to the direct intrastate and interstate expenses, it arrived at the total cost of intrastate and interstate passenger business.

*As the primary division of expenses has not been made as between trains (for the reason stated in the second paragraph hereof), but between the classes of cars hauled in the trains, all expenses of or incident to locomotives have been considered as common to all the classes of cars hauled in the trains and have been apportioned to the various classes of cars on basis of the car miles made through the instrumentality of the power furnished by the locomotives.*

With a few exceptions, which are explained in the accompanying memoranda, the car mile is used as the basis for dividing expenses between the various services of the passenger business, viz.: passenger carrying, and mail and express. As passenger equipment mileage varies but little, if at all, from month to month, October, 1907, mileage has been taken as representative of the mileage of the six months' period of which it is a part, and has been used as the basis for division of the expenses of the six months' period under review.

The totals of the passenger expenses, under the various classifications, which have been divided in the manner set forth above, are the amounts apportioned to the passenger business of Arkansas by the railway company, in the figures which it has submitted in the railroads' exhibits.

The inclusion of baggage, diner and cafe observation cars is not in the original exhibits. Heretofore has been explained an error in this connection, and this statement correctly states the plan of division, and following it the intrastate would be reduced about $29,000. The error and its correction is explained at R. pp. 2288, 2289.

I—MAINTENANCE-OF-WAY AND STRUCTURES.

The proportion of these expenses for the six months ended December 31, 1907, charged to the passenger service in Arkansas by the railway company, has been divided between the various classes of cars hauled in passenger trains on basis of the car miles of each class.

II—MAINTENANCE-OF-EQUIPMENT.

(A)—Locomotives.

The proportion of these expenses for the six months ended December 31, 1907, charged to the passenger service in Arkansas, by the railway company, has been divided between the various classes of cars hauled in passenger trains on basis of the car miles of each class during October, 1907.

II—MAINTENANCE-OF-EQUIPMENT.

(B)—Passenger Train Cars.

No expense for the maintenance of Pullman cars is included in these figures, as all such cars are repaired by, or at the expense of, the Pullman company and without cost to the railway company.

The proportion of the expenses of maintenance of coaches, baggage, dining cafe observation, mail and express cars for the six months ended December 31, 1907, charged to Arkansas, by the railway company, on a car mile basis, has been divided between the various classes of cars on basis of the car miles of each class during October, 1907.

II—MAINTENANCE-OF-EQUIPMENT.

(C)—Supervision.

This expense is incurred in supervising the repairs of locomotives and cars in passenger train service, the expense of which has been apportioned, on the statement, between the various classes of cars composing the trains. These directly apportioned expenses have been used as bases for the division of the supervisory expense incurred in connection with the repairs, the cost of which they represent.

III—TRAFFIC EXPENSES.

These expenses are incurred in securing and looking after traffic, and have been divided between intrastate and interstate passenger business and mail and express on basis of the gross earnings of each for the six months' period. This unduly burdens the intrastate passenger business, owing to the fact that the major portion of traffic expense is incurred in the effort to secure competitive business, while the intrastate business is largely noncompetitive.

IV—TRANSPORTATION EXPENSES.

(A)—Station Expenses.

Divided between intrastate and interstate business on the basis of the number of passengers of each class handled, after making an allowance of about 10 cents per day for the handling of mails at certain stations; and assuming that each intrastate passenger makes use of two terminals and each interstate passenger makes use of one terminal.

Included in the 257,950 interstate passengers, charged with one use of a station in Arkansas in the above division of expense, are the transstate passengers, who it has been claimed by the railway company would get no use of the stations. On the other hand, owing to the peculiar location of the Iron Mountain line into the city of Fort Smith, and the fact that Memphis station expenses are charged to Arkansas, the interstate passengers from or to the two cities mentioned make use of two stations, the expense of which is charged to Arkansas, and transstate passengers to or from Memphis would use one station, the expense of which is charged to Arkansas. No additional use of stations has been charged to this interstate traffic in the division of these expenses, and it is believed that this will more than compensate for any burden placed on the transstate traffic by charging all passengers of that class with one use of a station in Arkansas. In addition to these reasons, the few transstate trains run through the State will necessitate transstate passenger net on those trains to use stations service and also necessitate many interstate passengers to use more than one station service in the State.

IV—TRANSPORTATION EXPENSES.

(B)—Yard and Terminal Expenses.

These are the expenses incurred in running passenger train cars over the road in trains, and the cleaning, switching, and other care of them at terminals at the completion of each run to prepare them for their next run.

The expenses of this character for the six months ended December 31, 1907, charged to the passenger service in Arkansas, by the railway company, have been divided between the various classes of cars hauled in passenger trains on basis of the car miles of each class during October, 1907.

IV—TRANSPORTATION.

(C)—Loss and Damage—Baggage.

These expenses have been divided between intrastate and interstate business in proportion to the gross earnings of each.

V—TOTAL OPERATING EXPENSES.

The total operating expenses are, as hereinbefore explained, divided between baggage, diner and cafe observation, coach, Pullman, intrastate, interstate, mail and express business. The amounts charged to intrastate and interstate business are expenses not chargeable to the cost of train service. The expenses charged to mail and express business represent the total operating expenses assignable to those two classes of business. The expenses charged to baggage, diner and cafe observation, coach and Pullman service represent the proportion of train expenses assignable to the hauling of passengers.

VI—DIVISION OF BAGGAGE, DINER AND CAFE OBSERVATION COSTS BETWEEN COACH AND PULLMAN PASSENGERS.

The cost of baggage, diner and cafe observation service, $211,097.20, has been divided between coach and Pullman passengers, for the use of whom these auxiliary service cars are operated, on basis of the passengers carried one mile in coaches and Pullmans during October, 1907. Exhibit "56-A," filed by the railway company, shows that of the total passenger miles during October, 1907, 1,936,121, or 15.41 per cent, were carried in Pullmans, and 10,630,277, or 84.59 per cent, were carried in coaches. These percentages have been used in dividing the expense of baggage, diner and cafe observation service between the coach and Pullman services.

The result of this plan shows a return of 7.69 per cent on the property devoted to intrastate traffic, exhibits at page 2540, on the Iron Mountain; and, after correcting the error as to the Pullmans, reduced to 7.09 per cent. This upon the revenue basis of dividing property, which is unfair to the State, as the intrastate freight reve-

nue is 98.16 per cent higher than interstate, and passenger 3.48 per cent higher, and includes also the unfair train-mile basis, which assigns to intrastate traffic $101,500 more than if the revenue basis had been used for this item. It also includes both Memphis and Fort Smith terminal expenses and is infected with the many other errors discussed in that chapter. Undoubtedly under any sort of fair adjustment of these matters the intrastate is certainly earning more than 8 per cent on the property. Under the same plan, without any of the suggested matters regarding the Iron Mountain, the St. Louis Southwestern is shown to be earning 9.16 per cent on its property devoted to intrastate traffic.

This plan of dividing expenses and the results reached by it, are sustained by a decided preponderance of the evidence.

If the evidence supporting it was sufficient to cast doubt on the revenue basis and the other methods pursued in the plaintiffs' exhibits, then it would have accomplished its purpose as preventing the railroads' case being proved by that clear and decisive proof necessary to invalidate State legislation. But, as we will show, it goes further, and is sustained by a decided preponderance of the evidence; using that term in its best sense; not in number of witnesses only, but in witnesses least interested and best qualified to speak on the particular subject of the testimony.

## THE STATE'S PLAN AS A WHOLE.

*The State's Evidence.*

The plan as a whole was discussed and sustained by the following witnesses: T. F. Wharton, accountant (R. p. 1000); Herbert C. Whitehead, formerly Auditor of Santa Fe System (p. 1075); W. E. FitzGerald, Auditor of Texas Railroad Commission, a former railroad accountant (p. 1080); Henry Willmering, Auditor Oklahoma Corporation Commission (p. 1111); R. D. Parker, Engineer, Texas Railroad Commission (p. 1161); Charles S. Ludlam, railroad auditor and railroad accountant (p. 1309); T. A. Hamilton, railroad accountant (pp. 1402, 1520); Conway W. Hillman, railroad auditor and accountant (p. 1479). In all eight witnesses. That they discussed it intelligently and with knowledge of the subject can not be gainsaid. Messrs. Wharton, Ludlam and Hamilton were employed by the State to ascertain the facts of this case and their testimony should be scrutinized for bias or partizanship. Messrs. FitzGerald and Parker are public officers of the State of Texas. Their State has no litigation with the railroads and is striving as best it can to gather all the light and data possible upon these problems. Their freedom from interest, bias or partizanship is apparent from reading their testimony. Mr. Whitehead is a totally disinterested witness, called upon to give the benefit of his experience and learning on these subjects. Mr. Willmering has no interest in this case, but his State has a rate case with these same railroads, and, notwithstanding he is a

public officer, it is right to consider any bias on this account. Mr. Hillman is employed by other States with similar litigation. Three of the eight witnesses are entirely removed from possible selfish interests. The plan as a whole was discussed and condemned by M. L. Byers, Chief Engineer of Maintenance-of-Way of Missouri Pacific and Iron Mountain System (p. 1695); Frank Nay, Comptroller of Rock Island System (p. 1812); Frank E. Ward, Manager Burlington System (p. 1853); Carl Gray, Vice President St. Louis & San Francisco Railroad Company (p. 1893); Fred P. Johnson, Accountant of the Iron Mountain Railway Company (p. 1981). In all five witnesses. Of these, Messrs. Byers and Johnson are employees of the Iron Mountain; Messrs. Gray and Nay are officers of two roads which secured injunctions with these roads (R. pp. 73, 81), which are practically parties to this litigation, and their roads have similar litigation with Missouri and Oklahoma; Mr. Ward's road is not a party to this litigation, but is to the Missouri and Minnesota rate litigation. Mr. Ward has the same indirect interest which may be imputed to Mr. Willmering. On the score of interest, the State has the best of it.

While interest is a recognized canon of guidance in weighing evidence, we take pleasure in saying that in this case, only so far as environment and point of view is concerned should any discount be made of the testimony of any witness on either side.

One of the few statements of the opinion of Judge Trieber which meets with our full concurrence is this:

"In this connection it is but proper for the Court to say that all the witnesses in these cases impressed the Court as having testified as intelligently and as fairly as is possible. It is true they differ widely in their views, but it is an acknowledged psychological fact that the opinions entertained for years by a man can not be discarded at once, and that all persons are to a certain extent influenced in their views by their environments, as well as the duties they are called upon to discharge for others." (R. p. 2620.)

In view of the high order of the witnesses, their intelligence and grasp of the subject, then even numbers may properly be considered in testing where the preponderance lies. Take such men as Mr. Nay and Mr. Johnson, accountants of ability and character, but their lives devoted to seeing these questions from one standpoint. And contrast them with Messrs. Ludlam and FitzGerald. They have had the railroad experience to equal Messrs. Nay and Johnson in the grasp of the questions, and their work has carried them into broader fields where these subjects may be viewed from many angles—not one.

Much stress was laid in testimony and argument on the superior ability of operating officials to pass judgment on these questions. That operating officials can better pass judgment on questions of operation is readily granted, but that they can pass better judgment on the subject of a fair and accurate apportionment of expenses be-

tween State and interstate traffic than auditors and accountants is emphatically denied.

Every one who has touched the subject says that in operating trains State lines are not considered; it is with the operating man a question of through and local trains and the intrinsic character of the freight hauled and not the legal status of it which is intangibly stamped upon it. He is concerned in the delivery of the freight to the end of his division or its terminal or to a connecting carrier, and it boots not him where it originated or is destined so long as it is properly handled on his division or his road.

The comparative qualifications of the operating men or the accountant to pass judgment on a proper method of apportioning these expenses was discussed by several witnesses on both sides, and we submit this excerpt from Mr. Ludlam's testimony as stating the proportion most convincingly:

"Q. Some questions have been asked from other witnesses, indicating that an accountant would have to be an operating man in a particular business, before he could install a cost accounting system for that particular business:

What is your view about that? What has your experience taught you in regard to that matter?

A. My judgment is that the operating man, as a general proposition, is the last man who is able to figure out his own cost; that is done by the accounting department and by the various cost departments of the different manufacturing concerns.

Naturally, in installing a system of cost, we would confer with the operating man and familiarize ourselves with the operating transactions sufficiently to be able to devise forms and install systems that would take care of all the operating transactions, but we would never depend upon the operating man's opinion of what it cost him.

Q. If an operating man installed the system, the accountants would go out of business?

A. I think also the operating men would go out of business.

There is nothing that is more generally recognized, I think, and coming to be recognized more and more every day, than the absolute importance of separating the operating and the accounting departments, particularly in railroads.

I can remember back in my day when the General Manager would instruct the Auditor how to charge certain expenses, but the financial interests, in so far as they control railroad accounting and railroad investments, have learned that it is imperative that the accounting officer should act exclusively on his own responsibility and be accountable only to the Board of Directors of the corporation, if you want to know the actual facts as to the result of operating the property.

Any operating man could make a very fine showing for his property if he was allowed to direct how the different items should be charged.

Q. Explain why that is, particularly in railroad operation.

A. In order to ascertain the true results, the further you can separate the ascertaining of those results from the man who would be interested in the results shown, the more accurate your results will be, naturally.

Q. Then your object is to get actual conditions and apply your accounting knowledge to those conditions to properly apportion your expense?

A. Yes, sir." (R. pp. 1312, 1313.)

But it matters little to the State which view is accepted, its plan of work is the result of the views expressed by operating men in the Missouri case and in this case, which were applied by Mr. Wharton and find expression in the State's plan. (R. p. 1023.)

The plaintiffs have laid much stress upon the opinions of Messrs. Gray and Ward, both successful operating officials, but if this issue is to be controlled by the opinions of these operating officials, the plaintiffs' case is destroyed by their views. Both condemned the train-mile and car-mile bases as not sufficiently accurate for so important subject as determining rates.

The railroads' exhibits relied upon to show the return on the property to be confiscation, use both these bases—the train mile to apportion passenger and freight (to the detriment of the State compared with revenue basis in the bagatelle of $101.500), and the car mile to apportion the freight and passenger equipment expense between Arkansas and the eight other States composing the Iron Mountain System, resulting in one million dollars being apportioned to Arkansas. It takes the use of both these bases so heartily condemned by these eminent operating officials to bring about the confiscatory return relied on in their exhibits.

Mr. Gray also estops the plaintiffs from questioning the accuracy or representative character of the test month statistics, and, with these accepted, the plaintiffs' case is destroyed without more ado. Furthermore, Mr. Gray says the last six months of 1907 were not "representative enough to apply to a period of years, either before or since." (R. p. 1933.) Therefore, if plaintiffs' argument is followed and these eminent operating officials' opinions are to control, they necessarily walk out of court without relief, as they have not used proper bases to show themselves entitled to relief.

Mr. Doddridge works out the solution of freight train costs, terminal expenses, freight and passenger, and maintenance-of-equipment expenses. There can be no serious controversy over maintenance-of-equipment, as both sides use the car-mile basis for it; the railroads to find the apportionment between Arkansas and the other eight States composing the Missouri Pacific System and the State as between local and through freight trains and coaches and mail and express cars. Mr. Rawn approves the car mile for maintenance-of-way and maintenance-of-equipment. There can be no reasonable

doubt of the car mile or wheelage basis for maintenance-of-way as it is the basis commonly used by the railroads themselves in dealing with each other on this subject. These four great items are practically the whole problem, both in principle and dollars. Certainly the plaintiffs have presented no operating men of greater experience and ability than Messrs. Doddridge and Rawn.

The State's plan, and the evidence supporting and condemning it, can not be grouped other than by discussing each of the subjects.

## MAINTENANCE-OF-WAY.

*Car-Mile Basis.*

This item of expense is divided on the car mile, formerly called wheelage, basis. The origin, and change in name of this basis, may be found in Mr. Gray's evidence (R. p. 1937), Mr. Hillman's (R. p. 1487) and Mr. Nay's (R. p. 2043). The strainght car milage is used on the passenger side between coaches, mail and express. On the freight side the division of expense was on the car-mile basis between local and through freight trains with these additions: Each engine is counted as doing two and a half times more injury to the way than a freight car and the engine mileage increased accordingly.

To the engine of the local train is added 50 per cent to its mileage on acocunt of switching done at stations, thereby to that extent using the way that much the more than if it had made a straight run.

The discussion brought up three questions: (1) The basis used and (2) the allowance for locomotive wear over car wear, and (3) the allowance of 50 per cent of the local engine mileage for station switching.

(1) As to the basis used:

Mr. R. D. Parker, Expert Engineer for the Texas Railroad Commission, is an educated engineer, and has been in the service of the Texas Commission eight years; prior to that he was in railroad construction and maintenance-of-way work, and when he went to the Commission was in charge of 600 miles of line, and had under his supervision maintenance-of-way, bridge and track work. (R. p. 1161.) He is familiar with the bases and units used in apportioning expenses of maintenance-of-way, maintenance-of-equipment and other railroad accounts. Regarding the car mile as the basis of dividing maintenance-of-way expenses between local and through trains and passenger and mail and express cars, he says:

"To my mind, it is about as representative unit as could be applied; that is, a unit that is representative of the service." (R. p. 1162.)

Mr. Willmering was questioned as to this item of expense and this occurs:

"Q. Speaking of the freight traffic, I believe you say you would make it upon the car mile; I would like for you to give your reasons why you think that would be better?

A. I would give it upon the car mile, for, from observation, I find that oftentimes a local freight train would pull more cars, have more cars in the train, than the following through freight train, and I find it vice versa, and, in order to get a fair average, I believe that car mile should be taken in place of the train mile.

Q. You think it is nearer the actual results than the train mile?

A. Yes, sir; in my judgment." (R. p. 868.)

Mr. Wharton says:

"It was our idea, after considering the matter, that a car mile, as between local and through, would more nearly represent the difference in costs.

Q. What was the reason for that?

A. On account of the difference in the two classes of trains, local and through; and the difference in the cars they carry, and the number of cars in the train." (R. p. 1032.)

Mr. Wharton says that personally he would have preferred the gross ton mile, but the data was not available and he used the best method which was available. (R. p. 1007.)

Mr. FitzGerald said that the car and engine mileage is the closest approximation which can be reached for maintenance-of-way expenses, and it is the generally accepted basis for this purpose. (R. p. 1082.)

Mr. Ludlam says:

"We considered that the engine and car miles represent more correctly than any other ascertainable quantity, the use which was made of the track; the use which was made of the property that these expenses represent the cost of maintaining.

Q. There has been evidence in this case to the effect that a large part of that item of expense is due to the elements, wind and water; matters with which the actual operation of the road is not concerned—the actual running of trains is not concerned in the operation of the road, I mean.

What do you say to the justice of dividing those expenses that are not caused by the running of trains, on a car mile basis?

A. I think it is entirely equitable and proper. The question of whether the actual running of trains wears the tracks out, or whether the elements wear the tracks out, and the other property that is put there for the operation of trains, is immaterial. You have to charge the expense which is incurred for the use for which it is incurred. They maintain the track and maintain the property in order that trains may be operated over the property, not on account of the weather or elements wearing the property out. They don't repair it merely to replace the wear and tear of time or the elements, but they do it in order that they may operate trains.

Q. That roadbed is not there for ornamental purposes?

A. No, sir. It is exactly the same as in a case, for instance, of a chair factory: when you would have to repair the roof on a chair

factory it is an expense incurred which you would apportion to the cost of the chairs manufactured in that building, although, as a matter of fact, the actual making of a chair in that building has nothing to do with the wearing out of the roof. But it is a part of the cost of maintaining the property and you charge that cost to the use which is made of the property. That is an ordinary accounting principle.

Q. Is that a principle that is recognized by accountants generally and railroad accountants in the working out of accounting systems and properly distributing costs?

A. Yes, sir." (R. p. 1322.)

Mr. Hillman says that the car mile is the generally accepted basis among railroads for apportioning maintenance-of-way expenses where there is joint use of tracks. (R. p. 1486.)

On cross examination Mr. Hillman said that for a division between either freight and passenger or local and through trains, he considered a basis of car weights better than either train mile or car mile. (R. pp. 1509, 1510.)

*Car Mile In Use by Plaintiff Roads.*

The Iron Mountain leased of the St. Louis Southwestern Railway trackage rights from Paragould, Arkansas (it is 36 miles in Arkansas; distance in Missouri not given.) (R. p. 1000.) Prior to July 1, 1909, the rental was 40 cents per train mile. Mr. Kimbell says: "Subsequent to July 1, 1909, the track was placed on what is known in railroad parlance as a joint track basis, which provides for the St. Louis, Iron Mountain & Southern Railway paying the St. Louis Southwestern a rental on an arbitrary basis and paying its proportion of expenses of maintenance and operation on car mile basis." (R. p. 998.)

The Iron Mountain can only use it for their through freight trains. (R. p. 998.)

Mr. Gray regards their joint track agreements as a matter of barter, but when these roads bartered then they agreed on a rent and then to put these expenses on an equality, agreed on a car mile basis.

*The Attack On The Car Mile.*

Mr. Byers, Chief Engineer of Maintenance-of-Way of Iron Mountain, says the method of dividing this expense adopted by the State could only be accurate by accident. He says it does not take into consideration that (R. p. 1700) 75 per cent of this expense does not accrue by reason of the traffic. (Mr. Parker put 90 per cent as due to elements and time.) He says of the 25 per cent resulting from traffic there is a large proportion not incurred at the time the traffic is handled. His example is the steel rail, which may stay in the track from five to thirty years, and the wear is going on all the time, but the expense of replacement may not be incurred for many years. He objects to it on account of not taking into consideration the difference in size of locomotives. The loading of cars and speed of cars would

also affect this item and is not reflected in this basis. He says repairs of fences, part of these expenses, has nothing to do with the traffic. He says local trains generally have lighter engines. (R. pp. 1700-1703.)

He says these expenses ought to be divided as general expenses are divided, but he says he does not know how general expenses ought to be divided. (R. p. 1705.)

He admits that any factor with which he is familiar would have the same objection as the car mile for cost of replacement, etc. (R. p. 1706.)

In illustration of the ineffectiveness of the criticism of the State's plan, we call attention to these facts in Mr. Byers' evidence: He says the car mile does not account for difference in loading of cars and weight of locomotives. The through car is loaded 4.5 tons more than the local (R. p. 2518), and all agree that the local locomotive is lighter than the through; Mr. Byers admits the effect of the heavier locomotive would be more than the lighter car. (R. p. 1711.) Again the through train gets the best of it.

His criticism of the basis on account of its inapplicability to constant expenses applies to the revenue basis, the train mile basis or an actual division, and applies to any period, one month, one year or a series of years; and yet Mr. Nay (R. pp. 1823, 1824) also uses these arguments against it. Of course he has to admit that like criticism is applicable to any other factor. (R. p. 2042.)

Mr. Ward criticises along the same line (R. p. 1873), principally because from 75 per cent to 90 per cent is due to elements, natural wear, etc.

Mr. Gray criticises it because:

"The car mile is so variable a quantity as to be of no service in any comparison or division which I have ever made." (R. p. 1898.)

Mr. Gray repudiates the principle of taking a factor representing use; he is for the gross earnings apportion everything. (R. pp. 1834, 1835.) However, it is shown these same units are used by the Rock Island in statements to Interstate Commerce Commission, based on exactly the principles, and really much of the detail the same, as adopted by the State here. (R. p. 2033.)

Mr. Gray says that both car mile and train mile are in common use by railroads in dividing maintenance between themselves. (R. p. 1936.)

*Eminent Railroad Officials On Car-Mile Basis.*

The testimony of eminent railroad officials was read both to Mr. Gray and Mr. Byers as to the fairness of the car mile basis and that it was the generally accepted basis. Neither Mr. Byers nor Mr. Gray would agree with them. These were S. T. Emerson, Chief Engineer of St. Louis, Kansas City & Colorado Railway Company (p. 1715); James C. VanDyne, Superintendent Union Depot at St. Louis (p. 1716); A. A. Talmadge,

General Manager for Receivers of Wabash (p. 1317); James T. Howe, General Agent for the Receivers of Wabash (p. 1718).

This testimony was given in a case in the Federal Court at St. Louis over joint use of the Wabash tracks from Forsythe Junction near Forest Park into the Union Station at St. Louis.

It became necessary for the court to fix a fair basis for the maintenance of the tracks between the roads using them. The testimony of these officials was given before the master. The gist of it was:

The wheelage or car-mile basis is the one usually selected as a fair and equitable method of apportioning maintenance-of-way expenses between railroads jointly using a common track.

When contracts are made there is usually an agreed rental for use of the property and then an apportionment of the expense between them on a car-mile basis.

All these witnesses speak of this being the ordinary method among railroads of dividing maintenance-of-way expenses among themselves and regard it as fair and equitable. To these statements, some from men like Mr. Talmadge and Colonel Howe, historic names in railroad operation, Mr. Byers says: "Such division would produce correct results only by accident." (R. p. 1718.)

The master adopted this basis.

*This Court Approves Car-Mile Basis.*

The case came to this Court from the Circuit Court of Appeals and the Circuit Court of Appeals was reversed. The opinion of the Court, written by Mr. Justice Brewer, and adopted by the Court after his death, goes back to, and adopts, the original opinion at circuit, wherein this occurs: "So far as respects the mere matter of keeping up the track, I see no reason to doubt the justice of the rule fixed by the master." St. L., K. C. & Col. R. R. Co. v. Wabash Ry. Co., 217 U. S. 247, on p. 255.

The state of the evidence is this. Approving this basis, Parker, Willmering, Wharton, FitzGerald, Ludlam, Hillman; contra, Byers, Gray, Ward and Nay; but as Nay uses the engine mile in a formula for dividing expenses created by him (R. p. 2034), his action for it speaks louder than his words against it. Parker and Byers have each better qualifications from an operating and technical standpoint than any of the other witnesses on this subject, and they differ widely; none of the other witnesses have special training like them, but all are intelligent and qualified to express opinions on it. It is admitted by Gray and Nay that the car mile is in common use among railroads for this purpose. The testimony from eminent officials in the Wabash case with whom Mr. Byers differs so widely, and the approval of this basis by Justice Brewer and this Court, certainly ought to put this out of the realm of controversy.

To our minds, however, the strongest argument for it is found in the action of these two plaintiffs. One leases the other one of its main line tracks for the use of through freight trains; a contract is

made and expires and a new contract made; the rent is agreed upon as compensation for the use of the track and then the car mile adopted as the basis to apportion among themselves maintenance-of-way expenses. The train mile was discarded, the car mile adopted. It was exactly an analagous use, through freight trains on one road and locals and through on the other, and adding to the difficulty passenger trains on the other road, too, and yet this is the selected factor to fairly divide these expenses. If it is the best method for them in their own affairs, isn't it the best method for them in dealing with the public?

(2) The allowance of 2½ times for locomotive wear over freight car wear is the next controverted item. Mr. Ludlam thus explains why it was used: "That is a basis frequently used by railroads, based somewhat because the average locomotive has twenty wheels and a freight car eight. It is usually roughly figured about two and one-half car miles to an engine mile, on a wheelage basis. (R. p. 1323.) On this subject Mr. Parker gives this reason for using two and one-half times for the engine against the freight car:

*Engines 2½ Times Freight Cars.*

"A. I presume that is calculated on a wheelage basis; a 12-wheel engine and 8-wheel tender would be 20 wheels compared to an 8-wheel car.

Q. Is that about the proportion used in this Southwest country?

A. You might say that is the maximum, except in the new type of locomotives, Mallet compound, which are practically two locomotives connected with one boiler and one firebox; that is called articulated; the locomotive is hinged in the middle.

Q. Where are they used?

A. In mountain division; I believe the Santa Fe has some in use and some of the Western lines; I think the first one was exhibited here at the World's Fair.

Q. You are not referring to that exceptional class?

A. No, sir; there are none in the Southwestern country that I know of." (R. pp. 1163-4.)

This allowance was attacked as insufficient by Mr. Gray (p. 1898), Mr. Ward (p. 1857), Mr. Nay (p. 1826) and Mr. Byers (p. 1700). In addition to Mr. Parker, it was sustained by Mord Roberts, formerly Master Mechanic of this, and of other roads (pp. 2111, 2112); K. P. Alexander, formerly Master Mechanic in charge of power and equipment on several roads (p. 2161), and J. A. Simonds, who had served as Roadmaster for many years on different divisions of the Iron Mountain in Arkansas, also as Division Engineer (pp. 2168, 2169). Mr. Byers attacks the whole idea, Messrs. Gray, Ward and Nay say two and one-half times is insufficient; Mr. Alexander says two times is a maximum; Messrs. Roberts and Simons say a heavily-loaded freight car will do more damage to the way than a locomo-

tive and give very practical and technical reasons for it. On this issue every one of the State's witnesses are entirely disinterested, except Mr. Ludlam, and all the plaintiffs' were interested. Byers' and Parker's experience and training offset each other. Ludlam's and Nay's opinions may well offset each other. Roberts, Alexander and Simonds have better training and experience to pass judgment on this subject than Gray and Ward. In this, as in all other controverted issues, a preponderance in numbers is with the State, and in this instance much better experience to speak on the subject authoritatively.

(3) Allowance of 50 per cent extra engine mileage for switching done by the local trains at stations is the next controverted matter.

*Local Switching.*

The information for this allowance was given by Mr. Maurice Wright, who was assisting Haskins & Sells in some of the work for the State in this case. Mr. Wright had been for seven years a traveling auditor on the Iron Mountain and his duties required him to use all trains, local and through freight as well as passenger, and he was thoroughly familiar with the entire road in the State. From his knowledge of it, and guided by records of the stations and length of side and passing tracks, and his knowledge of the average cars dropped and picked up at these stations, he made an estimate on the amount of switching required in average conditions all over the State. He describes in detail the situation at each station. Then he makes a corroborating calculation based on time allowed by schedules for the two trains, and the extra time of the local was credited to switching. (The witnesses agree that generally the local runs faster between stations than the through.)

Taking the heaviest divisions on the road, Mr. Wright calculates the switching on each and it runs from 32 per cent to 50 per cent of the mileage of the engine. (R. pp. 1383-1388.) The State in its exhibit used—as in all cases—the maximum against itself and put it 50 per cent.

Mr. Nay said it was an arbitrary percentage; he did not know whether it was enough or too much, and he knows of no way by which it could be determined. He regards it as unreliable. (R. p. 1825.)

Mr. Ward questioned the feasibility of determining it. "No operating man that I know of could determine with accuracy whether that addition is correct or incorrect. It may be right or it may be wrong. I do not know." (R. p. 1857.)

Mr. Gray takes the same position; it is arbitrary, he thinks. (R. p. 1899.)

At last something is found upon which the operating men have no opinions.

Mr. F. P. Johnson attacked Mr. Wright's methods and found some supposed errors in them. Then he makes some calculations based

on running time, showing the percentage of switching allowance should be over 50 per cent. (R. pp. 1987-1989.) In cross examination, however, he made calculations on his own bases and the percentages shown were only 30 per cent. (R. p. 2225.) Mr. Wright recalled, showed he was right and not Mr. Johnson on some of the moves criticized. (R. p. 2263.)

In rebuttal, the State went into this matter thoroughly and put on these witnesses on this subject: Walter Nash, formerly brakeman and freight conductor (p. 2083); D. L. McNew, formerly brakeman, yardmaster and freight conductor (p. 2099); J. A. Simmons, who served as roadmaster on Iron Mountain for many years (p. 2168); Hubert F. Jernigan, former freight brakeman (p. 2189); D. Harston, who had served as brakeman and conductor on both local and through freights on the Iron Mountain (p. 2196); and A. Paulette, a former switchman and conductor (p. 2205). These witnesses were all in various business pursuits, all had honorably and voluntarily left railroad service. The General Manager and Vice Presidents who could form no ideas about the extent of switching performed by the local trains and did not believe any accurate estimate of it possible, should have talked with these men who had done the switching of local trains and whose work required them to daily observe it and know all about the subject. They make accurate estimates of average switching based on conditions thoroughly familiar to them. This testimony can not be read without being convinced that the switching mileage is susceptible of accurate approximation and that 50 per cent is in excess of the facts. In all these undefined matters the State resolved the doubts against itself; in this instance undoubtedly by 15 per cent. On this issue the State certainly overwhelmed the plaintiffs.

On the whole maintenance-of-way account it is submitted that the State has adopted a fair basis of division and it has allowed the utmost for the extra expense of the local over the through, which can be attributed to it, under this head. This is a basis which takes the factor applicable to the expense for dividing it, and necessarily and naturally produces fair results. Contrast it with the revenue basis which Mr. Doddridge says is "an arbitrary percentage based upon opinion and judgment," and which he admits is not accurate and not scientific. (R. p. 481.)

It may well be added that the "opinion and judgment" upon which it is based is not qualified opinion and judgment. The men giving it admit they are not rate men and not familiar with rates and unable to discuss rates, and, as the rates produce the revenue, how do they know whether it is a proper factor or not? We venture to say that no one of the three witnesses produced by the plaintiffs to sustain the revenue theory—Messrs. McPherson, Nay and Doddridge—would do so if he was familiar with the interstate rates prevailing in Arkansas as developed in this testimony, which was introduced

after they had given their evidence. We have too much confidence in the honesty and intelligence of these three gentlemen to believe that with a knowledge of the rate situation, as herein developed, that they would now say the revenue basis was the best method known to them. They each proceeded on the theory that, "consciously or unconsciously," rates reflected the cost of the service and assumed there was a cost relation between State and interstate rates. The testimony herein developed, demonstrates, beyond doubt, that the rates in the Arkansas interstate rate system do not reflect the cost of service—they could not with such patchwork system. The cost relation of State and interstate rates is even more theoretical than the "bridge theory" of transstate freight. No system of general averages can save it; there must be a common level to work that out upon, and that is impossible with the prevailing system. The more the intrastate rates are shown to be out of line and improperly constructed, the more the nonrelation between them and the interstate. There is no co-ordination. It is inordination.

This maintenance-of-way account is the stumbling block for a separation of expenses along practical lines instead of theoretical ones, on acocunt of the large percentage of its expense being due to time, natural decay and the elements, instead of the use of it by the traffic; but it is submitted that the difficulty is more imaginary than real, and this basis, when properly equalized, to bring any two classes of traffic on a common level of expense, must reflect actual conditions and afford a sound and safe basis with which to divide the expense. The weight of opinion and the weight of action sustain it, and it has met the approval of this Court as a fair and equitable basis on an analogous issue.

## MAINTENANCE-OF-EQUIPMENT.

*The Car-Mile Basis the Factor.*

There should be no controversy over the car mile being an absolutely fair factor with which to divide freight car repairs between local and through trains on one side and coaches and mail and express cars on the other, because the railroads and the State alike use it. If unfair, as Messrs. Gray and Ward say, then, as they admit, it is unfair for the railroads to use it, and their accounts predicated on it, necessarily fail of proof.

In statement 5, exhibit 3, page 2310, wherein the bases for dividing expense are given, and by which the expenses apportioned to Arkansas are obtained, this is found:

"*Maintenance of Equipment*: This account includes all cost of repairs, renewals and depreciation of cars and locomotives, also shop machinery and tools. The cost of repairs, renewals and depreciation of equipment being of a general nature, and not applicable to any particular State, is divided between all States upon the basis of the

mileage of each class of service in each State. The cost of repairs to shop machinery and tools, stationery and printing and supervision is divided between States upon the basis of the total engine mileage over the territory under the jurisdiction of each shop superintendent. The cost of repairs to freight and passenger cars are compiled separately and all expense of a common nature is divided between freight and passenger upon the basis of the number of train miles in each class of service." (R. p. 2310.)

The method used by the State was approved by the many witnesses called upon the subject, and we will omit reference to this testimony. The attack upon it was unusually weak. It was principally made by Mr. W. H. V. Rosing, Mechanical Engineer of the Missouri Pacific and Iron Mountain System. Mr. Rosing, as becomes a mechanical engineer, is extremely exact. He takes up many questions of car repairs and says that the car mileage will not reflect their cost, and that they can be accurately ascertained and that this basis does not do it and works unfairly for the many technical and minute reasons he gives. (R. pp. 1726-1736.)

It may be noted in passing that Mr. Rosing is a strong advocate of the ton-mile basis for dividing expenses, especially maintenance-of-equipment. (R. pp. 1746-7.) May Mr. McPherson pardon him!

Finally, Mr. Rosing's attention is called to the fact that these expenses are all pooled in the Missouri Pacific System and the proportion allotted to Arkansas obtained on a car-mile basis; and he at first says that the car mileage is fair between States but not between local and through freight trains and passenger coaches and mail and express (R. pp. 1751, 1764-5), but, on the plan being further explained to him, he recedes from this position, and concludes his testimony as follows:

"Q. In other words, is not this a fact: if you use the actual figures in one case you should use them in the other?

A. I should say so.

Q. If you use the unit which is a relatively correct unit, in one case, you would have to use it in the other, wouldn't you?

A. Yes, sir." (R. p. 1769.)

Every one must admit that the actual apportionment is better, and every one must admit that if actual figures are not obtainable for both purposes, and a relatively correct unit used to obtain the total expense for freight car repairs (and on the other side pasesnger coaches, baggage cars, mail and express cars) apportioned to Arkansas that the same relatively correct unit must be used in apportioning that total sum between the classes of cars for which, as a whole, it is obtained.

Mr. Nay also criticises it, but principally because there is a change of units from train mile to car mile from the division between pas-

senger and freight to the division between local and through, and between coaches and mail and express cars. (R. p. 1824.)

Mr. Wharton has heretofore explained that he did not study or consider the train mile division between passenger and freight. He merely used the railroad division to get a starting place to work out his plan of dividing between interstate and intrastate.

Mr. Ward says it is a wrong division, either between service or States. (R. pp. 1888-9.)

He says that its use to divide expenses between the nine States of the Missouri Pacific System as a basis for obtaining expenses to test rates in a rate suit is unsound (R. p. 1875), but finally, while adhering to its unsoundness, says there is "closer similarity" between States than local and through trains. (R. p. 1893.)

He overlooks the fact that between the local and through trains, as hereinafter explained; the dissimilarity is overcome by charging all extra cost of the local over the through to the local train.

Mr. Gray is more emphatic than Mr. Ward in denouncing the car mile decision, but works out a fairness for it between States and an unfairness between trains. (R. pp. 1941-4.) He says in the latter division a distinction enters between long and short haul. (R. p. 1950.) Mr. Ludlam points out the absurdity of such a criticism of the car mile. (R. p. 2273.)

Like Mr. Ward, he overlooked the fact that the difference between the trains is nicely equalized in the allowances mentioned heretofore and which are explained more fully hereafter.

*Supporting Car-Mile Basis For M. of E.*

The first testimony to which we wish to call attention is that given by Mr. Stewart R. Knott, at one time Vice President of Louisville & Nashville Railway Company, and later President of the Kansas City Southern Railway Company; and Mr. S. C. Johnson, General Auditor of the St. Louis Southwestern Railway Company (one of these plaintiffs), and the quoted testimony of Mr. Peabody, "a statistical expert" of the Santa Fe System, before the Postal Commission.

Their testimony was read to Messrs. Rosing and Gray (R. pp. 1747, 1748), 1962, 1963), and they disagreed with it.

The gist of the testimony given by these gentlemen before that high tribunal, investigating the postal service of the United States, and the fairness of mail contracts to be let by it, was this:

Messrs. Knott and Johnson testified that the car mile division of expenses between passenger coaches and baggage cars on one side and mail and express cars on the other was fair and equitable. They say that if this basis is subject to any criticism it is because the mail cars are more expensive to maintain than the passenger and express cars. Mr. Peabody's testimony in another connection was quoted before the Commission; he was advocating between express cars on

one hand and mail cars and coaches and baggage cars on the other, the car mile division of the expenses of the equipment.

Surely the State was justified in adopting the judgment of these eminent railroad officers given before a commission of the United States, wherein they say the car mile is a fair and equitable basis for this purpose, and it was adopted by the State exactly as they said it should be used.

*The State's Experts on M. of E.*

The value of the testimony of an expert, aside from his honesty and fairness, is his experience and technical training on the subject under consideration. Tested by this, by far the weightiest testimony on mechanical and the technical sides of the question now under consideration, is that of Mord Roberts. He says: "A. I am a machinist by trade; learned my trade in the city of Philadelphia, in the Baltimore Locomotive Works; transferred to the Pennsylvania Railroad Company, 1873, as machinist, and after a year and a half's service as machinist went on the road, firing a locomotive ten months; promoted to the position of locomotive engineer; ran a locomotive there until July 12, 1876. Dismissed for collision Centennial Yards in West Philadelphia; reached St. Louis July 16, 1876, and took service with the St. Louis, Iron Mountain & Southern Railway as machinist, July 17, 1876. Continuously in the employ of the St. Louis, Iron Mountain & Southern Railway from that date until May, 1899, as machinist, locomotive fireman, locomotive engineer, traveling engineer, general foreman of shops, De Soto, Missouri; Master Mechanic at Little Rock; for last six months' service, General Master Mechanic, Iron Mountain Railroad, with offices at De Soto, Missouri; two years as General Master Mechanic, Louisville & Nashville Railroad, headquarters Louisville, Kentucky; three years Superintendent of Machinery, Kansas City Southern Railway, part of the time with headquarters at Kansas City and the remainder of the time headquarters, Pittsburg, Kansas; leaving the railroad service entirely, August, 1904." (R. p. 2106.)

We have not quoted at length Mr. Rosing's reasons against the injustice to the coaches of putting them on equal basis with mail and express car because his conclusion finally agreed with the State's basis above outlined; but, while on the subject, we think this excerpt from Mr. Roberts will put at rest any question of the fairness of it. We desire to rely upon the fairness of the basis more than its conclusive effect by reason of its adoption by the plaintiffs:

"A. The cost of maintaining a vehicle in a passenger train varies considerably owing to the size or dimensions of the vehicle; that is, if it was a passenger coach or baggage car or express car; the express cars, baggage cars and mail cars are usually closest to the engine: the greatest amount of damage and expense to maintaining the draft gear, underframing and trucks, is usually applicable to the cars that are handled closest the engine, for reasons that is obvious, I guess

to you; in the first place, those cars have to take all the shock and stress, due to starting of trains, and the damage to roofs and exterior finish, as a result of cinders and gases from the locomotives; but other than those damages, the coach has a damage that does not enter into the baggage car or express car, and that is the damage to interior finish, lamps, and sash locks, and upholstering damaged sometimes by passengers, and, as I said before, they pro rate this cost between the cars; it doesn't take as much labor or varnish to cover a 50-foot car as it does a 70-foot car, and where the dimensions were practically the same, I would not make much difference between the kind of vehicles in the train, for I believe the damage to the cars nearest to the engine, as a result of the items I have just mentioned, is compensated for by the interior damage done to the passenger coach by the traveling public.

Q. Taking it by large and by small, you think one would about equalize the other?

A. I believe they about equalize each other." (R. p. 2115.)

Mr. K. P. Alexander gives his technical experience:

"A. I was a machinist about ten years, part of the time with the Missouri Pacific—machinist at St. Louis, Missouri. Later I was with the Frisco as machinist and Division Foreman at Newberg, Missouri, and at Fort Smith, Arkansas, about fifteen years.

I was then Master Mechanic for the Fort Smith & Western Railroad Company, in charge of all power and equipment, at Fort Smith, Arkansas—office at Fort Smith, Arkansas, for the period of two years." (R. p. 2158.)

On this particular subject Mr. Alexander testified as follows:

"Q. Now, not taking the figures derived from the pool, but upon car mileage basis, per mile run, separating the express and mail from the coach and baggage, what is your opinion on that, that is what I am asking?

A. Covering the matter, what we generally call car repairs, I should think the greatest expense would be on the car nearest the locomotive, on account of it having to absorb the shock of all the loads or cars behind it, which would mean that there would be less damage to the coaches than there would be on the baggage cars or mail cars. Very little cleaning at terminals is done to the mail car, express car and baggage car—

Q. Cleaning, Mr. Alexander, goes in another account, that is not the car repairs, that goes into the transportation account, that doesn't go into the car repair account, so you can exclude that from your consideration.

A. Then you want just the car repairs, everything pertaining to repairs?

Q. Yes, sir.

A. I have no figures; never kept any figures on that point, and from my experience, I doubt if it is usually done, and I would hardly know how to estimate it.

Q. Which goes into the shop more often, the car next the engine or the coach?

A. The car nearest the engine, it would go into the shop oftener, for the reason it would receive all the shock of the entire train, and the gases of the coal burning in the engine, and the cinders, would damage the roof more quickly than it would do further back in the train, but I presume there would be some compensating elements on the other side, about painting, varnishing, putting in glass, and so on, in the coach.

Q. Taking it by large and by small—the general average condition, what would you say as to the division of the car repairs, the mail and express on one side and the coach and baggage on the other—the damage to the baggage and coach as against the mail and express, what yould you say as to the repairs?

A. Well, the coaches are very much longer than the baggage or express cars, and the mail cars are usually also longer, which would require more painting and more varnish than for the shorter cars—the question is a little bit ambiguous.

Q. I will make myself clearer; the question is to separate and get the mail and express expense out of the passenger expense, and they have used the car mile basis and apportioned that expense, taking the mail and express on the one side and the baggage and coach and everything in passenger traffic from the other side—I understand your testimony is, the greatest injury to the cars would be to those toward the front—that is to starting and stopping and to paint and varnish?

A. Yes, sir.

Q. On the other hand, there would probably be more injury to the interior of the coach, the glass, upholstering, of the coach and things of that kind?

A. I think so.

Q. The question is this: treating them alike, has any injustice been done to either traffic—treating them *alike* on the car mile run?

A. I haven't ever kept any data on that; it is a very difficult question to answer; but then from my observation I should imagine that it would be about fair.

Q. The coach would likely get more repairs, but wouldn't get into the shop as often? That would probably be about the situation?

A. Yes, sir." (R. pp. 2164, 2165.)

Summarizing the evidence on this on the basis used for these maintenance-of-equipment expenses, the car mile:

It is supported generally by opinion evidence of many of the State's witnesses, supported by Messrs. Knott, Peabody and S. C. Johnson, in an investigation which would call for the utmost candor. Supported by Mr. Rosing, who says when actual data is not used for the initial sum to be apportioned, but a relatively correct unit, that the same unit should be used for these purposes; supported by Messrs.

Roberts and Alexander, disinterested and thoroughly qualified experts. It is opposed by Messrs. Nay, Gray and Ward; none of them with technical knowledge of the subject possessed by Rosing, Roberts or Alexander.

The preponderance, again, is with the State:

## STARTING AND STOPPING EXPENSES.

A source of much conflicting testimony was the proper allowance to be made against the local trains for additional stops of it over the through and the consequent injury to equipment from this cause.

Mr. Maurice Wright, who served for seven years as a traveling auditor on the Iron Mountain, and whose intimate knowledge of every mile of its road and every train run on it was of great service to the State in getting at actual conditions, testified:

"Taking the Iron Mountain System in Arkansas, I think that five miles average stops for local trains is very nearly accurate, and that twenty miles for through trains is a very fair average; that is my opinion, based on having frequently ridden on through freight trains and very frequently on local freight trains." (R. p. 1388.)

This was the basis used by the State, counting the local as stopping every five miles, the through every twenty, and charging four times as much to the local on this account. While Messrs. Gray and Ward said this ought to be eight times and the plaintiffs, in their correction of the State's plan (their exhibit 56), use eight times, we believe in was a confusion of issues and not of facts. The plaintiffs' witnesses laid much stress on the extra stops of the local over the through and the consequent greater injury to equipment. Especial attention is called to Mr. Doddridge on this point. (R. p. 489.) It is a recognized fact, and one of the elements for which proper compensation must be found.

That the stopping was correctly estimated was admitted by plaintiffs' counsel in a question to Mr. Gray. To it and Mr. Gray's answer your attention is especially directed:

"The State's accountant has made an assumption that each local train makes a stop each five miles, and each through train makes a stop for each 20 miles. That assumption is based upon the evidence of operating men of the Iron Mountain railway and we have no complaint to make of it.

Now, for the purpose of ascertaining the relative expense, the accountants have in determining the starting and stopping expenses, multiplied the local car miles by four, in order to account for the more frequent stops of the local train. Then they have in addition to that assumed that each car in local service requires two terminal handlings, to each terminal handling of a car in through service.

Now, I wish you would look at that and state if you think a sufficient allowance has been made there for stopping and starting of cars in local service?

A. There is as wide a variance as it is possible to conceive between two similar things, between a stop of a local train and a stop of a through train; in every-day practice.

The stop of a through train is most frequently for transportation or operating reasons; that is, it is a stop to take a siding for or to meet and holding the main line for the opposing train. It is usually unaccompanied by any more work than the taking of the sidetrack or holding the main line while the other train takes the sidetrack.

The local freight trains perform the greatest amount of its functions in connection with a stop of that kind. It may be hours' duration, or it may be short. It is all dependent upon the work required at that local station, as differentiated from the through train which has no work whatever to do.

I would say that an allowance of four times, which is predicated solely upon the fact that the stops are four times as frequent, is wholly unfair. I am not prepared to say what it should be, but it should be several times that." (R. p. 1902.)

That Mr. Gray, and likewise Mr. Ward (R. p. 1867), confuses these issues, is apparent from the following quotation from Mr. Roberts and Mr. Ludlam:

Mr. Roberts says, after the above quoted testimony of Mr. Gray was read to him:

"A. It occurs to me, if I might suggest there, that Mr. Gray has got two items mixed; it is the switching that he has reference to, that adds to the expense that the local would have.

Q. I am inclined to think you are right, but I don't know; I am just giving you in his own language, his entire statement on the subject.

A. The damage in stopping the train with the air brake, is to each individual vehicle in the train, which includes the wear on the wheels, brake shoes, and the brasses, and the local trains, as a rule, are light tonnage trains, and not near as many vehicles in the local trains as there is in the through train, and the damage to stopping a local train could not possibly be any greater than it would to a through train, and with the damage based upon each individual vehicle, if the local train had more cars than through trains, the damage would be greater, and if it had less cars, the damage would be less.

Q. For your information, I will state, that the statistics show that the average local train is 16 cars, and the average through train is 32, and on one road, 33. We are referring, of course, not to the expense per train, but the expense per car.

A. The expense per car should not be any greater.

Q. From this cause to any one train over the other?

A. The cost of stopping and starting, the greater expense would be to the train that had the greater number of vehicles in it—the greater tonnage, simply because the strains and stress would be that

much more severe on the cars nearest the engine; that is my way of looking at it, and that has been my experience; I don't think, in the damage to starting and stopping, we can consider the damage or cost of station switching." (R. pp. 2110, 2111.)

This occurs in Mr. Ludlam's testimony in surrebuttal:

"Q. Mr. Ludlam, in an exhibit filed by the railroads, number 56, (this is the exhibit which we term the correction of the State's plan. It is ostensibly an effort to correct the State's plan, using in some particulars, the State's bases, and in others their own), in 'Maintenance-of-Equipment' subdivision (b), under the head of 'stopping and starting,' the railroads have put this in:

'Car miles, same, with local car miles multiplied by eight.'

In an exhibit filed by the State the same factor was used, except the multiple was four, representing (as explained in the testimony), four stops of the local as against one of the through: Now, I assume that this 'eight times' is based upon the testimony of Mr. Gray and Mr. Ward, which I want to read to you." * * *

Then the testimony of Mr. Ward, and the above-quoted testimony of Mr. Gray was read to him, after which he was asked if they were correct in using the multiple eight instead of four, and said:

"A. No, sir. The multiple of four is used to apply to the question of starting and stopping only. The question of the increased cost of the terminal handling on the local train is covered by a separate allowance.

Q. Where is that? Point that out. I think these gentlement just failed to understand that and I want you to point it out.

A. That is on the same exhibit, under subdivision (b) 'Maintenance-of-Equipment.'

We make an allowance just below the allowance referred to for stopping and starting. We make an allowance for terminal handling by multiplying the mileage of the cars in the local trains by two and using the mileage of the cars in the through trains as they were.

Q. What does that represent, Mr. Ludlam?

A. That represents that on the average the cars in the local train will receive two terminal handlings to one terminal handling on a through train. That is in the case of the Iron Mountain, I am referring to.

In the case of the Cotton Belt we allow four terminal handlings on a local train to one terminal handling on the through train.

That is based on the premise that the local train will start out with a load of cars and that it will distribute all of those cars during the course of its run, and that during the same run it will pick up an equal number of cars, which it will carry into the last terminal.

That assumes that every car on the local train will be set out during the course of the run of the local train and another car picked up in its place. As a matter of fact there are some of the cars that

start out of the terminal, on a local train, that go through to the end of the run of the local train without being set out.

Q. That operates as a maximum as against the local train on this terminal handling between division points?

A. Yes, sir.

Q. And it is the very item that Mr. Ward and Mr. Gray discuss, is it not?

A. Yes, sir.

Q. I presume those gentlemen had not studied the exhibit carefully enough to see that that is taken care of.

A. I should assume from their evidence that they did not understand the exhibit.

Q. To take the eight times, as done there, would practically amount to doubling all these cars set out, and every car set out and in, would it not, following your plan?

A. It would be an attempt to provide for the terminal handling under the specific allowance made for stopping and starting, although, as I have already stated, the terminal handling is taken care of in another place.

Q. It occurred to me at one time that probably they were confusing that stopping and starting also with the terminal handling in the division; is not that taken care of?

A. Yes, sir.

Q. And this is merely the terminal handling between the divisions?

A. Yes, what you might call 'on the road.'

In that connection I would like to say before we get away from that, that we consider an allowance of four stops of the local train to one stop of the through train, as being the maximum that could possibly accrue to the local train for the stopping and starting expense.

Q. I think Mr. Ludlam, subsequent developments have proved that it was the maximum.

A. The same remark would apply to the allowance which we made of two terminal handlings for the cars on the local trains. We thought that would be the maximum that could possibly be reached." (R. pp. 2267-2269.)

We have gone into this, probably, more fully, than the importance of the subject justifies, to prove that the State's plan was right, and the criticism of it on this score which was carried forward into exhibit 56, was a palpable blunder on part of the plaintiffs.

Although the correctness of Mr. Wright's basis of a stop every five miles for the local to a stop every 20 miles of the through was expressly conceded, the State took further testimony on it, and showed it was a maximum.

A. Paulette served as brakeman for years on the Iron Mountain in Arkansas, then for five or six years as freight conductor on both

local and through freight trains. He served a long time on the Central Division, from Little Rock to Van Buren, one of the heavy divisions of the road, and takes up this question of the stops of local and through trains in detail.

He shows, through much detail, that on account of stops for water, at junction points and for orders and for passing trains, that the average through train can not make more than 10 miles without a stop; he reduces the stops of the local train to something under one for every five miles, about four. (R. pp. 2204-2213.)

This is the substance of all the testimony on this subject which we can find in the record.

Judge Trieber, in his opinion, says:

"The Court finds from the evidence that while the local train stops every five miles, the through trains stops every 35, and for this reason, the local trains are chargeable with seven times as much for that item as through trains." (R. p. 2624.)

So far as we can find, we have given the substance of all the testimony on this issue, and can find nothing to justify the 35 miles for the through.

Exhibit 46 (R. p. 2412), gives the stops of the through passenger trains as every 36 miles. The testimony of Mr. McPherson (R. p. 319), is that the through passenger trains stop on an average at intervals of 35 miles, while the local trains stop every five miles; and he calculates that the passenger mile division of expenses fails to consider these differences between the two trains, while the expense incident to the frequent stoppage is relatively seven times greater.

Probably in the mass of testimony, the learned Judge overlooked that this was referring to passenger trains, while the subject under consideration was local and through freight trains.

While somewhat a digression to save returning to this subject, Mr. McPherson said the through trains on the Central Division stop every 17 miles. (R. p. 319.)

Later, so as to avoid confusion as to what were local and what were through trains, both passenger and freight, Mr. McPherson was called up to file an exhibit classifying all trains running during the last six months of 1907. (R. pp. 377, 378.)

The State accepted his classifications as official (he was assistant to the General Manager), and it has removed any controversy on this subject. His exhibit 46, made in response to this, shows only eight of these through passenger trains, and those he referred to as through passenger trains on the Central Division, stopping every 17 miles, were local trains.

The starting and stopping on the passenger side is cared for by dividing that expense with mail and express, and the passenger portion divided between intrastate and interstate on the passenger mile basis. The greater intrastate passenger mileage absorbs the greater

part of it, being 58.71 per cent intrastate, and 41.27 per cent interstate. (R. p. 2539.)

The fact that the bulk of the 30,000,000 interstate passenger miles are necessarily made on the 48 local trains, removes, entirely, Mr. McPherson's theoretical objection to this basis for train costs. He was theorizing that the local train was the vehicle of intrastate passenger traffic, while the facts are, practically 85 per cent of the trains are local, carrying the bulk of both classes of the traffic.

Returning to the freight side of the problem, we submit that it is established that a stop four times on the local to one on the through is a maximum allowance against the local, and consequently, resulting, as all maximum allowances against the local ultimately do, in burdening the intrastate with more than its fair share of the expense.

The load of the local freight train is 71.49 per cent interstate, and 28.51 per cent intrastate; the through 5.59 per cent intrastate, and 94.41 per cent interstate. (R. p. 1005, and exhibit "I," p. 2516.)

Yet, the total interstate carried on the local is only 8.70 per cent of all the interstate, while the total intrastate carried on the local is 39.10 per cent of all the intrastate. (R. p. 2615.) Therefore, all these heavy expenses of the local ultimately fall on the intrastate in the proportion that 8.70 per cent bears to 39.10 per cent; and while 60.90 per cent of all the intrastate is borne on the through trains, yet, that only represents 5.59 per cent of the cost of the through.

As seen in exhibit "K," page 2531, there are the percentages ultimately applied for the division of expenses between these trains, found on the data shown in exhibit "I."

Having obtained the relative number of stops for the two trains, then the next problem was to find the amount of injury to the equipment attributed to this cause. The plaintiffs' witnesses, in enumerating the various causes of extra expense of the local over the through, laid great stress on this element, and it was a recognized element and must be properly cared for in any system of distribution of train costs between these two classes of trains.

*The Wellington Table.*

In the State's plan, the proportion of injury for these causes was allocated pursuant to a table prepared by A. M. Wellington, as the result of experiments on the Pennsylvania railroad. It is a text book called "The Economic Theory of Railway Location." (R. pp. 2523 and 1741.) According to this table, 21.5 per cent of the injuries to freight cars is due to stopping and starting, and 13.5 per cent to terminal handling.

The authority of Wellington's work, and its corroboration by recent technical data, was brought into evidence through Mr. Parker, engineer of the Texas Railroad Commission. The testimony is as follows:

"A. Yes, sir; we used it as a text book in my studies in engineering department at college.

Q. How is it regarded among engineers, and men studying the questions that are treated in his work?

A. It is taken as authority.

Q. Some question has been raised as to the date of Wellington and the date of this table from which this was taken; I believe it has been put back as far as 1887, the date when it was made; have you given any consideration to the effect of time upon these items?

A. Yes, sir; some.

Q. Have you any authority that would show any reasons or show any changes in the conditions?

A. I have before me the report of American Railway Engineers & Maintenance-of-Way Association, volume 5, of 1904, and on page 695 is a statement similar to Mr. Wellington's with some slight changes, which was compiled by Mr. G. B. Berry, now chief engineer of the Rock Island System.

Q. Read into the record so much of the statement as is pertinent here?

A. He contributes in table 2, on the page heretofore given, the statement showing the distribution of cost of locomotive repairs on the Union Pacific Railroad, and he applies to freight and work engines 7.35 per cent of the damage due to getting up steam and terminal work, and to switch engines 12.474 per cent.

Q. 12.47 where 13.05 is allowed in Wellington?

A. These figures I have just given apply to locomotive repairs; the figures quoted here from Mr. Wellington are applicable only to freight cars; the figures given by Wellington for damage due to stopping and starting at way stations is approximately 21.5 per cent, and Mr. Berry's table, the repairs to cars due to the same service is 20 per cent, and the repairs due to terminal handling in Mr. Wellington's quotation is 13½ per cent, and Mr. Berry's is 16 per cent.

Q. Makes a total of 36, where Wellington's total makes a total of 35?

A. Yes, sir." (R. p. 1165.)

Mr. Parker expressed the opinion that as applied to local and through freight trains in the Southwest, their percentage more than caused those contributing causes to the injury to freight cars. (R. p. 1166.)

*The Attack On Wellington's Table.*

Mr. Rosing makes a strong attack on the Wellington tables, and gives extended and technical reasons therefor, ending with a table of his own, assigning, according to his judgment, 32 or 33 per cent for stopping and starting, and 24 or 25 per cent for terminal handling. (R. pp. 1727-1731.) Aside from the technical features, which we will not discuss, his argument is this:

Wellington's book was written in 1887, the tables prepared in 1877, that freight cars only had one truck and brakes operated by hand.

Since, then, the brake rigging has been changed, and none of the old brake rigging is applicable today; and air-brakes are applied to both trucks.

The entire brake arrangement is quite different, and the maintenance very much more than stated by Wellington. Drawbars and sills, which Wellington puts at 15 per cent, he thinks should be 35 per cent.

He takes up the technical details of the Wellington table, and discusses them fully, and says they should be charged to fit modern conditions. (R. pp. 1728-1732.) He also brings in another factor adding to greater maintenance expense in modern railroading; that the use of automatic couplers and air-brakes, relieving the trainmen of exposure to danger, render them more careless in operating the trains, thereby causing more injury from these causes. (R. pp. 1731, 1732.)

He says he has always heard Mr. Berry spoken of as a man standing very high in his profession, but he says he is a civil engineer, while he (Rosing), is a mechanical engineer. (R. p. 1740.)

He disagreed entirely with Mr. Berry and seemed unable to understand Mr. Berry's paper and its exact application to the subject in hand. (R. pp. 1740-1758.)

The leading parts of this article which was read in 1904, before the "Railroad Engineers and Maintenance-of-Way Association" (R. p. 1741), is given at pages 1759-1763.

Mr. Berry was at that time Chief Engineer of the Union Pacific Railroad, and at the present time, Chief Engineer of the Rock Island System.

To show the thoroughness of his work, and the scientific basis upon which it has worked out, these excerpts, ending with the table in question, are given:

"In order to determine the relative merits of different locations, values must be ascertained for each detail affecting operating expenses. 'The Economic Theory of Railway Location' by Mr. A. M. Wellington, treats the entire subject fully. In this work Mr. Wellington has given to engineers a logical method of obtaining the values for distance, curvature, rise and fall and gradients, but the modern classification of operating expenses as adopted by the Interstate Commerce Commission gives these expenses in greater detail than could be obtained during the life of Mr. Wellington. This detail is of material assistance in following out Mr. Wellington's general method, as it lessens the chance for error in judgment as to the proportion of each item of expenses which will be affected by changes in the details of location.

Prof. W. L. Webb, in his recent work on 'Railroad Construction' has developed values for the various details, following the general method given by Mr. Wellington, but using the classification and figures given in the reports of the Interstate Commerce Commis-

sion for the entire railway system of the United States. A study of these reports shows that the average cost per train mile in the more populous States is less than in the States west of the Missouri River.

In order to obtain a value of these details of location for the use of engineers in the Western States, the general methods of both Mr. Wellington and Professor Webb are applied in this paper to the operating expenses of the Union Pacific Railroad Company."

* * * * * * * * * * * * *

"Before proceeding to consider the value of gradients, distance, etc., it is necessary to obtain some basis for arriving at the proportional percentages of the more important items that are affected by changes in location. In many of the smaller items judgment alone has to be used, and in most of such cases, a wide variation in judgment will produce but a slight change in the final figures. In the larger items of maintenance-of-way, maintenance-of-equipment and conducting transportation, the reports of the various departments for the four years covered by Table No. 1, have been studied, and the conditions as they exist on the Union Pacific have been considered. The reasons for adopting these percentages are given in detail in Wellington's 'Economic Theory of Railway Location.' Tables Nos. 2, 3, and 4, together with the following notes, give some additional reasons, and also explain those points wherein percentages different from Wellington's have been used."

"*Maintenance-of-Equipment.*—From the annual locomotive performance sheets and statistics of train service it is found that total train mileage is but 75 per cent of total locomotive mileage. Table No. 2 is similar to a table given by Wellington, the total cost of locomotive repairs being prorated between the different classes of service according to mileage. The distribution with reference to contributing causes is changed somewhat to fit the conditions on the Union Pacific, curvature on the Union Pacific averaging 17 degrees per mile, whereas Wellington assumed 30 degrees per mile."

* * * * * * * * * * * * *

TABLE NUMBER THREE.

"*Statement Showing Distribution of Cost of Car Repairs on Union Pacific Railroad.*

| CLASS OF SERVICE. | Total cost per cent. | Distribution of contributing causes in per cent. | | | | | |
|---|---|---|---|---|---|---|---|
| | | Time and exposure. | Stopping and starting. | Switching. | Curvature. | Grades. | Distance. |
| Passenger ..... | 100 | 11 | 20 | 11 | 2 | 20 | 36 |
| Freight and Work. | 100 | 6 | 20 | 16 | 2 | 20 | 36" |

(R. pp. 1759-1763.)

Mr. Nay says:

"The addition of the air brake I am sure would cause quite a change in those expenses. That is to say, in 1877, when a train was stopped it was stopped by the use of hand brakes. The brakeman would climb on top of the cars and set the brakes on one car and then on to the next, and the stop was bound to be gradual, under those conditions. While today, with the use of air brakes, stops are frequently made with great suddenness, such as to cause considerably more damage by stopping than in the days when hand brakes only were used.

Q. You think that per cent would be increased?

A. If it was 21.5 per cent in 1877, I am sure it ought to be much greater now." (R. p. 1829.)

Mr. Ward says he has examined Wellington's Treatise, and he does not know what hypothesis he pursued to reach the conclusions reached, but it was written 30 years ago, and in his "opinion, his figures can not be verified by any test in modern practice, because the repairs due to terminal handling are very much greater at the present day than 13.5 per cent."

As to stopping and starting at way stations, he does not know, but thinks the percentage too low. (R. p. 1860.)

He gives his reasons fully.

Mr. Gray criticises it much along the lines of Mr. Ward: He says these matters can not be ascertained, and such a table is a mere guess, and any tests made prior to 1887 would be valueless. In his judgment, the proportions between starting and stopping and terminal 35 per cent to 65 per cent for other causes, should be reversed. (R. p. 1900.)

Mr. Gray admits he was not familiar with Wellington's book. (It was shown that the one from which the table in question was taken was the 1908 edition.)

He says that he knows Mr. Berry intimately, and he would not give much consideration to the matter, but for the respect he has for Mr. Berry.

He says that "if Mr. Berry has stated, and it is in evidence, how he arrived at those figures, and they are no arbitrary assumptions, they would have a good deal of weight." But he says if Berry agrees with Wellington's proportions, he believes both are manifestly wrong. (R. pp. 1957, 1958.)

Mr. Berry has stated the methods of arriving at the contributing causes, based on tests on his road, reinforced by much scientific data, and they are certainly not arbitrary percentages, but scientifically worked-out results.

His article was read before men of his craft, an audience capable of scrutinizing it with scientific accuracy, and no man of Mr. Berry's position and standing would go before his profession with carefully worked-out "arbitrary assumptions." The operating men like

Mr. Gray and Mr. Ward have their opinions, but they must give way to such data as this.

The State might safely rested its case on Parker, Wellington and Berry v. Rosing, Nay, Gray and Ward, but it did not. Mr. Rosing made the point that a mechanical engineer could best pass on this subject, inferentially (but with due modesty), indicating that his qualification to pass judgment upon this subject was better than civil engineers. The State called two mechanical engineers, Roberts and Alexander, whose training and work furnished the same qualifications as Rosing's. In addition, called a roadmaster and experienced trainmen, who had operated trains under the old order and the new order, and showed that if Wellington's percentages were right at the time made, that the change in equipment instead of increasing, decreased these items of injury to freight cars.

*The State's Evidence on Starting and Stopping.*

So that the Court can grasp the converse of Rosing's proposition we quote that explanation from Mr. Roberts:

"I wish you would express your opinion, based upon your experience, as to the effect of the latter day equipment, to which I have referred, as contrasted with the link and pin equipment and the hand brakes, in so far as it affects injuries to freight cars?

A. Does that refer to the item of stopping and starting?

Q. I have included in my question both of them; probably you had better answer them separately; stopping and starting is one item, which Wellington gives at 21½, and switching, which he gives at 13½; they are grouped together in this exhibit as 35; I expect it would be better to treat them separately.

A. It was my experience, while connected with the railroad, that the application of the vertical plane coupler, with the improved draft gear, and also the completion and application of power brakes, to the train, had eliminated largely the damage accruing from stopping and starting in the train, local or through, and I believe I am familiar with Mr. Wellington's table, and as you stated, we all looked upon that as authority in its day, but that would not apply now to the changed conditions.

Draft gear and car underframing, has been designed and reenforced with a view to eliminating that damage; I remember very distinctly, when at almost any freight yard or at any intermediate terminal along the Iron Mountain railroad, during the days of the link and pin coupler, that at nighttime, you would need a lamp to get through it and keep from falling over drawbars, and draft timbers, pulled out in the ordinary handling of trains.

The item of caboose chains or car chains in caboose—we used to have to re-enforce springs in our cabooses and to carry chains to chain up cars that would be damaged on the road by pulling out of drawbars; that was largely due to the braking of trains, all from the hind end of the train. They used to have a very severe brake in

the caboose, and they would set that up, with the immense amount of slack that there was in the link and pin coupler, and if the train was of any length, it would very often pull out a drawbar, and the contributory damages, as a result of that—of the drawbar dropping down on the ties—perhaps would not come out of the socket entirely —I have known of many very severe and expensive freight wrecks, as a result of that, which is almost, or was when I left the service, an unheard-of thing, and we have knowledge of those things and I believe it is fair to presume that Mr. Wellington's figures today would be 50 per cent too high for the item of expense due to stopping and starting of trains.

Q. Assuming that his table was correct, as near as such tables could be in the day it was written, of 21½ per cent to that cause, you would now ascribe what per cent?

A. Not to exceed 12½, and I think 10 would be nearer the figure.

Q. What do you say on the other proposition—assuming that 13½ per cent would be correct for switching, under the old order of things, what would be the difference now?

A. It is very evident that cars are handled very rough, as a result of switchmen not being compelled to go between the cars to couple them, which applies also to cars broken on the road, but as I stated in the other case, owing to the design of the draft timbers and rigging generally, which was all taken into consideration when the changes were made, the yard damage is not near so great as it used to be; that is due to the fact that the cars are built very much stronger—to take the cars that we used to operate, 15 years ago, and handle them the way they handle them now, why you wouldn't need anybody only the switchmen, to break them up; they wouldn't stand it at all, but the expense to build those cars, to fit them for the purpose of resisting the rough usage, has been very much greater, but with a view, of course, to reducing the cost of maintenance.

Q. That additional expense would be reflected in the capital account, not in the repair account?

A. No, sir; that would not be taken into the repair account, and my judgment is that Mr. Wellington's figures are 25 to 40 per cent too high, as applicable in these days." (R. pp. 2108, 2109.)

Mr. Roberts was cross examined with great thoroughness on that subject, but like all well informed men on his subject, was able to explain his reasons, fully, intelligently, and in detail.

Mr. Alexander thus concisely states the proposition:

"From my observation and practical experience, I would say that the percentage should then be somewhat less, for the reason that all power and equipment was, during that time, and has previously been made much more substantial than it was during the time of the link and pin couplers, and during the time of the hand brake—all parts being strengthened to take care of the additional weights and additional length of trains and the heavier equipment, and I believe

that the percentage would be possible one-half of the percentage of the link and pin percentage." (R. p. 2159.)

Mr. Alexander says there were few changes in equipment from 1904 to 1907 (the former the year both he and Roberts left service, and the latter the period of our inquiry.)

On June 30, 1904, over 90 per cent of the equipment had been supplied with air brakes and automatic couplers. (R. p. 2167.)

Assuming Berry's table to have been prepared on data gathered three or four years prior to 1904, which were transition years from link and pin and hand brakes to automatic couplers, and air brakes, he says the starting and stopping percentage should be materially less since the equipment has been completely modernized. (R. p. 2162.)

Mr. Simmons served as roadmaster and division engineer on the Iron Mountain. He gives many practical reasons based on his observation under link and pin and hand-brakes equipment, and under modern equipment to show why the starting and stopping and terminal injuries should be less under modern equipment than under the old order. (R. pp. 2171, 2172.)

Mr. Paulette served as switchman, fireman, brakeman and freight conductor, his service being from 1885 to 1906. He is familiar with handling trains and equipment under both the old and modern systems, and he explains, practically, why there is less injury to the cars under the present method. (R. p. 2211.)

D. L. McNew was in railroad service from 1882 to 1906, as brakeman, freight conductor, yardmaster. He explains why the Wellington percentages for the stopping and starting should be less now than under the former system. (R. p. 2100.)

By men handling the cars receiving the injuries from these controverted causes; by the master mechanics who repaired the injuries; by the roadmasters and yardmasters gathering up the wreckage from them; by scientific engineers and by practical tests, made by men of the highest professional standing, Mr. Rosing, Mr. Gray, Mr. Ward and Mr. Nay are overwhelmed in their attack on the State's distribution of this expense.

## YARD AND TERMINAL EXPENSES.

Yard locomotives serve both local and through trains, and the expense was divided on basis of number of cars of each class of cars handled by the yard engine during the period. (This falls under maintenance-of-equipment.)

Other yard and terminal expense, after separating the station expenses at terminals, are divided according to number of cars handled in the yards and terminals, using the actual figures from the October test.

This method was criticised by Mr. Nay (R. pp. 1828-1832), and probably other witnesses, and explained fully by Mr. Ludlam (R. pp.

2285, 2286), wherein he showed that Mr. Nay had misunderstood the exhibit.

The justice of counting all cars in division yards equally has been demonstrated by the record of the actual movements of all transstate cars made by Mr. Hamilton and of the breaking-up of all through trains in the terminals. That testimony has been set out in full in discussing the "bridge theory" of transstate freight.

See Record, pages 1432-1442, wherein Hamilton traced all the transstate cars for first half of March and October, 1907, and the terminal handlings in October, showing that, with rare exception, every train into every terminal was broken up and the cars in it, went out to the next division in other trains, varying from two to nine others, carrying the cars brought in by one train—a complete breaking up and re-making of trains.

To meet the force of the plaintiffs in rebuttal, though Mr. Moore, filed a consist of train No. 55, during the month of October, 1907 (R. p. 1773), this was made exhibit 53. This was to show that there was little breaking of this train at division yards, and little switching of the cars detached or attached. He says the train was so made up as to cut off at next division the cars going out of it there, the main train staying on the main track, the other cars, engine and caboose would be added and then go on its journey. This was in effect a modified bridge theory. The purport being that while not a "straightaway movement through the State," yet, there was less yard service for these through trains than the locals.

The State, in surrebuttal, put on practical train men to explain the handling of such a train as No. 55, which is a fast red ball train, a high class merchandise train.

They say that the handling that train gets in terminals is no fair test of what through trains would get in terminals.

This train is classed higher than any through train.

McNew thus explains how it is handled:

"Those fast trains, every preparation is made to save delay to them; where there is any pick-ups, they are always fixed, placed first out, or in a place where they can be picked up with the least delay, even in big yards. Very often a man's position depends on whether he does delay that train or not; while the other trains, ordinary dead freight, it don't seem to have any particular thing to do with the handling of those trains—not so much at least—probably it will be composed of lumber or cotton, or something that is picked up by locals or through freights on the road, brought into the terminals, and used to fill out the engine's tonnage with, on either those fast trains or some other through trains.

Q. And they would all be switched in the terminals?

A. Yes, sir; probably stored; some may stay around for several days.

Q. You have had experience as yardmaster and know how those are handled?

A. Yes, sir." (R. p. 2104.)

Harston says that ordinarily, a good deal of switching was done to train No. 55. But that its class was usually gotten in and out of the terminals as fast as possible.

The exceptional character of this train was explained by Nash, (p. 2089), McNew (p. 2103), and Harston (p. 2200).

H. B. Amouck put in evidence exhibit 52 (R. p. 2434), showing terminal handling of loaded cars in 37 trains out of Hoxie in October, 1907.

He testifies that these 37 trains were selected, as he came to them from Mr. Hamilton's worksheets. He thinks they are representative movement, and that he did not pick out the best ones. Exhibit "I" shows about 2,700 through trains run in October. How less than 1½ per cent of them could be representative of 98½ per cent, is not explained.

There is a great deal of detail in his exhibit, the purport of it all to show the through trains in question got through without complete breaking up in terminals.

These all entered into Mr. Hamilton's report, which shows the average of all, and no value can be attached to a few selected ones, where the minimum breaking up occurred.

Mr. Hamilton thus explained this exhibit:

"Q. Mr. Amouck put in some exhibits on that subject, did he not?

A. He covered practically the same ground as Mr. Moore, taking some 30 trains out of Hoxie as a type.

Q. How did he get the 30 trains?

A. He took them from some worksheets we had prepared, on which we counted the cars into and out of the terminals and on which we showed lapsed or delayed time in the terminals. We simply prepared that to use in a division of expenses.

The other sheets were made—those to which in my mind Mr. Amouck's criticism would better be applied—were sheets in which we showed the breaking up of these trains at terminals and varying delays to the cars.

Q. He did not criticise those?

A. No, sir; his testimony was along the same line as Mr. Moore's as I understood it." (R. p. 2259.)

Returning to Mr. Moore's fast Red Ball No. 55, Moore says his exhibit was made up of the consists of that train (R. p. 1773.) He says the wheel report would not show the relative order of the cars, that it is made up to show system cars and foreign cars and empties, for the assistance of a car accountant, but not in train order. He was shown a form of conductor's wheel report giving direction "cars must be reported in train order commencing with the caboose, to

show the make-up of trains leaving district terminals," and said it was disregarded. (R. pp. 1781, 1782.)

He assumed the consist which he put in evidence gave the order of cars.

Cannon, the Division Superintendent, says the wheel reports show train order of cars, as a usual rule, the exception being the local. (R. p. 1800.)

Harston testified that wheel reports gave the train order. (R. p. 2200.)

Hamilton, as usual, went to the records to settle this conflict between Moore and Cannon, and found from a batch of wheel reports that they was made by train order disregarding system or foreign cars. (R. p. 2258.)

He testified from his minute investigation of this subject, that the wheel reports gave the train order of cars, and it was the only source of that information.

Moore testifies the consists he puts in were not copies of the wheel reports. (R. p. 1782.)

It is evident that as to the movement of even the one fast Red Ball, we have no evidence of value of the amount of switching done on it.

Mr. Moore also testified at great length as to the various switching movements in the Little Rock terminals. It varies but slightly, so far as actual movement was concerned, from McCutcheon's, whose testimony was quoted when discussing the "bridge theory."

He shows some more service in industrial switching than in ordinary shifting for making up through trains; but there would be four movements on grain, into the elevator, and not less than four nor more than six out (practically all interstate), four movements on cotton (all interstate). The switching of cotton being equal to industrial switching; cotton seed products (interstate), four movements. For through trains being iced there would be two or three movements, on through cattle trains, two or three movements. (R. pp. 1781-1789.)

The attempt to rehabilitate the "bridge theory" was weak; more a confession and avoidance than anything else. The total result of it is: On some through trains there is less terminal handling than on the usual through and local trains, but there is on some of the large interstate movements, like grain, cotton, cotton seed products, and on through iced trains and cattle trains, more terminal service than the local or the ordinary through train ever receive.

Hamilton's demonstration of breaking up trains, stands, and considering the matter largely—not by exceptional cases either way, every car should be counted equal in the terminals. When the switch engine takes the cars in any train, local or through, it, on average conditions, renders the same service to make them ready to go out of the terminal, and all other like expense follow this service.

There were many other minor criticisms of the State's plan, but we will not weary with further detail. The great items and bases applicable to them have been considered as fully, we hope, as the importance justifies. None of the other matters which were discussed would amount to anything in general results if these were sustained.

*Minor Criticisms.*

## EXHIBIT 56.

The criticism of the State's plan was put in concrete shape in an exhibit ostensibly formed along the same line, correcting, it was alleged, the errors of the State and changing bases to suit the modified views of the plaintiffs. We have, throughout the evidence, facetiously termed this a caricature of the State's plan. For maintenance-of-way the overhead plan of apportioning general expense is adopted, and general expenses relieved of all share of maintenance-of-way expenses.

*The Caricature of the State's Plan.*

For maintenance-of-equipment, the State's plan is adopted excepting Rosing's table instead of the Wellington and Berry tables for starting and stopping is used, and for stopping eight instead of four for the local over the through (this evidently based on the mistake made by Gray and Ward as to this item, heretofore pointed out).

For terminal handling, the local cars are multiplied by six, and car miles adopted.

Changes are made in station handling, in that the transstate is eliminated, and 10 per cent added to the interstate for two handlings (a revival of the bridge theory).

Yard and terminal are divided on tons handled. Various other changes are made, some large, some small. On the passenger side various changes are made conformable to Rosing, in contradiction of Roberts and Alexander.

Train auditor expense is taken out of the classification the plaintiffs' exhibits made of it and charged direct to passenger, proportionately intrastate and interstate.

The effect of the more important of these changes we will explain in excerpts from Mr. Ludlam, who reviewed them at length:

"Q. Mr. Ward, at page 613, criticises the method used by the State in apportioning the expense in terminals, of counting cars in and counting them out, and says that the proportion chargeable under this method, to through service, would be much greater than is actually the case, and adds this: 'The opinion of myself, or any other operating official, as to the excess cost of handling State over interstate business is on the basis of actual freight and not on the basis of the number of cars passing through the yards.'

*Ludlam on Ton Basis For Terminal Handling.*

I presume from Mr. Johnson's testimony this morning, that is very likely the foundation for his distribution of that expense on the ton basis, in his exhibit No. 56.

I will ask you what is your opinion of that basis which is used here in this exhibit, on the testimony of Mr. Ward, which I have read to you?

A. You are asking what I think of the basis used in exhibit 56?

Q. Yes, which I assume to be based on Mr. Ward's testimony, which I have read to you.

A. I think the basis is wrong, because it assumes that a ton of freight which moves 70 miles would have the same terminal service as a ton of freight that moves 224 miles.

Q. Those are the respective lengths of haul in this case on the Iron Mountain, I believe?

A. Of State and interstate.

I think I have already testified that, speaking generally, every ton of freight that passes through a terminal gets some handling at that terminal. I think also it is a matter of general railroad knowledge that the large and expensive terminals are required more and used more for the through business than for the local business.

Q. What effect would that length of haul have upon the proposition which you have referred to?

A. The effect, as that principle is used in exhibit 56, is that you charge as much for a terminal handling to the ton that moves 70 miles as you charge to the ton that moves 224 miles. You fail to take into consideration the most important element in distributing all expenses, and that is the use which is had from the expense incurred. The ton of freight that moves 70 miles, will, of course, not have the same use of the terminals as the ton of freight that moves 220 miles. Therefore, when you attempt to distribute your terminal expense on the tons handled, you arrive at a false conclusion and your figures are correspondingly unreliable." (R. pp. 2273, 2274.)

The most radical change was maintenance-of-way. The plaintiffs abandon the revenue and car mile and treat it as the accountants do direct expenses, and Mr. Ludlam thus explains the absurdity—if we may be pardoned the strong word, of this misapplication of an useful base.

*Overhead Basis For Maintenance-of-Way.*

"In exhibit 56, made up by the railroads—which I have somewhat facetiously called a "caricature" of the State's exhibit—they adopt many of the bases of the State, but in 'maintenance-of-way,' they have added that, as I understand it, to the general expense, and distributed that item of expense all through the other: I wish you would express your opinion on that. A. I think it is wrong in principle; that there is no accounting practice or procedure that would justify it. It is a well known rule of accounting that you should distribute those expenses

that are specific against the use which it had from the expenses incurred.

In the case of the 'maintenance-of-way' expense, they should be distributed, in my judgment, both the proportion which is direct, and the proportion which is indirect—which has been referred to as being from 75 per cent to 90 per cent—against the use which is made of the 'maintenance-of-way,' and the use which is made of 'maintenance-of-way' is to run trains.

If it is true that only 10 or 25 per cent of the 'maintenance-of-way' expenses apply specifically to the operation of the trains over the track, then that 10 or 25 per cent, if it could be determined, should be apportioned specifically against those trains that cause the damage, and the remainder of the 'maintenance-of-way' expense—which would be the indirect expense of 'maintenance-of-way'—should be apportioned over the direct expenses of 'maintenance-of-way.'

Q. And that was done?

A. The result of our distribution approximately does that.

Q. I believe you have heretofore testified that in your accounting experience you have had a great deal of experience in auditing railroads: Did you ever come across a proposition like this that distributed things like "maintenance-of-way" through all these various accounts?

A. No, sir; the 'maintenance-of-way' is a specific expense and that would be one of the elements used to distribute 'general expenses.'

There is a certain element of your 'general expenses' that applies to your 'maintenance-of-way' expenses. A certain proportion of your President's and Vice President's salaries, the clerks in the Auditor's office, all apply to the 'maintenance-of-way' expenses, and the 'general expenses' would be distributed over all the elements of expense, which, as I stated, would include the 'maintenance-of-way' expenses, as well as the 'maintenance-of-equipment;' 'traffic' expenses; and 'conducting transportation' expense, but there is absolutely, as I see it, no possible reason for adding your 'maintenance-of-way' expenses to your 'general expenses,' and then attempting to distribute those over the balance.

In that way you do not apportion any of your 'general expenses' to your 'maintenance-of-way' expense.

Q. Why is that?

A. Because if you add your 'maintenance-of-way' expense to your 'general expense,' then you apportion them all over 'maintenance-of-equipment;' 'traffic expenses;' and your 'conducting transportation expenses,' which are all that are left of your operating expenses.

I am sure no man who is familiar with railroad procedure, would claim that the officers of a company—and by 'officers,' I mean the

general officers, higher executive officers—have nothing to do with the 'maintenance-of-way.'

I can imagine, for instance, in the case of the panic in October, 1907, the President of this company wiring from New York to reduce the expenses, and probably the first men that were laid off were some of the section hands who would be charged to 'maintenance-of-way.'

I am sure the records of the company, if carefully searched, would show very explicit instructions from the higher executives during October, November and December of 1907, affecting the 'maintenance-of-way' department.

Q. Take the other items in 'general expense' outside of the higher executive officers; take your legal department—claim department, auditor's department, and various items going to make up 'general expenses:' Do not all of them have more or less relation or duties to perform in regard to the way and maintenance?

A. Yes; they all have something to do with the 'maintenance-of-way' expense and it is proper that those expenses should be distributed over the 'maintenance-of-way.'

Q. As I understand you, under this 'grand, gloomy and peculiar method,' that our friends have invented, the 'maintenance-of-way' would escape all of that—all portions of that?

A. Under their method the 'maintenance-of-way' would all be distributed against the other operating expenses.

Q. Now, coming to the practical end of that proposition on this matter: what is the effect when you come to carry out such an abnormal method—as we view it—to distribute it in connection with such abnormalities—as we view them—as is done in 'terminal expenses:' What is the practical effect of that?

A. On the basis followed by exhibit 56?

Q. Yes.

A. The practical effect is to increase the cost of the State freight, as shown by exhibit 56.

In the first place, you improperly apply certain of so-called direct expenses—specifically illustrated in the case of repairs of yard locomotives; in the case of handling and in the case of expense of yard and terminal—by apportioning, as I have said before, as much of that expense to a ton of freight that moves only 70 miles, as you apportion to another ton of freight that moves 220 miles.

If you take all of your 'maintenance-of-way' expenses and distribute them over your direct expenses, the proportion that would apply to those specific items, you are also—in the case of your 'maintenance-of-way'—charging as much to a ton that moves 70 miles as you are to a ton that moves 222 miles. That is, to the extent that the repairs of yard locomotives and the expense of yard terminals represent the total expense over which you distribute your 'maintenance-of-way' expenses; you are claiming it costs as much to main-

tain your property to move a ton of freight 70 miles as it does to maintain your property to move a ton of freight 222 miles.

Q. Are there any other matters in that connection which I have not called your attention to? I want to go into it thoroughly and then pass on to something else.

A. I think that explains the inaccuracy of the principle." (R. pp. 2276-2278.)

We believe this a sufficient consideration of exhibit 56, and the plan upon which it is built to justify our characterization of it.

It starts with this impossibility of treating maintenance-of-way as a general expense, and relieving that great item of all general expense charges, and then proceeds to take such factors as some one or more witness may have suggested totally regardless of the weight of evidence on the subject where the charge was made.

We hardly expect it to be seriously urged upon the Court, but as it is part of the evidence, it must be treated as if earnestly presented.

*The Plan As a Whole.*

On the whole subject of the State's plan, we have this to say: It was handicapped by having to use the train mile apportionment between freight and passenger, and by the use of the revenue basis for an apportionment of the property, and it earnestly endeavored to allow the utmost reasonable limit for all items of extra costs, and to work out fairly a distribution of costs between the two classes of traffic.

It would ill become a State to do this in any way than fairly, and with as just regard to the carrier as to the public, and that we believe was done by the able accountants who prepared this plan.

That its general plan is right was admitted by the learned trial Judge, and that it is substantially right in all of its details is proved by a decided weight of the evidence on every controverted issue.

Under this plan, the Iron Mountain's return on its property is 7.09 per cent after correcting the Pullman car mileage error, and when the inevitable correction is made to revenue or car mile basis for division between freight and passenger traffic, the return will be at least 9 per cent on the property, to say nothing of correcting the other errors included in the figures, like the Memphis expenses, etc.

This is a prosperous road in all its branches of service; if its management lopped off such excrescences as the Pratt Hotel and Bunch elevator favoritism and gave credit for the Express Company dividends in the past as well as in the present, and many other such items, its prosperity would be greater.

Under the facts here, we submit, in any view of the case, it is impossible for the plaintiffs to recover, because, with all the faults in their accounts, under any fair system of distributing the expenses of the two classes of traffic, both classes are making far more than a compensatory return. We sincerely submit that upon the whole evidence, the conviction is left that the intrastate is the more profit-

able traffic. Its revenue is double the interstate, and its extra expense, by the most liberal allowance, not as great as the higher revenue, and the road was paying 10 per cent annual dividends, during the period it complains that these rates are confiscatory.

## THE CRITICS.

The able and successful railroad officers, Messrs. Carl R. Gray, Vice President of the Frisco Lines; Frank E. Ward, General Manager of the Burlington, and Frank Nay, Comptroller of the Rock Island, each appeared in the role of critic of the State's plan of solving these problems.

Judge Trieber says of the plan: "The scheme for obtaining these facts is new, never having been used by any accountants in any of the numerous rate suits which have heretofore been before the courts." And again: "But, in the opinion of the Court, the scheme itself furnishes the best method of solving this problem that has been called to the attention of the Court, depending, of course, upon the correctness of the numerous factors necessary to obtain accurate results." (R. pp. 2620-2621.) Hereafter we think we show that the departures from the scheme by the trial judge were erroneously made, but the point we now call attention to is the difference in point of view of the critics and the judge to the scheme as a whole.

To them it was all obnoxious; no good was in it and no good could come from it. Probably their most pointed arrows were aimed at using the car mile basis for maintenance-of-way expenses, and it was admitted by them to be in common use among the railroads of the country for this purpose. Railroad officers of great distinction had testified as to its common use and equity, and it has met the approval of this Court. The car mile basis to divide expenses between coaches and mail and express cars was to the critics intolerable, but the Vice President of one of the plaintiff roads and the Vice President of the Louisville & Nashville road had advocated it as fair and just for that very purpose before the Postal Commission of the United States.

On the technical questions as to distribution of injuries to freight cars from various contributing causes, the critics aligned themselves against a standard text book, and a paper, carefully prepared by an eminent engineer on the subject, which was submitted to a technical body considering this matter.

The critics placed themselves in direct opposition to the opinions of the plaintiffs' witnesses in chief and could see no inconsistency in the plaintiffs bringing on in chief witnesses expressing certain opinions material to this case and then bringing the critics on with contrary opinions then material to their case, but they saw many inconsistencies in the case of the State.

The critics were especially skeptical of views of accountants on these problems; it was to them problems only for the operating men.

Their criticism operated as a demurrer to an answer, reaching back to the complaint.

They attack the car mile and train mile basis as utterly unsound for apportioning expenses in a matter so important as a rate case; and the plaintiffs had apportioned their $1,000,000 maintenance-of-way expenses between passenger and freight on the train mile basis and had obtained a million dollars of maintenance-of-equipment expenses for Arkansas from the other eight States in the Missouri Pacific System on the car mile basis.

Their demurrer-like criticism reached to the normality of the period of inquiry also. In fact, as critics-general they were as pronounced successes as they are as men of affairs.

## AN ANALYSIS OF JUDGE TRIEBER'S OPINION.

While it is the duty of this Court to determine the facts relied upon as rendering unconstitutional State statutes and State action through a commission, unfettered by findings of masters or conclusions of trial courts, as was so clearly put by Mr. Justice Moody in Knoxville v. Knoxville Water Co., 212 U. S. 1, yet weight will properly and naturally attach to the opinion of the trial judge; and this renders its review and analysis timely.

Specific findings of fact on controverted issues, deduced from conflicting evidence and made the predicate for a decree based upon them, would carry more weight than mere general conclusions of fact made in the course of an opinion whose office is to state the reasons why the particular decree has been rendered. In this case there was no specific findings of fact upon the numerous controverted issues; a final decree was rendered enjoining the enforcement of the rates attacked (R. p. 105) and an opinion filed wherein the judge discussed at length the questions of law and fact and stated his views upon them, resulting in an opinion that the rates in question were confiscatory, wherefore he had granted the perpetual injunction. This opinion is found in 187 Fed. Rep., p. 290, and in this record, beginning at page 2580.

The attitude of this Court towards the opinion of the trial court may be found stated in this excerpt from Loeb v. Trustees of Columbia Tp., 179 U. S. 472:

"Neither is the opinion of the Court a part of the record. Our rule requires a copy of any opinion that is filed in a cause to be annexed to and transmitted with the record, on a writ of error or an appeal to this Court; but that of itself does not make it a part of the record below. That language is not to be taken too broadly or without reference to the particular case then before the Court. What was said may undoubtedly be taken as an adjudication that the opinion of the Court can not, under our rule, be referred to for the purpose of ascertaining the evidence or the facts found below upon which

the judgment was based; but not as precluding this Court from looking into the opinion of the trial Court for any purpose whatever."

The meaning and application of this point of this decision was recently considered in majority and minority opinions in Memphis v. Cumberland Tel. & Tel. Co., 218 U. S. 624. We understand, from them, however, that the principle is unshaken that the opinion can not be looked to for the purpose of ascertaining the evidence, or the weight of evidence, or the facts found; but may, and should, be looked to for any purpose whatever which would aid the Court in reaching a correct conclusion on either the law or facts of the case. See also Egan v. Hart, 165 U. S. 188. Doubtless in performance of the onerous and delicate duty of weighing the evidence as to whether it is sufficiently clear and decisive to invalidate the State's statutory and Commission-made rates, the Court will turn to the opinion for what assistance may be received from it; and, in considering it, your attention is invited to what we classify as the major and minor errors therein.

## THE MAJOR ERRORS IN THE OPINION.

He uses the revenue basis to apportion the property to the State, but we will not rediscuss that subject, as we have presented our views as fully as we are capable of doing heretofore and it is only to his errors in apportioning expense to which this discussion is devoted.

*The Revenue Basis to Apportion Expenses.*

(1) He uses the revenue basis to apportion maintenance-of-way expenses, both freight and passenger, between State and interstate traffic; and uses it also to apportion other items of expense between those classes of traffic.

He says (R. p. 2608): "The straight revenue theory as advanced by the learned counsel and accountants of the railroads is clearly wrong, as none of them takes into consideration the increased rates charged for the intrastate traffic."

When considering maintenance-of-way expenses, he says (R. p. 2623): "The Court is of the opinion that the straight revenue basis will get more accurate results. The difference in intrastate and interstate rates will be taken care of by proper allowance to be made in the final calculation."

Passing, for the moment, the allowance referred to, which is based on an assumption that the difference in rates is ascertained and equalized—an utter impossibility; but even so, the fundamental error of the revenue basis is not removed.

One of the insuperable objections to the revenue basis is its failure to take account, in this case, of the higher intrastate revenue, producing a proportionately higher allotment of expenses to the intrastate, but if that were overcome, and the revenue per ton per mile intrastate and interstate identical, still the revenue basis would

have no value (even as admitted by its advocates) unless the rates of both classes were based on the cost of the service, and a relation, based on cost and reflected in the rates, existed between intrastate and interstate traffic. We will not weary the Court with repetition of the presentation of, as we believe, a great preponderance of the evidence which shows that, so far as the interstate rates prevailing in Arkansas are concerned, that they are not based upon or reflect the cost of service, and that no reduction exists between those rates and the Commission tariff.

The eradication of the one sound objection to the revenue basis leaves untouched these fundamental objections to it.

The fact that the revenue per ton per mile intrastate and interstate may be the same, or made so by a process of equalization, will not make the revenue an applicable factor with which to apportion the expenses between the two classes of traffic unless the rates producing the respective revenues, whatever it may be, is based on cost and there is a proper cost relation between the two. Whether intrastate or interstate revenue per ton per mile is the higher will depend on several concurring causes; the rates fixed interstate in that locality by the railroads and the rates fixed intrastate by the particular State, being the principal ones. But whether the rates of either traffic reflect the cost and are adjusted to each other so that they may be used as yardsticks of equal reliability is quite another question. If an unfortunate lunatic is suffering with tuberculosis and has an attack of appendicitis, the removal of the appendix will likely cure the latter ailment (or kill the patient), but is not likely to restore his mentality or destroy the bacilli.

*State and Interstate Rates and Revenue.*

(2) He attempts to find the difference in intrastate and interstate rates. His discussion of this subject is found at pages 2613-2619 of this record. He concludes that, while the freight revenue per ton per mile intrastate on the Iron Mountain is 98 per cent higher than the interstate and on the Southwestern 141 per cent and the passenger 3.48 per cent, that the intrastate freight rate is only 50 per cent higher than the interstate, including the transstate, and on passenger the rates are the same, while the revenue is 3.48 per cent higher. Many of the matters referred to in the discussion we fail to find in the evidence in this record; but conceding, *gratia argumenti*, that they are all established facts, we contend: (a) That it is a mere guess, not supported by such evidence as is referred to, as to the difference in the rates, and (b) that the difference in rates is not the question. The plaintiffs seek to divide the expenses between intrastate and interstate by the revenue produced from each class, and not by the rates.

(a) That the ascertainment of the difference between State and interstate rates is a mere guess, not susceptible on the evidence in this record of approximation, is unquestionably the case.

Judge Trieber refers to two exhibits put in by Mr. Kimbell. After Judge VanDeventer granted the injunctions in this case, the railroads put into effect both intrastate and interstate tariffs, untrammelled by State regulation. These tariffs of their making were in effect in January, 1909. In its efforts to establish the relation existing between State and interstate rates as understood by the railroads when they had the making of both, a statement of the January revenue, intrastate and interstate was called for. This is exhibit "A" (original page 5758). Mr. Kimbell made a calculation based on that exhibit, comparing the revenue with the six months' period under inquiry, when the State made the intrastate and the railroads the interstate, and he testified that the interstate had been increased 9.4 per cent and the intrastate 96.1 per cent. (R. p. 770.)

In rebuttal, Mr. Kimbell put in exhibit 58, a comparison of rates if the Commission tariff had been in effect during January, 1909, and it showed that while the intrastate revenue was increased 96.1 per cent, the rates were only increased 48.18 per cent. (R. p. 2078.) No showing was made on interstate. The conclusion that Judge Trieber reaches is that it is impossible to adopt revenue for the purpose of ascertaining the difference in the rates. (R. p. 2614.) Revenue represents result of rates, not the rates themselves, and it will fluctuate by different movements without fluctuation in rates is certain. As the unanimity of opinion is that the State and interstate traffic moves hand in hand and is as alike as Siamese twins, if it were possible to get a comparison with preexisting rates interstate for the same period some tangible basis might be reached. Mr. Kimbell was requested to furnish complementary data of the interstate when he furnished the intrastate and declined on acount of the labor. (R. pp. 947, 997.)

Take two extremes—coal, a low-grade commodity, and merchandise, a high grade. The coal intrastate and interstate will naturally move at the same season and the merchandise intrastate and interstate has no cause for difference in time of movement, and every cause for uniformity of movement. Apples from the fruit region of Northwestern Arkansas will go to market in Arkansas and interstate points at the same time.

Speculation as to difference in rates based on rate increases or decreases in intrastate traffic is futile when unaccompanied by data of the other class.

It is utterly impossible to compare State and interstate rates except theoretically. Take some tariffs and work out a careful comparison and then a little examination into movements under the two will show the comparisons to be worthless.

A striking illustration of that is found in Mr. Perkins' exhibit 37 and 37-A. (R. pp. 2406-2409.) These exhibits were to show, along border points, that the interstate rates were higher than intrastate and to establish a relation between State and interstate rates.

Judge Trieber refers to these rates as if they were of value. (R. p. 2615.) The judge evidently failed to read Mr. Lincoln's testimony about these tariffs, brought into the case by the plaintiffs themselves. Mr. Lincoln's attention was called to these tariff selections by the plaintiffs' counsel, and asked to state what they showed to be the relation between those rates; and, taking up one by one the rates, showed that the commodities do not move under the interstate rates set forth, but under commodity rates, and concludes as follows: "The comparisons are not those upon which you can very well base a conclusion, as to the interstate or even as to the State rates in other points, except as a paper proposition." (R. p. 972.)

No one controverted Mr. Lincoln's disposal of these paper rates and their usefulness there ended; and yet the Court, evidently overlooking that they did not represent real movements, considered them in his efforts to find the difference in the two sets of rates.

In another effort to find this difference, the judge tells of going over the minimum carloading prescribed in the Western classification and in the Commission tariff, item by item, and finding a difference of 40 per cent in favor of the interstate. (R. p. 2619.) But what avails that? There is no evidence of what freight has moved under the weights prescribed in the Western classification. Undoubtedly some does; much does not. All the Texas traffic moves under the Texas rate exception sheets to it; every State has its exceptions to it. The Official and Southern classification territory (all territory east of the Mississippi) have different classifications and minimums for all traffic originating in their respective territory from those in the Western. Interstate tariffs have many exceptions to the Western classification. All these facts are stated by the plaintiffs' witness, Mr. Becker, the chairman of the Western Classification Committee. (R. pp. 738-746.) How much of the interstate traffic in or through Arkansas has moved under the Western classification of minimum of carloading is left so absolutely an unknown quantity that even a guess would be impossible. The judge makes explanation of the existence of zone rates, Texas common point rates, etc., and quotes Mr. Perkins' justification of the latter (page 2615), but we are not concerned with the why of these rates, but as to their existence as a fact proving the unreliability of revenue from them to measure cost. But the very rates there explained, the transstate lumber, grain and Texas common points, illustrate the impossibility of ascertaining the difference between interstate and intrastate rates. Hardly any two similar movements of these commodities bear the same rate owing to different divisions of it with connecting lines, while each haul through Arkansas and its attendant cost is identical.

The Court accounts for difference in revenue of the plaintiffs' roads under the same tariffs as due to differences in low grade and high grade commodities carried by them. Possibly that may be true, and, if so, is another obstacle, under the evidence in this record,

to establish the difference between rates intrastate and interstate, because the rates on the low grade commodities are no better guides than on the high grade like the merchandise rates to Texas. Take coal from the Illinois fields to Little Rock and adjacent territory for $2.25 per ton and to Louisiana points, 150 miles longer haul, for $2.00 per ton; and on the other hand, the Arkansas coal moves into Little Rock from a zone 50 miles in extent for $1 per ton and out of Little Rock on a graduated distance scale. With which interstate rate will the comparison as made, the interstate to Arkansas points or the transstate to Louisiana points? No system of averages can be obtained as there is no data of the relative amount of the traffic to each of these consuming territories, other than it is a considerable movement. The expert rate men, though often requested to estimate or define the relation existing between State and interstate rates, fail to do so; and if they can not establish what the relation is or should be, how can the difference between the two be discovered?

The Texas Commission is calling on the carriers for data as to revenue and cost by commodities, intrastate and interstate. (R. p. 1106.) When reliable statistics along this line are furnished then an approximate, if not accurate, measure of difference in rates may be found.

(b) The difference in the rates, intrastate and interstate, is not the question in this case, but the difference in the revenue. It is the revenue—not the rates—which is used by the plaintiffs as the factor with which the expenses between the classes of traffic is apportioned by the plaintiffs in their exhibits. Therefore whatever may be the real difference in the rates is only of academic interest.

If the intrastate is 50 per cent higher than the interstate, as thought by the judge, that has not so far entered into their case, but the revenue resulting from these rates as a whole has been used by them to apportion these expenses, and that revenue is 98 per cent higher than the interstate, and therefore, on that account, apportions correspondingly to the intrastate that much more expense than would be apportioned if the revenue were the same. The issue is on the apparently confiscatory return shown by the plaintiffs using a factor, which, by reason of being thus much the higher than the other factor, assigns this much unreal expense to the intrastate. It may be that the extra expense is 50 per cent or 500 per cent; that is not the question now; the extra cost is added after the basic apportionment to the State is made on the revenue basis; and, in order to get that basic apportionment to which the extra cost must be added, there is used a factor producing unreal expense to the intrastate. Whether the basic sum has unreal expenses represented by 50 per cent or 98 per cent is one of degree; the fallacy of the principle is the same. The effort to find the difference in rates is an effort to correct the injustice to the State, and the finding of 50 per cent higher intrastate rates, convicts the result of the plaintiffs' case to be to that extent wrong.

But the whole theory of trying to find difference in the rates expressed in percentages other than in the revenue resulting from these rates is a mistake.

Thousands of rates are found in filed tariffs; until a shipment moves under one of them, it enters not into this subject. It is not a question of possibilities, but of actualities. One shipment only may move on a given rate in a year and a thousand a month on the next one. This is equally true in either traffic. These dormant rates afford no basis of comparison. A light movement under one and heavy under another may make a difference one way on rates and the other way on revenue. The measure of rates to determine compensation or confiscation is the revenue produced from them, not the rates themselves. The use of the factor on trial to measure the expense is one of the just criticisms of the revenue basis. (R. p. 1482.) The effort to correct the inequality and injustice of the revenue basis only results in minimizing it to whatever arbitrary figure the mind may rest upon as representing the difference in the two classes of rates.

The allowance in favor of the State, so far as we can discover, in the calculations made by the Court and those by the accountants under his direction, has not been given. The Court selected bases and directed the accountants to calculate upon them; that resulted in showing 201.5 per cent extra intrastate freight cost on the Iron Mountain; and to that he added 8.5 per cent and 10 per cent for the intrastate passenger. (R. p. 2630.) In reaching this result, the accountants used the revenue basis for several of the large items of expenses, as directed by the Court; and the injustice of the excessive revenue is, so far as we can discover, not corrected in the results obtained by this method. The system is abstruse, and, we may be mistaken in this statement, but, after careful examination, believe it is correct; and if so, it is doubtless an oversight because the Court intended to make this allowance.

*Train Mile Division Of Freight and Passenger Expenses.*

(3) The judge used the train mile division between freight and passenger expenses of maintenance-of-way. In our chapter devoted to this question, we showed that he condemned it utterly, and yet, doubtless, unwittingly, accepted the apportionment to each branch of the traffic so made. Thereby the intrastate is burdened with $101,500 more expenses than if he had used the revenue basis, and far more than that, if he had used the car mile basis.

This error likely occurred in this way: The railroads used it, and the State took the amount thus apportioned to freight and passenger and begun their work of apportioning between intrastate and interstate at that point. This was fully explained in the evidence, and no one for the State approved it and several on both sides condemned it.

If the State's plan had been accepted this would have been "harmless error," as the return shown was compensatory; but when both plans were rejected and one of his own formulated, then the basis which he expressly condemned (R. pp. 2608, 2623) should not have been used for this purpose.

At one place he says: "The train mile basis is conceded by all as the least accurate." (Rec. p. 2608.) And when discussing maintenance-of-way expenses, says: "In view of these facts (the large proportion due to weather and time) any attempt to apportion this item of expense on the ton, car or train mileage would be an injustice to the roads." (R. p. 2623.)

*Rejection of Test Months Statistics.*

(4) The rejection of the statistics of the test months and substitution of arbitrary percentages for the contents of the local and through trains, was, in our opinion, grave error. We have presented at great length the whole evidence on this subject and will not repeat it. The Court says that the most serious objection to the State's plan is that the calculations are based on the business of one month only. (R. p. 2621.) The local and through trains only are based on one month's performances, the percentages for that month applied to the six months' period, and the difference in a larger ton-mileage adjusted. This latter was criticized, but Mr. Johnson, the railroad accountant, admits the criticism only goes to using one month; not to the method or its accuracy in adjustment. (R. pp. 2236, 2237.) In view of the short period put in by the railroads, and that they put in these test months as representative of it, and the proved normality of that month to the six so far as car and train movements were concerned and the relative State and interstate traffic, we do not question for a moment this Court will accept them. Instead of the actual figures found from these exhaustive tests, the Court assigns to the local train 40 per cent interstate and 60 per cent intrastate, to the through 99 per cent interstate and 1 per cent intrastate.

If possible for the error to be graver than rejecting the test on the Iron Mountain, it was in rejecting the test on the Southwestern. It was all made by the railroads; its accuracy questioned by no one and no congestion even alleged of that month, October, 1908.

## EXHIBITS CORRECTING THE MAJOR ERRORS.

At our request, Messrs. Haskins & Sells have prepared for this brief exhibits "DD", "EE," "FF," which exhibits accept Judge Trieber's basis and findings throughout, except in the particulars herein set out. We even accept, for this purpose, the (1) major error, the revenue basis for property, without deductions; and accept the revenue basis for the expenses where it was applied with the 50 per cent excess allowed, as he said should be on the freight and 3.48

per cent on the passenger. Our correction of his base on this, merely makes clear the allowance of the 50 per cent excess of the intrastate, for which he says credit must be taken. The division of maintenance-of-way expenses between freight and passenger is on the revenue basis instead of train mile basis. It can hardly be doubted that, in the face of the condemnation of the train mile basis, that the Court would have used it if his attention, at the time, had been called to the fact that the sums apportioned where he began his plans were obtained through that basis. Certainly when he decides on the revenue basis as the most accurate between interstate and intrastate, it necessarily follows that it is also the most accurate between freight and passenger.

The actual percentages of October of the interstate and intrastate traffic found on the local and through trains are used instead of the percentages assumed for this purpose by the Court. Except in this respect, this exhibit only carries out the rules of apportionment and findings of fact indicated by the Court as the method to pursue in obtaining the relative cost and return on the property. In taking the actual percentages of October, instead of the assumed ones, we are merely following what we confidently believe this Court will adopt in that regard.

This exhibit may be examined, therefore, as one applying the methods and rules and findings of the Court, with one exception.

## COMMENTS REGARDING EXHIBIT "DD," EXHIBIT "EE," EXHIBIT "FF."

In these exhibits, the expenses have been distributed on bases laid down by Judge Trieber in his opinion, dated May 3, 1911, viz:

First. The total maintenance-of-way and structure expenses and the total value of the property have been divided between "freight" and "passenger" on the basis of the total revenue derived from each class of service as shown by exhibit No. 3.

Second. The "freight" and "passenger" expenses have, in turn, been divided between State business and interstate business on various bases prescribed by Judge Trieber, as follows:

### FREIGHT.

The maintenance-of-way and structure expenses applicable to the freight business have been divided between State and interstate on the basis of the earnings derived from each class of business after equalizing the revenue by eliminating from the State revenue the 50 per cent excess of State revenue over interstate revenue determined by Judge Trieber.

The figures given in Judge Trieber's opinion covering the division of maintenance-of-equipment expenses between State and interstate have been used.

Traffic expenses have been divided on the revenue basis after equalizing such revenue by eliminating from the State revenue the 50 per cent excess of State revenue over interstate revenue determined by Judge Trieber.

The figures given in Judge Trieber's opinion covering the division of the transportation expenses have been used except that in the case of "other train expenses" divided by Judge Trieber on a revenue basis, allowance has been made for the excess of 50 per cent of State revenue over interstate revenue. The item of "supervision and general" under transportation expenses has been apportioned on the basis used by Judge Trieber, but the amounts are somewhat different on account of the change in the direct charges resulting from the adjustment of the figures for "other train expenses."

General expenses have been divided on the basis used by Judge Trieber, but the amounts apportioned to the different accounts have been changed slightly as a result of the corrections made in the preceding figures already mentioned. It will be noted that under this method of distribution, no proportion of the general expenses is charged to "maintenance-of-ways and structures."

The division of the total expense of "local" and "through" trains between State and interstate has been made on the basis of the freight actually handled (local trains 26 per cent State, and 74 per cent interstate, and through trains 4.96 per cent State, and 95.04 per cent interstate) instead of on the basis used by Judge Trieber (local trains 60 per cent State, and 40 per cent interstate, and through trains 1 per cent State, and 99 per cent interstate).

Taxes and rentals have been apportioned on the basis followed by Judge Trieber after making allowance for the excess of 50 per cent of State revenue over interstate revenue as determined by Judge Trieber.

Hire of equipment has been apportioned on the basis followed by Judge Trieber by making an allowance of 30 per cent against the State freight, to cover the additional cost of State traffic; after first equalizing the revenue by allowing for the 50 per cent excess of State revenue over interstate revenue as determined by Judge Trieber.

PASSENGER.

The operating expenses applicable to the passenger business have been apportioned between State and interstate and miscellaneous on the basis followed by Judge Trieber as stated in his opinion by first eliminating from the State revenue the excess of 3.48 per cent of State revenue over interstate revenue as determined by Judge Trieber and then by adding 10 per cent to cover the "10 per cent additional cost" of doing State business as determined by Judge Trieber.

Taxes, rentals, hire of equipment, dining car deficit and value of property have been apportioned on a revenue basis after equalizing such revenue by eliminating from the State revenue the excess of

## STATE OF ARKANSAS—RATE MATTER

## ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY

**Statement of Freight Operating Expenses in Arkansas—For the Six Months Ended December 31, 1907—Divided Between Local and Through Train Service and Between Intrastate and Interstate Business.**

| | TRAIN COSTS | | OTHER COSTS | | |
|---|---|---|---|---|---|
| | Local | Through | Intrastate | Interstate | Total |
| 1—MAINTENANCE OF WAY AND STRUCTURES, | ..... | ..... | $ 72,409.45 | $ 701,195.77 | $ 773,605.22 |
| 2—MAINTENANCE OF EQUIPMENT: | | | | | |
| (a) Locomotives: | | | | | |
| (1) Yard, | $ 13,453.83 | $ 55,681.97 | ..... | ..... | $ 69,135.80 |
| (2) Road, | 43,733.35 | 70,807.25 | ..... | ..... | 114,540.60 |
| (b) Freight Cars, | 94,684.51 | 318,695.22 | $ 16,561.23 | $ 47,954.68 | 477,895.64 |
| (c) Supervision and General, | 14,202.89 | 41,625.12 | 1,546.48 | 4,484.80 | 61,859.29 |
| Total Maintenance of Equipment, | $166,074.58 | $ 486,809.56 | $ 18,107.71 | $ 52,439.48 | $ 723,431.33 |
| 3—TRAFFIC EXPENSES, | ..... | ..... | $ 8,305.54 | $ 80,428.88 | $ 88,734.42 |
| 4—TRANSPORTATION EXPENSES: | | | | | |
| (a) Station Expenses, | ..... | ..... | $ 99,198.00 | $ 134,428.94 | $ 233,626.94 |
| (b) Yard and Terminal Expenses, | $ 57,085.42 | $ 236,262.07 | ..... | ..... | 293,347.49 |
| (c) Fuel and Locomotive Expenses, and Road, Enginemen and Trainmen, | 238,060.24 | 451,170.33 | ..... | ..... | 689,230.57 |
| (d) Enginehouse Expenses, | 15,194.55 | 38,439.58 | ..... | ..... | 53,634.13 |
| (e) Other Train Expenses, | ..... | ..... | 12,384.48 | 119,928.39 | 132,312.87 |
| (f) Loss and Damage—Freight, | ..... | ..... | 30,972.08 | 96,537.35 | 127,509.38 |
| (g) Supervision and General, | 9,415.15 | 22,018.19 | 4,324.75 | 10,644.83 | 46,402.92 |
| Total Transportation Expenses, | $319,755.36 | $ 747,890.17 | $146,879.26 | $ 361,539.51 | $1,576,064.30 |
| 5—GENERAL EXPENSES, | $ 28,850.02 | $ 77,717.88 | $ 7,166.23 | $ 18,484.11 | $ 132,218.24 |
| 6—TOTAL OPERATING EXPENSES, | $514,679.96 | $1,312,417.61 | $252,868.19 | $1,214,087.75 | $3,294,053.51 |
| 7—DIVISION OF TRAIN COSTS BETWEEN INTRASTATE AND INTERSTATE BUSINESS: | | | | | |
| (a) Local Trains: | | | | | |
| (1) Intrastate Freight—26.00% of Total, | 133,816.79* | ..... | $133,816.79 | ..... | ..... |
| (2) Interstate Freight—74.00 of Total, | $380,863.17* | ..... | ..... | $ 380,863.17 | ..... |
| (b) Through Trains: | | | | | |
| (1) Intrastate Freight—4.96% of Total, | | 65,095.91* | 65,095.91 | ..... | ..... |
| (2) Interstate Freight—95.04% of Total, | | $1,247,321.70* | ..... | 1,247,321.70 | ..... |
| 8—TOTAL COST OF INTRASTATE AND INTERSTATE BUSINESS, | | | $451,780.89 | $2,842,272.62 | $3,294,053.51 |

EXHIBIT "DD"

*In Red Ink on Original Exhibit.

DARK PAGE BLEED THRU

STATE OF ARKANSAS—RATE MATTER

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY

Statement of Passenger Operating Expenses in Arkansas—For the Six Months Ended December 31, 1907—Divided Between Intrastate, Interstate and Miscellaneous Business

| | |
|---|---|
| 1—MAINTENANCE OF WAY AND STRUCTURES, | $ 281,071.29 |
| 2—MAINTENANCE OF EQUIPMENT: | |
| (a) Locomotives, | $ 166,461.61 |
| (b) Passenger Train Cars, | 87,099.15 |
| (c) Supervision and General, | 58,573.98 |
| Total Maintenance of Equipment, | $ 312,134.74 |
| 3—TRAFFIC EXPENSES, | $ 53,276.08 |
| 4—TRANSPORTATION EXPENSES: | |
| (a) Station Expenses, | $ 59,381.44 |
| (b) Yard and Train Expenses, | 549,069.76 |
| (c) Loss and Damage—Baggage, | 1,653.31 |
| (d) Supervision and General, | 40,476.06 |
| Total Transportation Expenses, | $ 650,580.57 |
| 5—GENERAL EXPENSES, | $ 160,767.19 |
| 6—TOTAL OPERATING EXPENSES, | $1,457,829.87 |

Above Expenses distributed between State, Interstate and Miscellaneous on the revenue basis after equalizing the excess of 3.48% realized from State business over Interstate business and allowing for 10% excess cost of State business over Interstate business as per Judge Trieber's opinion as follows:

| | | | |
|---|---|---|---|
| STATE, | $ 836,542.20÷103.48%=$808,409.55+10%=$ | 889,250.50= 48.08% of $1,457,829.87=$ | 700,924.60 |
| INTERSTATE, | 568,476.21 | 568,476.21= 30.74% of 1,457,829.87= | 448,136.90 |
| MISCELLANEOUS, | 391,869.47 | 391,869.47= 21.18% of 1,457,829.87= | 308,768.37 |
| TOTAL, | $1,796,887.88 | $1,849,596.18=100.00% of $1,457,829.87= | $1,457,829.87 |

EXHIBIT "EE"

## STATE OF ARKANSAS—RATE MATTER

## ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY

**Statement of Revenue, Expenses, Net Earnings, and Return upon the Value of the Property in Arkansas—For the Six Months Ended December 31, 1907—With Miscellaneous Earnings, Taxes, Rentals, Hire of Equipment, Dining Car Deficit, and Value of Property Divided Between the Various Classes of Business on a Revenue Basis.**

| | FREIGHT | | | PASSENGER | | | | |
|---|---|---|---|---|---|---|---|---|
| | State | Interstate | Total | State | Interstate | Miscellaneous | Total | Total Business |
| 1—REVENUE: | | | | | | | | |
| (a) Freight, Passenger, and Miscellaneous Passenger, | $ 640,248.17 | $ 4,133,210.33 | $ 4,773,458.50 | $ 836,542.20 | $ 568,476.21 | $ 391,869.47† | $1,796,887.88 | $ 6,570,346.38 |
| (b) Miscellaneous Freight, | 16,469.41 | 106,345.00 | 122,814.41 | ..... | ..... | ..... | ..... | 122,814.41 |
| Total Revenue, | $ 656,717.58 | $ 4,239,555.33 | $ 4,896,272.91 | $ 836,542.20 | $ 568,476.21 | $ 391,869.47† | $1,796,887.88 | $ 6,693,160.79 |
| 2—EXPENSES: | | | | | | | | |
| (a) Operating Expenses | $ 451,780.89 | $ 2,842,272.62 | $ 3,294,053.51 | $ 700,924.60 | $ 448,136.90 | $ 308,768.37 | $1,457,829.87 | $ 4,751,883.38 |
| (b) Taxes, | 15,251.72 | 147,693.97 | 162,945.69 | 27,055.54 | 19,027.68 | 13,119.27 | 59,202.49 | 222,148 .18 |
| (c) Rentals, | 1,505.51 | 14,579.05 | 16,084.56 | 2,670.69 | 1,878.25 | 1,295.01 | 5,843.95 | 21,928.51 |
| (d) Hire of Equipment, | 21,216.27 | 157,975.19 | 179,191.46 | 472.53* | 332.33* | 229.13* | 1,033.99* | 178,157.47 |
| (e) Dining Car Deficit, | ..... | ..... | ..... | 695.07 | 488.83 | ..... | 1,183.90 | 1,183.90 |
| Total Expenses, | $ 489,754.39 | $ 3,162,520.83 | $ 3,652,275.22 | $ 730,873.37 | $ 469,199.33 | $ 322,953.52 | $1,523,026.22 | $ 5,175,301.44 |
| 3—NET EARNINGS, | $ 166,963.19 | $ 1,077,034.50 | $ 1,243,997.69 | $ 105,668.83 | $ 99,276.88 | $ 68,915.95 | $ 273,861.66 | $ 1,517,859.35 |
| 4—ASSESSED VALUE OF PROPERTY DOUBLED, | $1,372,650.77 | $13,292,421.58 | $14,665,072.35 | $2,434,991.81 | $1,712,486.58 | $1,180,731.26 | $5,328,209.65 | $19,993,282.00 |
| 5—PERCENTAGE OF NET EARNINGS TO VALUATION, | 12.16% | 8.10% | 8.48% | 4.34% | 5.79% | 5.84% | 5.14% | 7.59% |

### SUMMARY

| | TOTAL STATE BUSINESS | TOTAL INTERSTATE BUSINESS | TOTAL MISCELLANEOUS BUSINESS |
|---|---|---|---|
| NET EARNINGS: | | | |
| Freight, | $ 166,963.19 | $1,077,034.50 | ..... |
| Passenger, | 105,668.83 | 99,276.88 | $ 68,915.95 |
| Total, | $ 272,632.02 | $1,176,311.38 | $ 68,915.95 |
| ASSESSED VALUE OF PROPERTY DOUBLED: | | | |
| Freight, | $1,372,650.77 | $13,292,421.58 | ..... |
| Passenger, | 2,434,991.81 | 1,712,486.58 | $1,180,731.26 |
| Total, | $3,807,642.58 | $15,004,908.16 | $1,180,731.26 |
| PERCENTAGE OF NET EARNINGS TO VALUATION, | 7.16% | 7.84% | 5.84% |

†INCLUDES:

| | |
|---|---|
| Dividend from Pacific Express Company, | $15,984.00 |
| Rents from Passenger Station at Little Rock, | 2,100.00 |
| Total, | $18,084.00 |

*In Red Ink on Original Exhibit.

EXHIBIT "FF"

3.48 per cent of State revenue over interstate revenue determined by Judge Trieber.

The additions made by the Court raises the return on the whole property to 7.59 per cent instead of 7.50 per cent under the former exhibits. This is distributed intrastate 7.16 per cent, interstate 7.84 per cent, mail and express 5.84 per cent.

There are many bases used in this formula which we earnestly insist are unjust to the State, and will be briefly referred to as minor errors. With them included, however, this return of 7.16 per cent is not confiscatory. With them or any of them modified to the relief of the State these percentages of the return will be increased and some of them are quite large items and will materially raise this return if corrected.

## MINOR ERRORS.

(a) The omission to charge the Iron Mountain with fair rent of the Bunch elevator; the charge of fines for crimes to operating expenses; the inclusion of Memphis and Fort Smith terminal expenses, the charge of any part of the various other matters heretofore discussed under the head of Errors in Exhibits are referred to, without repetition, as part of the errors now under discussion.

*Errors in Exhibits Heretofore Discussed.*

(b) Starting and stopping injuries have been discussed, and also the error of assuming that through trains only stop every 35 miles, has been presented.

(c) Terminal handling of transstate cars. While rejecting the "bridge theory," the Court mistakenly, we believe, works out a difference in their favor. We will not rediscuss the evidence which we have heretofore presented on that issue. The judge quotes from the testimony of Moore as to certain switching of a train at Little Rock, but that was Red Ball No. 55, the fast preferred merchandise train, which half a dozen trainmen swore was not typical of the through trains.

*Terminal Handling.*

The judge refers to Mr. Lincoln and Mr. Parker, saying that transstate freight ought not to be charged with terminal expenses.

In distinguishing intrastate, interstate and transstate, Mr. Lincoln stated that there would be no terminal service in the State on the transstate. (R. p. 965.)

No one questions this for a moment; the word is used in many senses; in this one meaning the origin and destination of the shipment.

There is a terminal service in division yards which is thoroughly explained by Mr. Lincoln, Mr. McCutcheon, Mr. Moore, and proved by Mr. Hamilton's records; that is the breaking up of trains there and switching them and remaking trains for them.

These are called yard and terminal expenses under transportation expense and also yard locomotive expenses under maintenance-of-equipment expenses. (See exhibit "M," p. 2521.) These are the expenses complained of when the State counts the transstate cars with the other cars handled in the division point.

Mr. Parker called attention to the difference between terminal handling and station handling, and says that transstate will receive same station service in the State, checking cars, recording passing cars, telegraphing, etc., but not as much as intrastate. (R. p. 1171.)

These expenses are (a) under transportation in the State's exhibits and are divided on the ton basis. The transstate tons are 33 per cent (ton-mileage 51, exhibit 26). It would be unfair to charge this traffic equally with one for the interstate and two for the intrastate if it were not for compensating equivalents. Memphis and Fort Smith tonnage, grain, cotton and lumber, are only counted as one ton as against two intrastate, and they are two (and grain and cotton often three); so by large and small the State's witnesses say where the interstate is overcharged on this item for transstate it more than gains on undercharges for these. We have gone into this tediously because the judge's discussion of these items at pages 2026 to 2028, shows a misconception of the plan adopted by the State. This confusion is followed into the calculations made by the accountants under his direction. (R. p. 2641.) The State's plan for expenses of repairs to yard locomotives is adopted under maintenance-of-equipment, but when the engineer and fireman running them have to be paid, under yard expenses of "conducting transportation," they are split into various percentages, dependent on amount of station service received at the terminals; whereas, the item is not for station service, but for handling the cars at division points where yard locomotives are maintained. He cuts out all the transstate, 51.16, under this. Even the author of the bridge theory admits that the engines and cabooses were changed at division points.

*Traffic Expenses.*

(d) The Court says: "The accountants for all parties agree that these (traffic) expenses should properly be divided on a straight revenue basis." (R. p. 2628.) Mr. Wharton testifies that he had used this basis, but it was not correct and unfair to the State, but owing to the way the statistics were kept he could get no actual apportionment of it; and he was not able to work out any correct method as the books then stood. He merely used the railroad basis in the absence of data for a better one.

He said that the State traffic being largely noncompetitive and not requiring the service of traffic men generally, this basis unduly burdened the State. (R. p. 1010.) Mr. Ludlam testified to the same effect and several other of the State's witnesses, and so did Mr. Ward. (R. p. 1890.)

(c) The Court says station expenses should be divided on the ton mileage charging the intrastate with six terminal handlings. (R. p. 2628.) What connection there is between expenses at stations and the mileage between them is incomprehensible to us. We have heretofore discussed this at length.

*Station Expense*

The Court ascertains in some way the cost of fuel and wages per train mile, on the through and on the local, and a difference of 47 per cent. Mr. Kimbell got accurately the fuel and wages for October, 1908, on his road and Mr. Hamilton found the wages for October, 1907, on the Iron Mountain. The records of the Iron Mountain were so kept that for a period in the past the actual fuel consumed for the month was unascertainable. Mr. Doddridge had been General Manager of both of these roads and, when he was on the stand in behalf of the plaintiffs, he was asked as to whether the actual fuel consumption on local and through trains on the Southwestern would be applicable to the Iron Mountain and said, "I presume that those proportions would be applicable in a general sense." (R. p. 515.)

*Fuel and Wages.*

Mr. Roberts also testified the test on the one road would fairly represent the other in this respect. (R. p. 2114.)

We submit that actual results should be accepted.

(g) The item of other train exepness, such as expense for signaling, wrecks, cattle killed, etc., the State apportioned on the train mile basis; believing that such items as these were incurred by the trains as a whole and in proportion to the miles it ran. This is one item to which the train mile would naturally apply. The Court adopts the revenue basis for this. (R. p. 2629.)

*Other Train Expenses.*

(h) The Court charges 30 per cent extra to the intrastate for hire of equipment on the ground that the cars used in local trains are delayed much more by reason of slow schedules, and shippers allowed 48 hours for unloading. (R. p. 2630.) If this was a charge to the local train and apportioned according to the traffic, it might not be so far amiss as charging it to the intrastate, which is done, and that on the revenue basis. (R. p. 2646.) That in proper operation there is more delay to equipment on local trains than through is unquestionably the case; but, say at Morrilton, there is no more delay on a car of merchandise delivered there which came from St. Louis than a similar car which came from Little Rock. But ideal conditions do not prevail on this road, and the local should not be charged with extra cost in this matter in the face of the undisputed record evidence that the transstate cars in passing through the State were delayed on an average in March, 1907, four days over schedule, and in October, 1907, five days over schedule.

*Hire of Equipment.*

Moreover, the evidence of Mr. Bee for the State and Mr. Whitenton for the railroads show that the interstate movement of cotton entails more delay in equipment than any other movement.

(i) The Court considers what he terms omissions from the State's plan of dividing expenses. (R. p. 2630.) The first is the dead weight on local trains is more than on through trains. This is true, but when the expense of the local train is fairly divided by the traffic carried on it, whether dead weight or wages or other expense it bears, is measured between the interstate and intrastate. This is equally true of the other items mentioned by the Court in this connection. They are all items relating to local trains, and had he added the 8.5 per cent which he finds these items represent to the cost of the local train and then apportion it over its load, we would not complain although his data is insufficient for a basis, but this is added directly to the intrastate.

*Omissions.*

(j) The Court says: "There is no charge on part of the State that these roads are not efficiently, economically and honestly managed." (R. p. 2634.) Surely the State failed to make its position clear to the Court. It put the plaintiffs' allegations in this regard directly in issue in the answer. It denied economy in operation; it denied that no unreasonable salaries or wages have been paid officers and employees. (R. p. 25.) We called for explanations of the high operating ratio of Mr. Johnson and Mr. McPherson. We put in evidence exhibits showing cost of operation had decreased generally and efficiency and power in equipment had increased. We put in evidence the favoritism to Pratt's hotel and Bunch elevator, whereby the revenues were depleted $22,000 per annum. We put in evidence a fine for violating the criminal laws of $10,000 and costs. We put in evidence a salary paid to a man notoriously known in the criminal courts as a corrupt lobbyist, and other salaries paid to men in Missouri, part of which were distributed against Arkansas, whose duties officially in Arkansas were unknown to officers of the company. We put in evidence the improvident contract with the Frisco road for the Van Buren bridge, and we put in evidence the express company contract and proof that the Missouri Pacific had received $144,000 a year and unjustly withheld $30,000 of it a year from the Iron Mountain revenues for 20 years, and the Court so found. (R. p. 2603.) Certainly this evidence is sufficient, at least, to acquit the State of giving the Iron Mountain a clean bill of health on its economical and efficient management.

*Management of The Road.*

## NO RETURN SHOULD BE ALLOWED ON NEW LINES.

The Iron Mountain recently constructed a new line, the purpose and character of it is thus stated in the opinion:

"The main line of the Iron Mountain railroad is practically a water level road; no mountains to cross, no rocks to blast or tunnels to

excavate, and the leading commercial cities and industries of the State are along its line. On the other hand the White River Branch of that road was the most expensive road ever constructed in the State. Miles of it had to be cut out of rock and tunnels cut through rocky mountains; there are no large cities along its line, and the country is sparsely settled owing to the heavy grades and the many curves made necessary by the topography of the country; it can not possibly carry as many cars to a train and transport freight as economically as the main line. The State officials, charged by law with the duty of assessing the property, must have taken these facts into consideration when they assessed those railroads. The White River Branch, in spite of its great cost, was in 1907 valued by that board at $19,000 per mile and assessed on the basis of 50 per cent of its value at $9,500, while the main line was valued at $45,000 per mile and assessed at 50 per cent of that sum at $22,500 per mile." (R. p. 26.)

The evidence shows it was finished in 1906, the year before the period of inquiry, and that it is chiefly used as a through line from the Northwest to the Gulf; most of the grain transstate traffic passes over it.

Should such a branch in its experimental state be considered an integral part of the system, weighing down on one side the expense account with its heavy maintenance account, and on the other the sparse intrastate revenue, and adding its assessment, even if a low one, to the property upon which the return upon the whole shall be compensatory?

We appeal to the principle decided in San Diego Land & I. Co. v. Jasper, 189 U. S. 439, to the effect that where a plant is built on larger lines than immediately needed, that neither the Constitution nor justice require the patrons of the other part of the plant to pay full return on the whole. In discussing the rate of return we have heretofore referred to this matter, and believe that in weighing the whole case, it should be decided that the Iron Mountain eliminate it from its property, and eliminate its revenue and expenses on this expensive new branch before it should be heard to complain of the rates as a whole.

## SWEEPING EFFECT OF FINAL DECREE.

Attention is called to the sweeping effect of the final decree and the assignment of error predicated thereupon.

Any and all rates in Standard Distance Tariff No. 3 are enjoined. Under its terms no rate therein or provision of that tariff can be enforced. If as a whole the rates therein are confiscatory, the injunction should go against a system of rates not producing more revenue than this system, but to absolutely prohibit any and all rates therein from ever being in force is, we submit, too sweeping. The clause for retention of jurisdiction is more broad than the form adopted by Judge Brewer in Ames v. Union Pacific, which met the

approval of this Court in Smythe v. Ames, and to that form it should be restrained, if by peradventure any injunction should be sustained.

## THE VALUE OF THE PROPERTY.

One of the troublesome problems in rate litigation is to establish the fair value of the property, but, fortunately, by terms of the bill and express stipulation of parties, that difficulty is removed from this case.

## STIPULATION OF COUNSEL AS TO VALUE OF THE PROPERTY.

"It is agred by counsel for defendant in these cases that the assessments introduced in evidence at the hearing of applications for injunction in these cases before Judge VanDeventer, and which are set out in the exhibits filed by the acocunting officials of the respective complainants in the evidence taken before the master in these cases, were made upon the basis of 50 per cent of the value of the property and that said asesssments, multiplied by two, respectively, represent the value of the property for the purpose of this case. Counsel for complainants have also introduced the assessments made by the Tax Commission of the State of Arkansas of the property of each of the complainants in the year 1909; which assessments are set out in the respective statements filed as exhibits in these cases by the accounting officials of each of the complainants.

Counsel for defendant objects to the competency and admissibility of said statements, as to the assessments made in the year 1909.

But if said statements are admitted as competent, it is then agreed that they were made on the basis of 50 per cent of the value of the property; and that in order to represent the full value they should be multiplied by two.

It is further understood that the defendants are not concluded by this agreement to object to any consideration of any items included in the assessments which the defendants claim should not be included therein, which has heretofore been brought out in evidence or which may hereafter be brought out in evidence." (R. pp. 655-654.)

In Willcox v. Consolidated Gas Co., 212 U. S., p. 52, the Court said:

"And we concur with the Court below in holding that the value of the property is to be determined as of the time when the inquiry is made regarding the rates."

Therefore the evidence of the 1909 assessment and the numerous calculations based upon it in plaintiffs' exhibits will be disregarded and the valuation considered as of the period of inquiry—1907.

## THE ASSIGNMENTS OF ERRORS.

We have presented the case in what has seemed to be the logical and orderly arrangement of the subjects without following the order of the assignments of errors.

The appellants have properly assigned error for each matter herein presented as error. (See Assignments of Error, R. pp. 2650-6655.)

There are some assignments of errors upon matters not herein discussed, but which are not intended to be waived. There is so much detail in the case that a separate discussion of each point would necessitate repetition, and where matters of like nature are covered in other discussion we have not repeated it in regard to some of the detail upon which error is assigned.

It is respectfully submitted that for the errors assigned that the decree should be reversed, the injunctions dissolved and the bills dismissed for want of equity.

Respectfully,

JOSEPH M. HILL,

*Special Counsel.*

# TOPICAL INDEX


Page

## A CONCISE STATEMENT OF THE CASE

THE PLEADINGS ..... 2
- The complaint ..... 2
- The answer ..... 3
- The temporary injunction ..... 4
- Motion to dissolve ..... 5
- Premature suit ..... 6

A STATEMENT OF THE EVIDENCE ..... 8
- Plaintiff's evidence on the revenue theory ..... 8
- Extra cost ..... 9
- Relation of rates ..... 9

THE STATE'S SIDE OF THESE CONTENTIONS ..... 10
- State's evidence on revenue theory ..... 10
- Extra cost ..... 10
- Relation of rates ..... 12

THE STATES PLAN OF SEPARATING EXPENSES ..... 14
- Freight Division ..... 16
- Passenger Division ..... 17

THE PLAINTIFF'S CASE IN REBUTTAL ..... 18

THE DEFENDANT'S CASE IN SURREBUTTAL ..... 21

OPINION OF THE TRIAL COURT ON THE BASES ADOPTED ..... 22

ASSIGNMENT OF ERRORS ..... 23

## ARGUMENT

ARGUMENT ..... 29

INTERFERENCE WITH INTERSTATE COMMERCE ..... 30

INTERFERENCE WITH INTERSTATE RATES ..... 37

DIVIDING THE PROPERTY ON THE REVENUE BASIS ..... 41

SUIT PREMATURELY BROUGHT ..... 45

QUANTUM OF PROOF NECESSARY TO SUSTAIN AN ATTACK ON THE CONSTITUTIONALITY OF THE RATES ..... 48
- Opinion evidence insufficient ..... 51

THE EXHIBITS ALONE SHOW THAT THE PLAINTIFFS FAIL ..... 56

RATE OF RETURN ON THE PROPERTY ..... 68

DIVIDENDS AND INTEREST ..... 71

AN ANALYSIS OF SMYTHE *v.* AMES, 169 U. S. 466 ..... 79

C. M. & ST. P. RY. CO. *v.* TOMPKINS, 176 U. S. 167, ON THE REVENUE BASIS ..... 83

THE EVIDENCE ON THE REVENUE THEORY—
Explanation and application of the revenue theory ..... 88
Agreed valuation of the property ..... 89

THEORETICAL SIDE OF THE REVENUE BASIS ..... 94
Plaintiff's evidence ..... 95

THE THEORETICAL SIDE OF THE REVENUE BASIS ..... 116
The State's evidence ..... 116
Ludlam's analysis of revenue theory ..... 122

THE RELATION OF THE RATES TO THE COST OF SERVICE ..... 133
The general proposition ..... 133
Plaintiff's evidence ..... 134

THE RELATION OF THE RATES TO THE COST OF SERVICE ..... 147
The defendant's evidence ..... 147
Testimony of Albert Frick in Smyth v. Ames ..... 171

THE STATE'S DEMONSTRATIVE EVIDENCE ON COST OF SERVICE 172
Zone rates ..... 173
Division of rates ..... 181

THE RELATION OF THE INTERSTATE AND INTRASTATE RATES—
Plaintiff's evidence ..... 187

THE RELATION OF THE INTERSTATE AND INTRASTATE RATES—
Defendant's evidence ..... 197
Nonrelation graphically explained ..... 199

EXTRA COST OF INTRASTATE TRAFFIC ..... 218
The plaintiff's evidence ..... 219

EXTRA COST OF INTRASTATE—
State's opinion evidence ..... 234

THE "BRIDGE THEORY" OF TRANSSTATE TRAFFIC ..... 238

AS TO EXTRA INTRASTATE PASSENGER TRAFFIC ..... 256

TRAIN-MILE DIVISION OF MAINTENANCE-OF-WAY BETWEEN PASSENGER AND FREIGHT TRAFFIC ..... 261

Plaintiff's evidence ..... 267
Defendant's evidence ..... 271
Decisions on the train-mile basis ..... 275

COMMENTS REGARDING EXHIBITS "AA" "BB" AND "CC." ..... 280

OTHER ERRORS IN PLAINTIFFS EXHIBITS ..... 281
Memphis expenses charged to Arkansas ..... 282
The Fort Smith terminals all charged to Arkansas ..... 286
The Paragould trackage ..... 288
The Bunch Elevator ..... 289
Pratt Hotel rental ..... 291
Express Company dividends ..... 291
The fine of $10,000 ..... 292
Salaries to lobbyists ..... 293
The Van Buren Bridge ..... 294
Erronous division of expenses ..... 294

THE TEST MONTHS— 297
The St. L. S. W. Railway test month 298
The Iron Mountain test month 305
Plaintiff's evidence of normality of period 309
A traffic opinion of using one month to test 311
Whitenton's test month 311

THE ATTACK ON THE VALUE OF TEST MONTHS 314

THE USE OF ONE MONTH'S TEST—
Attack on using one month 314
Gray estops plaintiff's in their attack on test months 317
Was October 1907, a congested month? 319

STATISTICS DEMONSTRATE OCTOBER NORMAL 325
The lapovers 327
The accuracy of exhibit "I" 329

THE STATE'S PLAN OF DIVIDING EXPENSES 331
The forming of exhibit "I". 339
Passenger traffic. 341

THE DETAIL OF THE STATE'S PLAN 344

FREIGHT 344
Maintenance-of-way and structures 344
Maintenance-of-equipments—*A.* Locomotives 345
Maintenance-of-equipment—*B.* Freight cars 346
Maintenance-of-equipment—*C.* Supervision 346
Traffic expenses 347
Transportation—*A.* Station expenses 347
Transportation expenses—*B.* Yard and terminal expenses 347
Transportation expenses—*C.* Fuel and locomotive expenses; road 347
Transportation expenses—*D.* Engine house expenses; road 347
Transportation expenses—*E.* Road enginemen and trainmen 348
Transportation expenses—*F.* Other train expenses 348
Transportation—*G.* Loss and damage—freight 348
Transportation expenses—*H.* Supervision 348
General expenses. 348
Total operating expenses 349
Method of dividing train costs 349

PASSENGER 349
Maintenance-of-way and structures 350
Maintenance-of-equipment—*A.* Locomotives 350
Maintenance-of-equipment—*B.* Passenger train cars 350
Maintenance-of-equipment—*C.* Supervision 351
Traffic expenses 351
Transportation expenses—*A.* Station expenses 351
Transportation expenses—*B.* Yard and terminal expenses 352
Transportation—*C.* Loss and damage—baggage 352
Total operating expenses 352
Between coach and Pullman expenses 352

THE STATE'S PLAN AS A WHOLE 353

MAINTENANCE-OF-WAY—
Car-mile basis 359
Car mile in use by plaintiff roads 359
The attack on the car mile 359
Eminent railroad officials on car-mile basis 360
This court approved car-mile basis 361
Engines 2½ times freight cars 362
Local switching 363

MAINTENANCE-OF-EQUIPMENT—
The car-mile basis the factor ..... 365
Supporting car-mile basis for M. of E ..... 367
The State's experts on M. of E ..... 369

STARTING AND STOPPING EXPENSES ..... 371
The Wellington table ..... 376
The attack on Wellington's table ..... 377
Berry's tables ..... 379
State's evidence on strarting and stopping ..... 381

YARD AND TERMINAL EXPENSES ..... 383
Minor criticisms ..... 387

EXHIBIT 56—
The caricature of the State's plan ..... 387
Ludlam on ton basis for terminal handling ..... 387
Overhead basis for maintenance-of-way ..... 388
The plan as a whole ..... 391

THE CRITICS ..... 392

AN ANALYSIS OF JUDGE TRIEBER'S OPINION ..... 393

THE MAJOR ERRORS IN THE OPINION—
The revenue basis to apportion expenses ..... 394
State and interstate rates and revenue ..... 395
The train mile division of freight and passenger expenses ..... 399
Rejection of test months statistics ..... 400

EXHIBITS CORRECTING THE MAJOR ERRORS ..... 400

COMMENTS REGARDING EXHIBITS "DD" "EE" and "FF" ..... 401

MINOR ERRORS—
Errors in exhibits heretofore discussed ..... 403
Teminal handling ..... 403
Traffic expenses ..... 404
Station expenses ..... 405
Fuel and wages ..... 405
Other train expenses ..... 405
Hire of equipment ..... 405
Omissions ..... 406
Management of the road ..... 406

NO RETURN SHOULD BE ALLOWED ON NEW LINES ..... 406

SWEEPING EFFECT OF FINAL DECREE ..... 407

THE VALUE OF THE PROPERTY ..... 408

STIPULATION OF COUNSEL AS TO VALUE OF THE PROPERTY ..... 408

THE ASSIGNMENTS OF ERRORS ..... 409

IN THE

# Supreme Court of the United States

"THE ARKANSAS RATE CASES."

ROBERT P. ALLEN *ET AL*, RAILROAD COMMISSIONERS ..... *Appellants*

v. No. 814.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY ..... *Appellee*

AND

ROBERT P. ALLEN *ET AL*, RAILROAD COMMISSIONERS ..... *Appellants*

v. No. 813.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY ..... *Appellee*

## SUPPLEMENTAL BRIEF FOR APPELLANTS.

Some matters in the brief of the learned counsel for the appellees require answer in order to make clear the facts. We will confine this brief solely to matters that we think are not sufficiently developed in the former brief, and which the brief of appellees require to be further developed, in order that the Court may arrive at the exact facts in issue. Where possible, reference will be made to pages of our former brief, where the evidence is set forth on both sides, instead of to the record, as it will likely be more convenient.

### APPORTIONMENT OF PROPERTY AND EXPENSES BETWEEN FREIGHT AND PASSENGER TRAFFIC.

Appellees state, at page 19, that they—the plaintiffs—in preparing their statistics, apportioned the value of the property between freight

and passenger traffic, and State and interstate traffic on the basis of gross revenue derived from each kind of traffic, and followed the same rule in division of expenses of operation between the several kinds of traffic. This is a mistake.

Plaintiffs' exhibit 3 (R. p. 2294), shows that they apportioned the property on the gross revenue, but statement 5, of that exhibit (R. p. 2310), shows that maintenance-of-way expenses (in round numbers, a million dollars), is divided between freight and passenger traffic on the train-mile basis. It also shows expenses common to repair of freight and passenger cars is likewise divided on the train-mile basis, and also shows other minor items which aggregate large sums, are likewise so apportioned. In our former brief, beginning at page 261, we discussed this subject at length, and therein show that this change of base from the revenue to train-mile on maintenance-of-way alone worked to the detriment of intrastate traffic, $101,-582.92 (our brief, p. 265), and changed the rate of return on the property from 7.04 per cent, which it would have been on the revenue basis, to 4.70 per cent on this mixed basis (our brief, p. 266). The appellees, in their brief, overlook this mixing of bases and mistakenly state that expenses between freight and passenger are divided on the revenue basis.

## PREPARATION OF OCTOBER STATEMENT.

Appellees say, referring to exhibit 26, "which was prepared by the accountant of the railroad company at the request of the State." In a sense, this is correct, yet (unintentionally), it leaves the wrong impression. The Iron Mountain railroad selected this month as a fairly representative month and worked up the statistics of it which constitute exhibit 26, and put the same in evidence in this case in chief.

Mr. Johnson, its accountant, says that he did so in anticipation of a request of the State for such data. He says when the request came it was for three months' statistics, and that he resisted the application for the same before Judge Trieber, but offered the one month's statistics, which he had already prepared, which he stated at the time he regarded as fairly typical of the period of inquiry. The Judge declined to require him to furnish the three months, and this month was furnished and was later introduced in evidence by the plaintiffs, and was frequently used by the plaintffis in the development of their case in chief, and was used by the State's accountants for the purpose for which it was offered when it came their time to offer evidence. The whole evidence on this subject is set forth in pages 305-313 of our former brief.

The impression left from the statement objected to is that this month was selected by the State, when, as a mater of fact, it was

not selected by the State, but was used by the State for the purpose for which the railroad selected and prepared it and introduced it.

## NORMALITY OF OCTOBER.

At page 21, appellees say: "It was also shown that the movements of State and interstate freight on local and through trains, respectively, in that month, was abnormal." Had counsel said that there was some evidence tending to show this, we would not challenge the correctness of the statement, but when it is stated that it was shown that the movement between State and interstate on local and through freight trains in October was abnormal, we must challenge, positively, the correctness of the statement.

The October statistics were prepared by the railroads as representative of the period. Many of the plaintiffs' witnesses testified that it was representative of the period, and that the movement of interstate and intrastate traffic, and of local and through trains could be fairly tested by one month's statistics. After that evidence was in, the State used the data for the purpose for which the plaintiffs' witnesses said it could be used. Subsequently, in rebuttal, the railroads challenged the normality of October and presented some testimony along the line indicated in the above quotation, but that testimony failed to overcome the railroads' previous testimony; even if it had done so, it was overwhelmed in turn by the undisputed statistics which demonstrated that October was normal so far as train and car movements were concerned, and State and interstate traffic were concerned. The evidence on both sides of this qustion is found on pages 297-331 of our former brief.

It is certainly a curious and probably unprecedented situation that all the evidence on a controverted issue in the case (with the exception of the compilation of the statistics from the plaintiffs' exhibits and books—and those were undisputed), is a conflict between the plaintiffs' evidence in chief, and the plaintiffs' evidence in rebuttal.

## THE LAPOVERS.

In the same connection, at page 21, the appellees attack the correctness of the results obtained in exhibit "I," owing to the lapovers from October to November. They assume that on account of these lapovers the result is unreliable, but overlook the fact that there is a great deal of testimony to the effect that the lapovers from September into October would offset the lapovers from October into November. It is indisputable fact that every period contains lapovers, whether the period is long or short. In any going business there are lapovers, but unless something is abnormal, the lapovers will equalize themselves and the period may be accepted as fairly repre

sentative; and there is no abnormality proved here. On the contrary, normality is demonstrated to exist, and, therefore, the lapover is a negligible quantity.

## INTERFERENCE WITH INTERSTATE RATES.

While differing somewhat as to the evidence touching this subject, each brief gives appropriate reference to the testimony where the evidence relied upon is found, and the Court must settle the effect of the testimony upon it, although the difference between the statement of it in the briefs is not radical. But, beginning at page 30 is an argument based on the geographical location of the cities in Arkansas, and statements as to the effect of intrastate rates upon the interstate rates in and out of these cities, and we feel that we can not pass this argument without challenging the assumptions upon which it is based.

The geographical location of the cities is correctly stated, but the evidence assumed in this argument relating to the rates in and out of these cities is not to be found in the record. The argument is evidently to bring this case within the Minnesota rate situation as found by Judge Sanborn in the Minnesota Rate Case, but the evidence as to the rates in and out of these cities, other than the Memphis situation, which is gone into in much detail, is conspicuous by its absence.

## INCREASED COST OF MATERIALS, LABOR, ETC.

Beginning at page 45, it is argued that there has been no acquiescence in the rates now attacked by reason of the long length of time in which they have been in force, because it is said that the increased cost of material, labor and supplies has rendered rates which might have been reasonable ten years ago, unreasonable at the time of this attack.

This argument is bottomed on the evidence of Mr. McPherson which culminated in his graphic chart, exhibit No. 30, in which he pictorially illustrated the evidence which he gave upon this subject. The error of this argument is dual. It is admitted that there has been increased efficiency in operation within the past ten years. There has been developed greater capacity of locomotives, larger cars, reduced curves and grades, enabling more cars to be carried to the train, and more load in the cars. It is admitted that there has been some increase in the cost of labor, supplies and material. Evidence, statistical or opinion, giving one side only, has no value. It is a question, which has produced the greater effect, the increased cost, or the increased efficiency.

There is another factor that is a necessary one to determine correctly the proposition, and that is the proportionate increase or de-

crease of revenue compared with increased cost and efficiency. Mr. McPherson admits that engines have a greater potentiality of 25 or 26 per cent, and that there is an increase of capacity in freight cars of 20 per cent (appellees' brief, p. 50). At other places, he tells of millions of dollars spent on the improvement of the line in Arkansas in the last ten years, which would necessarily give increased efficiency to operation.

The graphic chart shows decreased revenue, which was explained by Mr. McPherson to refer only to freight revenue, and not to passenger or miscellaneous (R. p. 382). It was shown in Mr. McPherson's cross examination (R. pp. 381, 382), that this necessarily referred to a decrease in interstate revenue. The appellees now say (brief, p. 57), that it is a mistake to assume that the decreased revenue referred to interstate revenue in Arkansas as the line on the chart showing this decreased revenue was for the whole Iron Mountain system, which embraced some five or six States. If this be true, the chart is of less value than we had supposed when we cross examined Mr. McPherson upon it, because it will not do to compare the increased cost of material and labor pertaining to all classes of service in Arkansas with the decreased freight revenue of the entire system consisting of five or six States. It is a comparison of the increased cost so far as it affects one-fifth of the whole with the revenue of the whole.

Mr. McPhrson failed to give the other side of the equation, but the State gave it. The State put in exhibit "Z" (R. p. 2569), which contains all of the elements necessary to a comparison of increased cost of material and labor with the increased efficiency and also with change in revenue for the period selected by Mr. McPherson, *i. e.*, 1897 to 1907. It shows that the improved efficiency taken into consideration with the revenue more than offsets the increased cost of material, supplies and labor and shows the ***net*** increase of revenue per mile on one of the pliantiffs' roads to be increased 69 per cent, and on the other one 163 per cent.

Exhibit "F-1" and "Z" (R. p. 2571), shows year by year from 1897 to 1907, in the entire United States railroad statistics of increased efficiency, and also in Group 8; and of these two roads for 1897 and 1907. The average train load in the United States, in tons, increased from 204 to 357, 75 per cent; on the Iron Mountain, 75.6 per cent; on Southwestern, 83.7 per cent. Receipts per ton-mile decreased in the United States 4.9 per cent; in Group 8, 10.5 per cent; on the Iron Mountain 10.4 per cent; on the Southwestern, .7 per cent.

The load increased 75 per cent in tons, and revenue per ton-mile decreased only 10 per cent, and the freight train mileage increased 36 per cent, and the ton mileage increased 139 per cent. The passenger side also shows similar increased efficiency. In the United States, the passengers per mile increased 37.8 per cent; on the Iron

Mountain, 49.41 per cent, on the Southwestern 57.7 per cent, and the revenue increased on the Iron Mountain, 1.9 per cent; on the Southwestern, .8 per cent, while in Group 8, it decreased 1 per cent, and in the United States decreased .4 per cent. These statistics demonstrate slight decrease in freight revenue per ton-mile, and slight increase per passenger mile, and tremendous gains in efficiency of operation and necessarily tremendous savings, if economically administered, of expenses of operation, notwithstanding increased cost of labor and material. They utterly destroy the one-sided picture presented in the McPhrson chart. But it is said these statistics are of no value because they begin with 1897, the worst year for railroads in their recent history, and compare it with 1907, the best year. That is exactly what the graphic chart does, and these exhibits but supplement the one side of the story told in it for the same period. It was the period for comparison selected by Mr. McPherson. He begins with 1897 when everything was at low ebb, and shows the increase in price of material, labor and supplies from then till 1907. The State begins with 1897, and shows the increase in efficiency, the greater loading per train, the greater train for the engine, the greater number of tons and passengers for the train, the greater mileage for the train, and the ultimate end, the *increased net revenue per train-mile.*

Chart 30 is a bald attempt to show one phase of a subject when there are offsetting elements known to exist, and the offsetting elements are omitted. When they are supplied, it is found that the net result is in favor of the railroads, and, therefore, if the rates were remunerative in 1900 when established, they were more so in 1907, the period of inquiry, and having acquiesced in them for over eight years before attacked, acquiescence should be presumed.

It is said the reduction in passenger fares are not shown in the tables of the State; part of it is, as the two-cent passenger act went into effect in the spring of 1907. Mr. McPherson's chart, however, does not deal with the passenger revenue or miscellaneous revenues, and he so admitted. (R. p. 382.) As the passenger revenue is only 26 per cent of the revenue, and the reduction from three cents to two cents per mile is 50 per cent nominally, yet, actually it was admitted to be only 35 per cent, excursion and other reduced fares not prevailing under the two-cent rate, bringing the reduction to 35 per cent actually; the intrastate passenger is 59 per cent of the passenger traffic (see table, our brief, p. 265); therefore, the two-cent fare reduced by 35 per cent, 59 per cent of 26 per cent of the revenue, or a reduction of 5.25 per cent of the whole, and this not taking into account the increased passenger traffic naturally flowing from the reduction of rates.

It follows that the legislative reduction of 5 per cent of the revenue when the increased efficiency far more than counterbalanced

such reduction, left the earning capacity of the road much greater than when the rates were established in 1900.

## DIVIDENDS.

Exhibit 47 (R. p. 2431), shows the Iron Mountain declared dividends from 1904 to 1907 inclusive, of 10 per cent, and for the fiscal year ending June 30, 1908, 5 per cent. It is said (appellees' brief, p. 61), that the latter embraced our period of inquiry. That is true, but the panic began in October, and was seriously felt from November on to and including June 30, the date that this statement was made out. Mr. McPherson thus described the period when it was most felt: "From April to June, it reached the highwater mark of effect." (Our brief, pp. 309, 310.)

It is fair to assume that but for the blighting effect of the panic in the first part of 1908, the six months after our period of inquiry, that the 10 per cent dividend of previous years would have been maintained for the fiscal year ending June 30, 1908, for the 5 per cent was evidently made prior to January 1, 1908.

On page 61, of appellee's brief, this is said: "It also represents all revenue that accrues from investment. The Iron Mountain railway owns a large part of the bonded indebtedness of other railroads, among them, the Texas & Pacific Railroad, and the earnings of the latter contribute to the dividends of the former." In view of the fact that there are seven thousand pages of typewritten evidence in this case, we hesitate to make the broad statement that there is no evidence in this voluminous record upon any given point, but notwithstanding that hesitation we feel called upon to deny absolutely the correctness of the quoted statement.

So far as we are able to discover, and we speak after careful investigation, there is no evidence whatever in this record that the Iron Mountain owns a large part or any part of the bonded indebtedness of any other road; no evidence that it owns the bonded indebtedness of the Texas & Pacific railroad, and no evidence that the earnings of the latter road contributed to the dividends of the Iron Mountain.

We will not combat for a moment the argument made at page 62, that, notwithstanding the railroad may be making money from other sources, that it is entitled to a reasonable return on the property devoted to intrastate traffic aside from the return it may make on the property devoted to interstate traffic. This was settled in Smythe v. Ames. The fact that the road is paying a large dividend is evidence to be considered in determining whether the plaintiffs have proved that they are losing on their intrastate business.

It has heretofore been shown that the Iron Mountain in Arkansas is costing less to earn a dollar of revenue than the Iron Mountain as a whole is costing, and this is true even after spending magnificent

sums in improving the road and buying equipment in Arkansas, and it is also shown that the revenue per ton-mile and per passenger mile is practically the same in Arkansas as on the system, and also shown that the net revenue per mile on the road is much greater in Arkansas than on the system; it is also shown that the freight intrastate revenue is double that of the freight interstate revenue, and the passenger intrastate revenue appreciably larger than the passenger interstate revenue (brief, pp. 56-59), and also shown by plaintiffs' exhibits that the return on all property in Arkansas is compensatory.

Therefore, the plaintiff must prove an intrastate expense so great as to wipe out the greater intrastate revenue and in addition thereto show that its intrastate expenses are so great that after wiping out this excess in intrastate revenue, they bring down the general level to a return below a compensatory one. If the road, as a whole, was a losing venture, or if the expenses in Arkansas were greater than on the system, or if the return on all business in Arkansas was confiscatory, this might not be difficult, but, in view of these proved facts, it is a pretty large order to fill to prove one part of the business is losing so enormously.

At page 63, of appellee's brief, the falling off in dividends in 1908 is ascribed to the facts of increased cost of material and labor given in Mr. McPherson's testimony, and depicted in the chart. In view of the testimony of Mr. McPherson and other officials of the blighting effect of the panic, especially in the first part of 1908, it seems a far cry to ascribe the falling-off in dividends to any other cause than this one; especially, as the statistics in exhibits "Z" and "F-1" prove the enhanced expenses have been overcome by the enhanced efficiency.

## EFFECT OF THE PANIC.

At page 70, it is said that the panic was not felt in time to affect the business in the last part of 1907, and reference is made to the testimony of Mr. Kimball, at page 160 of the record, to bear out this statement. This occurs in Mr. Kimball's testimony, at that page:

"Q. You did not begin to feel it until about November, you think?

A. I think not.

Q. You did begin to feel it then very severely, and from that time up until the close of this year, 1908, your road was suffering from depression in business, probably, as it never suffered before.

A. Yes. I might add, it affected both classes of business (referring to State and interstate), correspondingly, I should say."

Mr. McPherson says the operating department felt it in December. Mr. Johnson says it began in October, but its effect on the earnings began to be felt in November. (Our brief, p. 310.) Mr. Nay says the panic began in the latter part of October, and the "slump showed up in November" (p. 2075.) The testimony of these auditors,

Nay, Kimball and Johnson, who deal with revenue, conclusively show that the panic was severely felt in November and December—one-third of this six months' period by which these rates are to be tested. At page 68, the statement is made that the State's accountants adopted the last half of 1907 in making up their statements and applied their theory of dividing expenses to it. The State's accountants adopted no period; they merely took the accounts presented by the plaintiffs, and applied their theory of allocating expenses to them. After the plaintiffs presented October as a representative month of the six months' period, and stated that the movement of State and interstate, and local and through trains, could be fairly tested by it, they adopted it as representative of that period. The State has always combatted the fairness of testing these rates on that period. The Southwestern road, in addition to putting in this period, also put in the statistics for the year ending June 30, 1908, but that worsted rather than bettered the situation, as no one will contend for a moment that the rates could be tested on the first half of 1908. The Iron Mountain put in both halves of 1907, but the detail was only put in in regard to the last half and this is shown in exhibit 3 and exhibit 3-A. In fact the case was tried on the statistics of the last half of 1907. It is interesting to note that the rate of return shown by the Iron Mountain on the last half of 1907, according to its own method of computation on the revenue basis mixed with the train-mile basis, shows a return on all the business in Arkansas of 7.50 per cent (R. p. 2818), while the first half of 1907 shows a return of 9.97 per cent. (Ex. 8, R. p. 2334; 8-A, R. p. 2341.)

## IMPROPER CHARGES.

Each brief has developed their side of these controverted items. Our side of it is presented at pages 281-294, and attention will be called only to a few of the matters again. At page 70, of appellees' brief, it is seen that they miss the force of our objection to charging the State with 77 per cent of the expense for repairs to tools. Our contention in regard to this is set forth at page 294 of our former brief.

Regarding the Memphis expense being charged to Arkansas, it is said, at page 77, that if they were not charged to Arkansas, they could not be charged to any account as the road terminates at Memphis. We fail to see the connection between the two propositions. It is stated by appellees that there are many division points near the State lines that serve two States. It is true, and also true that the expenses of the division points are all charged to the States in which they are situated, and that is what we contend should be done in regard to the Memphis expenses. Instead of so doing, 13 per cent of the freight expenses are charged to Arkansas intrastate, and 59 per cent of the passenger expenses are charged to the Arkansas in-

trastate passenger when not a pound of the freight and not a single passenger in or out of Memphis was intrastate, but all interstate; and all the revenue is interstate and so carried in the exhibits in this case.

On the other hand, there are terminal expenses at Fort Smith, whether big or little is not the question. They are recognized to be terminal expenses, and yet no part of them was charged to Oklahoma, although Fort Smith is serving Oklahoma just as Memphis is serving Arkansas. It will not do to say that Fort Smith is a way station and the principle does not apply, for, in the testimony of Mr. Johnson, quoted in our former brief at pages 286-288, he recognizes terminal expenses in Fort Smith, not station expenses only, exactly like terminal expenses in Kansas City where the same question was raised as to charging all the Kansas City terminals to Missouri, in the Missouri rate litigation.

It is not a square deal to charge Arkansas with the Memphis expenses, and also with the Fort Smith expenses. As a matter of fact, Arkansas should bear the Fort Smith expenses, and it would be equalized by terminal expenses in other States being used to serve Arkansas. But there is no warrant for charging the terminal expenses, and all other expenses of part of a road in another State to any part of the Arkansas intrastate.

At page 81, the appellees fall into the same error in regard to the ownership of the Bunch elevator, which the trial court fell into; which has been pointed out in our former brief at page 289.

We assume from the silence of the appellees on the subpect, that they do not further question the correctness of charging the Express Company dividends, and the Pratt Hotel rental to the railroad revenue, although they were omitted in their account upon which they base their case.

## THE REVENUE BASIS.

We can not discuss either the authorities or the evidence on this subject without repetition, and merely call attention to the argument made at page 86, of appellees' brief, to the effect that the interstate rates, save in exceptional instances, do not exceed the combination of the local rates, and this is the condition generally prevailing. We think the evidence fails to prove it; but assume for the argument's sake, that this statement is correct; the rate varies with the length of the haul—the longer the haul the less proportionally the rate. In other words, the rate for 100 miles is not double the rate for 50 miles. Hence, in normal and proper rate-making, the rates for the longer haul should be less than the combination of intervening rates for shorter hauls. Sometimes, as is the instance in this record of the sugar rate, a combination of local rates will prevent an unreasonable rate obtaining; but, in proper rate-making, the combination of the locals would not produce the rate for the longer haul, but

the rate for the longer haul would be made on its own basis, irrespective of the intervening rates, which sometimes have a chastening effect, but should, in proper rate-making, never have a basic effect.

## ZONE RATES.

Beginning at page 94 is a defense of the zone and blanket rates. This would be quite forcible if presented to the Interstate Commerce Commission in defense of their existence, but is wholly beside the inquiry here, which is simply: "Does the revenue produced by them so measure the cost of the traffic moved under them that it may be used as a factor with which to divide the common mass of expenses between such traffic and other traffic moving under graduated distance rates." At page 94 it is said that the same conditions prevail in the Commission tariff that were shown to prevail in the interstate tariffs in this respect. This is a mistake. There is only one zone rate made by the Railroad Commission, and that is on coal. There is a zone rate on coal from the coal field of Western Arkansas, an area of 50 miles in extent, into Little Rock, and the movements out of Little Rock are on the graduated distance tariff. Whether wisely or unwisely, coal is always moved on zone rates, the zone embracing the particular mining territory where it originates. This particular zone rate is different from the others in that it is only effective to the distributing point, and out of it, the graduated distance rates apply. If, however, many zone rates were proved to be in the Commission tariff, it would only prove that the intrastate revenue was as unreliable yardstick to measure costs as the interstate revenue.

At page 109, this subject is again referred to, and it is sought to prove that there are other zone rates existing in the Commission tariff. Sugar is mentioned as one, but that is not a zone rate. It is merely a maximum fixed for all hauls of it over 200 miles. There might be, and doubtless are, some movements under this that would have practically the effect as a zone or flat rate, in disregarding distance for a given length of haul, but they would be few and rare, as the average intrastate haul is 72 miles, and the maximum only applies to hauls over 200 miles. The zone rate is where *all* of the given commodity moves under the same rate from a given territory. This maximum merely indicates that occasionally some movements would occur over 200 miles, where for the last miles of it, the distance would not be regarded in the rate. There are probably some other such maximums in the Commission tariff, but in view of 72 miles being the average State haul, they do not affect the general proposition that there are no zone rates in the Commission tariff save the coal zone rate heretofore referred to.

The rough material rate on lumber is not a zone rate, but a graduated rate where the graduation is longer than in merchandise and other class or rates. The graduations in those is usually every five or

ten miles. In lumber, the graduation is 25 and 50 miles distances, while the interstate lumber zone is 600 miles in diameter. No parity can be found there. Then it is argued, at page 102, that the State rates produce different revenue for the same length of haul where the haul is over two or more lines. This is recognized in all rate-making as proper. It cost more to move freight over two lines than over one for the same distance, and the rates are made correspondingly in all properly constructed tariffs, where commercial and competitive conditions are not controlling, and they are not effective in the Commission tariff, which is bottomed on the distance system, whereas, the interstate rates are bottomed principally on the commercial and competitive conditions. The more inequalities, however, that may be found in the Commission tariff, the worse the revenue produced from it is proved to be as a measure with which to divide the expenses incurred in hauling the whole traffic.

## THE RELATION OF RATES.

At page 103, it is said that the plaintiffs' testimony as to relation of rates does not conflict with the graphic charts put in evidence by Mr. Hamilton. Counsel seek to reconcile their testimony with the actual conditions found by Mr. Hamilton, on the ground that there can be no comparison between short-haul State rates and long-haul interstate rates. If that be true, the whole revenue theory is thereby destroyed. The average State haul is 72 miles, and the average interstate 222. A segment of the revenue from the whole interstate revenue, represented by the haul in Arkansas, is taken with which to measure the cost of the traffic, while the cost incurred in the intrastate or short-haul traffic is measured by the revenue produced from the intrastate rates, which, it is now said, can not be compared with the other. This explanation, however, does not explain the nonrelation of the interstate and State rates as found in the tariffs brought into the testimony by Mr. Hamilton from the tariffs themselves, and many of them are illustrated in the charts. Numerous charts are filed; two only of them are published in our brief to illustrate to the eye the effect of the great mass of testimony on this subject. Turning to the first chart (p. 206, of our brief), which is the simplest of all of them, it is seen the interstate rates run level in each instance, while the State rates are seen to be more or less regular in graduation.

The revenue produced from these rates represents the actual dollars and cents in the statistics in this case of the two classes of traffic over the given section of the road.

The next chart shows even greater nonrelation. For instance, take the third and fourth classes, where the interstate are graduated to some extent, but the graduations are so out of relation to the other graduation that it destroys all chance for parity. The various charts

in the record depict 39 per cent of the Iron Mountain system, and practically all the large movements of traffic carried by the road. It was impracticable and unnecessary to print all these charts. The testimony fully explains the facts, and they are merely to illustrate the facts proved in the record to the eye.

At page 213 of appellee's brief is inserted the table of Mr. Roth, which was introduced for the purpose of proving the relation of rates. We have (at page 179 of our brief), discussed this table and believe have shown it is unreliable and inapplicable; but, accepting it for the argument, what does it prove? Mr. Roth says: "The object of this comparison is to demonstrate that the revenue derived from the handling and hauling of all classes of freight traffic bears a very much closer relationship to the cost of handling these commodities than does the tons one mile." (R. p. 1977.) He says these percentage figures show that the construction of rates generally, State or interstate, is based on the cost of doing business, etc. (R. p. 1980.) Yet there is no cost shown in the table, and this is a mere assumption of Mr. Roth, based upon his grouping of the revenue opposite the ton-miles. All the witnesses agree that there are no cost data for specific commodities. There is no pretense that there is any cost in this table. Mr. Roth gives his opinion as to the relation of cost to revenue as compared with its relation to ton-miles. An examination of the table shows the revenue on the different classes received on the Missouri Pacific system, and that received in the intrastate traffic in Arkansas, are so variant and out of proportion to each other that it is impossible to use the two classes of revenue as a measure of the cost of the traffic and expect to get a result bearing any relation to the subject.

## THE STATE'S BASIS OF DIVIDING EXPENSES.

It is said, at page 158, that the State accepted as correct the railroads' apportionment of expenses to Arkansas, etc., with certain exceptions therein mentioned.

The State never accepted any apportionment of expenses to Arkansas; it merely used the railroad figures to demonstrate a sounder method for apportioning a given amount of expenses to two classes of traffic. This is explained at pages 261-281, of our former brief.

It is argued at length, at page 121, that, owing to the way the books are kept, that some business in October would be missed in exhibit 26, owing to the lapovers in the October, and which would not appear on the books, while the wheel reports would show the actual movements during the month.

This argument overlooks entirely the fact that the same conditions existed in September, and that there would be a corresponding lapover from September into October as from October into November. All the witnesses who discussed the subject on either side of

the case, stated, in more or less emphatic language, that State and interstate traffic moved uniformly. Hence, there is no reason why the lapovers from one month would not equalize the lapovers in another month.

The lapovers do not apply to the car-mile or train-miles; they only apply to the tons and ton-miles. Exhibit 56, filed by the plaintiffs in rebuttal, has in it all the vices of the lapovers which the State's exhibit contained, and also some of its own. (R. p. 2234.)

It is to be noted that the lapovers occur in exhibit 26, the work of the railroads themselves, and not in exhibit "I," which is compiled from it by the State. This is shown in the testimony of Mr. Gray (R. p. 1923.) Attention is called to the testimony of Mr. Roth, when he introduced into evidence exhibit 26, which is set forth fully in our brief at page 305. He was questioned closely by the State as to the accuracy of this exhibit, and whether it was compiled by a competent force; whether the statistics therein could be relied upon, and he assured the Court that it was correctly done by a competent force, and was absolutely accurate, save possibly for clerical errors, and he had taken every precaution to avoid them. (Brief, p. 305.)

The lapovers occur in the revenue of the test period of inquiry as found in the plaintiffs' own exhibits, probably somewhat diluted by being of a longer period than one month, but being a much larger proposition, would be as serious an impairment of their accuracy (if it be an impairment), as those of the the tons for a month's period. This was shown in Mr. Gray's testimony. (R. pp. 1923, 1924.) But, as a matter of fact, the lapovers do not impair the accuracy of these statements. They will occur in all going concerns, and, if the period is normal, the lapovers from one end will equal the lapovers from the other; and when the normality of the period is proved, then necessarily is proved that the lapovers are negligible, and the whole railroad case is dependent on the six months being normal.

Beginning at page 125 is a criticism of Mr. Wharton for originating the plan of dividing expenses because he was not an experienced railroad man, and quite an argument is made discrediting his work on account of his lack of experience in railroad affairs. Mr. Wharton is an accountant. He studied the testimony of the operating officials given in the Missouri Rate Case, and got all information possible from experienced railroad men, and then applied his accountanting skill to the problem before him. If the scheme is a good one, it matters not where it originated. Judge Trieber said it was "the best method of solving these problems that has been called to the attention of the Court." (R. p. 2621.) It was supported in its main lines by Mr. Doddridge, chief witness for the plaintiffs, and by Mr. Rawn, president of the "Monon Route," also a witness for the plaintiffs. It was also supported by many railroad accountants, men of vast experience in the problems to be worked out; it was

supported on the different questions, where it was attacked by men thoroughly familiar with the particular question in controversy. On the mechanical questions, it was supported by master mechanics and roadmasters; on engineering questions, by civil engineers and standard treatises; on switching and train movements, by yardmasters and switchmen, brakemen and conductors. It can not be brushed aside because not planned by a railroad man.

It was planned by an expert accountant, applying his knowledge of accountancy to the facts developed by men familiar with the subject. An accountant would not have to be a wagonmaker in order to devise a cost system for a wagon factory; he would not have to be a merchant in order to devise a cost system for a department store; but he would have to have a knowledge of the principles of cost accountancy and information as to the particular business to which it was to be applied; and that was the principle upon which the State's plan was worked out.

It was opposed and criticised particularly by Mr. Gray, Mr. Ward and Mr. Nay, reinforced in some places by employees and officers of the plaintiffs' roads. Their views were in turn opposed and criticised on mechanical and operating subjects by men far more familiar with these subjects than these officials could possibly be, as they were men on the ground and whose everyday work was in the line upon which their testimony was given.

At pages 134, 135, it is argued that the Iron Mountain test should be disregarded because contrary to the views of operating men as to the proportion of interstate and State freight on local and through trains. The Southwestern test month is appealed to also as a refutation of it, and in this connection the Southwestern test month is referred to as a normal month. It will be noted in passing that the trial court disregarded the Southwestern test month as well as the Iron Mountain test month in regard to the proportion of State and interstate freight on the local and through trains and substituted what we respectfully term arbitrary proportions in lieu thereof. The Southwestern test month was submited to Mr. Sewell, one of plaintiffs' expert witnesses and vice president of one of the Northern Pacific railroads, and he said that in view of the facts therein shown, that his testimony as to the proportion usually carried on local and through of State and interstate traffic would not apply. (Our brief, p. 232.) The undisputed facts in regard to the Arkansas traffic we also submitted to Mr. Rawn, another of their operating experts, and he said his views would not apply to such a situation (p. 230). Mr. Doddridge and Mr. Lincoln, each familiar with the Iron Mountain, said that the local freight train carried more interstate than intrastate traffic. (B. p. 285.) Hence, the result of the analysis of these test months should not have been such a surprise and shock to the plaintiffs.

As a matter of fact, the difference in the essential element between the Southwestern test and the Iron Mountain test is not radical, and one corroborates the other. The Iron Mountain test (exhibit "I," page 2517), shows the local train is made up of 71.49 per cent interstate, and 28.51 per cent intrastate, but this 71.49 per cent interstate is only 8.70 per cent of the total interstate, the balances being carried on the through train. The Southwestern test, exhibit "P," (p. 2541), made up from exhibits 19 and 20, filed by the road itself, shows 7.69 per cent of the total interstate was carried on the local (as against 8.70 of the Iron Mountain), and this 7.69 per cent is 67.34 per cent of the total load of the local as against 71.49 per cent of the Iron Mountain. The only material difference is the amount of intrastate on the through trains. On the Southwestern, only 21.48 per cent of the intrastate is on the through (exhibit "P," p. 2541), while on the Iron Mountain, 60.90 of the intrastate is on the through (exhibit "I," p 2516).

Whittenton's test month on the Rock Island showed 18 per cent of the load of the local was intrastate, and 82 per cent interstate. The 18 per cent represented 60 per cent of the total intrastate freight, and 40 per cent of the intrastate was on the through. (Our brief, p. 312.)

To summarize: On the Southwestern, 67.34 of the load of the local is interstate, on the Rock Island 82 per cent, and on the Iron Mountain 71.49. Surely, the Iron Mountain figures are not so out of line with the undisputed statistics of the other two roads, compiled by their own offices, as to cause the Iron Mountain statistics to be discredited. When you examine the maps of the Iron Mountain system which are in evidence in connection with much testimony upon the point, the reason for larger intrastate traffic on the through train is plain.

Little Rock is the great distributing point for the State of Arkansas. The lines of the Iron Mountain radiate out of Little Rock as the spokes from the hub of the wheel. The division points average 98 miles apart. Some are much shorter. Little Rock to Pine Bluff is 42 miles; all the intrastate traffic going out of Little Rock to division points and beyond them properly go on through trains, and the local trains would carry all the intermediate traffic whether State or intrastate. There is striking similarity in the three tests before you of the load of the local and the fact that the actual figures show more intrastate on the through train than the officials of other railroads expected to find there is not an argument against its correctness, but merely against their knowledge of local conditions.

The greatest clash between opinion and facts, however, was over the load of the local. These faraway experts regarded the interstate on it as negligible, and its load almost entirely intrastate and

largely L. C. L. intrastate. The tests of the three roads show the contrary, and the interstate from 68 to 82 per cent of the load of the local.

The evidence shows that months were spent checking over exhibit "I," and out of over 20,000 cars, errors in only 23 discovered.

If the Cannon-Moore-Brown theory be correct, that an undue amount of interstate traffic was loaded on the local train during October, how can they account for this large amount of intrastate traffic being on the through train in October? The through trains are always, in proper railroad operation, loaded to the full capacity of the locomotive. There is supposed to be no waste on them. It is incomprehensible that interstate traffic would be taken from the through train and put on the local, and intrastate traffic taken off the local and put on the through. But some such shifting of traffic would have to have taken place to give any credence to the Cannon-Moore-Brown theory in face of 60 per cent of the intrastate traffic being carried on the through trains.

## RENAISSANCE OF THE CANNON-MOORE-BROWN THEORY.

As anticipated in our former brief, the appellees relied upon the Cannon-Moore-Brown theory to establish the abnormality of train loading in October. We discussed at length this testimony at pages 319-323 of our brief. The inherent weakness of this theory is shown in their own statements. The statistics set forth at page 323, which were undisputed, demonstrate that the train-miles and the car-miles for October were an exact one-sixth of the six months' period of inquiry, and also demonstrated that the State and interstate traffic moved normally in October, in relation to each other, compared to their respective movements for the six months' period, and hence the overloading of the local with interstate traffic was an impossibility.

The Roth's statistics presented by the appellees in this connection were discussed while considering lapovers. (See p. 323 of our former brief.)

We, again, at the expense of repetition, call the attention of the Court to that fact that the trial court, in disregarding the statistics in the case, and giving credence to the Cannon-Moore-Brown theory, swept away the Southwestern test as well as the Iron Mountain test, and substituted 40 and 60 percentage respectively for the interstate and intrastate load of the local trains.

If we try this case on either the Southwestern test or the Rock Island test, it is as conclusive against the plaintiffs as the Iron Mountain test itself, and there is not a scintilla of testimony—not even from Cannon, Brown or Moore—attacking either the normality of the months in which these tests were made, or the accuracy of the results shown by them; they are plaintiffs' evidence and work, not the State's.

## MAINTENANCE-OF-WAY.

In the conclusion of the argument against the State's plan of dividing maintenance-of-way expense, at page 168, counsel made this point: That the transstate freight should not participate equally with other freight in the expense of repairs to building and stations, in the maintenance-of-way expenses. Exhibit 3, statement 4, (R. p. 2303), shows this item: "13. Buildings and grounds, $38,425.50" out of a total expense of $965,445.89, or about 4 per cent of the total. The transstate business used the buildings and grounds, and should participate in these expenses. The statistical evidence showed that the transstate cars are in the State four or five days over their schedule. Telegraph operators, station agents, switchmen, weighmen and other employees using the stations and grounds, are employed in and about the transstate cars while they are thus loitering overtime from division to another; and even when passed through as "on a bridge," some station, telegraph and other house service is rendered this traffic.

On the other hand, the interstate has certain facilities peculiar to itself in which the intrastate does participate: The Paragould trackage, the cattle chutes and pens, cotton platforms, etc.

Next, it is said the transstate makes no use of the switching for which 50 per cent is charged to the local train car mileage. The effect of so charging the local train is to relieve to that extent the through trains, and correspondingly the strict interstate and the transstate of that much expense represented by the added 50 per cent of local car mileage. Certainly, the plaintiff should not complain of this, but many of the State witnesses did complain of it as being an injustice to the State on the ground that much of the switching done by the local train was done in order to permit the through train to have the right-of-way.

## STOPPING OF LOCAL AND THROUGH TRAINS.

Counsel claim, at pages 179 and 180, that we are in error as to the finding of the Court that the through train stops every 35 miles, and the local train every five miles. We have heretofore quoted the Court exactly. There is no warrant for this finding in the evidence of the conductors and brakesmen, as thought by the learned counsel, and an examination of their testimony will so prove; in fact, their testimony tended to reduce the stopping of through trains to less than every 20 miles, which estimate had been made by Mr. Maurice Wright, and accepted by the State in its exhibits. This is just one of those errors which are often made by the most careful men; but that it is an error is patent as is seen by the testimony set forth at page 375 of our former brief.

## WAY STATION SWITCHING.

At pages 182-185, counsel claim that the way station switching is not provided for in the State's exhibits. They quote the critics-general, Messrs. Gray, Ward and Nay, at length on this point. Mr. Ludlam explained that this had been done, and it was merely an oversight of these gentlemen in saying that it had not been done. It is contended by counsel that these critics-general know more of the subject than Mr. Ludlam, "a mere accountant." We readily concede that they may be better authority on way station switching, but do not concede that they are better auhority on what is contained in the State's exhibit than Mr. Ludlam. There is no dispute that this way station switching should be allowed; Messrs. Gray, Ward and Nay made that quite clear. It was made clear to the accountants for the State before they prepared their exhibit, and they provided for it fully. In the hasty examination which these critics-general necessarily made of a rather complicated formula, they merely misunderstand the allowances made. It may be true that the exhibit did not make it as clear as it should have done. There is really no dispute over the fact of the justice of this allowance. The dispute is as to whether the State has accounted for it in its division of expenses.

At pages 375-379 we have quoted Mr. Ludlam's testimony in full, wherein he shows that this is fully accounted for. We have no doubt that if the critics-general had had the benefit of this explanation before they made this criticism, that the criticism would not have been made.

## STATION EXPENSES.

At pages 188 and 189, counsel quote from Messrs. McPherson and Ward on the injustice of the ton-mile to measure station expenses. The State accepted as correct the objections to the ton-mile to measure station expenses on information received before they prepared the exhibits, and did not use the ton-mile as the measure of station expenses, but used the ton. Mr. Ward illustrates the injustice of using the ton-miles to apportion station expenses, with two similar shipments of merchandise, one from Chicago, and one from Little Rock, to Benton, Arkansas. He says that station expense is exactly the same on each, but the application of the ton-mile, one being 25 miles and the other 600 miles, would disproportionately burden one of the shipments with an expense over the other with 24 times for identically the same service. (The quotation in appellee's brief is not full, but is substantially correct. See R. p. 1864.) The State fell into no such error as using the ton-mile for station expense, but the trial court did fall into this error and rejected the State's ton-basis and accepted the ton-mile basis, multiplying the ton-miles by six on account of the interstate haul being six times longer than the State haul. (R. p. 2628.)

Under the head of "Extra Cost of Intrastate Traffic," we have discussed at length the error of using the ton-mile for measuring the station expenses. (See pages 225-227, subdivision 6, of our brief.)

## YARD AND TERMINAL EXPENSES.

The evidence on this subject was discussed in our brief under the head of "Bridge Theory of Transstate State Traffic."

In order to meet this bridge theory, the State went exhaustively into the manner of handling cars in yards and terminals. The evidence is summarized in our brief at pages 238-256. The results of these actual conditions in yards and terminals, as disclosed by the exhaustive examination of them, were made the basis of this division of expenses. It is also explained as compiled in the exhibits at pages 383-387 of our brief. The appellees quote at length the evidence directed against it at pages 190-198 of their brief. The State's theory is founded on the actual facts as found in the yard records and in the train movements, and all theoretical opinions on the subject must give way to the actual facts as they exist.

## OTHER TRAIN EXPENSES.

Counsel, at page 201, say that this item, which includes wrecks, injuries to persons on track, and to stock and various other causes, could have been allocated to local and through trains and criticise the State's using the train-mile basis for this item.

It is pertinent to inquire why the plaintiffs did not allocate this item if it was capable of being allocated. In fact, much of it is insusceptible of allocation to a definite train; for instance, a fire starts in the night time, or stock is killed in the night time, and probably a dozen trains pass, and it is impossible to tell which one of them caused the loss. It seemed to the State's accountants that this was a train expense, and the train mileage should measure it.

## TON-MILE DIVISION OF TRAIN COST.

The appellees, beginning at page 208, criticise rather severely the State's witnesses on account of their lack of railroad experience, when dealing with the evidence sustaining the ton-mile basis for dividing train costs.

Counsel overlooked the fact that this division of expense is largely founded on the testimony of W. B. Doddridge, former general manager of both of these roads, and an expert witness for the plaintiff, and adviser of counsel and witnesses in both the Missouri case and in this case. They can not question either his experience, his ability as an operating man, or his knowledge of the subject, as they feel justified in criticising the State's witnesses along these lines. It is also sustained by Mr. Rawn, president of the Monon Route, another

of their experienced operating experts. Their testimony is abstracted at pages 334-338 of our brief. Mr. McPherson's analysis of the various units of measurement also gives warrant for this use of it. He says: "The ton-mile basis makes no provision for terminal expense, because there are no ton-miles at terminals that represent the expense. It only attaches as a unit of measurement between two given points, the beginning and the end of the journey, but does not consider the expense at either end. It can not measure the expense at either end." (R. p. 315.) It was used by the State only as a unit of measurement between the beginning and the end of the journey. The train cost is incurred between these points, and its justice, fairness and common use for this purpose is so thoroughly established by such an overwhelming mass of testimony on each side of the case that we do not consider it open for argument.

## EFFECT OF THE COURT'S FINDINGS OF FACT.

Counsel for the appellee, at page 254, say that the lower court considered conflicting evidence and made its findings and decree thereon, and that all presumptions are in favor of the correctness of the findings, and they will not be disturbed unless clearly in conflict with the weight of the evidence.

There were no findings of fact in this case in the sense that that term is used in the decisions. We called attention to this at page 393 of our former brief, but, even if there were findings of fact, the rule would not obtain in this class of cases. This was pointed out clearly by Mr. Justice Moody, speaking for this Court in Knoxville v. Knoxville Water Company, 212 United States, page 1. The Court will not fetter its own independent judgment in cases where State statutes are sought to be invalidated by facts, but will weigh the facts according to its own scales, and not by the scales adopted by a master or the trial court.

The authorities cited by counsel to sustain their statement do not sustain it. Kimberly v. Arms, 129 United States 512, the first case cited, is a decision on the effect of the finding of the master in the trial court, and not upon the effect of the finding of a court in chancery on appeal to this Court; much less is it an authority on the effect of the trial judge's opinion in a case attacking a State statute as invalid on account of an alleged confiscatory effect of the same as developed in the evidence. Idaho Mining & Milling Company v. Davis, 123 Federal 396, is a decision of the circuit court of appeals of the Ninth Circuit, to the effect that the findings of the trial court in equity will not be reversed unless clearly erroneous or against the preponderance of the evidence. McKinley v. Williams, 74 Federal 94, is a decision of the Circuit Court of Appeals of the Eighth Circuit to the effect that where the court below has considered conflicting evidence, and made a finding and a decree thereon, the finding will be taken as presump-

tively correct, if the appellate court is in doubt as to the facts found. Snider v. Dobson, 74 Federal 757, is a decision from the same court to the same effect. None of these authorities reach this situation. There are no specific findings of fact, but mere conclusions from the evidence embodied in the opinion in the way of argument or reasons for the rendition of the particular decree. But, if there were such, the rule invoked does not reach to this character of cases. The appellants could safely try their case, however, upon the rules ordinarily in force in regard to the findings of fact by trial courts in chancery and could even treat all the judges' opinions as specific findings of fact, even if we were trying the case on the defendants' plan of dividing expenses, and not relying on the failure of plaintiffs to make their case.

We believe that we have in our former brief and in this one demonstrated that the proportion of State and interstate traffic on the local and through trains, adopted in the State's exhibit, is not only supported by a preponderance of the evidence, but rises to the height of established facts, and the finding to the contrary is against the decided weight of the evidence, and practically against all of the evidence; and is against the undisputed statistics of the plaintiffs' own exhibits, and is supported by the plaintiffs' witnesses in chief. The discarding of the October statistics on the Southwestern road is without any evidence whatever to support it. If the defendants were the plaintiffs seeking to prove the rates were compensatory, all the other adverse findings of the trial court would be but harmless error, as if these months are accepted, the rates are proved compensatory beyond cavil. In fact, the case was disposed of in the lower court as if the defendants failed to prove the rates to be compensatory, when the truth is, the plaintiffs must prove the rates are confiscatory by clear and decisive evidence (almost beyond a reasonable doubt), or else fail. In fact, the rejection by the trial court of the plaintiffs' theory and the trial on the defendants' theory, reversed the relative positions, and practically required the defendants to prove by a preponderance of the evidence that their plan of dividing expenses showed the rates to be compensatory. Really, the defendants can stand that test under the facts, and are entitled to a decree as having established the compensatory return of the rates by a preponderance of the evidence; we can meet this harsh rule, and are entitled to a reversal on it under the authorities cited: Whereas, the rule is the opposite, and more, see former brief, page 48, on quantum of proof necessary to sustain these suits.

However, as we understand the position of the Court in these grave constitutional matters, it will not be troubled by the effect of the findings of the lower court.

Respectfully submitted,

JOSEPH M. HILL,
*Special Counsel.*

4

440. 441.

Nos. ~~843~~ and ~~844~~.

Office Supreme Court, U. S.
FILED.
APR 12 1912
JAMES H. McKENNEY
Clerk

IN THE

# Supreme Court of the United States

OCTOBER TERM, 1911.

---

ARKANSAS RATE CASES.

---

**RAILROAD SUGGESTIONS AS TO WHY STATE FREIGHT EXPENSES SHOULD BE ASCERTAINED UPON A REVENUE BASIS.**

---

JOHN M. MOORE,
*Solicitor for Railroads.*

---

GUNTHORP-WARREN PRINTING CO., CHICAGO

IN THE SUPREME COURT OF THE UNITED STATES,

OCTOBER TERM, 1911.

ARKANSAS RATE CASES.

RAILROAD SUGGESTIONS AS TO WHY STATE FREIGHT EXPENSES SHOULD BE ASCERTAINED UPON A REVENUE INSTEAD OF A TON MILE BASIS.

Upon the closing argument in the Missouri Rate Cases, Mr. Justice Hughes asked for the reasons why the state freight expenses should be ascertained upon a revenue instead of a ton mile basis. In those cases the reasons are set forth in Johnson's Exhibit 55, appearing in the original brief therein (pp. 194-197), together with those given by the courts. (Id., pp. 181-194.)

In addition thereto, there has been prepared for use herein a statement of Mr. James Peabody, of the A., T. & S. F. R. Co., of the many reasons why the revenue basis is correct, and it is here submitted as an additional argument herein.

WHY THE REVENUE BASIS FOR THE DISTRIBUTION OF EXPENSES AS BETWEEN STATE AND INTERSTATE TRAFFIC IS BETTER THAN THE TON MILE BASIS.

In the making of freight rates two considerations are always present and consciously apprehended, although, perhaps, not always specifically applied. These are the cost of the service to the carrier and the value of the service to the shipper. The "cost of service"

takes account of weight, distance, bulk, volume, insurance, handling, switching, maintenance of tracks, terminals and equipment, dispatching, hauling, receiving, delivering and accounting, all of which may be broadly divided under two general heads, viz., those costs which relate to distance and those which are incurred irrespective of distance, or, in other words, hauling or movement costs, and terminal or stationary costs. The "value of the service" embraces such items as competition, both of other carriers and of markets, relation to public need as a luxury or necessity, the development of natural resources and the stimulation of trade, all modified by the commercial necessity of distributing the total transportation charge among the different articles of commerce in the ratio that will best facilitate their movement, or, more popularly expressed, assigning to each article the proportion of the total charge it ought properly to bear, having in mind the necessity for an adequate return on the property of the carrier performing the service.

As already suggested, these expenditures involved in the cost of service naturally subdivide under two heads, viz., transportation or movement costs and terminal or stationary costs, the one depending upon distance, the other having no reference thereto. Transportation costs include movement of trains, a portion of the maintenance charges both of track and equipment and also of insurance and accounting. As applied to these items the ton-mile (weight multiplied by distance) constitutes a measure which is more or less valuable for comparative purposes. Under the head of terminal or stationary costs come the remaining expenditures, all of which are constant whether the shipment moves five miles or five hundred and which constitute, for the average distance hauled, by

far the larger part of the outlay. With these items the ton-mile has no connection, distance not being a contributing factor.

It is patent, therefore, that the ton-mile as being wholly unrelated to so material a part of the total cost cannot be correctly employed as a basis for apportioning expenses. The revenue basis, being the resultant expression of the rate schedules, which take into account all of the elements going to make up the total cost, including the ton-mile, is therefore a much more comprehensive and accurate measure by which to apportion expenses. Neither method, however, takes account of the fact that of the large tonnage of the through train, a much greater proportion is interstate freight as compared with state freight than is the case with the local trains hauling a small tonnage. These relative proportions are shown in the two exhibits of tests made by The Atchison, Topeka and Santa Fe Railway. (Rec. #936) *7

(First test November 30 to December 6, 1908, inclusive.)

| | | | | | |
|---|---|---|---|---|---|
| Analysis of through trains—15,046 train miles. | | | | | |
| Trans-state tons | 27,054 | ton-miles | 5,411,836=86.00%) | | |
| Interstate | 9,745 | | 797,201=12.67 | )96.87% | |
| State | 1,905 | | 83,795= 1.33 | ) | |
| | | | 6,292,832 | 100.00% | |
| Consolidated makes | | | | | |
| Trans-state | | | | | 5,411,836 |
| Interstate | | | | | 962,754 |
| State | | | | | 121,746 |
| | | | | | 6,496,336 |
| Analysis of local trains—2,234 train miles. | | | | | |
| Interstate tons | 2,204 | ton-miles | 165,553=81.35%) | | |
| State | 863 | | 37,951=18.65%) | 3.13% | |
| | | | 203,504 | 100.00% | 100.00% |

(Second test November 30 to December 6, 1908, inclusive.)

| | | | | |
|---|---|---|---|---|
| Analysis of through trains—11,722 train miles. | | | | |
| Trans-state tons | 23,011 | ton miles | 4,579,108=81.12%) | |
| Interstate | 6,191 | | 1,005,071=17.80%) | 96.60% |
| State | 1,511 | | 60,640= 1.08%) | |
| | | | 5,644,819 | 100.00% |
| Consolidated makes | | | | |
| Trans-state | | | 4,579,108 | |
| Interstate | | | 1,174,664 | |
| State | | | 89,849 | |
| | | | 5,843,621 | |
| Analysis of local trains—2,274 train miles. | | | | |
| Interstate tons | 2,039 | ton miles | 169,493=85.30% | |
| State | 862 | | 29,208=14.70% | 3.40% |
| | | | 198,701 | 100.00% 100.00% |

These Exhibits show that the expense attaching to the state freight was in both cases more than three times as much as for interstate, a result that is readily apprehended when it is observed that 81 per cent. of the movement was trans-state on which no terminal or state expense was incurred in Missouri but only the expense of hauling or moving, that 17.3 per cent. of the movement was interstate on which only one terminal was chargeable to Missouri, while only 1.7 per cent. of the traffic was intrastate on which both terminals accrue to the state.

These exhibits further show that the cost per train mile of through and local trains is estimated the same although the local trains actually cost more to operate, because of higher wages and larger crews, but the cost per ton mile on the local train is very much larger by reason of the much smaller tonnage. It is for this reason that in making an estimate of the cost of state freight something must be added to the average cost of the total to offset this extra expense.

## Missouri State Traffic.

Appended herewith is a section of the class tariff of The Atchison, Topeka and Santa Fe Ry. applicable to Missouri state traffic: I. C. C. No. 5723.

LOCAL FREIGHT TARIFF APPLYING BETWEEN STATIONS IN MISSOURI ON THE ATCHISON, TOPEKA & SANTA FE RY.

| Distances. (In Miles) | Rates in Cents per 100 lbs. Classes. | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Any Quantity | | | | Car Loads Only | | | | | |
| | 1 | 2 | 3 | 4 | 5 | A | B | C | D | E |
| 5 miles and under .. | 15 | 12 | 10 | 7½ | 6 | 7 | 5 | 4½ | 4 | 3 |
| 10 miles and over 5 | 18 | 14½ | 12 | 9 | 6½ | 8 | 6 | 5 | 4½ | 3½ |
| 15 miles and over 10 | 20 | 16 | 13 | 10 | 7 | 9 | 7 | 6 | 5 | 4 |
| 20 miles and over 15 | 22 | 17½ | 14 | 11 | 7½ | 9½ | 7 | 6½ | 5½ | 4½ |
| 25 miles and over 20 | 24 | 19 | 15½ | 12 | 8 | 10 | 7½ | 7 | 6 | 5 |
| 30 miles and over 25 | 25 | 20 | 16 | 12½ | 8 | 10½ | 7½ | 7½ | 6½ | 5 |
| 35 miles and over 30 | 27 | 21½ | 17½ | 13½ | 8½ | 11 | 8 | 7½ | 6½ | 5½ |
| 40 miles and over 35 | 28 | 23 | 18 | 14 | 9½ | 12 | 8½ | 8 | 7 | 5½ |
| 45 miles and over 40 | 29 | 24 | 19 | 14½ | 10 | 12½ | 9 | 8½ | 7 | 5½ |
| 50 miles and over 45 | 30 | 25 | 20 | 15½ | 11 | 13 | 10 | 9 | 7½ | 6 |
| 55 miles and over 50 | 31 | 26 | 20½ | 16 | 11½ | 13 | 11 | 9 | 7½ | 6 |
| 60 miles and over 55 | 32 | 27 | 21½ | 16 | 11½ | 13½ | 11 | 9 | 8 | 6½ |
| 65 miles and over 60 | 33 | 27½ | 22½ | 16½ | 12 | 14 | 12 | 9½ | 8 | 6½ |
| 70 miles and over 65 | 34 | 28 | 23 | 17 | 12½ | 14½ | 12 | 9½ | 8 | 6½ |
| 75 miles and over 70 | 35 | 29 | 23½ | 17½ | 13 | 15 | 13 | 10 | 8½ | 7 |
| 80 miles and over 75 | 36 | 29½ | 24 | 18 | 13 | 15 | 13 | 10 | 8½ | 7 |
| 85 miles and over 80 | 37 | 30 | 24½ | 18½ | 13½ | 15½ | 13½ | 10½ | 9 | 7½ |
| 90 miles and over 85 | 38 | 31 | 25 | 19 | 14 | 16 | 14 | 11 | 9 | 7½ |
| 95 miles and over 90 | 39 | 32 | 25½ | 19½ | 14½ | 16½ | 14½ | 11½ | 9½ | 7½ |
| 100 miles and over 95 | 40 | 33 | 26 | 20 | 15 | 17 | 15 | 12 | 10 | 8 |
| 105 miles and over 100 | 41 | 33½ | 26 | 20½ | 15½ | 17 | 15 | 12 | 10 | 8 |
| 110 miles and over 105 | 42 | 34 | 26½ | 20½ | 15½ | 17½ | 15½ | 12½ | 10½ | 8½ |
| 115 miles and over 110 | 43 | 34½ | 27 | 21 | 16 | 18 | 16 | 13 | 10½ | 8½ |
| 120 miles and over 115 | 44 | 35 | 27½ | 21½ | 16½ | 18½ | 16½ | 13 | 10½ | 8½ |
| 125 miles and over 120 | 45 | 36 | 28 | 22½ | 17½ | 19½ | 17 | 13½ | 11 | 9 |
| 130 miles and over 125 | 46 | 36½ | 28½ | 22½ | 17½ | 20 | 17 | 13½ | 11 | 9 |
| 135 miles and over 130 | 47 | 37 | 29 | 23 | 18 | 20½ | 17½ | 14 | 11½ | 9 |
| 140 miles and over 135 | 48 | 37½ | 30 | 23½ | 18½ | 21 | 17½ | 14 | 11½ | 9 |
| 145 miles and over 140 | 49 | 38½ | 31 | 24 | 19 | 21½ | 17½ | 14½ | 11½ | 9 |
| 150 miles and over 145 | 50 | 40 | 32 | 25 | 20 | 22 | 18 | 15 | 12 | 9½ |
| 155 miles and over 150 | 51 | 41 | 32½ | 25 | 20 | 22 | 18 | 15 | 12 | 9½ |
| 160 miles and over 155 | 52 | 42 | 33 | 25½ | 20½ | 22½ | 18 | 15½ | 12½ | 9½ |
| 165 miles and over 160 | 53 | 43 | 33½ | 25½ | 20½ | 23 | 18½ | 15½ | 12½ | 9½ |
| 170 miles and over 165 | 54 | 43½ | 34 | 25½ | 20½ | 23½ | 18½ | 15½ | 12½ | 9½ |
| 175 miles and over 170 | 55 | 44 | 35 | 26 | 21 | 24 | 19 | 16 | 13 | 10 |
| 180 miles and over 175 | 56 | 44½ | 35 | 26 | 21 | 24 | 19 | 16 | 13 | 10 |
| 185 miles and over 180 | 57 | 45 | 35½ | 26½ | 21½ | 24½ | 19 | 16½ | 13 | 10 |
| 190 miles and over 185 | 58 | 45½ | 35½ | 26½ | 21½ | 24½ | 19 | 16½ | 13½ | 10½ |
| 195 miles and over 190 | 59 | 46 | 36 | 26½ | 21½ | 24½ | 19 | 16½ | 13½ | 10½ |
| 200 miles and over 195 | 60 | 47 | 36½ | 27 | 22 | 25 | 19½ | 17 | 14 | 11 |

## Illustrative Demonstration.

For the purpose of demonstration first class and class E rates, being respectively the highest and lowest of the class rates, have been applied to a car of each class to each of three points the average of which most nearly approximate in distance from the state line the actual average haul on state traffic, 47.4 miles. (Rec. 495.) The average tonnage of first class merchandise, which consists of articles of light weight and large value and which are both loaded and unloaded by the carrier is, on The Atchison, Topeka and Santa Fe Railway, 5 tons per car, while the average loading of class E, carload freight, is 30 tons or six times as much. The rates on these respective classes are as follows:

| | Miles | 1st class per 100 lbs. | Class E per 100 lbs. |
|---|---|---|---|
| State line to Gorin, Missouri | 26 | 25¢ | 5¢ |
| Hurdland | 49 | 30 | 6 |
| Ethel | 75 | 35 | 7 |

An examination of the tariff will show that generally the first class rates increase in the ratio of 5 cents for each 25 miles and the class E rates increase in the ratio of 1 cent for each 25 miles. It is apparent, therefore, that these rates may be taken as representing the hauling or moving charge for each 25 miles for the reason that the terminal charge remaining constant regardless of the length of haul, the changes result from the application of the hauling charge only. It also follows that the remainder of the rate is to take care of the terminal or stationary costs, none of which are affected by distance. Apportioning the rates on this basis we find the charges to be as follows:

| | Miles | Revenue per 100 | Revenue per ton | Haulage proportion per 100 | Haulage proportion per ton | Terminal proportion per 100 | Terminal proportion per ton |
|---|---|---|---|---|---|---|---|
| On 1st class: | | | | | | | |
| Gorin | 26 | 25¢ | $5.00 | 5¢ | $1.00 | 20¢ | $4.00 |
| Hurdland | 49 | 30 | 6.00 | 10 | 2.00 | 20 | 4.00 |
| Ethel | 75 | 35 | 7.00 | 15 | 3.00 | 20 | 4.00 |
| On Class E: | | | | | | | |
| Gorin | 26 | 5 | 1.00 | 1 | .20 | 4 | .80 |
| Hurdland | 49 | 6 | 1.20 | 2 | .40 | 4 | .80 |
| Ethel | 75 | 7 | 1.40 | 3 | .60 | 4 | .80 |

The result of the movement of the six cars would be as follows:

| | Total Revenue | Haulage proportion | Terminal proportion |
|---|---|---|---|
| Gorin | $55.00 | $11.00 | $44.00 |
| Hurdland | 66.00 | 22.00 | 44.00 |
| Ethel | 77.00 | 33.00 | 44.00 |
| | $198.00 | $66.00 | $132.00 |

## Missouri Interstate Traffic.

The average haul in Missouri on interstate traffic is approximately double the average haul on state traffic. (Rec. 49 56) Applying the same tariff on the same commodities from Kansas City, Kan., to points most nearly approximating a distance twice as far as the haul on the state traffic the result is as follows:

| | Miles | 1st class per 100 | Class E per 100 |
|---|---|---|---|
| Kansas City, Kan., to | | | |
| Hardin, Missouri | 48 | 30¢ | 6¢ |
| Rothville, Missouri | 100 | 40 | 8 |
| Gibbs, Missouri | 147 | 50 | 9.5 |

Apportioning these charges between hauling and terminal on the same basis as before we have:

| | Miles | Revenue per 100 | Revenue per ton | Haulage proportion per 100 | Haulage proportion per ton | Terminal proportion per 100 | Terminal proportion per ton |
|---|---|---|---|---|---|---|---|
| On 1st class: | | | | | | | |
| Hardin, Mo. | 48 | 30¢ | $6.00 | 10¢ | $2.00 | 20¢ | $4.00 |
| Rothville, Mo. | 100 | 40 | 8.00 | 20 | 4.00 | 20 | 4.00 |
| Gibbs, Mo. | 147 | 50 | 10.00 | 30 | 6.00 | 20 | 4.00 |
| On Class E: | | | | | | | |
| Hardin, Mo. | 48 | 6 | 1.20 | 2 | .40 | 4 | .80 |
| Rothville, Mo. | 100 | 8 | 1.60 | 4 | .80 | 4 | .80 |
| Gibbs, M. | 147 | 9.5 | 1.90 | 5.5 | 1.10 | 4 | .80 |

It will be observed that this distribution provides for exactly the same terminal charge on the same commodity in each car on both state and interstate, the variable attaching only to the haulage charge. The ton-mile basis ignores this vital feature. The result of the movement of these six cars of interstate freight would be as follows:

| | Total Revenue | Haulage proportion | Terminal proportion |
|---|---|---|---|
| Hardin, Mo. | $66.00 | $22.00 | $44.00 |
| Rothville | 88.00 | 44.00 | 44.00 |
| Gibbs | 107.00 | 63.00 | 44.00 |
| | $261.00 | $129.00 | $132.00 |

As Kansas City, Kansas, is at the state line and there is no haulage in Kansas but only a terminal charge for that state, half of the above terminal charge must be deducted from the above to ascertain the total revenue in Missouri.

| | | |
|---|---|---|
| State | $198.00= | 50.38% |
| Interstate, $261, less ½ terminal | 195.00= | 49.62 |
| | $393.00 | 100. % |
| Assumed operating ratio 70% | 275.10 | |
| State expense 50.38% of $275.10 | 138.60 | |
| Interstate expense, 49.62% of $275.10 | 136.50 | |

The result thus obtained shows that without any allowance for the extra cost of doing the state business, the expense assignable thereto is slightly greater than that accruing to the interstate traffic, but these expenses must of course be readjusted to provide for the extra cost of the state freight haul. Using Judge McPherson's basis, viz., that it costs 50 per cent. more to earn $1 on Missouri state traffic than on interstate traffic, the result would be as follows:

Formula.

| | | | | | |
|---|---|---|---|---|---|
| 50.38% | x | 1½ | = | 75.57% | ÷125.19= 60.36% |
| 49.62% | | 1 | | 49.62% | 125.19 39.64% |
| 100.00% | | | | 125.19 | 100.00% |

| | |
|---|---|
| State freight revenue | $198.00 |
| State freight expenses (60.36% of $275.10) | 166.05 |
| Apparent surplus | $ 31.95 |
| Interstate freight revenue | $195.00 |
| Interstate freight expenses (39.64% of $275.10) | 109.05 |
| Apparent surplus | $85.95 |

If we use a larger factor for extra expense on state freight as, for instance, that adopted by Mr. Justice Vandevanter when circuit judge in the Arkansas case, viz., two times the cost, we would have—

Formula.

| | | | | | |
|---|---|---|---|---|---|
| 50.38% | x | 2 | = | 100.76% | ÷150.38= 67.00% |
| 49.62% | | 1 | | 49.62% | 150.38 33.00% |
| 100.00% | | | | 150.38% | 100.00% |

| | |
|---|---|
| State freight revenue | $198.00 |
| State freight expenses (67.00% of $275.10) | 194.32 |
| Apparent surplus | $ 3.68 |
| Interstate freight revenue | $195.00 |
| Interstate freight expense (33.00% of $275.10) | 90.78 |
| Apparent surplus | $104.22 |

In the last above computation the basis not only appears to be, but is, excessive, as applied to the traffic taken to illustrate the proposition, for the reason that the traffic here used for illustrating the proposition includes no trans-state business which constitute so large a proportion of the actual traffic—81 per cent. as shown by the test figures—and on which only the haulage expenses are chargeable against Missouri. The computation will nevertheless illustrate how the application works out, and not only serves to demonstrate the correctness of the theory, but shows that as always has been done by the courts, existing conditions must be con-

sidered in determining the factor to be used in connection with the added cost.

### The Ton Mile Basis.

Applying the ton mile basis of division of expenses to the illustrative traffic here used, the results show at a glance the absurdity of that proposition.

| | | |
|---|---|---|
| State ton miles | 5250 | |
| Interstate | 10325 | |
| Total | 15575 | |
| Total freight expense | $275.10=1.7663c per ton mile | |
| State freight earnings | | $198.00 |
| State freight expenses (5250 ton miles at 1.7663) | | 92.75 |
| Apparent surplus | | $105.25 |
| Interstate freight earnings | | $195.00 |
| Interstate freight expenses 10325 ton miles at 1.7663 | | 182.35 |
| Apparent surplus | | 12.65 |

Nothing could be more conclusive as to the error of the ton mile basis than these results. Here we have state traffic consisting of identical shipments hauled half the distance with two terminals equal to $46.20 (70 per cent. of one-half of $132.00) more expense, yielding a net revenue over eight times as large as the interstate shipments with only one terminal expense.

The contention that under the revenue theory all that is needed to double the expense on the state traffic is to double the rates is manifestly unfounded as well as absurd. Tariff rates, both state and interstate, proceed, as mileage increases, on the same general scale. The fact that at some point in the tariff an imaginary line fixing a state boundary runs through the tariff makes no difference in the scale of rates. The same rate applies for the same distance whether the haul is on either side of the state line or across it. The reason why the rev-

enue, as measured by the ton mile, is higher on state than on interstate is because the state haul averages much shorter than the interstate haul and therefore the heavy terminal expense which under similar circumstances is the same in both cases is loaded upon a shorter mileage in the one case than in the other. It not only is never the fact, but it would be manifestly impossible that any scale of rates should be doubled simply because of the crossing of an imaginary line.

JOHN M. MOORE,
*Solicitor for Railroads.*

MAR 26 1912
JAMES H. McKENNEY,
Clerk.

# The Arkansas Rate Cases.

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS,

Appellants,

v. No. 441.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,

Appellee.

AND

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS,

Appellants,

v. No. 440.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

Appellee.

IN THE SUPREME COURT OF THE UNITED STATES.

BRIEF AND ARGUMENT FOR APPELLANTS IN THE ABOVE ENTITLED CAUSES.

MARION S. CLARKE,
SAMUEL H. WEST,
JESSE M. MOORE,
Solicitors for Appellants.

## INDEX


STATEMENT ..... 1

INTERSTATE COMMERCE..... 24

PREMATURE BRINGING OF SUIT..... 44

ACQUIESCENCE ..... 45

Increased cost of maintenance of operation after 1897 ..... 47

Exhibit Z of no value..... 57

DIVIDENDS ..... 60

COMPARATIVE COST OF OPERATION..... 64

PERIOD COVERED BY ACCOUNTS..... 68

ALLEGED IMPROPER CHARGES AND OMISSIONS ..... 70

Repairs to tools and machinery..... 70

Rental of trackage..... 72

Payment of attorneys, lobbyists and for fine..... 75

Memphis and Fort Smith terminals..... 77

Bunch elevator..... 81

VALUE OF PROPERTY..... 82

DIVISIONS OF EXPENSES BETWEEN STATE AND INTERSTATE BUSINESS..... 86

REVENUE BASIS ..... 86

Evidence of Doddridge..... 87

Evidence of McPherson..... 90

State's contention that there is no relation between rates and cost of service, or between State and interstate rates ..... 91

Classification of commodities..... 91

Zones and blanket rates..... 93

## INDEX—Continued

REVENUE BASIS (continued).

Texas tariff 1-DD ..... 95
Relation between State and interstate rates ..... 100
Rates from St. Louis to Texas common points ... 100
Inequality in the revenue tariff from the same commodities on joint and single haul ..... 101
Exhibit L-1, comparing State and interstate rates, 102
Exhibits C-1 and D-1 concerning certain rate adjustments from Memphis into Arkansas ..... 103
Evidence of Perkins explaining Memphis adjustment ..... 104
Revision of State and interstate tariffs after the granting of injunctions ..... 106
Exhibits G and A, comparing increase in State and interstate revenue per ton mile in January, 1909, with last half of 1907, and Kimbell's evidence in connection with same ..... 107
Hypothetical statement of earnings from State and interstate business, Exhibit 23 ..... 111
Roth's tables comparing percentage of total revenue from classified commodities with percentage of total ton miles ..... 112

STATE'S BASIS OF DIVISION ..... 118

Exhibit 26, compilation of freight statistics for October, 1907 ..... 119
Auditor's revenue accounts—how kept ..... 120
Exhibit I—State's compilation of freight statistics for October, 1907 ..... 124
Qualification of witnesses ..... 126
Opinions of Ward, and other railroad operating officials as to plaintiff's plan of division ..... 132
Division of freight between local and through trains in Exhibit I ..... 135
Roth's investigation of certain trains ..... 137
Views of operating men as to correctness of division ..... 140
Exhibit E-1 ..... 157

## INDEX—Continued


EXHIBIT K, CONTAINING STATE'S FORMULAS FOR DIVIDING COST OF FREIGHT SERVICE ..... 161
Maintenance of way and structures..... 161
Maintenance of equipment..... 169
Locomotives ..... 169
Freight cars..... 171
Repairs, caused by way station switching..... 183
Supervision and general..... 186
Traffic expense ..... 187
Transportation expenses..... 187
Station expenses..... 187
Yard and terminal expense..... 190
Exhibit 52, showing movement of through trains at division terminals..... 193
Exhibit 53, showing consist of through freight trains ..... 194
Switching service at division terminals..... 195
Fuel and locomotive, road enginemen and trainmen expenses..... 199
Engine house expense..... 201
Loss and damage—freight..... 202
Supervision and general and general expenses.. 202
Other train expense..... 203
METHOD OF DIVIDING TRAIN COST BETWEEN INTRASTATE AND INTERSTATE ..... 204
RELATIVE COST OF TRANSPORTING STATE AND INTERSTATE TRAFFIC..... 206
QUALIFICATION OF WITNESSES..... 208
TEST ON ST. L. S. W. RY. OCTOBER, 1908..... 211

## INDEX—Continued


EXTRA COST OF INTRASTATE FREIGHT DISREGARDED IN THE APPORTIONMENT CONTAINED IN EXHIBIT K..... 213
Mr. Ward's evidence..... 214
Mr. McPherson's evidence..... 220
Mr. Gray's evidence..... 228

FINDINGS OF COURT IN REGARD TO EXTRA COST ..... 229

STATE'S DIVISION BASED ON ERRONEOUS DIVISION OF STATE AND INTERSTATE FREIGHT BETWEEN LOCAL AND THROUGH TRAINS..... 233

EFFECT OF CONGESTION ON LOADING OF LOCAL TRAINS ..... 235

BASIS USED BY THE STATE IN DIVIDING EXPENSE OF STATE AND INTERSTATE PASSENGER, MAIL AND EXPRESS SERVICE, EXHIBITS M AND T..... 239
Maintenance of way and structures..... 241
Maintenance of equipment..... 242
Locomotive expense..... 242
Passenger train cars..... 242
Traffic expense..... 243
Train auditors..... 245
Station expense..... 245
Yard and train service..... 246
Division of coach and Pullman service between intrastate and interstate..... 248
Remarkable result of division of passenger expense on the State's basis used in Exhibit M... 249
Result after correcting obvious mistakes..... 250

EXTRA EXPENSE OF PASSENGER TRAFFIC, 253

EFFECT OF COURT'S FINDINGS..... 254

RETURN ON THE INVESTMENT..... 255

IN THE

# Supreme Court of the United States

---

R. P. ALLEN *et al.*, RAILROAD COMMISSIONERS OF THE STATE OF ARKANSAS,

*v.* No. 813.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, *et al.*

R. P. ALLEN *et al.*, RAILROAD COMMISSIONERS OF THE STATE OF ARKANSAS,

*v.* No. 814.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, *et al.*

---

## BRIEF AND ARGUMENT ON BEHALF OF APPELLEES.

---

### STATEMENT.

These cases represent nineteen suits filed by as many different railroad corporations operating railroads in the State of Arkansas, for the purpose of enjoining freight and passenger rates in force in that State in 1907.

The Legislature of Arkansas passed an act creating a Railroad Commission and defining its powers at the session of 1899. Section 9 of the act provides:

"That every person or corporation operating any railroad or express business in this State is hereby required to furnish said Commission, within fifteen days after notice to do so, with the rate sheet and tariff charges for transportation of every kind over such railroad, it shall be the duty of said Commission to examine and revise said rate sheet and tariff charges for freight or express matter for each railroad in this State, and determine whether or not, and in what manner, if any, such charges and rates are more than just and reasonable compensation for the services rendered, and whether or not, and in what manner, if any, said charges and rates are in violation of any of the provisions of this act; and said Commission will make reasonable and just rates of freight, express and passenger tariffs to be observed by all persons and corporations operating any railroad or engaged in transporting persons or property as express or freight in this State; shall make rules and regulations as to charges at any and all points for the necessary hauling and delivering of express and freight; regulate rates and charges for such service on all railroads as, in their judgment, justice to the public and said person or corporation may require; and so make the same conform to the requirements of this act." (Acts of 1899, pp. 86-87.)

Section 10. "Every person or corporation engaged as aforesaid, shall receive, load, unload, transport, store and deliver to the consignee thereof any and all property offered for shipment, whether as freight or express matters at and for charges not greater than those specified in such schedule, as may at that time be in force, and shall, on demand, issue to shippers, duplicate freight or express receipts, which shall state the class of freight shipped, the weight and charges." (Acts of 1899, p. 88.)

Section 14. "In case any person or corporation, as defined in this act, engaged as aforesaid, shall do, or permit to be done, any act, matter or thing in this act required to be done, or shall be guilty of any of the violations of the provisions of this act, such person or corporation shall be held to pay to the person, firm or corporation injured thereby, double the amount of damages so sustained, and all costs, to be recovered by the person, firm or corporation so damaged, in any court having jurisdiction of the amount, where

the person or corporation causing the damage can be found, or has an agent or place of business." (Acts of 1899, p. 91.)

Section 18. "That if any person or corporation operating a railroad or express company in this State, or any receiver, trustee, or lessee of any such person or corporation as aforesaid, shall violate any of the provisions of this act, or aid or abet therein, or shall violate the tariff of charges, as fixed by said Commission, or any of the rules regarding railroads or express companies, as made by said Commission, and for which there is no other penalty prescribed in this act, such person, or corporation, or receiver, trustee or lessee shall be liable to a penalty of not less than five hundred nor more than three thousand dollars for each violation of this act, or such tariff of charges or rules and regulations, and such penalty may be recovered by an action to be brought in the name of the State of Arkansas, in the county in which such violation may occur. * * * Nothing in this section shall be so construed as to in any manner interfere with the action for damages as provided in section fourteen of this act." (Acts of 1899, pp. 93-94.) (Kirby's Digest of the Statutes of Arkansas, 1904, sections 6802, 6804, 6808, 6813.)

By an act approved April 8, 1903, it is provided:

Section 2. "That all persons, companies or corporations operating any railroad in this State that forms part of a continuous line of railway communication to any point in the State shall issue through passenger tickets and check baggage through to and from points on such continuous line of communication at through rates and fares; that all freight and traffic carried wholly within this State to and from stations on lines of continuous carriage aforesaid shall be waybilled through at through rates and tolls from point of departure to point of arrival without being rebilled at junction points, and in case of carload freights the forwarding carrier shall receive and forward the same in the car or cars in which the freight is tendered without breaking bulk of package."

Section 3. "That in all cases where there is by physical connection of railroads a continuous line of railway communication between railroad stations within this State,

whether such stations be on railroads operated by one and the same company or corporation or on railroads operated by different and independent companies or corporations, it shall be the duty of the Railroad Commission of this State, to and from such stations, to make just and reasonable rates of freight, express and passenger traffic, to be observed by all persons, companies or corporations, operating any railroad or engaged in transporting persons or property as express or freight in this State."

Section 4. "If any two or more connecting lines of railroad in this State shall fail to agree upon a fair and just division of the charges arising from the transportation of freights, passengers or cars over their lines, the Commission shall make the division and shall fix the pro rata part of such charges to be received by each of said connecting lines." (Acts of 1903, p. 220.)

Section 5 of the act provides that any person or corporation violating any of its provisions shall be liable to a penalty of not less than $500 nor more than $3,000 for each violation of the act, or of the tariff or charges or rules and regulations prescribed therein, to be recovered in an action to be brought in the name of the State.

An act approved April 19, 1907, provides that a shipper on whose order a car or cars have been placed for loading shall be allowed forty-eight hours free time for loading, computed from 7 A. M. the day after such car or cars have been placed subject to the shipper's order (section 6). That the consignee of cars containing fertilizers, hay, coal, coke, brick, sand, and lumber in covered cars, and meat, potatoes, grain and grain products, cotton seed and cotton seed hulls in bulk, shall have seventy-two hours free time for unloading from 7 o'clock, A. M., the day fol-

lowing that upon which legal notice of arrival is given, and on all other cars forty-eight hours. Whenever the weather during the period of free time is so severe, inclement or rainy during business hours that it is impossible or impracticable to secure means of loading or unloading freight, or when from the nature of the goods loading or unloading would cause injury or damage, such time shall be added to the free time. A consignee or consignor five miles or more from the depot, whose freight is destined to or from his place of business or residence, shall not be subject to storage or demurrage charges until sufficient time has elapsed after notice for him to remove or load his goods by the exercise of ordinary diligence, but the time limit shall not exceed five days. (Sections 10, 11 and 12.)

Section 22 provides that any person or corporation operating a railroad who shall violate any of the provisions of the act or the tariff of charges or rules of the Railroad Commission in regard to furnishing cars on application of shippers, transportation, delivery and storage of freight, etc., for which there is no other penalty prescribed in the act, shall be liable to a penalty of not less than $500 nor more than $3,000 for each violation, to be recovered in an action to be brought in the name of the State.

Section 6611 of Kirby's Digest of the Statutes of Arkansas as amended by an act approved February 9, 1907, provided the following maximum charges for transportation of passengers by railroads within the State:

On lines 15 miles or less in length, 5 cents per mile;

Over 15 miles and less than 85 miles in length, 3 cents per mile;

Over 85 miles, 2 cents per mile.

Children, in charge of an adult, between the ages of five and twelve years, half the above rates, and children under five years of age, free (Acts of 1907, p. 10).

Sections 6615 and 6618 provide that each passenger shall be entitled to transport on the same train and without any additional charge 150 pounds of baggage, and that no railroad in the State over five miles in length shall charge more than 12½ per cent of the cost of first-class fare between all points in this State per hundred pounds for excess of baggage over 150 pounds; and section 6617 makes a carrier responsible, as carrier, for all baggage or goods checked as baggage for forty-eight hours after the same has reached its destination, and prohibits a charge for storage during that time or a greater charge than five cents per day after the expiration of said time on baggage not exceeding 150 pounds.

Section 6620 provides a penalty of not less than $50 nor more than $300 and attorney's fee, to be taxed as costs by the court, on the carrier, or any officer, agent or employe thereof, who shall knowingly and wilfully charge a greater rate of fare than is prescribed in the preceding sections.

The statute provides that the Railroad Commission shall be composed of three persons, to be chosen, respectively, from certain designated districts in the State. The

first Commissioners were appointed by the Governor, and their successors were elected at the first general election thereafter. In the year 1900 the Commission prepared and put in force a general tariff of rates for the transportation of all kinds of freight within the State. The Commission was composed at that time, as it has ever since been, of men who had never had any experience in connection with the business or operation of railroads. The first tariff continued in force with changes, made from time to time, until the 15th of July, 1904, when the Commission prepared a new and revised tariff, which went into effect and continued in force until June 4, 1908, at which time Standard Freight Distance Tariff No. 3, applying on all classes and commodities and between all railroad stations in the State, subject to Western Classification as adjusted to the traffic, cancelling the tariff theretofore in force, was promulgated, to take effect and be in force on and after July 15, 1908. This tariff contained many of the rates and regulations that were contained in the tariff of 1904, with such changes and amendments as had been made in the former tariff. Said tariff also put in force through joint rates for the transportation of freight over connecting lines of railroad, although under different ownership and management, by adding to the rates prescribed in the schedules for a single line or a continuous mileage certain differentials and by fixing a maximum of through joint rates on classes and commodities to be charged by all railroads over which freight might be transported between stations within the State. At the same time the Commission promulgated

the rates for the transportation of passengers prescribed in in the act of the Legislature of February 9, 1907, aforesaid, although the act was self-executing and the rates prescribed by it had been in force on all the railroads in the State some time prior to the promulgation of this tariff.

On July 18, 1908, the appellees and other corporations operating trunk-line railroads within the State filed their bills in equity in the United States Circuit Court for the Western Division of the Eastern District of Arkansas, in which it was alleged that the rates prescribed for the transportation of freight and passengers by the aforesaid tariff were not sufficient to yield any adequate and reasonable profit or return upon the value of the property used in and about said business or for service rendered the public, after paying the cost of conducting the business, including operating expenses, maintenance and fixed charges properly appertaining thereto under economical operation and management of the properties and conduct of the business; were unreasonable, unjust and confiscatory, and deprived the plaintiffs of their property without due process of law, and of the equal protection of the laws, in violation of the provisions of the Fourteenth Amendment to the Constitution of the United States. It was further shown and alleged that the said lines of railroad were operated in and through different States, and that a very large amount of interstate traffic passed over them respectively; that the rates prescribed by the Commission had a controlling influence on through rates charged on interstate shipments. Many of them were

established by said Commission with the intention and for the purpose, and did, in fact, have the effect, of regulating and fixing interstate rates, in violation of the Constitution and laws of the United States, and were an invasion by the Commission of the powers, rights and duties vested by act of Congress in officials of the United States.

The bills also alleged that the penalties and liabilities imposed by the provisions of the statutes of said State upon the persons and corporations owning and operating railroads in the State and the officers, agents and employes thereof, for the failure or refusal to put in force any tariff prescribed by said Railroad Commissioners, or by statute, or to comply with any of the rules, regulations and orders prescribed by said Commission, were so severe as to constrain persons and corporations operating railroads in said State to submit to such unreasonable, confiscatory and illegal exactions rather than take the risk of incurring said penalties, and that the complainants had in good faith attempted to comply with all the rates, rules, regulations and requirements prescribed by said Commission and by statute rather than to incur the aforesaid penalties and liabilities applying to the corporations operating said roads and the officers, agents and employes thereof; but further compliance would result in irreparable loss and be destructive of the property, rights and interest of those owning and interested in the properties.

The bills were originally filed against R. P. Allen, John W. Crockett and John D. Hampton, as Railroad

Commissioners. The two latter were succeeded during the progress of the case by George W. Bellamy and William F. McKnight, who, upon proper orders of the court, were substituted as defendants in the place of their predecessors in office. Each of the bills also made individual shippers and patrons of the road defendants as representatives of their class, for the purpose of restraining actions by individuals during the progress of the case. The bills contained the usual prayer for relief by temporary and perpetual injunction against the alleged rates and the rules, regulations and orders of the Railroad Commission and the penalties prescribed by the statutes of the State on their enforcement. (R. 1-21.)

Answers were filed on July 25, and applications for temporary injunctions were heard before the Honorable Willis VanDevanter, Circuit Judge, at St. Paul on September 3. The following order of injunction was entered:

"This cause came on to be heard on the motion of the complainant for a temporary restraining order, and after submission of the proofs was argued by counsel; and now upon consideration thereof, it is ordered as follows:

"That as to the complainant, all the rates prescribed by the defendants, the Railroad Commissioners of the State of Arkansas, for transporting and carrying intrastate freights in said State in Standard Freight Distance Tariff No. 3, which was issued by the order of said Commissioners, which took effect on June 15, 1908, and all amendments and supplements thereto, be and are hereby suspended and the enforcement of each and all thereof be and the same is hereby restrained and enjoined until the further order of the Court.

"It is further ordered that the enforcement of the two-cent per mile rate, prescribed in an Act of the Legislature of the State of Arkansas, approved February 9, 1907, entitled, "An Act to amend section 6611 of Kirby's Digest of the Statutes of Arkansas, by fixing passenger rates in this State, and for other purposes," and also prescribed in the order made by the defendants, the Railroad Commissioners of the State of Arkansas, on May 15, 1907, putting in force the rates prescribed by the aforesaid statute, be and the same are hereby suspended and restrained as to the complainant herein, until the further order of the Court.

"It is further ordered that no suit or suits, action or actions, shall, at any time, be instituted or maintained against the complainant, its officers, agents or employes, by any of the defendants for or on account of its failure to continue or keep in force any of the aforesaid inhibited rates, during the time that this order shall continue in force, and that the defendants, the Railroad Commissioners of the State of Arkansas, be and they are hereby enjoined from at any time instituting or prosecuting any suit or action as aforesaid, or causing the same to be instituted or prosecuted by any officer, agent or attorney, of said Commission, or by any officer of the State of Arkansas, or any other person for a failure to keep in effect and observe the aforesaid inhibited rates; that the defendants, Henry Leigh and George McLean, and all other persons and each of them from and after the time that they shall have knowledge of this order, be enjoined from at any time instituting any such suit or action for or on account of any failure of the complainant to keep in effect and observe said inhibited rates or for the recovery of damages by reason of such failure during the time that this order shall continue in effect.

"It is further ordered that complainant execute a bond to the United States of America in the penal sum of two hundred thousand dollars, conditioned that said complainant shall keep a correct account showing as respects every carriage of passengers or freight, the difference between the tariff actually charged and that which would have been charged had the rates inhibited hereby been applied, showing the particular carriage in question, and the stations be-

tween which the same occurred, the name of the person affected, so far as may be practicable, which record shall be made and kept subject to the further order of this court, and further conditioned that if it shall eventually be decided that so much of this order as inhibits the enforcement of existing rates should not have been granted, that said complainant shall, within a reasonable time to be fixed by the Court, refund in every instance to the party entitled thereto the excess of charge over what would have been charged had the inhibited rate been applied, together with lawful interest and damages.

"It is further ordered that this order suspending the aforesaid rates and restraining the said defendants take effect upon the filing of the aforesaid bond and the approval thereof by the clerk of this Court, but not within less than ten days hereof. Nothing recited in this order shall operate to prevent the said Railroad Commissioners of the State of Arkansas from establishing and enforcing any reasonably compensatory and lawful rates in place of those whose enforcement is hereby inhibited." (R. 38-39.)

Replications were subsequently filed.

On July 2, 1909, orders were entered in the cases of the St. Louis, Iron Mountain & Southern Railway Company and St. Louis Southwestern Railway Company, directing the standing master of the court to take testimony, with the usual power to compel the attendance of witnesses and the production of all books, papers, accounts, vouchers and other documentary evidence. The master was not directed nor authorized to make findings of law or fact and did not attempt to do so. The order provided that all testimony taken before the master might be used in each of the cases so far as applicable, as though they were consolidated and heard together (R. 89). The standing master died during the taking of the testimony, and Charles M. Rice

was appointed special examiner to take additional proof, with all the powers and subject to the directions given to the standing master (R. 94). The remaining cases have not been heard, but stand upon an agreement that the testimony taken in the cases now before the court may be used in all of them so far as applicable.

A large amount of testimony was taken and reported to the court by the master and the examiner.

No question is presented as to the total value of the property of the appellees in the State of Arkansas. It was stipulated by the parties that the assessment of the property of each of the respective roads for taxation multiplied by two (assessments having been made upon the basis of 50 per cent of the value) should be taken as the value of the property of each road for the purpose of the suit (R. 653). Pursuant to this agreement double the amount of the assessment was adopted and used by the court and accountants as representing the value of the property of each of the appellees. The basis of dividing the value as between state and interstate traffic was not agreed upon, but was determined by the court, as will be seen in reviewing the ruling. The value of the property of each of the appellees and the division thereof as made by the court is set out elsewhere.

The cases were heard and final decrees rendered on May 11, 1911. The following decree was rendered in each case:

"Now on this day comes the complainant by its solicitors, Moore, Smith & Moore, Esq., and also come the

defendants by their solicitors, Joseph M. Hill and James H. Harrod, Esq., and thereupon said cause having been argued and submitted upon the evidence and stipulations on file and of record in said cause, and having been taken under advisement at a former term of this court, and the court being well and sufficiently advised in the premises,

"It is accordingly ordered and decreed that the defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, as Railroad Commissioners of the State of Arkansas, and Henry Leigh and George McLean and each of them, their agents, employes and successors, as well as all other persons patrons of complainant, either in the shipment of freight or as passengers, or as passengers between stations on complainant's road in the State of Arkansas, are hereby perpetually enjoined from enforcing or attempting, directly or indirectly, by any suit, or in any manner whatsoever, to enforce against the complainant, its officers, agents, employes or servants, any of the provisions of Standard Freight Distance Tariff No. 3 and amendments thereto adopted prior to the institution of this action, prescribing the rate or rates for the transportation of classes and commodities, or any provision of said tariff whereby any of said rates shall be continued in force, or from enforcing or attempting, directly or indirectly, by suit or in any other manner whatsoever, to enforce against complainant, its officers, agents, or servants, any of the provisions of an act of the General Assembly of the State of Arkansas entitled, 'An Act to amend section 6611 of Kirby's Digest of the Statutes of the State of Arkansas by fixing passenger rates in this State, and for other purposes,' approved February 9, 1907, or to enforce the provisions of any other act or acts of the Legislature of said State, providing penalties for noncompliance by complainant with the provisions and requirements of said Standard Freight Distance Tariff No. 3 and amendments thereto as aforesaid, or the aforesaid act of the Legislature of the State of Arkansas, fixing passenger rates in said State.

"It is further ordered that the costs incurred by complainants and defendants, respectively, in procuring the attendance of witnesses before the master, and in payment of the fees of stenographers in the recording of said testi-

mony, be borne by the complainant and the defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, and that neither party recover from the other therefor; that all remaining costs, including master's fees, the complainant pay one-fourth and the defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners aforesaid, pay one-half, the other one-fourth to be paid by complainant in case No. 1637, the payment of said costs to be recovered by execution to be issued by the clerk of this court upon the application of either party in interest.

"It is further ordered that the bond for injunction filed by the complainant herein be released and the sureties thereon discharged from liability.

"And the Court hereby retains and reserves unto itself jurisdiction of the subject-matter of this suit and of all parties hereto, to the end that such other and further orders and decrees may be made herein as may become necessary by reason of any changed condition as to the facts, equities or rights that may hereafter take place or arise." (R. 105-106.)

Defendant Railroad Commissioners appealed from the decree. They assigned forty-six errors, viz.:

(1) The refusal of the court to sustain a motion to dissolve injunction on the ground that the bills were filed without first praying relief against the freight rates from the Commission, (Assignment 1); in not dismissing the bills on final hearing on the ground that Standard Distance Tariff No. 3 sought to be enjoined, had been in force with only minor changes for a period of six years prior to the filing of the suit and complainant had not applied to the Commission for relief, (Assignment 2); that the evidence showed that the general scheme of freight rates had been

in force since 1900, and that plaintiff had acquiesced for that period, (Assignment 3); in finding that the evidence showed an increased cost of operation for ten years prior to the filing of the suit, and that rates that had been remunerative ten years prior to the filing of the suit would no longer be so on account of the increased cost of operation and on such account there was no acquiescence, (Assignment 4); in holding that a reduction of passenger rates from three to two cents per mile was an excuse for complainants to seek relief in the Federal Court prior to applying to the Railroad Commission for relief against the rates. (Assignment 5.)

(2) In finding and decreeing that freight and passenger rates complained of would not afford a reasonable return upon the property and were confiscatory, and in not dismissing the bill. (Assignments 6, 7, 8, 9, 10, 11, 12, and 13).

(3) In finding that the period of six months fairly represented the earnings and expenses, and in not holding that the revenue and expense of October, 1907, fairly represented one-sixth of the said period. (Assignment 14.)

(4) Failure to charge plaintiff with fair rental value of the Bunch elevator. (Assignment 15.)

(5) In holding that the apportionment of expense for the repair of tools and machinery to Arkansas by plaintiff was fair. (Assignment 16.)

(6) In not deducting from operating expenses a fine of $10,000 and costs incurred by plaintiff for issuing passes to members of the Legislature. (Assignment 17.)

(7) In charging the expense of Memphis and Fort Smith terminals to Arkansas, (Assignments 18 and 19); in charging salaries paid to lobbyists and fees paid attorneys outside the State to expense of operation. (Assignment 20).

(8) In holding that any part of the expense for leased lines known as the Paragould trackage and the Van Buren bridge, was chargeable to intrastate traffic, or that any part of the expense of said bridge was chargeable to the State of Arkansas. (Assignments 21 and 22.)

(9) In holding that the railroad was efficiently operated. (Assignment 23.)

(10) In apportioning the property between intrastate and interstate traffic on the revenue basis to ascertain the portion used in intrastate business. (Assignment 24.)

(11) In the bases adopted for apportioning expense between intrastate and interstate traffic. (Assignment 25.)

(12) In apportioning the miscellaneous expense on a revenue basis. (Assignment 26.)

(13) In declaring in the opinion that the State contended for a division of property and expense on the ton mile basis. (Assignment 27.)

(14) In finding that the intrastate freight rates were only 50 per cent higher than the interstate. (Assignment 28.)

(15) In using the revenue basis for dividing any expense, and, particularly, without allowing for the excess of

at least 50 per cent which the court found the state revenue was higher than the interstate. (Assignment 29.)

(16) In not adopting as a whole the plan of division presented by the State. (Assignment 30.)

(17) In not accepting the results of statistics obtained from the months of October, 1907, and October, 1908. (Assignment 31.)

(18) In charging to interstate business only 40 per cent of the expense of local trains. (Assignment 32.)

(19) In dividing maintenance-of-way expense on a revenue basis, and not making allowances for the difference between the intrastate and interstate revenue when using the revenue as a factor in dividing said expense. (Assignment 33.)

(20) In the division of expense between local and through trains in charging 50 per cent extra to yard locomotives as against the local trains and 75 per cent additional for local locomotive mileage. (Assignment 34.)

(21) In charging 25 per cent extra to local trains for stopping and starting and 13½ per cent for terminal handling; in finding that through trains stop every 35 miles against 5 miles for local trains; in not charging interstate and trans-state traffic with the cost of starting and stopping freight cars and in making different allowance for interstate and trans-state traffic. (Assignment 35.)

(22) In not apportioning general expenses according to the plan adopted by the State and in charging the same

on the basis of the supervision and maintenance of equipment and transportation only. (Assignment 36.)

(23) In dividing the item of hire of equipment on the revenue basis and charging 30 per cent to local traffic. (Assignment 37.)

(24) In the basis adopted for the apportioning station expense. (Assignment 38.)

(25) In finding various omissions from the expense apportioned to the State in the State's plan of dividing expenses between intrastate and interstate traffic, and in finding that 8½ per cent should be charged to the local trains for such omissions, and in finding that the dead weight on local trains exceeded that on through trains 14 per cent. (Assignment 39.)

(26) In the basis adopted for apportioning fuel and locomotive expense and "other train expenses." (Assignment 40.)

(27) In charging the state passenger traffic with 10 per cent greater than the interstate passenger traffic. (Assignment 41.)

(28) In holding that the St. Louis Southwestern Railway freight and passenger traffic was more expensive than the Iron Mountain freight and passenger traffic. (Assignment 42.)

(29) In finding that the extra expense of intrastate traffic over interstate freight traffic for the Iron Mountain

Road was 210 per cent and on the St. Louis Southwestern Road 250 per cent. (Assignment 43.)

(30) In holding that the plaintiff was entitled to earn 6 per cent on the value of its property and 1.5 per cent surplus, and that a return of less than 7½ per cent on the value of its property devoted to intrastate traffic was confiscatory, (Assignment 44); and in not holding that a return on the investment equal to the rate of interest prevailing on railroad securities was compensatory. (Assignment 45.)

(31) In retaining jurisdiction of the cause for any other purposes than to permit defendants to show a changed situation which might relieve them of the injunction. (Assignment 46.) (R. 2650.)

Some of the assignments relate to matters that do not affect the merits of the case and are immaterial; some of them are based on a misconception of the rulings of the court; others on assumptions of fact that do not exist, and only a few of them relate to matters that are material on this appeal.

The plaintiffs, in preparing their statistics, apportioned the value of the property between freight and passenger traffic and between state and interstate traffic of each kind on the basis of the gross revenue derived from each kind of traffic, and followed the same rule in apportioning the expense of operation as between the several kinds of traffic, making such allowance for extra expense in conducting

state freight and passenger traffic over interstate as, in the judgment of their operating officials and others experienced in such matters, would cover the increased cost. The statistics used by them were taken from the books of account, records and vouchers kept by the accounting department of each road, which were thrown open to the State's accountants and examined by them, and the correctness of which were not questioned.

The State, through its accountants, submitted a scheme for dividing state freight traffic by first apportioning the cost of operating local and through freight trains. After determining the cost of operating each class of trains, amounting, in the total, to $2,592,298.33 out of the total expense of $3,073,843.40, on various arbitrary assumptions upon which their theories were based, they divided the train cost between state and interstate traffic on the basis of the relative amount of ton miles of each class of freight transported on local and through trains. In order to determine the ton miles of state and interstate freight carried on each class of trains they ascertained the amount of freight carried on local trains during the month of October, 1907, from an examination of the wheel reports of freight trains made by the conductors and the waybills, and after ascertaining the movement on local trains, they deducted the amount so ascertained from the total shown on exhibit 26, which was prepared by the accountants of the railroad company at the request of the State, and contained a statement of the total freight accounted for in the month of October in the auditor's revenue accounts, assuming that

the difference between the freight that moved on local trains as ascertained by them from wheel reports and the entire volume as reflected by the auditor's accounts showed the freight transported on through trains, although it was shown that the auditor's books did not reflect the dates on which freight, and especially interstate freight, moved on the line of railroad in the State of Arkansas, the dates shown on the entries being those on which the freight was received, or delivered to the owner or connecting carrier, which, as to trans-state shipments, occurred altogether outside of the State, and as to interstate shipments beginning or ending in the State, occurred outside the State either at the beginning or the end of the shipment, and which varied very greatly from the time the freight moved through, into and out of the State. It was also shown that the movement of state and interstate freight on local and through trains, respectively, during said month, was abnormal, owing to the fact that there was, during that time, such a congestion of freight in the yards of the railroad company as to disturb the usual and normal loading on the two classes of trains, and to cause a much larger quantity and proportion of interstate freight than was usual and customary to be transported on local trains, by utilizing the local train to its full capacity regardless of its normal functions. After ascertaining the total amount of state and interstate freight carried on each of the two classes of trains during the month and the per cent thereof to the total freight movement for the month, in the manner shown, in ton miles, they applied the per cents to the total ton miles

of state and interstate freight handled during the entire period of six months covering the last half of the year, and divided it between the two classes of service on that basis, and then divided the train cost between state and interstate business in proportion to the volume of traffic of each kind handled in each class of service, on the assumption that the same conditions that existed during the month of October were in existence throughout the six months' period, which was clearly shown, by the evidence, not to be the case.

The court adopted the State's theory of dividing the expense of operation to a large extent, making modifications in the details thereof in accordance with the testimony, and, in that manner arrived at the findings of fact in regard to the net earnings and the return upon the investment, and reached a result so nearly approximating the revenue basis, with 50 per cent added for extra cost, as to make practically no change in the net results as shown by the railroads' exhibits.

It found that the gross earnings of the St. Louis, Iron Mountain & Southern Railway Company, during the six months' period, were $1,726,578.86, the cost of conducting traffic during the same period was $1,688,558.93, the net earnings were $38,020.03. The value of the property apportioned to intrastate traffic was $5,158,266.56, making the net earnings a little under three-fourths of one per cent; that the earnings of the St. Louis Southwestern Railway were, during the same period, $466,476.19, the cost of conducting state traffic was $429,221.07, the net earnings were

$37,255.12; the value of the property apportioned to intrastate traffic was $1,430,321.00, making the net earnings 2.6 per cent on the investment.

A lengthy opinion was filed containing many findings of law and fact on the various questions presented, which is contained in the printed record, but for the convenience of the members of the court we file separate copies of the opinion. The net earnings of intrastate business on the bases of division of expense submitted by the parties and that used by the Court are contained in an appendix at the end of the brief.

## INTERFERENCE WITH INTERSTATE COMMERCE.

This question has been very fully presented in the briefs filed in other cases now before the court, which will be under consideration at the same time as these cases. For that reason, and because the decrees in these cases are based upon findings and rulings on other questions, we do not deem it necessary to discuss the question in its legal aspect in this brief, and will only present such views and considerations as grow out of the evidence and are peculiar to these cases.

The following facts are established by the evidence:

Many of the rates prescribed by the State Commission do, and were, at the time they were put in force, intended, to influence and control interstate rates. Judge J. G. Wallace, a very intelligent man, was chairman of the Commission in 1900, at the time the first tariff was prepared and promulgated by the Commission. He testified that in practice interstate rates were made on the basis of a combination of the local rates, and as a rule could not be higher than the combined local rates. As an instance he referred to the fact that prior to the promulgation of the Commission's tariff, the St. Louis & San Francisco Railroad Company, which had a direct line running from Fort Smith to St. Louis, had put in interstate rates between points in Missouri and North Arkansas that were more favorable than the local rates within the latter State, and under which the jobbers at Fort Smith could not compete with commercial centers in Missouri. The effect of that tariff was to divert the trade

of that section to Missouri points. The effect of the tariff promulgated by the Commission was to reverse the order of things and transfer the trade to Fort Smith, which forced the Frisco to lower its rates from St. Louis and other interstate points in Missouri in order that the jobbers of that State might compete with those at Fort Smith. The same conditions existed in other parts of the State and all through on long lines of railroad. (R. 889, 897.)

J. E. Hampton, who was a member of the Commission after Judge Wallace retired, and was, for a time, chairman, testified to the same effect. He referred to an instance in which the intrastate rate on sugar from Helena to all points in the State was reduced from 15 to 13 cents at the instance of jobbers at Texarkana, for the purpose of forcing down the interstate rate from New Orleans to that place. The interstate rate was 25 cents per hundred pounds. The river rate from New Orleans to Helena was 10 cents, the maximum rate from Helena to any point in the State was reduced from 15 to 13 cents, making the rate via Helena 23 cents, and forcing a corresponding reduction in the interstate rate. (R. 804, 805.)

C. E. Perkins, the General Freight Agent of the Missouri Pacific System, of which the St. Louis, Iron Mountain & Southern is a part, testified that when the intrastate rates in Arkansas were advanced it produced a similar advance in the interstate rates. He cited the condition at Memphis, to which we will refer later, and stated that the raising of the Memphis rates practically affects all the interstate rates into

the State of Arkansas; that Cairo and St. Louis rates would have to be advanced differentially over Memphis; that they were large distributing centers, and it was necessary to preserve a parity in the rates in order to allow the free distribution of business. That the interstate rates from St. Louis into Arkansas and Texas were factors in determining interstate rates from practically all parts of the country into that territory; that it affected Kansas City, Chicago, Pittsburg, and many other points mentioned by him, and when the rate from Memphis was changed, on account of the changes which were made in the intrastate rates in the State of Arkansas, it operated practically to change the entire rate adjustment affecting interstate rates to and from the State. This condition was not confined to the State of Arkansas, but applied practically to all States. As an example, he mentioned an instance in which the intrastate rates in Kansas on grain were reduced, and the reduction effected a change in every rate on grain carried from that State to points in other states. He further testified that the state adjustment fixes the rates from points of origin in Kansas to the Missouri River, the rates to the Mississippi River and Chicago, and that section are made practically on a combination of locals through to the Mississippi River, and the fixing of those rates fixes the rates to all points east and to seaboard territory; and in a similar way the rates from Kansas to Louisiana, Texas, and Arkansas were all affected by the change in the intrastate rates in the former State, and so, by changing one of the factors you have changed all your interstate rates. He testified that the relation of interstate and

intrastate rates is recognized by the Interstate Commerce Commission (Rule 56-B, p. 61, of "Administrative Rules"), in which it is said to be the policy of the Commission "to consider the through rate of fare which is higher than the sum of the locals between the same points as *prima facie* unreasonable, and the burden of proof will be upon the carrier to justify such higher rate or through fare." (This rule has since been enacted into a law. Act of Congress June 18, 1910.) He says: "There is a constant pressure on the part of shippers at all times to keep the two classes of rates in relative adjustment, and many complaints are made to the Interstate Commerce Commission, and we know that we could not disregard the rule because of the power of the Interstate Commerce Commission." (R. 598-603.)

Again, in his testimony on rebuttal, he testified that to stations in Arkansas in the vicinity of Arkansas City and Helena, the rates from Memphis are based on full combination of locals to and from Arkansas City and Helena, using the Commission's schedule from those points, and the St. Louis rates are adjusted differentially higher; conditions affecting the business force them to do so. As an illustration, he referred to the fact that the rates from Memphis to Helena are on a low scale on account of river competition; that a disregard of the state rates would force shipments into Helena and Arkansas City by river, or by the Illinois Central Railroad, which has a direct line to Memphis, from which points they would be reshipped into the interior of the State. (R. 1630.)

J. D. Watson, the Assistant General Freight Agent of the St. Louis Southwestern Railway, testified to the same effect. (R. 1672, 1673, 1674.)

The following exhibit (No. 50), filed by him shows the differentials in the rates on all classes between Memphis and Cairo, Memphis and St. Louis and Memphis and Kansas City:

CLASS RATES TO LITTLE ROCK AND PINE BLUFF.

| From | 1 | 2 | 3 | 4 | 5 | A | B | C | D | E |
|---|---|---|---|---|---|---|---|---|---|---|
| Memphis ... | 70 | 60 | 45 | 32 | 24 | 25 | 20 | 17 | 14 | 10 |
| Cairo ..... | 90 | 75 | 55 | 40 | 29 | 30 | 25 | 21 | 17 | 12 |
| Difference .. | 20 | 15 | 10 | 8 | 5 | 5 | 5 | 4 | 3 | 2 |
| Memphis ... | 70 | 60 | 45 | 32 | 24 | 25 | 20 | 17 | 14 | 10 |
| St. Louis... | 1.00 | 85 | 65 | 45 | 34 | 35 | 30 | 25 | 20 | 15 |
| Difference .. | 30 | 25 | 20 | 13 | 10 | 10 | 10 | 8 | 6 | 5 |
| Memphis ... | 70 | 60 | 45 | 32 | 24 | 25 | 20 | 17 | 14 | 10 |
| Kansas City. | 1.10 | 90 | 75 | 55 | 43 | 45 | 40 | 30 | 27 | 24 |
| Difference .. | 40 | 30 | 30 | 23 | 19 | 20 | 20 | 13 | 13 | 14 |

*Tariff No. 1010.

The differentials shown on the exhibit were used in making the rates to Little Rock and Pine Bluff, and points based thereon, and the rates to points beyond Little Rock and Pine Bluff were adjusted either by combination or differential over the Little Rock rates for the purpose of preserving the length of haul both as to origin and destination as a controlling factor in making the rates. He mentioned in his testimony the rate adjustments in the territory south of Pine Bluff as an illustration of the effect of a change in intrastate on interstate rates. The St. Louis Southwestern Railroad Company, he stated, had no line

of its own into Memphis, and the rate from West Memphis to its territory in the interior did not force them to apply the West Memphis rate, but the reduction of the rates from Pine Bluff made it necessary for his company to reduce the rates from Memphis to the stations south of that point, which was shown by exhibit (No. 51), filed by him. Column No. 1 of the exhibit shows the rates that were in effect from Memphis to the stations named at and prior to the time the standard freight distance tariff promulgated by the Commission in 1900 was made effective. Column No. 2 shows the rates as they were readjusted to the Commission basis; column No. 3 shows the reductions in the interstate rates resulting from the readjustment.

See exhibit 51, following page 2432 of the record.

The Commission tariff contained a larger list of commodity rates than was used in the interstate adjustments. Referring to that, Mr. Watson testified that that change forced a corresponding change in the classifications in the interstate schedules. (R. 1672-1674.)

See testimony of B. M. Flippin, the Freight Traffic Manager of the Missouri Pacific System. (R. 239, 240.)

Fort Smith is situated on the south bank of the Arkansas River; Van Buren is five miles below it on the opposite side, both stations being in the State of Arkansas. The main line of the St. Louis, Iron Mountain & Southern Railway extends from Little Rock, in the State of Arkansas, to

Coffeyville, in the State of Kansas, along the north bank of the Arkansas River in the States of Arkansas and Oklahoma. Trains going eastward in the direction of Little Rock from Fort Smith cross the river on a bridge into Oklahoma, and thence turn eastward into Arkansas. The run in Oklahoma is four miles. The traffic is interstate, and is so treated in the statistics in this case, but is treated as state traffic, so far as concerns the rates, and the State Commission rates are applied to it. All traffic to and from Van Buren, in the State of Arkansas, is intrastate traffic, and is regulated by the state tariff. All traffic north of Fort Smith, on the St. Louis & San Francisco Railroad, to the Missouri line is intrastate, and the rates are regulated by the State Commission. Fayetteville is a city in the State of Arkansas, 63 miles north of Fort Smith, and one of the principal stations on the St. Louis & San Francisco Railroad in the State. Rogers is the next important station, and is 82 miles north of Fort Smith. Magazine and Danville are important stations on the Chicago, Rock Island & Pacific Railway, which connects with the St. Louis & San Francisco Railway at Mansfield, a station on both lines 32 miles from Fort Smith. They are distant, respectively, 58 and 83 miles from Fort Smith, and all shipments originating at Fort Smith are billed and treated as a continuous haul to those and other points on the Chicago, Rock Island & Pacific Railway. Clarksville and Russellville are important stations on the main line of the St. Louis, Iron Mountain & Southern Railway, 63 and 90 miles, respectively, east of Fort

Smith. All shipments out of Fort Smith to those points and all other points on that line of road are interstate traffic. All shipments to all points, including those mentioned on other lines of road referred to, are intrastate traffic. Paris, in Logan county, Arkansas, is the eastern terminus of the Arkansas Central Railroad. Fort Smith is its western terminus. The road is 46 miles in length, is wholly within the State and under the control of the State Commission. If the intrastate rates were not applied to the traffic out of Fort Smith on the St. Louis, Iron Mountain & Southern Railway, and different (interstate) rates were applied, it would result in a discrimination between localities not only as to the points mentioned, but as to all other points on the several lines of railroad equi-distant from Fort Smith.

The city of Memphis is the principal eastern gateway for the business of Arkansas and Oklahoma. Nearly all of the principal lines of railway in the State, either directly or through their connections, enter Memphis and conduct traffic which passes through that gateway. The St. Louis, Iron Mountain & Southern Railway connects the city of Memphis with a very large part of the interior of the State of Arkansas through its main line and branches, extending westerly to and beyond Little Rock, and in a southerly direction to and beyond Helena, McGehee and Montrose, in the direction of New Orleans.

The main line of the Chicago, Rock Island & Pacific Railway extends westerly from Memphis into and beyond

Oklahoma, with branches radiating therefrom in the State of Arkansas. The St. Louis Southwestern Railway through trackage arrangements with other lines of road has an entrance into Memphis connecting its main line, which extends through Southeastern Arkansas, by way of Pine Bluff and Camden, to and beyond the city of Texarkana, with branches to Shreveport, Louisiana, Little Rock, Arkansas, and other points. A considerable amount of business also enters the State from Helena, a city on the west bank of the Mississippi River, in the State of Arkansas, and sixty miles south of Memphis, via the Illinois Central Railway, which enters that city from the east. The St. Louis, Iron Mountain & Southern Railway and the Missouri & North Arkansas Railway, which extends from Helena northwestwardly, to the cities of Joplin and Kansas City, Missouri, conduct a large traffic, both state and interstate, into and out of that gateway. These lines entering the State at Memphis and Helena and radiating in various directions, constitute a network that covers all of Eastern Arkansas.

The cities of Texarkana, in Arkansas and Texas, are situated, respectively, on the south boundary of the State of Arkansas and the east boundary of the State of Texas. The State line divides the two cities. It is the gateway for all traffic handled by the appellees through the State of Arkansas into Texas and a large territory beyond, and of a large amount of traffic into the State of Louisiana, the lines of many of the principal railroads in that section on each side of the State line terminating at that point. The St.

Louis, Iron Mountain & Southern Railway, and the St. Louis Southwestern Railway terminate there, and the lines of the Kansas City Southern Railway, coming from the north, through the State of Arkansas, passes into Texas at that point. The Texas & Pacific, traversing the States of Texas and Louisiana from the south, west, and east, also terminate there. A very large amount of interstate traffic and of intrastate traffic is conducted over the lines of the three railways entering Texarkana in the State of Arkansas from the north, and a large amount of traffic is also brought into the State and conducted within the State on branches radiating from the main lines of those roads.

The St. Louis, Iron Mountain & Southern, and the St. Louis Southwestern Railways, each, enter the city of Little Rock from the south, and are competing lines between Texarkana and that city. Those lines and the Chicago, Rock Island & Pacific are competing lines between Memphis and the city of Little Rock. It will thus be seen that a very large amount of interstate freight traffic is necessarily affected and the rates for transporting the same to a large extent controlled by the rates prescribed by the State Railroad Commission.

C. L. Stone, the Passenger Traffic Manager of the Missouri Pacific System and the St. Louis, Iron Mountain & Southern Railway, testified as to the effect of the State Commission passenger rates upon the interstate passenger rates. He testified that immediately after the change of the interstate passenger rates from three to two cents per

mile, under the act of 1907, a similar rate was applied to interstate passenger traffic, and upon the restoration of the three-cent rate, subsequent to the granting of the injunction in these cases, it was applied to both classes of service. He stated that it was impracticable, if not impossible, to reduce the passenger fare in the State from three to two cents per mile and not change the interstate rates correspondingly. He filed a map (Exhibit 24), which shows the lines of the St. Louis, Iron Mountain & Southern Railway and Missouri Pacific System, of which it is a part, in the States of Arkansas, Missouri, Kansas, Colorado, Nebraska, Oklahoma and Louisiana, an examination of which will demonstrate how difficult it would be to put and keep in force different rates for the transportation of interstate passengers from those applied to local passengers in the several States traversed by these lines of road. Twenty-five copies of this map have been filed to be used at this hearing.

Mr. Stone further testified in this connection:

"The rate per mile in the State of Arkansas was reduced by legislative action from three cents to two cents per mile, on April 9, 1907. This had the effect of making the following reductions between border points in the State of Arkansas:

"Between Moark, on the north, and Texarkana, on the south, the fare was reduced from $9.11 to $6.08; making a reduction of $3.03 in the intrastate fare.

"Between Bridge Junction, on the east, and Fort Smith, on the west, the fare was reduced from $8.60 to $5.73; or a reduction of $2.87.

"Between Bridge Junction, on the east, and Texarkana, on the southwest, the fare was reduced from $8.25 to $5.50; or a reduction of $2.75.

"Between Bridge Junction, on the east, and Mammoth Spring, on the north, the fare was reduced from $4.17 to $2.80; or a net reduction of $1.37.

"These reductions had the effect of reducing interstate rates between the territory as outlined on this map, between the points located in the territory marked '1' and the points located in the territory marked '8' (that is Mexico); a reduction of the local fares between Moark and Texarkana made an average reduction of from $2.25 to $3.03 on each ticket passing over the lines of the St. Louis, Iron Mountain & Southern Railway between Moark and Texarkana.

"The territory marked '8' includes Texas and Mexico (it is marked in blue on the map).

"Between points located in territory marked '3', '4' and '5' on the map, that is routed through the Memphis gateway, the reduction of the fare on the Arkansas lines would average from $1.90 to $2.87 for each passenger carried across the State of Arkansas.

"Between the points shown in the territories marked '2', '3', and '4' on the east and the territory marked '8' on the southwest, when routed via Memphis and Texarkana, the average reduction in the revenue accruing to the Arkansas lines was from $1.75 to $2.75 for each passenger carried between Memphis and Texarkana.

"Between the territory marked '4' and '5' on the southeast, and the territory marked '6' on the northwest, the average reduction brought about by the change in the fares in the State of Arkansas, was from $1 to $1.37 on each ticket.

"In other words, to make this perfectly plain, all of this coloring (indicating map) shows the effect that the reduction in the local passenger fares in the State of Arkansas from three cents to two cents per mile, had on interstate traffic.

"We cannot reduce the passenger fare in Arkansas from three cents to two cents per mile and not change our interstate rates. It is impracticable and almost an impossibility." (R. 266, 270, 271.)

The court below made the following finding of facts on this subject:

"That intrastate tariffs bear certain relations to, and to some extent control interstate rates cannot be doubted. The evidence in this case establishes that fact conclusively, and, even in the absence of such evidence, the court would be justified to take judicial notice of it. No better illustration is needed than the facts and conclusions of law in Gulf, C. & S. F. Railway Co. *v.* Texas, 204 U. S. 403, 413. And this seems to be the rule adopted by the Interstate Commerce Commission since the decision in the Gulf Railroad case. Ambrey Semple *v.* Galveston, etc., Ry. Co., 17 I. C. C. 267, and Rule 56-B of Administrative Rules. Although the Texas case was one involving freight only, the same principle applies to passenger rates. In fact, it is more apparent in the latter than in the former. Even in the absence of a rule to that effect by the Interstate Commerce Commission, or of decisions of the courts, if the States of Arkansas, Texas, and Missouri, each, enact a two-cent rate fare, it would be folly for a carrier to attempt to charge a higher rate for interstate or trans-state passenpers in those States, for passengers would purchase tickets to the State line of each State at the reduced local rate and thus defeat the higher interstate rates, although the state rates are, by the statutes of these States, limited to intrastate transportation solely."

Judge Sanborn, in discussing the effect of the Minnesota law on the rates of cities located in the same vicinity, said:

"Duluth and Superior, Grand Forks and East Grand Forks, Fargo and Moorehead, and Wahpeton and Breckinridge are so situated that each pair must be considered for the purpose of rate-making, as one locality. Both as a practical matter of the operation of a railroad, and in

order that undue and unjust discrimination as between the members of any pair may be avoided, each city of each pair must have rates equal to those accorded to the other city. If different rates, a different classification, or a different basis of rates be lawfully prescribed by one regulating power in or out of one city of any pair to those prescribed by another regulating power in or out of the other city of the pair, the carriers serving them both must, in order to avoid undue and unjust discrimination in fact, as between them, as well as to preserve their own power to transact business with each of them, adopt for each city the lower rates, or basis of rates, or classification, prescribed for either city." 184 Fed. 791.

This view may be applied to the twin cities of Texarkana, in Texas and Arkansas. If the railroads entering that city from the State of Arkansas should not apply the state rates to traffic from Texarkana, Texas, to points in the State of Arkansas, a condition would be created similar to that described by Judge Sanborn, and which would result in a discrimination against that city. The same is true of shipments from stations in Arkansas to Texarkana, Texas. Two rates would obtain on every shipment from and to stations in Arkansas to the two cities. Judge Sanborn says, at page 786:

"Whether discrimination, in fact, exists between rates is determined by comparison of the rates involved. If conditions are substantially the same, rates for like distances should be the same, and, if not the same, undue and unjust discrimination in fact will exist."

Again, at page 788:

"If the companies shall be compelled to maintain within Minnesota the rates prescribed by chapter 232, they will be compelled to reduce the basis of their interstate rates between Eastern Montana and North Dakota points

and Minnesota points, and between Eastern Montana, North Dakota and Minnesota points and Superior to a substantial parity with the basis prescribed by chapter 232, in order to avoid undue and unjust prejudice and disadvantage, in fact, against shippers and localities transacting the interstate business, as well as in order to protect the interstate business of carriers against serious impairment."

We think these statements by the court apply to the conditions existing at Fort Smith. All business from Fort Smith on the lines of the St. Louis, Iron Mountain & Southern Railway into the interior of the State of Arkansas is interstate. Other railroads radiate from that center to a large territory in the State northerly, southerly and westerly. In order to preserve a parity between shippers and localities on the lines of the Iron Mountain Railroad out of Fort Smith into the State with other localities penetrated by other lines of railroad, that company is forced to apply the State Commission rates to all business out of Fort Smith into the State.

Memphis is a distributing center for the State of Arkansas. West Memphis is situated on the opposite, west, bank of the Mississippi River, and is accessible to steamboat traffic on the river. All shipments from Memphis into the State of Arkansas take the Arkansas Commission rates, subject to a small differential for bridge toll. The railroads are forced to apply those rates by the laws of trade and insurmountable conditions affecting traffic. Speaking of a similar condition, Judge Sanborn said, page 793:

"They say that, while the reduction of the local fares and rates may induce the companies to reduce their inter-



PAGES

state rates and fares across the borders of the State to a parity with the local rates, this is the voluntary act of the companies, not directly required by the laws and orders. There are, however, known and inexorable laws of commerce, and one of them is that transported articles will move at the lowest available rates. * * * There is nothing voluntary on the part of the companies in the loss or burden imposed upon them by these reductions. That they must suffer whether they reduce their interstate rates or maintain them and permit the transformation of their affected interstate commerce into intrastate commerce by rebilling and local contracts so that it can pass at the sums of the locals. * * *

"Moreover, the acts and orders making these intrastate reductions necessarily operate to discriminate against interstate commerce and the right of the companies to carry it on, and in that way constitute a direct burden upon such commerce. Mr. Justice White said in the Pullman Company's case, 216 U. S., at page 65, 30 Sup. Ct., at page 236 (54 L. Ed. 378), that, though a power exerted by a State may not abstractly impose a direct burden on interstate commerce, yet such exertion will be a direct burden upon such commerce if the power as exercised operates a discrimination against that commerce, or, what is equivalent thereto, discriminates against the right to carry it on. If the companies exercised their right to maintain, and did maintain, their former interstate rates upon that portion of their interstate commerce affected by the local Minnesota rates, they lost to local commerce that interstate commerce, because it passed by rebilling and local contracts at the sums of the locals. This necessary effect of the local maximum rates was a direct discrimination against interstate commerce and the right to conduct it, and, hence, a direct burden upon that commerce. If, on the other hand, to avoid this discrimination, the companies reduce their rates, that reduction was a like direct burden, and no course was open to them whereby they could exercise their constitutional right to conduct their interstate commerce free from the direct regulation thereof, effected by these acts and orders."

Again, in speaking on the subject of the indirect effect of state regulation upon interstate commerce, the court say:

"Counsel for the defendants argue, however, that this radical discrimination is not forbidden by the interstate commerce law because it is a discrimination wrought, not by an undue difference between intrastate rates, of which they say the State has exclusive jurisdiction, nor by an undue difference between interstate rates of which, they admit, the Nation has exclusive jurisdiction, but by an undue difference between intrastate rates and interstate rates, and they contend that, over the discrimination thus wrought, neither State nor Nation has any power. The argument, however, again disregards the broad and fundamental difference between the power of the State over intrastate commerce and the power of the Nation over interstate commerce. The State may regulate its intrastate commerce so far, only, as the exercise of its power does not substantially burden or regulate or discriminate against interstate commerce, but no farther. A State may not prohibit or regulate discrimination between interstate and intrastate rates in such a way as substantially to burden or regulate interstate commerce, as, for instance, by the prohibition of a higher charge or rate for a short haul wholly within the State than for a long haul that includes the short haul and extends into another State, because such action burdens and regulates interstate commerce. Louisville & Nashville R. R. Co. *v* Eubank, 184 U. S. 27, 42, 43, 22 Sup. Ct. 277, 46 L. Ed. 416. By the same mark, because it is a direct regulation of interstate commerce, the Nation may regulate and prohibit discrimination wrought by an undue difference between interstate and intrastate rates, although such regulation or prohibition may also, to some extent, affect and regulate intrastate commerce. For, to the extent necessary completely and effectually to regulate interstate commerce, the Nation, by the Congress and its courts, may affect and regulate intrastate commerce." (Pages 794, 795.)

We submit that the statement made by the court in these cases that the facts found in the Minnesota case dif-

fer very materially from the evidence in these cases, is not warranted. In many respects, it is true, conditions differ in detail, but many of the conditions shown by the evidence to exist in these cases are covered by the principle announced in the case cited.

The court below, in speaking on this subject, said:

"If then the power to regulate carriers' rates rests upon the police power, which, under the decisions cited, is in fact coextensive with the governmental power of the State, it requires no extended argument to prove that a regulation or statute of a State enacted under that power is not void because it incidentally affects the commerce clause or any other provision of the National Constitution, especially, if it is not in conflict with any act of Congress on that subject, or when Congress has not seen proper to act upon that subject."

And, again:

"Another matter not to be overlooked is, if the State is without the power to regulate purely intrastate transportation because it affects interstate traffic indirectly, where is it vested? Congress is clearly without power to do so, and, of course, it cannot delegate to a commission a power it does not itself possess."

For the purpose of these cases, we submit that the suggestions of the court are answered by the recent opinion of this court in Southern Railway Co. *v.* United States, delivered on October 30, and not yet published. The case arose under the Safety Appliance Acts of Congress, which were passed largely for the protection of life and property, and, insofar as they applied to local trains operated within the State, affected matters within the State's police power. The court, through Van Devanter, J., in disposing of a



BLURRED PA

contention based on the view expressed by the court in the extracts, say:

"We come, then, to the question whether these acts are within the power of Congress under the commerce clause of the Constitution, considering that they are not confined to vehicles used in moving interstate traffic. * * * Is there such a close or direct relation or connection between the two classes of traffic, when moving over the same railroad, as to make it certain that the safety of the interstate traffic and those who are employed in its movement will be promoted in a real or substantial sense by applying the requirements of these acts to vehicles used in moving the traffic which is intrastate, as well as to those used in moving that which is interstate? If the answer to this question, as doubly stated, be in the affirmative, then the principal question must be answered in the same way. And this is so, not because Congress possesses any power to regulate intrastate commerce as such, but because its power to regulate interstate commerce is plenary and competently may be exerted to secure the safety of the persons and property transported therein, and of those who are employed in such transportation, no matter what may be the source of the dangers which threaten them. That is to say, it is no objection to such an exertion of this power that the dangers intended to be avoided arise, in whole or in part, out of matters connected with intrastate commerce."

If we understand the effect of this ruling it is a complete answer to the suggestions contained in the above extracts from the opinion of the court below.

In M. & I. Coal Co. *v.* I. C. R. R. Co., 21 I. C. C. Rep. 39, the Interstate Commerce Commission held that under the Hepburn Act

"It is the duty of the carriers to so unite themselves that they will constitute one national system. They must establish through routes, keep these routes open and in operation, furnish the necessary facilities for transporta-



GES

tion, make reasonable and proper rules of practice as between themselves and the shippers, and as between each other. And the full burden of this great obligation is in the first instance upon the carriers themselves.

"But the power to control and regulate railroad practices is vested in the Commission as between the carriers themselves, as well as the carriers and the public."

It is difficult to conceive how this vast power can be exercised consistently with the exercise of the power of regulation and control by the States as to intrastate traffic and operation, without producing a conflict that would impair the full measure of power assumed by the Federal Government and intended to be conferred on the Interstate Commerce Commission. (See Traffic World, Vol. 8, No. 25, Dec. 16, 1911).

## PREMATURE BRINGING OF SUIT AND ACQUIESCENCE.

It is contended by counsel for the State that the plaintiffs should have applied to the Railroad Commission for relief before they brought suit to enjoin the rates.

This contention is based on the ruling in Prentis *v.* Atlantic Coast Line, 211 U. S. 210. The ruling in that case was based on the peculiar provisions of the Constitution of Virginia. The legislative action had not become final under the laws of Virginia at the time the suit was brought. It was still at the legislative stage, and the rates complained of were in process of formation, and, for that reason, the court held that it was only a just recognition of the care with which the rights of the plaintiffs had been guarded that they should make sure that the State, in its *final legislative action,* would not respect them. Willcox *v.* Consolidated Gas Co., 212 U. S. 19, 40; A., T. & S. F. Ry. *v.* Love, 174 Fed. 59, 62.

Here, the action of the State, through its administrative board, had become complete and final. It was taken after hearing and over the objection of the parties affected. There was no reason to suppose, and the railroads were not required to assume, that they would reverse their action. The Commission had no power to change the passenger rate; the legislative act of 1907 left it no discretion in the matter. It merely registered the will of the Legislature in in the order promulgated in regard to passenger rates. (See opinion of the Circuit Court in this case, p. 24.)

**It is also claimed that the railroads delayed bringing suits for a length of time that implies acquiescence.**

Mr. Hampton, the chairman of the Commission, testified that the railroads appeared before the Commission when invited to do so and objected to the changes, and that the reductions were made over their protest (R. 802). All the traffic men of the railroads testified to the same effect. He also testified that about seventy-five changes were made in rates during the time he was a member of the Commission, and all of them were reductions. Besides this, the Commission made many changes in the classification by enlarging the list of commodities which carried a lower rate and operated as a reduction of the rates. They changed the minimum carload prescribed in the Western Classification, which was used by the railroads, materially, making many reductions in that respect which effected a reduction in the revenue. The reduction in passenger rates made by the act of the Legislature of 1907, produced a very material reduction in the revenues of the roads.

The cost of material and labor employed in the maintenance and operation of railroads was materially increased during the time the Commission rates were in force, and the expense of operation was constantly increasing by reason of statutory requirements involving large outlay; the installation and maintenance of new equipment and appliances, the employment of additional employes by shortening the hours of labor of certain classes, the increase in the number of employes engaged in certain departments of

the service—for instance, by the statute requiring three brakemen on certain classes of trains. These changes are set out in the testimony of C. J. McPherson, who was Assistant to the General Manager of the Missouri Pacific System and the St. Louis, Iron Mountain & Southern Railway Company, to which we will now call attention at some length, more on account of its general importance and bearing on other questions that may arise hereafter, than on account of the particular matter we are now discussing. It shows conclusively that the condition of the railroads in the State of Arkansas had continually grown worse until they had reached a point where the revenue produced by the rates in force was entirely inadequate to meet ordinary operating expenses and afford a reasonable return to the owners of the property. As pointed out by the circuit court in the opinion in this case, acquiescence could have no greater effect in a case of this character than to raise the presumption that the rates are reasonable if the conditions are unchanged. It would not be conclusive nor produce an estoppel. None of the elements of estoppel arise. Leaving out all other questions, the passenger rate statute had only recently gone into effect at the time the suits were brought, and that alone produced such a serious diminution in the revenues of the railroads as to justify legal proceedings. But there has, in fact, been no acquiescence. All the testimony on the subject in the record shows that the railroads were at all times objecting, protesting, and doing all they could to prevent the reductions complained of.

(See opinion of the Circuit Court in these cases, p. 26, and the cases cited.) Love v. A., T. & S. F. Ry. Co., 185 F. 332.

FOR A PERIOD OF TEN YEARS BEFORE THE INSTITUTION OF THESE SUITS, THERE HAD BEEN A CONTINUOUS INCREASE IN THE EXPENSE INCIDENT TO THE OPERATION OF RAILROADS IN THE STATE OF ARKANSAS, GROWING OUT OF THE INCREASE IN THE COST OF LABOR AND OF ALL MATERIAL USED IN MAINTENANCE AND OPERATION, AND THE LARGE BURDENS IMPOSED ON RAILROADS IN COMPLYING WITH THE REQUIREMENTS OF THE RAILROAD COMMISSION AND STATUTORY REGULATIONS AND REQUIREMENTS AND A LARGE INCREASE IN ALL CLASSES OF TAXES.

Mr. McPherson testified that the cost of operation had increased enormously since 1897, caused by various forces, the principal of which is (1) the increase in wages paid to all classes of railroad employes, (2) the increased cost of material, (3) the increase due to compliance with various laws, (4) the increase in taxation (R. 287). At page 286, he gave a detailed statement of the increase in wages of a large number of employes, and filed exhibit 27, showing the average daily rates of pay for classes of service per day and per 100 miles (in freight service) during various years, from, and including, 1897 to 1909. The increase ranges from 13.2 per cent to 61.9 per cent.

The amount paid to the classes of employes referred to in the exhibit, and in his testimony, for the fiscal year ending June 30, 1908, was $11,196,767.00. He testified that had the wage scale prevailing prior to 1902 prevailed in the fiscal year of 1908, the amount would have been $7,803,951, showing an increase in wages, alone, of the ten classes of employes enumerated, to be $3,392,815 in the year 1908. These figures apply to the Missouri Pacific System, but of the increase Arkansas would bear more than her relative proportion because of greater volume of business, density of traffic, and the Three Brakemen Law. The increase had extendeded to all classes of employes as well as those enumerated, particularly since 1902. The amount in the unclassified service could not be exactly stated prior to 1907, but in that year, because of the increased cost of living, an advance in wages was made to many persons in the unclassified service, which, including the classified service previously referred to, averaged 6.7 per cent of the entire labor roll for the fiscal year, 1908. The ratio of increase in wages did not show the increased cost of labor, owing to changes in duties imposed upon certain classes of employes—for instance, firemen, who formerly wiped their engines above the running board had been relieved of that duty since April 1, 1907, making it necessary for others to perform that service at an approximate annual cost of $60,000. Switchmen formerly worked twelve hours a day as a unit of the day's work; they now receive 61.9 per cent increase in the wages and their hours of service have been reduced to ten as a unit of a day's

work. Since 1890 the classification of railway employes has been sharply defined, and has resulted in a gradual increase in the number of employes. The increased cost brought about by advances in the price of materials entering into railroad construction, operation and maintenance was greater than that brought about by the advance in labor cost. One of the largest items in maintenance-of-way and structures is crossties, the cost of which has increased from 108 to 129 per cent over that of 1897. Up to 1900, the company paid 24 cents per tie for first-class crossties in the State of Arkansas. He then gives the increase from that time to 1908, the cost being 55 cents per tie in the latter year, or an increase of 129 per cent, north of the Arkansas River, in Arkansas, and 50 cents per tie, or 108 per cent increase south of the river. That item alone has increased the cost $250,000 a year. He made a comparison of prices paid in 1898 with prices paid during the current months of the year 1909, which is condensed in exhibit 28, filed by him, and shows an increase in prices ranging from 7.7 per cent to 147.7 per cent in articles that enter largely into operation and maintenance. He filed a statement compiled from bulletin No. 75, issued by the Department of Commerce and Labor in March, 1908, which he testified exhibits the range in prices of some material entering into railway maintenance and operation, from 1897 to 1907. This is made exhibit 29 to his deposition, enumerates different articles from those contained in exhibit 28, and shows an increase ranging from 15 per cent to 171.4 per cent in prices between the years mentioned. He referred to and

enumerated certain statutory enactments which he testified had largely augmented the cost of operation in the State of Arkansas. Among them was the installation of headlights on locomotives, the Full Passenger Crew Law, the Three Brakemen Law, and other enactments. He showed that the total expense incident to complying with these laws in the current volume of business, under current conditions, was $217,987 per annum. He testified that the railway company, that is, the Missouri Pacific System, including the St. Louis, Iron Mountain & Southern, had expended $4,748,231 to equip its locomotives with air-pumps and driver-brakes and its freight cars with automatic couplers and air-brakes, and that the cost of their maintenance was $250,000 per annum. The increases referred to in his testimony, except where otherwise mentioned, are on the St. Louis, Iron Mountain & Southern, alone. He states that the increase per mile for taxes during the nine years was 96.6 per cent, growing largely out of the increase in the assessment of the value of the property. Another source of expense in first cost and maintenance is the erection of stations under laws passed by the Legislature and orders of the Railroad Commission. Many stations have been erected in that way which would not otherwise have been established, not only the cost of erection, but the cost of maintenance of the structures, and of agents and operators at such stations, involve material expense. He filed a graphic chart as exhibit 30, showing comparative prices of material and labor during the period covered by his testimony and the ton mile return for service in freight traffic, that is, the

revenue per ton mile. The chart shows that there was a decrease of 12 per cent in the revenue per ton mile from 1897 to 1909. The chart is explained and its meaning pointed out in the testimony of the witness at page 296 and the following pages. It shows that the producing power of the railway had decreased, relatively, for the volume of business done, approximately 12 per cent. He further testified that the conditions described in his testimony and shown on the chart, applied generally to railroads operated in the State. His testimony further shows that in 1906 all the organizations connected with train service formulated demands on railroads west of the Mississippi River and northwest from Chicago, for radical changes in the labor status. It included demands for reduction in the unit time of labor to eight hours, and also for an increase in the rate of wages. A compromise was effected between the railroads and the labor organization, which resulted in an increase in wages amounting, for engineers and firemen to 8.2 per cent, and of all trainmen to 10.2 per cent. The wages of the yard men had been increased in the preceding November 13.4 per cent. These increases, as to trainmen, took effect on April 1, 1907. In the meantime, demand was made and an increase in wages granted to all the crafts —the shopmen, boiler-makers, machinists, blacksmiths, etc., as follows:

Machinists and boiler-makers...8.8 per cent
Boiler-maker's helpers.....8.3 per cent
Blacksmiths and their helpers....9.7 per cent
Car department employes.....6.1 per cent
Tinners, coppersmiths, and pipe-
fitters ..... .4.8 per cent,

and, later in the year, it was also necessary to increase the wages of unskilled labor, because of the increased cost of living. The total increases that were made, including crafts, he testified, affected 19,811 out of a total of 37,000 employees in the service of the Missouri Pacific System, and amounted, during the six months' period, in the State of Arkansas, to $215,204, or 6.7 per cent of the entire labor rolls. 65.9 per cent of the entire operating expenses in the State is for labor, and it was on this proportion of operating expenses that the increase of 6.7 per cent was made during the early part of the year 1907. He introduced two extracts from bulletin No. 75 of the Department of Commerce and Labor, issued in March, 1908, showing a very material increase in the cost of material used in operation in the years 1906 and 1907. This enumeration is contained at pages 299, 300, of the record. He testified that the tendency of prices of labor and material used in maintenance and equipment, judging from his observation during the last ten years, is upward; that increases in wages made by a railroad company are permanent, and there is no probability of any abatement or recession in the price of labor. His testimony on this subject will be found in the record, beginning at pages 286-300.

He was asked what the railroad company had done to improve efficiency in operation, beginning with the year 1900. His answer to that question, in full, was as follows:

"The railway company has made extensive grade revisions and changes in its alignment and purchased heavier

equipment. That is, locomotives of greater tractive power, and cars of larger capacity, and made other improvements to increase the efficiency of its train service. The grade between Moark, near the State line between Missouri and Arkansas, a distance of 307 miles, is now six-tenths of one per cent, and this involved the reduction of the maximum grades between Moark and Little Rock, 35 feet to the mile, and between Little Rock and Texarkana, 26 feet to the mile, these reductions bringing the maximum grade to 31 feet to the mile, or six-tenths of one per cent.

"Between Knobel and Helena, a distance of 140 miles, the maximum grade was reduced from 91 feet to the mile, southbound, to 62 feet to the mile. And, northbound to 83 feet, involving the cutting down of the maximum grade 28 feet to the mile, southbound, and 8 feet, northbound.

"Between East Little Rock and Pine Bluff, a distance of 42 miles, the maximum grade has been reduced from 52 feet to the mile to 26 feet, which was a maximum grade reduction of 26 feet to the mile, and leaves the present grade one-half of one per cent.

"Between Little Rock and Van Buren, a distance of 152 miles, the maximum grade, prior to the revision, was 85 feet to the mile, eastbound, and 81 feet to the mile, westbound. These grades have both been reduced to 31 feet to the mile, or six-tenths of one per cent. This involved a reduction of maximum grade 54 feet to the mile, eastbound, and 50 feet to the mile, westbound.

"This, with other work in the way of improvements, improving the efficiency of the property, caused an expenditure of $8,684,411.00 for the eight fiscal years, 1901 to 1908.

"It does not embrace some of the expenses, however, as the figures chargeable to 1899 and the first half of 1900 were not accessible at the time that this compilation was prepared.

"This reduction of grade increased the efficiency of the railway in its tonnage road haul.

"As a further improvement, the company purchased, during the period mentioned, 323 locomotives of large tractive power, and 6,680 freight cars of large capacity, at a cost of $9,660,372.00.

"This heavier power likewise contributed to increasing the average tonnage road haul and thus increased the efficiency of the service.

"This increased efficiency of operation, however, has been overcome and far outrun by the forces working against it. That is, the increased rate of wages and the increased cost of material, the burdens imposed by legislation and the increase in taxes." (R. 331, 332.)

His statement that the increase in efficiency is overcome and far outrun by the forces working against it, was not contradicted, and is corroborated by a comparison of the percentage of expenses to revenue during the period covered, which shows that the net earnings decreased, and this decrease was unquestionably traceable to the fact that the cost of operation, growing out of the increase in the expense of operation and cost of material, outran and was greater in proportion than the effect of improvement in efficiency. The net earnings are the result of all the forces that were at work during this period,—increased efficiency on one side and the increased cost of everything that enters into railroad operation on the other. We know of no higher test for the purpose of demonstrating the correctness of Mr. McPherson's views.

Mr. McPherson had been engaged in railroad operation for thirty-two years at the time he testified. His service covered a vast field, ranging from telegraph operator,

station agent, general yard master, master of transportation, chief clerk to the general manager, and assistant to the general manager. He was more closely in touch with the conditions in regard to which he was examined than any official connected with the Missouri Pacific System, and far more than any witness who testified in the case on either side. His duties required him to deal with and study economies in operation, and he was peculiarly well qualified to give information upon those matters.

On cross-examination, Mr. McPherson testified that the graphic chart introduced by him (Exhibit 30) did not reflect the increased efficiency of locomotives, car capacity, etc., and was asked if it would reflect the actual conditions without that. He said it was not intended for that purpose; that it would be difficult for any graphic illustration to be made that would embody those elements. (R. 392.)

In response to a question on cross-examination, he stated that the purpose of the chart filed by him was to show the increasing trend of the cost of the articles the railway must buy, and the decrease in the trend of its purchasing power, and the fact that it did not show the increased efficiency of locomotives, cars, etc., did not impair its value for that purpose. (R. 394.)

He was then asked if the railroad secured any more efficiency for its purchasing power now than it had at the beginning of the period referred to by him. His answer was that it did not; that it is doubtful if the company today secures the labor efficiency that it formerly did, or gets the

same efficiency for its expenditures for labor that it formerly did. He stated, in answer to a cross-interrogatory, that the increased efficiency of locomotives measured by the average tons of revenue freight per ton mile in 1909, over 1900, is substantially 26 per cent; that with this increase of 26 per cent, there goes a heavier expenditure for maintenance. The maintenance of the present-day locomotive is very much greater than the average locomotive of 1900. The average increase of tractive power of locomotives as between 1902 and 1908, is substantially the same, 26 per cent. The increase in the average capacity of the cars is 43 per cent. When asked what the increased efficiency produced by the movement on the line of the Iron Mountain in Arkansas was, he stated that it would be difficult to put in the shape of figures beyond what he had given, but he said: "We get a 25 per cent to 26 per cent larger train haul than we formerly did, but the increased capacity of cars has not helped us very much because, while it has been 43 per cent, the increased use of those cars has been only about 20 per cent, that is, the average tons per loaded car mile, due to various reasons, partly the Commission tariff, on account of the low minimum. Our freight cars have an average tonnage capacity of 33.62 tons; their minimums on very many articles are not one-half that amount, and my recollection is there is no minimum in Arkansas (under the Commission tariff) that is higher than 30,000 pounds. We have those difficulties to contend with." (R. 392, 394.)

Counsel, at the hearing below, contended that the lower line of the chart, showing diminution in revenue, repre-

sents fluctuations in interstate rates in the State of Arkansas. He is obviously mistaken in that. The chart represents the revenue on the St. Louis, Iron Mountain & Southern System, including five or six States, and not in the State of Arkansas, alone, and could not, therefore, represent fluctuations in interstate rates in that State. The chart, in truth, however, largely reflects conditions that are independent of, and not connected with, the tariff of charges—results growing out of the changes in the cost of labor, material and everything that enters into the cost of operation, increased taxation, and burdens imposed by legislative requirements. Every element of increased expense enumerated by Mr. McPherson would have a direct bearing on the relation between earnings and revenue, without any regard to the rates that were charged for the service. The effect of the conditions described by him would necessarily require higher revenues for the purpose of meeting the increased expenditure, and as the revenue depends on the rates received for service rendered, it may well be that a rate that would have produced a reasonable return in 1900 would not do so in 1907. But that fact is not illustrated nor represented on the chart. Counsel labor under a misapprehension. (Twenty-five copies of said chart are filed, it having been omitted from the printed record.)

## THE STATE'S EXHIBIT Z OF NO VALUE.

The State, for the purpose of meeting the testimony of Mr. McPherson, filed exhibit Z, which is a comparison of revenue and expenses per train mile for the years ending

June 30, 1897, and 1907, as shown by the Interstate Commerce Commission's reports for those years.

Examination of that exhibit in the light of the conditions existing in the year 1897 will show that it is of no value for the purpose for which it was used. It shows that on the Iron Mountain Railroad System the operating revenues for the year ending June 30, 1907, was 50 per cent greater than in the fiscal year of 1897, and that the expenses were 40 per cent greater; the net revenue per train mile being 69 per cent greater, in the latter, than in the former year.

But the year 1897 was so exceptional that it cannot be made the basis of a comparison. It was a period of great depression and falling off in the business and in the earnings of all railroads, and that accounts for the difference that is shown in the figures that appear in the exhibit.

Mr. F. P. Johnson, an expert accountant in the employment of the St. Louis, Iron Mountain & Southern Railway Co., testified that the statistics shown by the exhibit were taken from the annual report of the Interstate Commerce Commission for the year 1897, that the opening statement of that report contained the following statement as to its statistical value:

"A review of statistics of operation since 1890 would disclose the fact that each year ending June 30, from 1890 to 1893, inclusive, closed with an increase in net and gross earnings as compared with the previous year.

"The year 1893-1894, however, proved to be a disastrous one for railways, the gross earnings being less than

$147,000,000 and the net earnings $50,000,000, than the corresponding items of the previous year.

"The year 1894-1895 showed practically no recovery from the depression of the previous year.

"The year 1895-1896 closed with an increase in gross earnings of $74,000,000 and net earnings of $27,000,000. But this movement toward better conditions did not continue during the year covered by the present report, which, as compared with 1896, shows again a decrease in gross earnings of $28,000,000 and in net earnings of $7,000,000.

"It was not until June, 1897, that is to say, the last month of the twelve covered by this report, that the railway earnings showed a healthy revival of commercial conditions. This fact indicates the character of the year covered by the present report *and must be held in mind by one who endeavors to interpret the figures about to be presented.*" (R. 2003-4.)

Continuing, Mr. Johnson testified that the year ending June 30, 1907, was one of the best in the history of the railroads, and that fact is not controverted. (R. 200-203.)

Exhibit F-1, filed by the State in this case, was also referred to by counsel for the purpose of showing heavier train loading in 1907 than in 1897. Mr. Johnson, referring to this exhibit, stated that it was subject to the same criticism as exhibit Z; that it compared two periods entirely different in their character, and in addition to that, so far as the passenger service on exhibit F-1 is concerned, it gives no consideration to the change in revenue produced by the two-cent passenger fare. (R. 2004.)

We submit that no just or fair comparison can be made between the two years taken for that purpose, on ac-

count of the great dissimilarity in the conditions. Learned counsel asserted, in argument below, that McPherson's exhibit 30 contained a similar comparison. He was mistaken. It does not purport to make any comparison as between periods, but was solely intended to show the continuous increase in the prices of labor and material from 1897 to 1907.

## DIVIDENDS.

Exhibit 47 shows the dividends paid by the St. L., I. M. & S. Ry. Co. from 1904 to 1909 inclusive. The Company paid 10 per cent dividends from 1904 to 1907. In 1908 the dividends dropped to 5 per cent and in 1909 to 4 per cent. The dividend for 1908 represented the fiscal year ending June 30, 1908, and embraces the period covered in this suit. The total track mileage of the St. Louis, Iron Mountain & Southern Railway during the period covered, was 2,599 miles, that in Arkansas 1,353 miles, constituting 52 per cent of the total track mileage. (Statement No. 3, Exhibit No. 3.)

Dividends to a certain extent represent earnings from operations, but not wholly, because every conceivable source of revenue, not only from freight and passenger and mail and express business in Arkansas, but in Missouri, Illinois, Oklahoma, and Louisiana, contributes to it. The dividends represent every class of business on the system, interstate as well as domestic, in each one of the several States in which the system is operated. It also represents all revenue that accrues from investments. The Iron Mountain

Railway owns a large part of the bonded indebtedness of other railroads, among them, the Texas & Pacific Railroad, and the earnings of the latter contribute to the dividends of the former.

The fact that the railroad company may be earning sufficient to cover operating expenses, meet the interest on its bonds, and provide a dividend on the entire system, does not affect its right to earn reasonable compensation on its state business, which is a very small part of the business of the Iron Mountain Railway System. The intrastate earnings in Arkansas for the last half of 1907 were $1,476,000, or less than 12 per cent of the total earnings of the system, and much less if the revenue from the investments is considered. So it may well be that a loss on that small proportion of the business made up of short hauls and the more expensive classes of business to handle, would not affect the result of the entire volume of business to the extent that it would prevent the earning of dividends on the total business and the profits accruing from investments.

The court, in the case of Smythe v. Ames, 169 U. S., p. 466, discussing that question, said this:

"It is further said in behalf of the appellant, that the reasonableness of the rates established by the Nebraska statute is not to be determined by the inquiry whether such rates would leave a reasonable net profit from the local business affected thereby, but that the court should take into consideration, among other things, the whole business of the company, that is, all its business, passenger and freight, interstate and domestic."

That is what is represented by the dividends introduced in evidence here, the whole business and receipts from every source on the entire system.

"If it be found upon investigation that the profits derived by a railroad company from its interstate business alone are sufficient to cover operating expenses on its entire line, and also to meet interest, and justify a liberal dividend upon its stock, may the Legislature prescribe rates for domestic business that would bring no reward and be less than the services rendered are reasonably worth? Or, must the rate for such transportation as begins and ends in the State be established with reference solely to the amount of business done by the carrier wholly within such State, to the cost of doing such local business and to the fair value of the property used in conducting it, without taking into consideration the amount and cost of its interstate business, and the value of the property employed in it? If we do not misapprehend counsel, their argument leads to the conclusion that the State of Nebraska could legally require local freight business to be conducted even at an actual loss, if the company earned on its interstate business enough to give it just compensation in respect of its entire line and all its business, interstate and domestic. We cannot concur in this view. In our judgment, it must be held that the reasonableness or unreasonableness of rates prescribed by a State for the transportation of persons and property wholly within its limits must be determined without reference to the interstate business done by the carrier, or to the profits derived from it. The State can not justify unreasonably low rates for domestic transportation, considered alone, upon the ground that the carrier is earning large profits on its interstate business, over which, so far as rates are concerned, the State has no control. Nor can the carrier justify unreasonably high rates on domestic business upon the ground that it will be able only in that way to meet losses on its interstate business. So far as rates of transportation are concerned, domestic business should not be made to bear the losses on interstate business, nor the latter the losses on domestic business. It is only rates for the transportation of persons and property between points within the State that the State can prescribe; and when it undertakes to

prescribe rates not to be exceeded by the carrier, it must do so with reference exclusively to what is just and reasonable, as between the carrier and the public, in respect of domestic business. The argument that a railroad line is an entirety; that its income goes into, and its expenses are provided for, out of a common fund; and that its capitalization is on the entire line, within and without the State, can have no application where the State is without authority over rates on the entire line, and can only deal with local rates and make such regulations as are necessary to give just compensation on local business."

The falling off in the dividends during and after the fiscal year, 1908, may be accounted for by the conditions developed in the testimony of Mr. McPherson. It would be the natural and necessary consequence of the facts and conditions shown in his testimony. He showed that there had been a gradual increase in the cost of material, supplies, and labor from 1898 to 1908; that in the early part of the year 1907 increases were made affecting the wages of nearly 20,000 employes in the various departments of service, which item, alone, amounted to $215,214.00 during the last six months of the year 1907, or 6.7 per cent of 65.9 per cent of the entire operating expenses in the State. That during the same period the cost of materials made a substantial advance; that the cost of operation in Arkansas was increased $48,053 under the new classification of operating expenses issued by the Interstate Commerce Commission under the Hepburn Act, which act became effective in August, 1906, and $67,104 under an act of the Legislature of Arkansas requiring railroads to employ additional brakemen on all trains composed of more than twenty-four cars, the increase having been made in May, 1907.

The validity of the act was upheld by this court in C., R. I. & P. Ry. Co. *v.* State of Arkansas, 219 U. S. 453.

## COMPARATIVE COST OF OPERATION.

Exhibit 6, filed by the railroad companies shows that it cost 36 cents less to earn $100 on the St. Louis, Iron Mountain & Southern Railway in the State of Arkansas during the six months ending December 31, 1907, than it did to earn $100 on the entire line during the preceding fiscal year; that it cost $9.54 more to earn $100 in the State of Arkansas than it did upon all of the lines of railroad in group 8, which is composed of the States of Oklahoma, Kansas, Missouri, south of the Missouri River, parts of Texas, Colorado, New Mexico, and Arkansas, during the same periods. Counsel in the argument at the hearing below drew the conclusion, and based an argument upon that showing, that was unfavorable to conditions on the Iron Mountain Railroad in Arkansas as compared with other lines, both with regard to the revenue and manner of operation. The figures referred to show the ratio of expense to the gross earnings. Counsel cross-examined Mr. McPherson as to these statistics. He testified that the ratio of expense to gross earnings is not an index of much value for comparative purposes. (Record, p. 298.) It depends upon several factors, on conditions, favorable or otherwise, that may permanently differ between railroads; conditions that may come about in the same year and different years on the same railroad. It depends on traffic and on expenses, also on the standard

of maintenance; the maintenance observed by the different railroads compared, or upon the same railroad in different years. It is entirely possible for that ratio to vary between railroads as much as 10 per cent from the maintenance put upon the property by different roads or upon the same railroad in two different years. Taken independently, without analysis of its factors for comparison to determine the efficiency of operation, the road that expended less than a sum sufficient to preserve its standard of maintenance would apparently be better operated and more favorably conducted than a road that preserved its standard of maintenance by expending a large sum.

Again, speaking of exhibit 6, he says it is between two different periods; one the fiscal year ending June 30, 1907, the other the six months' period ending December 31, 1907. The conditions that existed during these periods were unlike. The cost of operation during the latter period was increased largely for various reasons—increased cost of labor, increase in the cost of material, etc. Then he gave in detail some of the increases in the cost of labor, and stated further that during the same period the cost of all materials used by the railroad in its operation and maintenance made a substantial advance, quoting in support of the statement from bulletin No. 75 of the Department of Commerce and Labor, issued in March, 1908, heretofore referred to in connection with his testimony.

He says at page 301, that the ratio of expense to earnings on the Iron Mountain as a system for the fiscal year

ending June 30, 1907, was 62.8 per cent, and the ratio for the United States was 67.53 per cent, 4.73 per cent greater than on the Iron Mountain, and in group 8, 64.34 per cent—1.54 per cent greater than on the Iron Mountain. He then makes a comparison of the operating ratios of railways touching Arkansas, and those operated under similar conditions for the fiscal years ending June 30, 1907, and June 30, 1908, taken from published annual reports for the purpose of showing that the increase in the ratio of operating expenses was not confined to the Iron Mountain Railroad alone. This comparison will be found at page 301 of the record. The similarity of conditions grows out of the fact that similar wage conditions affected all the railways used in the comparison. Since exhibit 6 was filed, he had obtained the advance bulletin of revenues and expenses of systems of railroad issued by the Interstate Commerce Commission, which enabled a comparison to be made of the six months from July to December, 1907, inclusive, the result of which is shown in exhibit 31 filed by him, and bears out his statement as to the general ratio of increase of operating expenses on all lines of road in the country.

Counsel assume that exhibit 6 shows a larger earning from passenger business on the Iron Mountain than on other roads in group 8, and throughout the country generally, but exhibit 31 shows that the ratio of earnings on the St. Louis Southwestern Railway and the Iron Mountain during the last half of the year 1907 is lower than on other lines, and

in fact, that the passenger business on these roads was not as large as the average of the United States, or as a large number of other railroads operating in the same territory. The two-cent rate during the period involved was in force in Missouri. The percentage on the Illinois Central Railroad, where the two-cent rate applied, was the same as the Iron Mountain in Arkansas, both being 21.05 per cent. Counsel fell into the error of making this comparison and illustration from exhibit 6, which covers the fiscal year ending June 30, 1907, as to the States in group 8, and the last six months in 1907 as to the St. Louis, Iron Mountain & Southern system, and that part of the line in Arkansas, while the bulletin from which exhibit 31 is compiled makes the comparison upon the same period. The information as to the earnings and expenses for the last half of the year 1907 was not accessible at the time exhibit 6 was prepared, and that exhibit is unreliable for the purpose for which it was used by counsel.

## THE PERIOD COVERED BY THE ACCOUNTS AFFORDS A FAIR TEST AS TO THE REASONABLENESS OF THE RATES.

The accounts introduced by the St. Louis, Iron Mountain & Southern Railway cover the calendar year 1907. They are stated separately and the earnings for each six months' period is shown.

The accounts of the St. Louis Southwestern cover the fiscal year ending June 30, 1908, divided into two periods and showing the earnings for each half of the fiscal year separately.

The State's accountants adopted the last half of the year 1907 in making up their statements and applied their theory of dividing the expense of operation between interstate and intrastate traffic, based on the performance in the month of October. They had access to, and investigated so far as they wished to do so, all the accounts showing all earnings and expenses of both companies for previous years.

The business and gross earnings of both roads were shown to have been larger during the six months ending December 31, 1907, than in any other similar period, and the gross earnings per mile above the average of the eight years preceding it. These facts sustain the court's finding that:

"In view of these facts there is no substantial ground for the claim that the period selected by complainants was unfair to the State or insufficient to enable the court to determine the issues in these cases, or that the earnings and

expenditures for these periods do not show a fair average of the business of complainants, at least fair to the defense. The fact that the able counsel for the State, and expert accountants did not call for data of other periods than those produced by complainants and in evidence, is, if not conclusive at least persuasive that they considered the evidence offered sufficient for a just determination of the issues involved." (P. 23.)

The panic that came on in the latter part of 1907 was not felt in time to affect the business of that period. This is abundantly established by the evidence of R. E. Kimbell, the Assistant Auditor of the St. Louis Southwestern, who testified that the panic began in November, but was not seriously felt until the early part of 1908. (R. 160.)

The best evidence on that point is a comparison of the earnings of that period with previous years. The evidence shows that the gross earnings of the St. Louis Southwestern Railroad for the last half of 1907 were $5,427,121.82. During the same period in 1906 they were $5,341,994.91; 1905—$4,594,748.99; 1904—$4,753,032.78; 1903—$4,-064,853.19. On the St. Louis, Iron Mountain & Southern road the gross earnings for the last half of 1907 were $12,385,947.00; 1906—$11,833,245.96; 1905—$10,395,-654.67; 1904—$10,334,596.81; 1903—$10,128,966.95. (Exhibit 45.) These statistics we submit settle any question as to the effect the panic may have had on the last half of the year 1907.

## ALLEGED IMPROPER CHARGES AGAINST THE EXPENSE OF OPERATION AND OMISSIONS FROM EARNINGS IN INTRASTATE BUSINESS.

The State contends that certain charges were improperly made to intrastate business by the court. Statement No. 4 filed with exhibit 3 is a statement of operating expenses during the six months in question. Under the head of "Maintenance-of-Equipment" there appears a total charge of $63,288.35 for repairs to tools and machinery, 77 per cent of which, or $48,671.67, is charged to the State of Arkansas and is divided between intrastate and interstate expenses. It is contended that this sum is expended at the Argenta shops because they are the largest of the system, that the shops in Missouri and Kansas are smaller. The court found that there was nothing in the evidence to indicate what would be a proper sum to be charged, which is undoubtedly correct. The ground of the State's contention in the court below was that a larger ratio was charged to the State on that item than on other items. The average ratio of the charge of "Maintenance-of-Equipment" to the State was 55 per cent of the total. The items vary, ranging between 53 per cent and 77 per cent. The State contends that it should not exceed 55 per cent, that is the average ratio chargeable to the State. The same contention might be as logically made by the railroad companies as to any item that dropped below 55 per cent. The exhibit was filed by Mr. F. P. Johnson of the auditing department of the railroad company. He was examined in regard to it and

testified that the item related to repairs of tools and shop machinery and heating and lighting, and is charged to the operating division, that is to the jurisdiction of each master mechanic. In Arkansas the principal machine shop is at Little Rock, which entails a heavier expense than at any other division point because it is larger than any other division point in the State. Miscellaneous shop expenses, such as this item, are not apportioned over the entire Missouri Pacific System, but are localized to the particular division, on which each shop is located. The general repair accounts applying to locomotives and cars is apportioned over the system. If the shop accounts were apportioned over the entire system in like manner, Arkansas would be compelled to stand a proportion of the expense incurred at shops located in other States. "If we were to pool this amount on the same basis that we pool the repairs to locomotives and cars, I think the amount charged to the State of Arkansas would be just as large." The shop account is of a local nature. (R. 142.) The evidence shows that the system is uniform and has been in existence for a long time on the Missouri Pacific Railroad. The $63,000 contained in this item applies to the Iron Mountain and the $48,000, which is charged to Arkansas accrues at the shops in that State. Mr. Johnson testified that they were larger and of more importance than any other shops on the Missouri Pacific system, except those at Sedalia, Mo.

The method of dividing operating expenses, taxes and fixed charges on the St. Louis, Iron Mountain & Southern Railway System between states and between freight and passenger business is set forth in statement No. 5 to exhibit 3. (See R. 2310.) This method has been in use a long time and presumably has commended itself to the operating officials of the system as the best that could be applied for that purpose. We submit that it should require something more than mere criticism of persons without knowledge or experience to justify a finding that the method was not adopted in good faith or did not result in a fair and proper distribution. The best evidence of the propriety and reasonableness of administrative methods in the operation of large and complicated business or properties is the practice of those charged with the responsibility of operation, the methods adopted by whom are presumably the result of knowledge based on experience and observation, and will not be lightly set aside.

## RENTAL OF ST. LOUIS SOUTHWESTERN TRACKS AND VAN BUREN BRIDGE.

The St. Louis, Iron Mountain & Southern Railway has trackage rights over the rails of the St. Louis Southwestern Railway from Paragould, in the State of Arkansas, to the Thebes bridge in Missouri, a distance of 110 miles, 34 miles of which is in the State of Arkansas, and the operation of which is chargeable to that State. The expense was charged in the railroad accounts as an operating expense, and divided between intrastate and interstate business.

The tracks of the St. Louis, Iron Mountain & Southern Railway cross the Arkansas River to the north side at Fort Smith, and run to Van Buren on the north side of the river, a distance of eleven miles. The main line of the St. Louis & San Francisco Railway crosses the river at Van Buren, and runs directly to Fort Smith, the distance being five miles. The St. Louis, Iron Mountain & Southern Railway has a contract with the St. Louis & San Francisco Company for trackage rights over the bridge of that company crossing the river at Van Buren, under which they contract to pay for locomotives $2.00, freight cars $1.50, passenger cars $2.00, with a minimum of $1,000 per month. Two passenger trains a day crossed the bridge during the time in controversy.

The State objected to both these charges. Their objection in regard to the tracks leased from the St. Louis Southwestern Railway was that no part of it should be charged to intrastate traffic, inasmuch as the track was used exclusively for interstate traffic. The objection to the rentals for the Van Buren bridge urged at the hearing below was on the ground that the use of that bridge was unnecessary to the traffic. The court found that the interstate business was benefited by relieving the tracks of the company of the intrastate trains, thereby facilitating the movement of all classes of trains and business on the line of that company. (Opinion, pp. 41, 42.) Mr. McPherson was examined in regard to these charges and the propriety of distributing them among the different classes of traffic. He said:

"The Iron Mountain Railway found from the enormous volume of traffic between Bald Knob and the State line, that it must make further provision to handle it expeditiously. There were two things that might be done; one was to build a double track, and the other was to ascertain if a track already existing could not be secured at a reasonable cost to relieve the situation, and the latter arrangement was made.

"No local business is done on that line between Paragould and the State line. It is merely a through line. After this arrangement had been completed, it was found as a practical business proposition, that it would be better to use it for interstate traffic, and that is the present practice.

"It results in expediting the traffic from Bald Knob and the State line over the main line of the St. Louis, Iron Mountain & Southern, and is to all intents and purposes the same as a double track.

"Q. In view of the fact that it is used exclusively for interstate business, do you regard it as proper that any part of expenses should be charged into the intrastate traffic of Arkansas?

"A. Yes sir; because it is the same as a second track or double track, located on our right-of-way, and the purpose of that double track would be to expedite the business of that division.

"An enormous amount of local business is handled between Bald Knob and Knobel, and the relief that it gives to the main line makes it one of the instruments of aiding transportation, making it possible, in effect, to conduct the transportation of the intrastate and interstate business, both freight and passenger." (R. 285, 286.)

Referring to the Van Buren bridge, he testified:

"Whatever aids in the facilities of the railway is a charge to the entire traffic that it handles. It may be that that added facility would handle only freight business; or, that would handle only passenger business. But a necessity

existed for relieving the entire operation. Otherwise, the facility would not have been added to the railway company's development.

"Now, the Van Buren bridge adds to the general facilities of the company in that way. It expedites the movement of all traffic.

"Likewise, the Little Rock Junction Railway. It may be used only for freight purposes, but it is necessary in order to facilitate the handling of all trains.

"Freight trains can go in there and get out of the way of passenger trains, thereby aiding the passenger trains.

"They are the material aids to all of the traffic that the company would handle." (R. 286.)

Mr. F. P. Johnson testified that:

"The Cotton Belt (St. Louis Southwestern) track is practically a double line, and when we secured the privilege to operate over the Cotton Belt to Paragould, and to the State line and north of that, it benefited our main line from Texarkana to St. Louis to the extent that it gave us more use for other than through freight business."

Referring to the rental of the Van Buren bridge, he testified:

"It was in line with other rentals. We have not attempted to divide our rent at all for freight and passenger service based upon the actual facilities we rent any more than we attempt to divide our taxes." (R. 177-179.)

The above is all the testimony in explanation of the charges, and we do not think anything need be added to what the witnesses have said.

## AMOUNTS PAID TO ATTORNEYS OUTSIDE OF THE STATE, LOBBYISTS AND TEN THOUSAND DOLLAR FINE.

These assignments are based on the following facts:

The evidence showed that a fee was paid by the St. Louis, Iron Mountain & Southern Railway Company, to Mr. Leake, an attorney at Dallas, Texas, for legal services rendered the company; that salaries were paid certain agents for services in connection with matters pending before the Legislatures of the States of Arkansas and Missouri, and that a fine of $10,000 was adjudged against the company on account of the issuance of passes to members of the Legislature of Arkansas. The state of the evidence on those points is summed up by the Court in its findings:

"Another claim is that the State of Arkansas is charged with part of the salaries paid to Messrs. Phelps and Seibert, shown by the accounts of the Iron Mountain to have been connected with the legal department at the headquarters in the city of St. Louis, Mo., and of Mr. Cox, who was, during the year 1907, residing at Little Rock. It is claimed on the part of the State that the services of these parties were for lobbying and therefore not a proper charge. But there is no evidence to sustain the claim that the salaries were paid for such services. The failure of the railway company to show what the services were for which they were compensated does not justify the court in finding upon a mere suspicion that they were for services which are unlawful and against public policy. The burden to prove an unlawful act is upon the party charging it, and will not be presumed in the absence of evidence to that effect." (Opinion, p. 41.)

This applies also to the small fee of $800 paid to Mr. Leake.

Referring to the fine, the court, in its findings, says:

"The evidence fails to show whether this was done with the knowledge and approval of the higher officials of the company, or by the inferior officials for whose acts the company is, under the statute, responsible. As there is no presumption of an unlawful intent, in the absence of proof, the court is not inclined to sustain this claim without determining whether it could under any circumstances be sustained." (Opinion, p. 40.)

## MEMPHIS AND FORT SMITH TERMINALS.

The St. Louis, Iron Mountain & Southern Railway has a terminal yard at the city of Memphis, in the State of Tennessee. Its line of road terminates at that point. The extent of its tracks is 2.07 miles. It is the end of the Memphis Division, just across the State line. The cost of operating the yards is charged to Arkansas, and in the accounts of the railroad company it is divided between state and interstate traffic as other accounts are. All the facilities in the Memphis yards are necessary for operating the trains and doing the work for the Memphis Division, which extends from that city to Bald Knob, in the State of Arkansas. All the roundhouse work for that division is carried on in the Memphis terminals. If it were not charged to Arkansas, all the expense of maintenance growing out of the work of that division could not be charged to any account, as the road terminates there. If the line extended beyond Memphis, in the State of Tennessee, it would be proper, and conform to universal usage, to charge that expense to the State of Tennessee. This charge does not include the expense of traffic. That is charged to traffic, and not as an

operating expense. The matter is clearly explained in the testimony of Mr. McPherson, who was entirely familiar with the conditions. He testified:

"There must of necessity be a terminal on the Memphis Division; and it is immaterial whether it is on the east or on the west side of the Mississippi River. The fact that it is on the east side of the river is an accident of convenience.

"If there were no terminal on the east side of the river there would of necessity have to be a terminal on the west side.

"The expense of the bridge transportation and of the interchange of cars, with other railroads at Memphis, is not an operating expense; it is an expense that traffic bears directly.

"It costs no more to operate the terminal on the east side of the river than it would on the west side. And if no part of the expense of the Memphis terminal were charged to state traffic or intrastate traffic, then the expense of caring for locomotives and cars, supplies, fuel, would not follow the local work that was done by the trains on the Memphis Division.

"The trains between Bald Knob and Memphis handle a great deal of local freight, and unless a part of the expenses were chargeable to intrastate traffic, no expense for handling that freight would appear in the operating accounts, as a charge against them.

"The expense of handling the intrastate freight should be a charge to that freight, regardless of where the terminal may be." (R. 280, 281.)

"The Iron Mountain Railroad does not operate any lines in the State of Tennessee. There are substantially no earnings on that business in Tennessee that the Iron Mountain receives, and so far as the accident of location is concerned, it would be the same to the railway company whether delivery was made to it on the east side or on the west side of the river." (R. 349.)

There is where the distinction arises. If it operated a line in the State of Tennessee, then the railroad would treat that expense just as it does elsewhere—it would charge it to the State of Tennessee. But there is no operation in the State of Tennessee, and for that reason, if we are to meet the conditions that exist here, it is bound to be charged to the State of Arkansas.

Its yard trackage in that State is 2.07 miles, including the bridge, more than two-thirds of which is in the State of Arkansas. If its lines extended into the State a different proposition would be presented. It would then be proper to treat Memphis as a Tennessee terminal, and to charge expenses to it as incurred in that State. That is the manner in which operating terminal expenses are carried on the Missouri Pacific-Iron Mountain System, wherever their lines are operated in a State.

If we were to eliminate from the accounts all of the expenses incurred at the city of Memphis, we would not be charging to the trains that operate in this State any of the terminal expense incurred at the end of their runs into Memphis or at the beginning of their runs out of Memphis; the roundhouse and yard accounts would not correctly reflect the actual cost of operating those trains in this State. It is not a terminal expense charged to traffic like the handling of freights carried; it is an operating expense.

In this connection, let us see the situation at Fort Smith. Counsel for the State stated in the argument at the hearing that he would not object to either one of these

charges if they were consistent, but it was inconsistent to treat Memphis and Fort Smith both as Arkansas terminals, because Memphis is in the State of Tennessee and Fort Smith in the State of Arkansas.

There are some minor repair shops at Van Buren of small importance, but there are no shops at Fort Smith, and it is simply a way station on the line of the road, which extends into Oklahoma and points beyond Fort Smith for a considerable distance, and the expense at this point is small. If Fort Smith is regarded as a divisional terminal, it should be treated as every other terminal station where operating terminal expenses are incurred on the Iron Mountain system. There are shops and much larger terminal facilities at Poplar Bluff which serves Arkansas territory just as it is claimed that Fort Smith serves Oklahoma. All that expense is charged to Missouri. But the fact is, as stated before, there are no repair shops at Fort Smith, and there are no operating terminal expenses of any great amount. The situation is the same at Carthage, Mo., on the White River branch and at Coffeyville, on the Kansas and Arkansas Valley Line. There is no more reason why Fort Smith should be treated as in Oklahoma than there is that Coffeyville should be treated as in Arkansas. The same condition exists in regard to Monroe, La., which is in a comparatively short distance of the Arkansas State Line, and is an important terminal. The operating expenses, however, are all charged to the State of Louisiana. This is a universal practice in the division of terminal operating

expenses throughout the entire Missouri Pacific and Iron Mountain systems, and no good reason can be given why Fort Smith should be treated as exceptional.

## BUNCH ELEVATOR.

This is an elevator located partly on the right-of-way of the railroad yards at Argenta, Ark. It was operated by the T. H. Bunch Company, who claimed to own the improvements. The records show that a nominal rental for the elevator was carried in the account of the railroad company. The State introduced evidence to show that the plant (that is the elevator building and machinery) had a rental value of $20,000 per annum, but there was no evidence as to the ownership of the property other than it was partly situated on the railroad's right-of-way. The State has assigned as error the failure of the court to credit the plaintiff with an annual rental in accordance with the value of the plant. There is not a scintilla of evidence in the record that would have justified the court in doing so. See the court's findings at page 38 of the opinion.

## VALUE OF PROPERTY.

The witnesses for the State and railroad company expressed conflicting views as to the proper method of division. The State contends that the property should be divided with reference to its use and that the use is represented by the ton miles rather than by the revenue. In settling this question the court will be guided by the general rules applicable to all classes of productive property and the rules of reason, rather than by the opinions of witnesses. It is not a matter to be determined by the opinions of experts, but rests on the application of sound reason and the results of experience in determining what is the proper factor upon which to estimate the value of property, whose value consists in its earning capacity. A railroad company like a storehouse or a manufacturing plant, has no intrinsic value aside from the return it is capable of producing in its operation. The earnings is the test universally applied, so far as we know, for the purpose of determining the value of that class of property. This is the view taken by Judge Hook in M. K. & T. Ry. Co. *v.* Love, 177 Fed. 497, and by Judge Sanborn in Shepard *v.* Northern Pacific Railway Co., 184 Fed. 765, 811:

"The issue is between the apportionment by use without regard to the worth or value of the use and apportionment according to the value of the use. The latter basis seems to be more logical and rational. Capitalization is founded on the worth of use, not on mere use. The value of property and investment in every form is measured by the value of its use, not by its use divorced from the value thereof."

The principle is nowhere better expressed than in the following statement by Judge Trieber in his opinion in this case:

"In estimating the value of property its net income, if not the most important, is certainly a very important factor. A building in New York City is valued much higher than a building exactly like it, and an erection of which cost the same price, situated in Little Rock. The reason therefor is that the income from its rentals is much higher in the former city than in the latter. So a building in Little Rock, or any other city, on its main business street, is of much greater value than if standing in the suburbs, although both buildings may be exactly alike, put to the same uses and cost the same. That the same rule should and does apply to railroads is shown by the market value of the stocks. While the share of a railroad whose earnings enable it to pay a 6 per cent dividend annually will command a premium on its face value, those of a railroad earning no dividends, and whose income is barely sufficient to earn the fixed charged are practically worthless, or will sell for a very low price, and that only on speculative grounds.

"Take two roads, one in a level country with practically no grades, inexpensive to maintain, and constructed by reason of these facts, at a low cost, while another road built in a mountainous, rocky country where it was necessary to do a great deal of expensive blasting of rock, building tunnels, with heavy grades and many curves. The latter road cost probably three or four times as much to build as the former, yet, ow[illegible] to the level grades, absence of sharp curves and more productive lands along its line, the earnings of the former are much greater than of the latter. Not only that, but owing to the grades, the one road can carry only half as many cars as the other; the consumption of fuel; added to these the greater outlay for wages to employees, cause expenses to be so great as to leave small net earnings for that road whose cost was greatest, while the net earnings of the other are sufficient to pay large dividends. Can there be any doubt that the value of the first will be much greater than the latter, and that its shares will sell for a much higher price? The value of every investment or property is measured, to a large extent at least, by

the value of its use, not by its use divorced from its value. The value of a railroad for taxation, it has been uniformly held by the courts, may properly be determined by the values of its bonds and stocks. Without citing the numerous cases decided by the courts, both State and National, approving this method of assessing railroad, telegraph and other property of this nature, the following may be referred to:

"State Railroad Tax Cases, 92 U. S. 575; Kentucky Railroad Tax Cases, 115 U. S. 321; Western Union Telegraph Co. *v.* Massachusetts, 125 U. S. 530; Pullman Company *v.* Pennsylvania, 141 U. S. 18; Columbus, Southern Railway Co. *v.* Wright, 151 U. S. 470; Pittsburg, etc., R. R. Co. *v.* Barkus, 154 U. S. 421; Adams Express Co. *v.* Ohio, 166 U. S., where the court said:

" 'Whatever property is worth for the purpose of income and sale, it is worth for the purpose of taxation.'

"And this is the rule sanctioned by the Supreme Court of Arkansas. Wells Fargo Express Co. *v.* Crawford County, 63 Ark. 576.

"This is evidently the rule recognized and acted on by the railroad assessing board of the State of Arkansas as shown by the evidence in this case. The main line of the Iron Mountain Railroad is practically a water level road; no mountains to cross, no rocks to blast or tunnels to excavate, and the leading commercial cities and industries of the State along its line. On the other hand, the White River Branch of that road was the most expensive road ever constructed in the State. Miles of it had to be cut out of rock and tunnels cut through rocky mountains; there are no large cities along its lines, and the country but sparsely settled; owing to the heavy grades and the many curves made necessary by the topography of the country, it can not possibly carry as many cars to a train and transport freight as economically as the main line. The State officials, charged by law with the duty of assessing the property, must have taken these facts into consideration when they assessed these railroads. The White River Branch, in spite of its great cost, was in 1907 valued by that board at $19,000 per mile, and assessed on the basis of 50 per cent of its value at $9,500.

while the main line was valued at $45,000 per mile, and assessed at 50 per cent of that sum at $22,500 per mile.

"For these reasons, the earning capacity of a railroad is the most important factor to be taken into consideration in determining its value. As shown above, it has been taken into consideration by the assessing officers of the State, and should be taken into consideration for the purpose of determining the apportionment of values in this case. If by reason of the higher rates allowed by the state tariff, the net earnings of the property are increased, the value of the property is correspondingly increased, and the assessment for taxation made accordingly." (See Opinion, pp. 46-49.)

"Capitalization is founded on the worth of use, not on mere use alone. The value of property, of investment in every form, is measured by the value of its use, not by its use divorced from the value thereof. Railroad rates are founded primarily on the worth of the use of the railroad machine by the various classes of freight and by the passengers, and not on the amount of the use only. In fact there is no proportioning or measuring relation between the various uses of property and its value when no regard is given to the values of the uses. On the other hand, the values of the uses of property, which its gross earnings substantially represent, present a natural and logical basis for apportioning its value to these uses." Love v. A., T. & S. F. Ry. Co., 185 Fed. 329.

"The value of property results from the use to which it is put and varies with the profitableness of that use." Postal Tel. Co. v. Adams, 155 U. S. 688, 697.



BLURRE

## DIVISION OF EXPENSE BETWEEN INTRASTATE AND INTERSTATE BUSINESS.

### REVENUE BASIS.

This question has been before the courts in a number of cases, and the great weight of authority is in support of the use of the gross earnings as a factor for dividing the expense of conducting traffic between the two classes of business. The question arose and was determined favorably to the revenue basis in Ames v. Union Pacific R. R., 64 Fed. 165, approved in Smythe v. Ames, 169 U. S. 466, C., M. & St. Paul R. R. Co. v. Tompkins, 176 U. S. 167, Nor. Pac. R. R. v. Keyes, 91 Fed. 47, 53, Arkansas Rate Cases, 163 Fed. 141, Buell v. C., M. & St. Paul R. R., Wisc. R. R. Comm. (1907), M., K. & T. R. R. Co. v. Love, 177 Fed. 493, Love v. A. T. & S. F. Ry. Co., 185 Fed. 329. The court is familiar with the rulings and it will not be necessary for us to review the cases in detail. Their weight and authority can not be impaired, or the cases brushed aside upon the ground that the question is one of fact, to be determined according to the evidence in each case, because the conditions affecting the question are general and prevail throughout the country. The same rule as to the relation of cost of service between state and interstate freight and passengers is bound to apply on different railroads and in different parts of the country. It is true that state rates differ, some being prescribed by state authority and others, where that authority has not been exercised, adopted by the railroads themselves, but in all cases and in



PAGES

all parts of the country and on all railroads conducting interstate traffic the interstate rates as a rule are based on the local rates to the extent that they do not and can not, unless perhaps in exceptional cases, exceed the combination of local rates. In view of the similarity of conditions applicable to all railroads in all parts of the country, the rule *stare decisis* might well be applied.

A large amount of testimony was taken on both sides as to the proper basis of division. Many railroad officials of large experience in the operation of railroads and the management of railroad traffic were introduced by plaintiffs. Mr. W. B. Doddridge, whose life had been spent in railroad operation, and who had been general manager of both the railroads involved in this litigation, including the Missouri-Pacific Railway System, testified:

"There is no unit or basis that I am aware of by which such a separation or apportionment can be made with mathematical accuracy. For the reason that all classes of traffic are carried in the same cars, intermingled, over the same rails, in the same trains, handled by the same employees, using the same terminals, a definite separation of common expenses is impossible.

"To be fair and equitable a unit must be used that will reflect all of the average conditions under which transportation is furnished and charge each ton mile or each passenger mile with its proper proportion of all the expenses.

"In the establishment of rates many elements are considered, such as the physical cost of service, the weight, the distance, the competitive conditions, the space occupied, the character of the service, and the value of the service to the shipper. It is, therefore, necessary to use an arbitrary unit.

"In my judgment the best method that has been suggested for this purpose is what is commonly known and called the gross-earnings basis.' That is, the gross earnings derived from each class of traffic for the given period, being accurately known, the total expense for the same period being accurately known, the expenses between state and interstate traffic may then be divided and apportioned upon the per cent each class of gross earnings bears to the whole.

"The aggregate of gross earnings is made up of thousands of small units, each of these units representing the amount received for the transportation of individual shipments. The sums charged for transportation bear some definite relation to the cost. These sums vary being governed by circumstances and conditions; such as weight, distance, classification, and the commercial conditions under which the transportation is furnished. I refer to competition and other like conditions, which enter into and influence the rates charged on many classes of commodities and traffic.

"For instance, the railroads charge a much higher rate on many articles where the value is large and liability great, than they do on other articles where the weight and bulk is similar, but they are of less value.

"There are a great many considerations of this character that enter into and influence railroads in determining the proper rates to be charged for transportation.

"The gross earnings reflect all of these conditions and by allotting the expenses in proportion to the amount which each shipment produces in the aggregate, seems to be the most reasonable and equitable method by which expenses can be apportioned between state and interstate traffic.

Q. "Does the difference in the value of the articles transported and the liability incurred enter to any extent into the difference in rates and affect the difference in cost?

A. Yes, sir; these things are always taken into consideration as one of the factors to be considered in the establishment of rates.

"However, there are many other considerations that also affect the establishment of rates; such as competitive conditions between producing sections and consuming markets.

"The following example illustrates the general theory which I have in mind:

"The interstate rates upon the products of the forest, which constitute a large proportion of the tonnage of Arkansas, to the consuming markets in other states are established mainly upon the value of the service to the shipper and to the consumer, based upon existing commercial conditions.

"The physical cost of transportation in individual cases being a secondary consideration, as a whole the traffic yields a profit either directly or indirectly.

"Changes in rates are necessary from time to time and would affect the allotment of expense as between state and interstate traffic to that extent, while it is not contended that the actual physical expense would be changed.

"Interstate rates frequently extend across several states and if below normal by comparison with other rates, for the reasons stated each state would bear its pro rata in the reduced expense thus allotted.

"Other interstate rates as compared to the total may be abnormally high, which would tend to equalize the condition in the example pointed out.

"Interstate rates into and out of Arkansas must be so adjusted as to enable its products to find markets in competition with other producing sections. This principle is essential to the prosperity of both State and the railroads. Intrastate traffic depends upon this condition being maintained.

"Trans-state traffic as a whole being carried on at a much lower cost than short haul traffic, low interstate rates applied to that class of traffic in some cases work no injus-

tice to the intrastate traffic in the apportionment of expenses as a whole.

"The gross earnings method of apportionment of expenses deals with all of the intrastate traffic as a single unit and with all of the interstate traffic as a single unit, upon a system of general averages, without reference to individual shipments or particular rates." (R. pp. 455, 456.)

Mr. Frank Nay, Comptroller of the Chicago, Rock Island & Pacific Railway Co. (R. 632); W. M. Whittenton, General Manager of the Chicago, Rock Island & Pacific Ry. (R. 757), and others testified to the same effect.

Mr. McPherson testified:

"The revenues of the railway are derived from different sources; the transportation of passengers and freight, and from miscellaneous services rendered; rentals, etc.

"A division of these earnings can be exactly ascertained and, naturally, they reflect the value to the railway of each class of the service it performs.

"The passenger and freight revenue consist of both intrastate and interstate traffic; the 'revenue basis' is reflective of the efforts of the traffic men who made the rates, to consider, in a measure, the value and character of commodities, and the risk and distance attached to their transportation. This is apparent in the classification of commodities into classes and the different rates established for their carriage.

"The revenue derived represents the well established and generally recognized elements considered in fixing rates of the railway for the service it performs. The rates on first class freight are higher than on second class, on second class higher than on third class, and so on through the general classification and established schedule of rates.

"Differentiation in the commodities and rates is recognized by the railways, by the public for whom the com-

modities are transported, and by all of the railway commissions.

"The revenue, therefore, expresses value, character, risk and distance rather than quantity; and likewise considers, to no little extent, the question of cost, as it is obvious that it costs more to transport some commodities, and commodities in small quantities, than it does other commodities, and commodities in larger quantities.

"A consideration, therefore, of cost on the mere basis of quantity, would mean the blending of all classes of freight; a reduction of all classes of freight to a common unit, and the assumption that the cost of their transportation was equal. Also that the length of haul and other conditions affecting the cost were equal or the same.

"For these reasons, in my opinion, the revenue basis is a proper basis on which to apportion the cost, or to divide the cost of operation as between intrastate and interstate traffic." (R. 320.)

## THE STATE DENIED THAT THERE WAS ANY RELATION BETWEEN THE RATES AND THE COST OF THE SERVICE, OR BETWEEN STATE AND INTERSTATE RATES, AND CONTENDED ON THOSE GROUNDS THAT THE REVENUE WAS NOT THE PROPER BASIS OF DIVISION.

It was shown that all freights are classified by committees representing groups of railroads for the purpose of grading commodities with reference to the various conditions and elements that enter into and affect their transportation; that the element of cost enters largely and is a dominating influence in the classification made by those committees; that the Western Clas-

sification prevails in the territory west of the Mississippi River and was used largely by the Arkansas Railroad Commission. The testimony of Mr. F. O. Becker, the chairman of the Western Classification Committee, was taken, and he testified at length as to the methods pursued by that committee in making its classification and showed that it was made with reference to the element of cost. That they considered the density, the value, the character of the risk with reference to susceptibility to damage, and the volume. (R. 738.)

J. D. Watson, Assistant General Freight Agent of the St. Louis Southwestern Railway, testified that the purpose of classifying the various articles that are transported by the railroad companies is to determine the rates, that the classification fixes the rate to be applied. He further testified that the value of the service is a dominating and controlling influence in fixing the price of transportation. He described in detail the manner in which the classification is used. (See R. 555.)

C. E. Perkins, the General Freight Agent of the St. Louis, Iron Mountain & Southern Railway, testified that the object of the classification is to assign to one of the classes the various articles which are offered to a railroad for transportation; with the thousands of different commodities, any one of which may be offered to a railroad for transportation, we must have some guide as to the rating which would be applied on each particular article. The commodities have been gathered together by the classifica-

tion committee after years of work, and have been assigned to one of the various classes prescribed in the classification. Upon these various classes or ratings we base our freight rates. The classification does not give the rate on commodities; it assigns each commodity to a class upon which we publish rates. They run from 1 to 5 and from A to E; the highest class articles are in the first class except in the cases where ratings are made double first and so on.

He also testified that railroads make commodity ratings to meet special conditions. They are not controlled by the Western Classification, but in making them the cost of the service is always regarded, as far as the circumstances will permit it to be done and where the conditions, growing out of competition for instance, are such that they are compelled to disregard the cost of service, they would not attempt to meet them. (R. 585 and 592 and following pages, where he treats the subject in great detail.) See also evidence of B. M. Flippen, the Freight Traffic Manager of the Missouri-Pacific System. (R. 239.)

## ZONES AND BLANKET RATES.

The State introduced exhibits 38-42, showing certain zones in which blanket rates were applied, and contend that the blanket rates within territory covered by the zones are inconsistent with the testimony of our witnesses. The reason and necessity for the establishment of blanket rates in zone territory, and especially in the Texas lumber adjustment, which covers a large territory and about which a good deal is said, was shown in the testimony of traffic

men introduced by plaintiffs. Mr. Perkins, at page 595, gave a history of the condition that led to the blanket rates on lumber in southern territory. He showed that the lumber traffic moved in very large quantities and long distances, affording long hauls, that the cars that carried the lumber north as a rule returned loaded with other commodities, and thus gave a steady movement to commodities in large quantities and steady employment to the motive power, enabling them to load their trains to the maximum carrying capacity in all cases and furnishing tonnage on a wholesale basis. He and other witnesses also testified that in view of the volume of traffic and the reciprocal movement growing out of it, the length of the haul and other incidents of the large lumber traffic from the Southwest, the railroads could afford to make low rates and realize a reasonable profit on the business; that while the rates might appear to be low from that part of the zone territory farthest removed from the market and high on the opposite side, these discrepancies were neutralized and the rates fairly equalized throughout the entire territory, and the revenue accruing from that business fairly represented the cost of the service.

The testimony shows that commercial necessity, for the protection of trade centers in various parts of the country, have rendered it necessary to establish zones within which similar rates are applied both in producing and consuming territory. Pittsburg and the surrounding country constitutes a zone, as does Chicago, Kansas City and various

commercial centers, with the adjacent territory, to and from which freight is transported at what is termed blanket rates; that is, a similar rate prevails within the territory embraced in a given zone. The rates are based on the rating from the common point, or commercial center of the zone, and on freight transported from the various sections into Arkansas the rates are fixed on differentials, taking Memphis and St. Louis as the basing points, and are on a uniform scale. The traffic men testified that such an arrangement was necessary on account of competition between different lines and for commercial reasons, that is to protect commercial centers. It is an evolution of trade and commerce. The testimony on the subject is too voluminous to be referred to in detail within the limits of a brief.

The same conditions growing out of the zones and blanket rates obtained in state traffic under the state commission rates. Blanket rates are applied by the State Commission in numerous cases; as, for instance, to coal from Coal Hill and all points west of there in the State of Arkansas, to Little Rock and to all points north and south of that place. Coal Hill is about one-half the distance from Little Rock to the western coal fields of the State.

We refer more in detail to this subject infra page 100.

C. S. Ludlam, a witness for the State, referred to Texas tariff 1-DD, which he testified covered 2,600 stations in Texas and represents a movement that may vary as much as four hundred miles in the length of haul, in which he says

the classification is disregarded. Mr. Perkins, referring to that condition, testified that the Western Classification governs in Texas traffic as well as all other traffic west of the Mississippi River; that there are exceptions to the classification applicable on Texas interstate traffic which change to some extent the rating or minimum weights as the case may be.

"While I do not feel that the zone basis of rates mentioned detracts to any great extent from the statements already made with respect to the cost of service, that element being present in a somewhat modified form, it is true that this basis is used only where commercial conditions fix it, or in cases where the mileage is great and the zone rate will yield approximately the same rate per ton per mile on account of the length of the haul. Our general basis of rates is to a large extent on a mileage scale, that is, the rates increase with the mileage, the increment being smaller as the distance increases. Our rates, as an example, from St. Louis to Arkansas, are 70 cents per 100 pounds, on first class, at Moark, the first station in Arkansas, and grade up as the distance increases to $1.22 on first class at Fulton, in Southern Arkansas. This is also true in Louisiana, the rate to Jones Spur, the first station, being $1.15 on first class and grading up to $1.37 at Fenton, in the southern portion of the State." (R. 1623-4.)

For the purpose of further showing that the Western Classification was disregarded in the application of rates from St. Louis to Texas, Mr. Ludlam cited a number of instances in which he claimed that higher rates were applied to low class articles than to those of a higher class, comparing such articles as beer in glass and bar iron, excelsior and potatoes, hollow building tile with pig iron, etc. Mr.

Perkins in rebuttal reviewed this testimony and explained in every instance the ground upon which the apparent inconsistency in the application of the rates existed.

He showed that a low rate had to be applied to beer on account of large breweries located at various points in Texas, which necessitated a lower rate on that commodity in order to prevent the exclusion of beer from other states. He further stated that the rate on bar iron represented a fair and reasonable rate, and that they were obliged, on account of the conditions referred to, to accept a lower rate on beer. He then went through the entire list of commodities mentioned by Mr. Ludlam, there being some eighteen or twenty of them, and showed similar and exceptional conditions in each case, accounting for the apparent disregard of the classification in fixing the rates on those articles. For instance, excelsior, which he says is more or less a paper adjustment and is a very cheap commodity manufactured in the South; potatoes, which represent a relatively large movement and are a necessity of life, which, regardless of their perishable nature, will not stand as high a rate as horseshoes, with which Mr. Ludlam compares them. Pipe iron coils for refrigerating machines were compared by Mr. Ludlam with bar iron. Mr. Perkins explains that if the railroad company was not limited by factors beyond its control the rate on the iron pipe would undoubtedly be higher than the rate on bar iron, but the Texas Commission, on account of pipe being manufactured at the penitentiary at Rusk, in that State, established an ex-extremely low rate in the State, which forced correspond-

ingly low rates from interstate points. This fact, he said, only emphasizes what has been said with respect to the effect of state rates upon interstate rates. He reviewed all of the exceptional rates mentioned by Mr. Ludlam, and further testified that the tariff from which Mr. Ludlam testified covered practically all the articles which can be shipped—thousands of them in number; that it is governed by the Western Classification, a copy of which was in evidence, except where exceptional conditions made it impracticable to apply the classification. (R. 1625, 1626 and 1627.)

See also evidence of J. D. Watson, Record 1674.

One of the most intelligent witnesses introduced by the State, and the only man of any practical experience in railroad traffic, was Mr. J. C. Lincoln, manager of the St. Louis Traffic Bureau. He first stated that the cost of service is not the factor that controls in making rates, but on cross examination he testified:

"The results of operation necessarily as to the revenue would have to have some regard to the cost of service or you would go into the hands of a receiver. If the railroads disregarded it and handled its business without regard to the cost of service, it would either have to get a receiver or rules in that respect that all other industrial institutions are they ought to be The Western Classification Committee considered a great many things in the development of proper rating, the cost, the risk, the density and the volume of traffic. They take into consideration the cost of handling those different commodities. Their classification is the best prepared document of the relations that should exist between different commodities. The classification shows the rela-

tion that should exist, not the rates. Railroad statistics are kept as an index to the business handled by your railroad, the operating cost of service, cost of handling business over certain divisions." (R. 980.)

These statements clearly bear out the evidence of traffic officials of the railroads. They have before them the information referred to by Mr. Lincoln, and naturally they use that information and apply it in adjusting rates.

## RELATION BETWEEN INTRASTATE AND INTERSTATE RATES.

Counsel in their argument at the hearing of these cases in the court below commented at some length on the effect of the testimony in regard to rates from St. Louis to Texas common points upon the question as to the relation between state and interstate rates, contending that there could be no parity under the conditions disclosed. But in truth the record shows that the same conditions existed under the state commission rates. An examination of their schedules will show a blanket rate on coal from Coal Hill and all points west of there in the State of Arkansas to all points north and south of Little Rock, embracing a territory of hundreds of miles. Coal is the largest commodity moved under the commission rates, and the conditions in regard to the rates are in all respects analogous to that shown by the testimony and exhibits of the State referred to. Under the commission tariff sugar carires a flat rate of 13c for 200 miles and everything in excess of that. So it is with regard to rice. Rough material has blanket rates from one to 50 miles, from 50 to 100 miles, from 100 to 150 miles, and from 151 to 250 miles. The rates operate in the same way in regard to the state traffic that the blanket rates do in the zones shown on the exhibits referred to. The Texas zone is quite large; that relating to lumber covers 500 miles, but a comparison of those distances with the average haul in the State of 72 miles with a blanket rate of 25 miles, 50 miles, 100 miles and so on will disclose some pretty close

analogies running through them. On cotton in the state movement there is a maximum rate of 40c on all hauls 150 miles. Cotton seed hulls, coke, coal slack, cord wood, all have the same rate under the state tariff for from one to 50 miles; flour in carloads from 90 to 150 miles; rice from 100 to 150 miles; iron, wire, nails, from 25 to 75 miles; rails and fastenings from 60 to 100 miles; live stock from 180 to 250 miles. Packing house products take the same rate for the first 35 miles in carloads; in less than carloads the same from 35 to 75 miles. These are all important commodities, and are only referred to as representative of the entire rate situation under the State's schedules in regard to blanket rates, as will be seen by an examination of the distance tariff, copies of which are filed for the use of the court.

It can not be maintained, therefore, that there is any ground upon which a distinction between state and interstate rates can be made on account of the creation of zones and the application to them of blanket rates.

In this same connection it was shown in evidence by the State that a different revenue is reecived on the same commodities shipped across the State of Arkansas from points north or east into Texas. The same condition exists in the state traffic under the joint tariff. To illustrate: Take a shipment from Hope to Camden by the Iron Mountain Railroad, a distance of 65 miles. The Iron Mountain receives 38 cents on first class, 34 cents on second class, 30 cents on third class, and 25 cents on fourth class. Now, on a shipment

from Hope to a point on the St. Louis Southwestern Railway, 65 miles beyond Camden, making 130 miles—just double the distance from Hope to Camden—the Iron Mountain will get for its part of the shipment 32.5 cents on first class, on second class 28 cents, on third class 24 cents, and fourth class 20 cents. The inequality in the revenue from the same commodities referred to in the testimony of the State's witnesses grows out of the fact that it is handled by connecting lines. It is a joint haul, and the example shows that a similar condition prevails in the state traffic, where there is a joint haul over connecting lines.

T. A. Hamilton, a witness for the State, for the purpose of showing inequality between state and interstate rates, filed an exhibit marked "L-1," containing a comparison of the rates on that part of a haul from St. Louis to various stations in Arkansas which is wholly within the State with the Commission rates between the same stations. For instance, the first sheet of the exhibit shows the haul from St. Louis, Mo., to stations in Arkansas beginning at Moark and running to Peach Orchard, and compares that with the distance tariff of the Arkansas Railroad Commission, which contains graduated rates between the two points. The distance from Moark to Peach Orchard is 17 miles. The distance from St. Louis to Moark is 186 miles and from St. Louis to Peach Orchard 202 miles. There are three intervening stations, distant from St. Louis, respectively, 192, 195 and 198 miles. The rate from St. Louis to these five stations in Arkansas is the same.

There is no testimony in this case with which the facts illustrated by the exhibit conflict. Our traffic men have testified throughout the case that you can not make a comparison of a long distance interstate haul with a state haul in that way. They are bound to vary. It results necessarily from the effect of the long and short haul on rates. The stations referred to illustrate the effect of the exhibit throughout. The second sheet contains a comparison between shipments from St. Louis to stations in Arkansas beginning at Joly and going to Wynne, that is a distance of 80 miles. It compares the state rate from the state line with the portion of the interstate rate from St. Louis that is located in Arkansas. It is an attempt to compare the rate charged on a haul from 200 to 280 miles with a haul of 80 miles within the limits of the State.

Exhibits "C-1" and "D-1" are intended to show that the testimony of the railroad's traffic men to the effect that the interstate rates on the St. Louis, Iron Mountain & Southern Railway from St. Louis and Memphis are influenced by the State Commission's rates is incorrect. Exhibit "C-1" shows that the interstate rate from Memphis to Gum Springs, a station situated on the St. Louis, Iron Mountain & Southern Railway, 70 miles south of Little Rock, runs level from Little Rock to Gum Springs, while a graduated rate to all stations between Little Rock and Gum Springs is applied by the State Commission. Exhibit "D-1" shows the same conditions from St. Louis, and covers the same territory south from Little Rock. The following extract

from the testimony of Mr. Perkins, the general freight agent of the St. Louis, Iron Mountain & Southern Railway, will explain the conditions developed by these exhibits. He said:

"From a casual glance at the exhibit ('C-1') mentioned, it would not appear that there was any relation whatever as between the state and interstate adjustment. As a matter of fact, however, our rates from Memphis to all points in Arkansas were made by using three factors, one of which was the Arkansas Commission's local rates.

"At the time these rates were in effect the St. Louis, Iron Mountain & Southern had an agreement with the city of Memphis as to the rates which we would carry from that point to Arkansas as compared with rates in effect locally in Arkansas. That agreement provided that to points in Arkansas on the main line and branches south and west of Little Rock, except Fort Smith, Van Buren, the Greenwood Branch and the K. & A. V. Division, rates from Memphis would be published the same number of cents per hundred pounds higher than the local state rates from Little Rock to destination, as the rate from St. Louis was higher than the rate from Memphis to Little Rock, or the following figures in cents per hundred pounds." (R. 1628.)

Then follow the figures in cents per hundred pounds. That differential is 30 cents on first class, 25 cents on second class, 20 cents on third class, etc., between St. Louis and Memphis. He says:

"With the further provision that the rates from Memphis to Little Rock would apply as minimum figures."

The point is just this: The rates from Memphis to Little Rock were applied in those cases because of that provision in regard to the minimum.

Mr. Perkins further says:

"To illustrate this basis we will check the adjustment at Gum Springs, 70 miles south of Little Rock (that is one point mentioned in the exhibit).

"The first class rate under the Commission's tariff is 40 cents, adding the differential (between Memphis and St. Louis rates) for first class mentioned, namely, 30 cents, produces the rate as shown in the chart, or 70 cents.

"Second Class—The rate from Little Rock is 35 cents plus second class differential of 25 cents, or through rate of 60 cents.

"Third Class—Local rate from Little Rock is 31 cents, plus differential of 20 cents, or 51 cents, and so on down through the entire list.

"In cases where the interstate rates are shown to be the same to the points mentioned in the chart the Memphis to Little Rock rate has been applied as a minimum, these minimum figures applying only to the stations directly south and west of Little Rock, which it will be seen were selected by the State to disprove our basis. Gum Springs is the most southerly point to which it applies. That is the most southerly point at which any of the rates apply on that basis. All of the rates are not blanketed even as far as Gum Springs." (R. 1629.)

That chart covers a distance of 148 miles from Asylum, but the real point of difference is from Little Rock to Gum Springs. The rate from Memphis to Little Rock plus the differential is the maximum that could be charged on those shipments, because that is the charge which in the agreement between the Iron Mountain Railroad and the city of Memphis was to control as a minimum charge and they can not go above that. For that reason that rate will apply to Little Rock and all the way down to Gum Springs

and that holds the rate level from Little Rock to Gum Springs. They are comparing it there with rates for the same distance, but the territory that really is covered by that is the territory from Little Rock to Gum Springs on the Iron Mountain Railroad. It was caused under the arrangement that they could not charge a greater rate from Memphis to that point than the Memphis rate to Little Rock plus the differential.

On November 9, 1908, some two months after the injunctions in these cases were issued, the railroad companies put in a new tariff of rates on commodities transported within the limits of the State. They also began immediately to readjust their interstate rates to conform to the change in the State's tariff. Mr. Flippen, the Traffic Manager of the Iron Mountain Railway, and the traffic officials of the St. Louis Southwestern Railway, testified that they began, immediately after the November state tariff was put in, to readjust interstate rates, but considerable time elapsed before the effective date of the readjustment, on account of the difficulties of the compilation, the delay in publication, the checking of proof, and the notice required by the rules of the Interstate Commerce Commission; also negotiations with connecting carriers for their concurrence in the changes. (R. 238.) This witness and Mr. Watson and Mr. Bragg, all testified that the change in interstate rates was necessary in order to preserve the parity between the state and interstate rates. Mr. Flippen further testified that the increase in the interstate rates was from 15 to 20 per cent;

that they could not be advanced proportionately with the state rates because the adjustment of the interstate rates, by reason of recent increases, was relatively higher than the rates within the State for equal commercial conditions and service. He and Mr. Bragg also testified that the railroads were forced to increase their rates in February, 1907, and again in September, 1908; that these increases in the interstate rates rendered a larger increase than that mentioned by Mr. Flippen in the state rates unnecessary. (R. 263 and 840.)

The State sought to impeach the correctness of this evidence by exhibits "G" and "A," filed at their request by Mr. Kimbell, Assistant Auditor of the St. Louis Southwestern Railway.

Exhibit "G" showed an increase of 96.01 per cent in the intrastate revenue in January, 1909, as compared with the last six months of 1907. Exhibit "A" showed an increase in revenue per ton per mile during the same periods of 96 per cent in state business and between 9 and 10 per cent in interstate business. These exhibits were filed on the theory that the increased revenue was based on the increase in rates, which was incorrect. Mr. Kimbell explained in his evidence at the time that the variation in revenue did not follow variation in rates, but grew largely out of the shifting of commodities carried at different times and changes in conditions affecting traffic, rates being only one of the factors. Exhibit 58 filed by him shows that the increase in revenue in January, 1909, on the application of

the rates in force in the latter half of 1907 to the intrastate business of 1909, would have been 48.18 per cent. This exhibit is accompanied by the following explanatory note:

"Exhibit 'G,' filed at the request of Judge Hill, assumed an increase of 96.1 per cent in the intrastate freight revenue for six months ending December 31, 1907, based on that percentage of increase in the average intrastate revenue per ton per mile, for January, 1909, over a like average for the six months named."

"Testimony has heretofore been given in this case to show that an increase in the average revenue per ton per mile is not absolute evidence of an increase in the rates; that this average could change materially, due to shifting in the character of tonnage handled, without any change whatever in the rates, and that there was a material change in the character of tonnage handled in January, 1909, as compared with the six months ending December 31, 1907.

"The correct way to determine the percentage of increase in revenue for the six months ending December 31, 1907, had the rates in effect in January, 1909, been in effect during those six months, would be to apply the latter rates to the actual movement for the six months' period and figure the increase in the revenue so obtained over the actual revenue.

"On account of the magnitude of the task this has not been done. However, under the order of this court this company is keeping a record of amounts collected under the current freight and passenger tariffs, pending a decision in this case, and by applying the inhibited rates to the actual movement for each month, we are able to arrive at the actual revenue increase and the percentage of increase under the current over the inhibted rates.

"It will be noted that for the month of January, 1909, the percentage of increase is 48.18 per cent, or about one-half the percentage which Judge Hill requested exhibit 'G' be based upon. Even this percentage is, no doubt, greater than the percentage would be, based on an application of

the railroad rates, to the actual movement for the six months ending December 31, 1907." (R. 2078.)

A similar exhibit for the Iron Mountain Railroad was filed by Mr. Johnson. (See exhibit 54 and his evidence.) (R. 2000, 2001.)

In this connection Mr. Kimbell testified:

"Since this question was raised by Judge Hill a few weeks ago I have investigated in a general way the character of the principal commodities handled during the two periods referred to and find these important changes in the commodity movement, which would under any set of rates have the effect of increasing the average revenue per ton per mile:

"Coal, a low rate commodity, constitutes 5.5 per cent of the total state movement for the six months ending December 31, 1907, and but 1.02 per cent for January, 1909.

"Forest product material, another low rate commodity, constitutes 29.40 per cent for the six months ending December 31, 1907, and but 13.96 per cent for January, 1909.

"Now, on the other hand, the following important commodities which are rated higher than coal and forest product material show a proportionate increase in volume handled as follows:

"Grain and grain products for the six months, 3.87 per cent, and for January, 1909, 5.86 per cent.

"Hay, for the six months' period, 13.30 per cent, and for January, 1909, 18.56 per cent.

"Cotton seed products for the six months' period, 5.58 per cent, and for January, 1909, 15.67 per cent.

"This marked shifting in the character of tonnage handled would in itself make a radical change in the average revenue per ton per mile, even though there was no

change in the rates, and in my opinion accounts in a large measure for the difference in the averages of state business during the two periods.

"The length of haul of the differently rated classes and commodities is also an important factor to be considered in a comparison of this kind.

"Exhibit 35, which covers the six months' period, shows an average haul of 43 miles for state freight and 232 miles for interstate freight.

"Exhibit 'A,' which covers the month of January, 1909, shows an average haul of 41 miles for state and 222 miles for interstate freight.

"It is a recognized fact that as the haul increases the average revenue per ton per mile decreases. It is, therefore, to my mind, misleading to make a comparison of the average revenue per ton per mile for one period with another unless the character of tonnage carried and the haul for each kind of tonnage is identical." (R. 942, 943.)

The rate of increase in the interstate rates is explained by the testimony of Mr. Flippen and other witnesses referred to. It must be borne in mind that this comparison was made between January, immediately after the voluntary railroad rate had gone into effect, and before the adjustment of interstate rates could have been made effective. It was just beginning at that time. The delay was unavoidable, and is explained by Mr. Flippen in his testimony cited above, and it is apparent that the raise in interstate rates in February and September preceding the increase in the state rates, rendered a larger increase in interstate rates after the change had been made in the state rates unnecessary.

Mr. Kimbell was requested to file an exhibit based upon a hypothetical statement of earnings from state and interstate business and the total cost of producing a given revenue. He was asked to calculate the amount of expense chargeable to state and interstate business, respectively, on the revenue theory, on the assumed earnings, and then to further assume that the intrastate rates are increased 33⅓ per cent without any increase in the interstate rates, and make the same calculation showing the amount of expense that would be chargeable to each class of business under the latter assumption. He did so, and filed the example as exhibit 23. The State sought to show by this that the revenue theory of division was impracticable because of the effect that would be produced by a change in one class of rates without a corresponding change in the other.

Such an example is not entitled to any force unless it is found to represent conditions that do or may exist. A number of witnesses were examined on that subject. Mr. Nay, an old accountant and traffic man, Mr. Kimbell and others all testified that such a condition was impossible, because it is contrary to all the principles upon which state and interstate rates are constructed. (See the evidence of R. E. Kimbell, R. 236; Nay, R. 656.) The State did not produce a single witness to the contrary, nor show a solitary instance, except their attempt to show a large increase in the ratio of intrastate over interstate earnings by a comparison of the revenues accruing between the six months ending December 31, 1907, and January, 1909,

growing out of the change in the intrastate rates following the granting of the injunctions in these cases; the explanation made by the traffic men not only destroys all the force of the illustration for that purpose, but supports the testimony of Nay, Kimbell, Johnson and others as to the practice in preserving parity of rates and the impracticability of a radical increase in state rates without a corresponding change in interstate rates.

But the most convincing evidence in the record on this point is certain tables prepared and filed by Hubert Roth, as a part of his testimony, containing a comparison between the percentage of the total revenue accruing from the handling of commodities and the percentage of total ton miles. Mr. Roth is clerk to the General Auditor of the Iron Mountain Railway. He is an expert accountant and statistician. The various commodities are graded in six groups according to character, loading, risk, damage, etc., the first group consists of that class of commodities which bears the highest rate. The second is the next lower grade and so on down through the six groups. The description of the groups gives sufficient information as to the classes of commodities upon which they are based. For instance, group one consists entirely of less than carload merchandise, which is the most expensive class of freight that is handled by the railroads. Group 2 represents carload commodities the loading of which is, on the average, light; many of them have the same characteristics of less than carloads, making them liable to loss, damage and subject to extra handling

Group 3 represents commodities generally carried in light loads and on which the risk from loss and damage is less and which require no handling. It consists of hay, packing house products, etc. Group 4 represents the medium grade commodities, with little, if any, risk from loss and damage, such as salt, brick, lime, etc. Group 5 consist of lower grade commodities carried in heavy loads with little, if any, risk from loss and damage, consisting of lumber, brick, salt, lime and cement.

Group 6 represents the lowest grade commodities and the cheapest to handle, cars loaded to full capacity, several cars usually moving together and at times in train loads It includes coal, ore, sand, stone and gravel.

The following table, based upon the aforesaid grouping, shows the percentages of tons one mile and revenue on the Missouri Pacific System and Iron Mountain Railway in the State of Arkansas for the calendar year, 1909. Mr. Roth stated that he was unable to make the comparison between the intrastate traffic on the Iron Mountain in the State of Arkansas with the interstate traffic in the State or on the Iron Mountain system, because he did not have the figures and could not obtain them without a very great deal of labor. He was, however, able to obtain the percents of tonnage and revenue on the Missouri-Pacific System and also within the State of Arkansas. We do not regard the fact that the Missouri-Pacific System, which includes the St. Louis, Iron Mountain & Southern Railway, is used as material in determining the difference in expense

of handling, and that is what creates the difference between the commodities as they are grouped. It is as fair to take the entire line as the Iron Mountain alone for the purpose of comparison, because the same conditions precisely, in regard to the effect of classification, apply to the one as to the other. It would be the same with the Great Northern or any other system of roads, for it is a general and broad proposition that the cost of handling commodities is influenced more largely by this classification of carload and less than carload than by any other consideration, and you have the same relation between carload and less than carload, whether the traffic is dense or light. It is a matter of relation. Relatively speaking, the Pennsylvania Railroad has the same difference between carload and less than carload in the cost of handling. For instance, it will be conceded that the same conditions exist as between brick and stone and basket and fragile glassware on the Missouri-Pacific System as on the Iron Mountain. Such conditions exist everywhere. They are general, underlying conditions that apply on every railroad.

*Percentage of Tons One Mile.*
Calendar Year, 1909.

| | Mo. Pac. & I. M. & S. System. | | Arkansas Intrastate. | |
|---|---|---|---|---|
| | Tons 1 Mile. | Revenue. | Tons 1 Mile. | Revenue. |
| No. 1..... | 4.61 | 19.12 | 6.02 | 27.65 |
| No. 2..... | 16.20 | 21.12 | 4.19 | 5.79 |
| No. 3..... | 4.24 | 4.92 | 1.04 | 1.79 |
| No. 4..... | 14.77 | 12.53 | 10.52 | 12.27 |
| No. 5..... | 35.80 | 25.94 | 47.98 | 37.94 |
| No. 6..... | 24.38 | 16.37 | 30.25 | 14.58 |
| | 100.00 | 100.00 | 100.00 | 100.00 |

The table shows (1) that the proportion of the revenue per ton mile diminishes in proportion as the grade of the commodities embraced in the different groups is lower, as it should do according to the testimony of the railroad traffic men. The reason is that it costs more to move and handle the commodities embraced in the higher than in the lower groups. It shows how evenly the revenue derived from the rates applied to the classification of the Western Classification Committee runs with the classification made by that committee. (2) It shows that the same relation that exists on the Missouri-Pacific System as between ton miles and revenue is found in the intrastate movement in the State of Arkansas. The difference on the interstate traffic is greater. That is accounted for by the difference in the length of the haul. The average haul on the Missouri-Pacific System is very much longer than on the intrastate haul in Arkansas. (3) It further shows a parity between intrastate and interstate rates by the relation shown between the ton miles of the several groups of commodities handled and the revenue derived therefrom as between the Missouri-Pacific System and the Arkansas intrastate business. The ratios between the ton miles and revenue accruing therefrom are preserved to a large extent as between the two classes of business. It is particularly observable that the higher grade commodities yield the higher revenue in both state and interstate traffic. (See the evidence of Mr. Roth, Record 1977.)

In connection with the above is another table which gives all the principal commodities transported, and devel-

ops facts that are very significant in this connection. Grain, for instance, is 13.43 per cent of the total tons one mile. The revenue produced from that commodity on the Missouri-Pacific System is 11.15 per cent. Lumber is 29.94 per cent in tonnage and 21.14 in revenue. Cotton, which it is shown is much more expensive to handle than grain or lumber, which are among the lower grade commodities, is 1.03 per cent in tonnage and 2.43 per cent in revenue. Merchandise, which is the highest grade in point of cost of handling, is 4.61 per cent of tonnage and 19.12 per cent in revenue. (R. 1979.) These differences in the relation of tonnage to revenue grow out of the difference in cost of handling the several commodities, and we submit demonstrates the correctness of our contention that there is a relation between the cost of performing the service incident to the different commodities and the rates that are paid for the service. The result is reflected in the comparisons contained in the tables. Many other commodities are included in the last table referred to, but those we have mentioned are sufficient to show their effect. The comparison is based on statistics for the year 1909, because those for the year 1907 were not accessible, but the effect is the same without regard to the period of time covered by the comparison.

The court used various bases of dividing expenses between the two classes of traffic. The result of the findings on the bases adopted by the court was, however, practically the same as if our views had been followed. The appel-

lants having themselves propounded many of the theories upon which the court acted in making the division and determining the expense of intrastate business, are not in an attitude to question its correctness. If it is erroneous it is invited error, and they are within the rule which precludes a party from taking advantage of an error induced by his own action. Elevated Railroad Co. v. National Bank, 135 U. S. 432; Water Works Co. v. Barret, 103 U. S. 516; Railroad Company v. Estill, 147 U. S. 591.

On the other hand, if this court should find error in the views by which the circuit court was guided and should take the view that the revenue was the proper unit of division of expenses between the two classes of business, then we submit that the decree should be affirmed on the showing made by the railroad companies, under the rule that a judgment will not be reversed on the ground that it was based upon a wrong view if it can be sustained and affirmed by the application of correct rules.

"A just judgment, which is warranted by the record and facts, will not be reversed because it was based on a wrong reason." Smiley v. Barker, 83 F. 684, affirmed in 169 U. S. 736.

## THE STATE'S BASIS IS AN ARTIFICIAL BLENDING OF ENGINE MILES, CAR MILES, TRAIN MILES AND TON MILES. IT IS BASED ON ARBITRARY ASSUMPTIONS THAT ARE INCAPABLE OF PROOF AND FOREIGN TO ALL KNOWN RULES AND PRACTICE IN RAILROAD OPERATION OR ACCOUNTING.

The State filed certain exhibits containings formulas for dividing the expense of conducting traffic between state and interstate business.

They accept as correct the railroads' assignment of the amount of expense properly chargeable to the State of Arkansas, except the expense at Memphis and at Fort Smith, and the items of legal expense already mentioned; they also accept the amounts reported under the various operating expense accounts prescribed by the Interstate Commerce Commission and the division of those expenses between the freight and passenger traffic.

They first assume that it is competent to divide the expense of operating local and through freight trains, and when they have done that and ascertained the relative cost of those two classes of trains, they attempt to ascertain the amount of state and interstate freight carried on each class of trains and divide the train cost between state and interstate on the basis of the relative amount of ton miles of each class of freight on each class of trains.

This is an outline in short of the mode they have adopted.

One of the prime and unanswerable objections to their scheme is that it is impracticable, as the railroad operating men have testified in this case, to make the division between trains on the basis attempted by the State.

If that could be done, another difficulty is met right at the threshhold; that is, that it is necessary to ascertain how much freight was carried on local trains, and how much on through trains, in the six months in controversy, before they could make an apportionment between state and interstate business.

Recognizing the necessity, they attempted to do it in this way: They took the month of October, 1907, and an exhibit made by Mr. Johnson at the request of the State and filed in this case as exhibit 26, that contained, among other things, a statement of the tonnage and ton miles taken into the auditor's revenue accounts in the month of October, 1907. It did not separate it between local and through trains, but contained simply the aggregate amount of freight carried in the accounts for that month.

They next obtained what is called the wheel reports of all local trains—not of the through trains, but only the local trains—that operated in the State during that month.

The wheel report is the record kept by the conductor as he goes along from station to station, of the cars he picks up; he gives the car numbers and where picked up and where left off, and all that sort of thing. It is intended to be a sort of rough history of the cars handled on the train,

and may be taken to be reasonably correct. Of course, they may contain mistakes, and we think they do. They contain also the loading of the cars among other things.

Then they got the waybills covering all shipments that moved on local trains during the month. That gave them pretty correct information as to the movement of freight on local trains in the State in the month of October, 1907.

When they had gotten that together (and it took them four or five months to work up the one month, which gives an idea of the magnitude of the task), they wanted to know what the movement on the through trains was. To ascertain that they simply deducted the amount they found was carried on local trains from the total shown on exhibit 26. They said, that is the freight that was carried on the through trains.

Now it is important right here to pause and see to what extent the information contained in exhibit 26 should be relied upon for that purpose, because upon that depends everything so far as the attempted division by the State is concerned.

The total freight taken into the accounts in that month, as shown in exhibit 26, does not represent the actual movement of freight on trains in the State of Arkansas during the month.

The accounts of the railroad company do not and could not have shown how much freight was handled on trains, local and through, in the State of Arkansas in the month of

October, and the company's accountants could not obtain that information without devoting the same relative amount of time to the investigation for each of the six months, as the State gave to the investigation of the local trains for one month, and then as much more as would have been necessary to work out the very much larger proportion of freight carried on through trains, for the same period, in the manner the State worked it out as to the local trains for one month.

It could not be ascertained, because no account is kept of such matters.

The Iron Mountain Railroad is a part of a large system which operates in eight States. The accounts from which exhibit 26 was compiled are made up in this way:

(1) Freight originating on the Missouri-Pacific System lines and destined to points on that system, including the Iron Mountain Railway, is taken into account as of the date it is received at the station where it is taken in charge by the railroad company.

Now, freight received in Kansas or Colorado, or Nebraska, in the month of September, or in the month of August, might be, and the testimony of Mr. Nay and others shows is frequently delayed, just the natural delays incident to rail transportation might cause that freight to move in or through Arkansas in October, and yet it would be entered in the auditor's accounts of September or August, the month in which it was received by the railroad company

at a distant station in another State, and not be taken into account in the month of October, or represented in exhibit 26 in this case.

(2) All freight which is received on the Missouri-Pacific System lines and billed to points on other lines of railroad, is taken into account in the same manner; that is to say, at the time it is received for shipment.

Suppose a shipment should be received in Kansas or Nebraska or Missouri, destined to a point in Arkansas or Louisiana, off the line of the Missouri-Pacific System, and that occurs every day. It goes into the auditor's accounts as of the date it is received at the station where it originates. For instance, if it is received at Pueblo in September, it goes into the accounts of the auditor as of that date, regardless of when it moved in Arkansas, or when it arrived at destination, and necessarily so, for the tonnage and revenue must be handled in a uniform manner, and it is impossible to divide the revenue from each shipment between months on the basis of its movement in trains over approximately seven thousand miles of road. In order to know whether a shipment that moved over the line in Arkansas in October entered into the accounts, you would have to trace it back and see if it was received in October. If it was received in September or some other previous month, it would not enter into the accounts for October.

Or, take it the other way. It might be received in October and not move until a later period, a later month.

(3) There is another kind of business called "Interline received;" that is, freight received from other lines. That is taken into account at the time it is reported at destination. If a shipment is made from Chicago to a point on the Missouri-Pacific System, say Kansas City or Little Rock, it gets into the auditor's account at the time it is received at destination.

Another class of business handled by the railroad company is what is called "Interline Through" business, originating, say at Chicago, destinated to Galveston or San Francisco via the Missouri Pacific Iron Mountain lines, the Iron Mountain being merely an intermediate carrier. This class of business is taken into account when reported by the agent at final destination; in other words, when reported by the agent at Galveston or San Francisco; all of these classes representing more than three hundred and fifty thousand separate and distinct consignments per month.

Thus, it will be seen what wide scope for error the taking of this account as representative of a month's physical movement affords, when it is borne in mind that 51 per cent of the ton mileage in Arkansas is trans-state freight, and not more than 11 per cent of the total ton miles, according to the State's figures, is carried on local trains. There might be large quantities of freight moved in October which would not reach Texas or California or Louisiana or Arizona, or freight that originated in those States that did not reach Nebraska, Missouri, or the States north, until November or December. None of that movement got into exhibit 26.

They did get the actual movement of the local trains, but did not in any manner get the movement of the through trains, and that is nearly all interstate freight. So there is a large amount of interstate freight that is left off on this through train movement, because it moves on the through trains almost altogether.

The details of the October movement of freight worked out by the State's accountants is contained in exhibit I, filed by Mr. Wharton, which is based upon exhibit 26, as explained in the foregoing statement. Having separated the freight carried on the two classes of trains to their satisfaction, they assume that that month correctly represented the six months' period, and used certain arbitrary bases, confessedly adopted without any investigation except such as the accountants who prepared the formulas were able to make, to segregate and divide all train cost as between local and through trains, and then apportioned the cost of each class of trains to the state and interstate freight carried thereon on the basis of the ton miles. Transportation expense was also divided on arbitrary allowances for extra cost made here and there, and based wholly upon the views of the accountants and persons whom they say they consulted, but who were not witnesses and whose names were not even given by them.

After they had ascertained the cost of local and through trains for the six months' period, and the ton miles of state and interstate freight carried on local and through trains, in the manner indicated, for one month, they applied the per-

centages of the ton miles thus obtained to the total ton miles for the six months' period to determine the number of ton miles of each class of freight on each class of trains and apportioned the train cost of each class of trains between the State and interstate freight carried on them respectively in proportion to the ton miles of each (exhibit K, p. 78). This assumes that the relative proportion of state and interstate freight on local and through trains is exactly the same for each of the six months, which is manifestly wrong for the reason that even in a normal period, the month of October is the heaviest month of the year for all southwestern roads, and especially so in this particular year on account of the congestion and abnormal use of the local trains.

The manner and the details of their division are contained in exhibit K. The statistics contained in exhibit I are the foundation of their schemes of division as between state and interstate freight. If that month is not representative, or if the statistics of operation as used by them for that month are incorrect, or if the arbitrary assumptions upon which they proceeded in making their division of train and transportation cost, or any or either of them, are incorrect, the results shown in their exhibits can not be correct and the relation of cost obtained in that way would be worthless. The correct application of their scheme of division, therefore, depends upon whether the bases and the numerous hypotheses upon which they acted in its preparation are correct.

It is a remarkable fact that not a single witness who had had any experience in railroad operation that would qualify him to pass upon the merit of their scheme of division was called. Their principal witnesses were public accountants, whose only experience in railroad accounting was such as they had acquired through the occasional examination of railroad records in their capacity as accountants. Mr. Hamilton, as we now recall, was the only man among their accountants who had had any experience in railroad service, and his experience was not such as to qualify him to pass upon the many radical assumptions made in the formulation of their plan. The scheme was devised by Mr. T. F. Wharton, the manager of the agency of Haskins & Sells, in St. Louis, who had been employed as a public accountant for about eight years, prior to which he was a printer and business manager in a newspaper office and city clerk of a small town in Wisconsin. During his employment as a public accountant he was principally engaged in checking accounts of various business and industrial concerns. The only work he had ever done involving railroad accounting was in connection with the Missouri and Arkansas Rate Cases, which are now pending in this court. He only had general charge of that work, however, and did not make any investigation in the offices of the companies, or give it close personal attention, and did not testify in the Missouri case. His first real work in connection with the cases was in May or June, preceding the time he testified, in the spring of 1910. He testified that he

devised the State's scheme of division; that the ideas originated with Mr. Hamilton and himself after reading the testimony in the Arkansas and Missouri cases, and particularly that of the operating men. He admitted that the division of expenses made by him was not based on any knowledge as to the actual operations of railroads, also that he was not prepared to be examined on the details of his scheme. He was asked if he felt that he was qualified to testify as to the manner in which the expense of operating railroads should be divided, and said that he was not, except from the point of view of an accountant. He was asked on cross examination if the division of expense between freight and passenger traffic which appeared in the exhibits filed by him was correct, and said that he would not care to pass a personal opinion on them because he had not studied it sufficiently to form an opinion as between freight and passenger traffic. That is the very basis and groundwork of any intelligent division of expense. He was asked if he could make an intelligent or satisfactory assignment of the expense of either freight or passenger traffic as between the several branches or departments of each kind of traffic without having before him a correct statement of the total of each. He said he could approximately, but admitted that it was necessary to have the total cost of freight and passenger service before you could go into details, and finally said that he accepted the railroad company's division as between freight and passenger service, and that it was not necessary to give any particular consideration to a division between those two branches of the business.

Is it not remarkable that a person who undertakes to make a division which he claims is more nearly in accord with actual conditions than any other method, would not give it further thought? His testimony shows that at the very foundation of his work he is undertaking it without that investigation that a man who wanted to arrive at actual results should have made.

He was asked this question:

Q. "In adding 50 per cent to the engine mileage on local trains on account of station switching, did you make any distinction between that part of the traffic that was trans-state, and the other part?

A. No, sir.

Q. Well, do you think there is any difference between the amount of switching done for trans-state and interstate freight?

A. I couldn't say as to that on local trains.

Q. What is your opinion about that?

A. I wouldn't express any; I have none as to that."

Here is a very important element of division that is made upon an arbitrary assumption, and the man who originated it says he knows nothing about it and has no opinion about it. He was asked:

"Q. Wasn't that a very important feature to know?

A. Not as I understand between local and through train service—no, sir.

Q. Now, let me see; I don't mean to make a difference just now between local and through trains; I mean when you come to divide expense like the difference between state freight and interstate freight. Wouldn't it cut a figure then?

A. It would in the final division between state and interstate.

Q. Did you make any allowance or give any attention to that in making your final division between state and interstate after you had apportioned the expense to local and through trains?

A. No, sir.

Q. So if there was any distinction it was not taken into your statement?

A. If there was any distinction, it was not taken into consideration."

In connection with his division of the expense of "Maintenance of way and structures," which is the largest item of train cost, he was asked why he added 50 per cent to the engine mileage of local trains on account of station switching. His answer was:

"That percentage was worked up after consultation with Mr. Hamilton and others, and was simply an arbitrary percentage added.

Q. You have no qualifying knowledge or information?

A. Except such as I have just stated, discussing the matter with Mr. Hamilton and others.

Q. You don't know whether 50 per cent or some other figure should be added?

A. No, sir.

Q. Then you added 150 per cent for each engine mile to make it equal a car mile? Why did you do that?

A. We added 150 per cent to each engine mile also after consultation with Mr. Hamilton and others as representing the difference in the weight of the engine and the cars.

Q. Did you weigh an engine and car for the purpose of ascertaining from actual weight what the difference was?

A. No, sir.

Q. Then what reasons were given in your consultations for adopting that per cent? I ask this because it is the foundation of your figures.

A. Well, if hearsay testimony is not competent, I would not be able to say.

Q. So you are unable to make an explanation?

A. Except upon information I gathered from consultation with men who were qualified to pass on that."

We give this as an example of the character of his testimony as to the division, and the arbitrary assumptions contained in the exhibit. (See R. 1033-1036.)

We have dwelt somewhat on Mr. Wharton's testimony as to his knowledge and qualification because he is put forward as the originator of the scheme of division developed in the State's exhibits.

The plaintiffs, for the purpose of determining the feasibility of the State's scheme and the correctness of the assumptions on which it was worked out in its several parts and details, took the testimony of a number of witnesses who it was thought, from their experience in operating rail-

roads and in connection with railroad accounting, would be qualified to form opinions based on knowledge, and thus to pass intelligently upon the scheme in its entirety and in detail.

Mr. Carl Gray, Senior Vice President and General Manager of the St. Louis & San Francisco Railroad Company, who had had large experience in operating railroads in Missouri, Arkansas and Texas, Mr. F. E. Ward, who from 1898 to 1907 was the General Superintendent and General Manager of the Great Northern Railroad System, and was at the time he testified General Manager of the Chicago, Burlington & Quincy Railroad Company, Mr. Frank Nay, Comptroller of the Chicago, Rock Island & Pacific Railway, who was in the service of the Missouri-Pacific and the St. Louis Southwestern railways in various capacities in connection with statistics, freight accounts and as traveling auditor, and with the Minneapolis & St. Louis and Chicago, Rock Island & Pacific Railway systems as auditor and comptroller, who testified that he had studied operating conditions on railroads in connection with his duties in the auditing department, Mr. F. P. Johnson, who had served for 21 years in the auditing department of the St. Louis, Iron Mountain & Southern Railway and the Missouri-Pacific System, and for nine years had been in charge of operating statistics, were examined. All these men are eminent in their several departments of railroad service, and were qualified by their knowledge and experience, as the reading of their testimony will show, to pass upon the various matters involved in the State's scheme.

Mr. Ward testified as follows:

"In my opinion, such a method would not be accurate and reliable for the purpose of accomplishing the object sought. In the first place, the taking of any one month would not, in my opinion, be safe for determining so important a thing as the cost of performing service, when it is to be used for determining the revenue of the company." (R. 1854.)

A number of witnesses testified you could not take the month of October or any one month, and apply those particular results to six months. That the conditions affecting the traffic were such that no one month could be applied to six months, for the purpose of effecting the distribution of expense as between state and interstate business.

Continuing, Mr. Ward testified:

"The months vary very greatly, one from the other. The month of October, on most railroads in the West, is a month of very heavy business.

"By reason of the difference in the method of taking record of the tonnage, part of it being taken from billing, and part from the date of receipt, there would be a very great opportunity for tonnage to be omitted that was actually carried in that month. Or, on the other hand, there might be a great deal of tonnage included in the figures which would not move at all on the rails of the company during that month. Therefore, the great uncertainty as to the accuracy of the tonnage would make the first grave doubt as to the accuracy of the method for computing the cost."

Q. "Would the incorrectness that would result from that method of ascertaining the relative proportion of freight carried on local and through trains be cured by the fact that the omissions and the inclusions to which you refer would occur from month to month and would be about the same in each month?

A. It would not, in my opinion. I do not believe that any one month should be taken or could be taken as a basis upon which to determine an accurate computation. Any month might be a high one or it might be a low one, and if it should happen to be correct in any given case, it would be so purely by accident and not by reason of the inherent accuracy of the theory. No short period of a day, a week, or a month would be safe. They would all give opportunity for variations sufficient to destroy the value of the method as a means of determining the separation of cost.

Q. What effect, if any, would a change in the character of the tonnage have upon the correctness of that method of ascertaining the total tonnage?

A. By character of tonnage, do you mean the character.

Q. I mean the character of the business, and the character of the freight, and all the characteristics that enter into and form an element in determining whether the method of keeping accounts by the auditor would give a correct result.

A. A variation in the character of the business handled—that is, business of kinds that had different origins or destinations during that time—for instance, if, during the month that was used as the basis of these computations, there should be any material change in the class of business handled, there might be a very material opportunity for a variation in the time at which those tons would be recorded, and they might be omitted in that month, or other tonnage might be included. It would have a bearing on that same opportunity for inaccuracy." (R. 1854, 1855.)

It was shown that during the month of October, 1907, that there was a congestion of freight in this State and elsewhere, which had an effect upon the movement of freight. Freight was delayed very considerably in transit, and in the delivery all over the country by reason of it. The attention of Mr. Ward was called to that condition:

Q. "What effect would congestion during the period that is covered by this investigation and during the month, or a congestion which was at its height during the month selected as a representative month, and in which the relative tonnage is sought to be determined in the manner I have described, have?

A. If congestion existed in the State of Arkansas during the month that was used in this theory, undoubtedly the same congestion existed in States outside of Arkansas" (and that is shown by the evidence) "on lines connecting with the lines that are being considered here. That would mean in any such period of congestion the business would all move more slowly than at a time when business was being handled in a normal way. That would mean that business would be delayed outside of the State and inside of the State, and the margin for such inaccuracies would be greater. There would be a greater spread between the tonnage actually moved in that month and the tonnage that was recorded by the method described.

Q. Would such a condition have a tendency to change the proportions of tonnage carried by the two classes of trains mentioned; that is, the local and through trains?

A. Yes, sir; it would, for this reason, among others: That in a time of congestion, when a railroad is hard-pressed to move its business and keep its terminals clear, it would use to the fullest possible extent the capacity of the engines on its local trains, and the proportion of long haul, or interstate business, handled on its local trains would increase during such a time. And the local trains being ordinarily such light trains, the addition of comparatively few cars to their makeup would materially alter the perecentage of given tonnage that was carried in those trains.

Q. What do you think of the practicability of apportioning the expense of interstate and intrastate traffic by separating and ascertaining the cost of operation of through and local trains, as the State has done in exhibit K?

A. I have given the matter of finding an accurate method of dividing that cost considerable thought, and have heretofore expressed myself as being of the opinion that

there was not any practicable way of determining it by any mathematical calculations or any exact method; and I am now of the same opinion. I do not think the State has yet solved the problem. I think the plan outlined in exhibit K is not a practicable one.

Q. In introducing this scheme of division, the State assumes that it has presented a method which is not based upon theory, but upon actual conditions; and they advance it here as an apportionment based on actual facts. In that view, what is your opinion of its merits as presenting a division based either actually or approximately on facts?

A. As I read the State's exhibit K, the basis used is one that is not based upon facts, but to a very large extent upon assumptions of facts which, in my opinion, have no proper basis in fact. My idea of the office of an accountant is that he should record accurately things that occur, and not undertake to formulate theories to prove one thing and another. It would be quite possible, by not very serious modifications of this particular theory, to make a very wide variation in the results that would be obtained from it." (R. 1855, 1856.)

There is other testimony in the case which establishes clearly and beyond reasonable controversy, that the apportionment which has been made of state and interstate freight between the two classes of trains, in the method adopted and followed by the State, is incorrect.

It will be observed that all the witnesses who have testified in the case, and they are men who have been engaged all their lives in railroad operation, and who ought to know about these problems if anybody could, have testified that the larger amount of the State freight is carried on the local trains. We have heard that from all the witnesses. And yet the State produces an exhibit here, made up partly from exhibit 26, which shows that 61 per cent of the intrastate

ton mileage was on the through trains and 39 per cent on local trains. That is contrary to the testimony of all the operating men in this case.

A test was made on the St. Louis & Southwestern Railroad just one year later, that is in October, 1908, when conditions affecting traffic were normal, and that test showed that the relation was just the reverse; in other words, 22 per cent of the state freight was carried on through trains and 78 per cent on local trains. We could not understand how these conditions were reversed, until we came to look into it and understand how those accounts were made up, and until the effect of the congestion referred to was explained by the operating officials in charge at the time.

Mr. Cannon, who is a superintendent of the Iron Mountain Railway, came to the State and gave his personal attention to the conditions caused by that congestion. He testified that when the movement of freight became congested it was necessary to utilize every possible means of moving the freight and getting it out, particularly the interstate and trans-state freight going beyond the terminal points; that in order to accomplish this they loaded the interstate freight on the local trains at the terminal points, to the full capacity of the engines to pull it. (R. 1795, 1796.) Mr. Ward's and Mr. Gray's testimony as to the general practice under such conditions corroborates his statements.

There is, under normal conditions, a great difference in the make-up of local and through trains. The local train

does not haul half the tonnage the through train does. But under these circumstances, this congestion existing, they loaded the local trains to their full capacity; Mr. Cannon testified that they loaded thousands of tons of freight on the local trains each day, in order to move it. The yardmaster at Little Rock testified to the same thing.

Mr. Cannon was asked, without any knowledge of the State's exhibit I, what he thought the relation of state and interstate freight on local trains during that month, growing out of that congestion, was. He answered that he expected it would show that 75 per cent of the freight was interstate. He was asked how it would be normally, outside of that congestion, and he said, "Just the reverse." Mr. Brown, who was the assistant yardmaster at Little Rock, said practically the same thing—his figure, instead of 70, was 65 per cent. (R. 1798, 1806.) These conditions destroy the value of the methods pursued by the State.

Now, let us trace that a little further. If it took four or five months to ascertain the actual freight hauled on local trains for one month, which was 11 per cent of the tonnage, how much time would it have taken to go through and ascertain the tonnage carried on the through trains, for that month, and the tonnage on both classes of trains for the other five months? It was practically impossible to do it.

Mr. Roth, an expert accountant employed by the Iron Mountain Railway, took 16 trains and ascertained from the waybills what freight was carried in them. The result of

his investigation is shown by the following extract from his testimony:

Q. "Mr. Roth, you are familiar with exhibit 26, filed on the part of the railroads, and with exhibit I, filed on the part of the State in this case?

A. Yes, sir.

Q. The first exhibit referred to covers all freight taken into the account of the Iron Mountain road for the month of October, 1907: Have you made any investigation of the local trains that ran during October, 1907, for the purpose of ascertaining whether there was any freight hauled on those trains that was not included in the auditor's accounts, and in the statements contained in exhibit 26 and exhibit I?

A. Yes, sir; I made such an investigation.

Q. Please state what that investigation was and what it showed. First, how did you make it, and what did you investigate, what trains, and so on?

A. We investigated 16 trains in all, 13 of which were on the Arkansas Division; one westbound on the Memphis Division; one northbound on the Valley Division (that is from Monroe to McGehee), and one eastbound on the Central Division. We compared the State's detailed sheets with the waybills, and made corresponding sheets, in which we inserted the dates of the waybill as an index of the account that that particular freight would have gone into in auditing our accounts. We also made a notation if it was received at a period subsequent to the month of October. We found that all of the freight on those 16 trains, of the trans-state freight, about 30.5 per cent was not included in our October account, and about 15.5 per cent of the interstate was not included in our October account or our exhibit 26. Of the state freight, a fraction over 6 per cent was not included.

Q. As I understand you, those proportions you have mentioned of trans-state, interstate and state freight you found on those 16 trains, were not included in the auditor's accounts of freight handled in October, or in the statistics

on exhibit 26, and consequently not in totals of the State's exhibit I, which is based on the railroad's exhibit 26?

A. That is correct.

Q. You investigated about one-third of the local trains for October?

A. Yes, sir; about one-third.

Q. Why did you not extend your investigation over the entire 46?

A. It would have taken too much time. I believe we could not have completed that under a year's work.

Q. So it was impracticable to extend it beyond the trains you did investigate?

A. Yes, sir; it was.

Q. Did you have any data from which to investigate the through trains?

A. No, sir; there was nothing in the shape of data which would enable us to do that.

Q. If the same conditions that developed on the 16 local trains you investigated in regard to freight not included in the auditor's accounts, had existed on the through trains, what would have been the amount of tonnage, actually handled in the month of October, omitted from the auditor's accounts and from exhibit 26?

A. There would have been a difference of about twenty-seven million ton miles.

Q. It would have swelled the tonnage for October about 27,000,000 ton miles?

A. Yes, sir.

Q. Where did you find the percentage of business not included on the trains you investigated was heaviest with

regard to the division or territory in which the trains operated?

A. We found it was heaviest on the trains nearest the borders of the State, and not so heavy on those running central in Arkansas.

Q. What effect, in your judgment, would that have upon the percentage which would have developed if you had been able to analyze the entire 46 trains?

A. I think if we had been able to analyze the 46 trains the three percentages I have mentioned would have been considerably increased." (R. 1973-5.)

(Mr. Roth filed exhibit 26, and testified that it was correctly taken from the records; when asked if it was a correct statement of the operations represented on the exhibit during the period covered by it, he stated he thought it as correct as figures of that kind could be. (R. 279.) We refer to this because of comments made by counsel at the hearing growing out of the fact that the exhibit was filed by this witness. The fact is that exhibit 26 was prepared in anticipation that it would be called for by the State; later a statement covering three months was called for at chambers, and it was agreed that a statement covering one month would answer the purpose, and it was in fact prepared and filed for the State's use. [F. P. Johnson, R. 1878.])

Mr. Carl Gray testified as follows:

He had examined the exhibits introduced by the State, and the method pursued by the Iron Mountain Railroad in keeping its revenue account.

"Predicated upon that, I would say that to subtract an absolutely determined amount from one which was not arrived at in any wise by the same manner, is entirely misleading, for the reason that the gross which is represented in the auditor's net ton miles includes business that may have been billed for some months before; certainly a very con-

siderable portion of it is billed the month before, and excludes a great deal of business that was actually handled in this month.

"That is such a variable quantity, varying as the proportion of the last two days may bear to the first two, that in my opinion it is unreliable.

Q. "Would the variations you speak of be cured by any equality in the lapovers from month to month, and make it representative in that way?

A. It would not, as applied to any reasonably short period. It might, if applied to a five or ten-year period.

Q. I mean for one month, say the month of October.

A. One month as applied to what?

Q. To six months?

A. No, sir.

Q. Have you had any experience on your line of railroad that furnishes you with any information in that respect?

A. At one time, in endeavoring to provide statistics of value in determining the relative performance on the several divisions of the road, we took the ton miles from the auditor's reports. We found them to be unsatisfactory, for the reasons I have stated, and for the additional reason that the auditor assumes, naturally, that freight travels through a certain prescribed route.

"The operating department may not handle it via that route, for reasons that are good, and sufficient to them; such as interruption of the line or a more economical routing to a certain class of business, or a handling that would conserve time. Therefore, we were compelled, in order to have reliable statistics, to adopt the method by which we arrive at the net ton miles handled on any division of the road,

from the conductor's wheel reports, which represent actual conditions. And we have been satisfied with that.

Q. The tonnage handled on local trains on the Iron Mountain road during the month of October, 1907, in question here, appears to be only 11 per cent of the total tonnage: In that view about 89 per cent of the tonnage was ascertained in the manner I have indicated from the auditor's revenue accounts. What effect would that small proportion of located tonnage, so to speak, have? As between the two classes of trains, it would leave a very large margin for inaccuracy and incorrectness as to the other part of it, would it not?

A. It would add to the possibility and probability of that, in the greater proportion it bears to the amount accurately determined.

Q. What effect would a congestion of the business in October have upon the correctness or incorrectness of such a method of dividing the ton miles carried on those two classes of trains?

A. It would have this effect: It would distort those conditions which prevailed under a more normal situation. To make myself clear, in order to satisfactorily handle local business, the local freight trains running upon something like an established daylight schedule should handle the preponderance of that business. In time of congestion or stress that is of necessity lost sight of, and under those conditions, there can be no doubt that a greater proportion than normal of through business would find its place in the local trains.

Q. Why is that, Mr. Gray?

A. Well, you have a certain given amount of power, and it is human nature, if not good practice, under those circumstances to make it count just so far as you can; and in that case they would load down the local freight trains to the full efficiency of the engine, even in some instances knowing it would be very seriously delayed, and the service materially hampered, in an effort to get out from under. (R. 1895-1897.)

"From my knowledge of the conditions on all southwestern railroads in October, 1907, I would say that in my opinion for a comparison of this kind, it would have been difficult to have selected a month in which the results would have been more misleading as applied to a longer period, for the reason that the congestion reached its flood during that month, and the conditions which were distorted by reason of the efforts of the operating department to move this unprecedented tonnage would reflect themselves through all of the remaining months, and the proportion of tonnage included which really did not move in that month, and the proportion of tonnage excluded which did move in that month, due to the auditor's method of keeping his ton miles, would equally distort and perhaps distort more greatly, all of the other months. (R. 1898.)

Q. What do you think of the merits of the plan adopted by the State's accountants for ascertaining and dividing the relative cost of handling interstate and intrastate business?

A. I feel it is an unsatisfactory basis for the reason that it is not a consistent theory. That is, not consistent in itself, in that it has used a number of varying methods. Those methods being the car mile, ton mile, arbitrary assumptions as to the relation between the locomotive mile and the car mile; and that it has applied over a six months' period a result determined upon in one month; and that result in itself, and in the nature of things, is an unsatisfactory one and an indefinite one. That at any point throughout its deductions, an error or a switch of the business in the other months would very materially affect the final result.

"That it is objectionable because it is difficult of understanding. It assumes conditions which, in practice, we are not able to verify. But above all, remains the fact that there is not a proper allowance that has been made for the relative cost of the two classes of business.

Q. Mr. Gray, speaking of this plan of separation from the standpoint of the State, as to the arbitraries that have been allowed in these various subdivisions, if those arbitraries were correct, and there was any way to arrive at

what division would be proper, and you could say these allowances would be proper in favor of the local trains, would that account for the excess cost of handling intrastate over interstate freight?

A. No, sir." (R. 1909, 1910.)

Mr. Nay testified in regard to the State's theory:

"My opinion is, that it does not reflect true conditions or true relative cost of the two kinds of service. After examining these exhibits carefully, I am unable to find any results—that is, any assignment of expense between local and through, or between state and interstate, that is an actual fact, or based on actual facts. The method subdivides the total operating expenses into various subdivisions, and treats of each subdivision separately.

"The expenses that are grouped in these subdivisions are divided on various bases, many of which have little or no relation to the expenses that are subdivided thereon. The method is complicated, and is capable of being adjusted in different ways throughout the details, that might bring entirely different results in different cases. The attempt is sought to divide what are termed train expenses between local and through, and those which are not train expenses between state and interstate. And then after the total local and through train expenses are ascertained, by a series of approximations, without any actual results being obtained, or without being based on any actual results, the entire expense of those trains is then apportioned between state and interstate on a ton mile basis, which is another approximation of this summary of approximations. It might or might not produce a fair result. If it did produce a fair result, I think it would be a coincidence or an accident. (R. 1814, 1815.)

"My understanding of the method used by the State's witnesses in ascertaining the state and interstate tonnage one mile on local and through trains is as follows:

"They took the conductor's reports, commonly known as 'wheel reports,' of all the local trains that were run during the month of October, 1907, and drew from those wheel

reports the numbers of the loaded cars. They then traced from those car numbers the waybills covering as many as they could find. I understand they were unable to find all of the waybills covering those cars. After locating the waybills, the separation was then made between state and interstate shipments, and the tons one mile, state and interstate, were computed for car load freight only. I understand that all of the less than carload freight was considered to be state business; that is, less than carload freight that was hauled on local trains.

"Having obtained those results, which purported to show state and interstate tons one mile, transported on local trains in October, 1907, they deducted those results from the total tons one mile for October, 1907, state and interstate, as compiled by the railroad company. What was left was assumed to be the tons one mile, state and interstate, that were transported on through trains.

"However, the total tons one mile for the month of October, 1907, as computed by the railroad companies covers only shipments that were taken into the accounts of the companies in October, 1907, regardless of whether the shipments actually moved over the rails in that month or at some other time. I do not think a correct result can be reached by that method for the reason that the business of the company is not taken into account according to when it actually moved in the trains, but is taken into account as follows:

"System business, which covers shipments moving between points on the Missouri-Pacific System (including the Iron Mountain), is taken into account on what is known as the 'forwarded basis;' that is, all system waybills dated in the month of October, 1907, were taken into account for that month regardless of whether the shipments were actually hauled on the trains in that month or not.

"Under that plan system waybills dated during the latter part of October, 1907, and which started to move in October, but finished their journey in November, 1907, would be taken into account by the company in October for the full journey. But the State's accountants in compiling the tons one mile (on local trains), from the local con-

ductor's wheel report, would include only that portion of the journey that actually moved in October.

"The same condition prevailed at the beginning of the month. That is to say, the waybills dated during the last few days of September, 1907, which were en route at the end of the month, were taken into account by the companies for the full journey in September, 1907; while the State's accountants would have in their reports for October the ton miles covering the completion of the journey in October. The railroad's figures would include nothing whatever in October accounts covering such shipments.

Q. "The result would be, if a shipment was made and billed in Missouri or Nebraska or Oklahoma, in October, 1907, it would go in the auditor's accounts as an October shipment, without regard to when it passed through the State of Arkansas?

A. Yes, sir; if the waybill is dated in October. If a waybill on any part of the system covering the several States, is dated in August or September, it would go into the auditor's accounts as of August or September as the case might be."

"The interline business represents business covered by waybills reading to or from points on other railroads, and is divided into three classes: Interline forwarded, interline received, and interline through or overhead.

"The interline received business covers waybills made by other railroads reading to stations on the Missouri-Pacific System, and is taken into account when such waybills are reported by the agent at destination.

"In that way waybills which reach destination during the early part of October, which travel part of their journey over the Iron Mountain in the month of September, would be included in the company's tons one mile, but that portion of their journey which was traveled in September would be excluded from the figures compiled by the witnesses for State.

Q. "Suppose a shipment which passed through Arkansas in the month of October was received in Texas or Louisiana in November or even in December. In what month would it be entered in the auditor's accounts?

A. It would be entered on the auditor's account in either November or December, according to when the shipment reached destination." (R. 1816, 1818.)

"And, furthermore, if that shipment, or any shipment of like character moved part of the distance on through trains across Arkansas, and part of the distance on local trains, the State's witnesses would have entered the figures only for the mileage that actually moved on the local train and would omit the mileage moved on the through train.

"The next class of interline business is known as 'interline forwarded,' covering shipments that are waybilled at stations on the Missouri-Pacific System going to points off that line and on some other railroad. The waybills for such shipments are taken into account by railroads when they are reported by the destination carrier, and the destination carrier reports them when the agent at destination reports the receipt of the shipment to his accounting department.

Q. "That may be weeks after it has passed through the State, may it not?

A. It may be a long time. In actual railroad practice, I think every railroad in the country has a large number of waybills of that kind, which are being constantly traced. The Rock Island has several men tracing waybills that are not reported until some time after the close of the current month. In case there is a congestion, it sometimes happens that such waybills are reported several months after they have actually moved over the rails of the original carrier.

Q. What effect would a congestion in the traffic have in the way of delaying the entries in the book of the auditor of that class of shipments?

A. On all interline business, it would serve to increase the delay. The system business being taken up on a for-

warded basis, congestion would delay the actual movement. But on interline business, which is taken up by the receiving carrier, when it reaches its destination, any congestion delays the reporting of that business, and, consequently, the taking of it into account. This interline forwarded business is subject to perhaps the greatest delay of any (except perhaps the third kind of interline business, which is 'through' or 'overhead') because the company which originates the business has no control of when it is reported, and usually a large portion of the interline forwarded business of any carrier is not reported until after the close of the month in which it actually moved over the line."

"In this case waybills would be taken into account for October, 1907, which covered the actual movement in months prior, say in September or August, or even the months prior to August. While those shipments would not actually move in October, they would be omitted from the figures compiled by the State's witnesses, so far as the movement on local trains is concerned. Likewise, at the other end of the month a large amount of traffic would actually move in October, which would not be taken into the company's accounts until a subsequent month, but such shipments, if they moved on local trains, would be included in the figures compiled by the State's witnesses.

"The third class of business is the interline through, or overhead, covered by the waybills made at stations on other roads, which passes across or over the Missouri-Pacific, and has destination on some other road, the Missouri-Pacific being the intermediate road. This business is taken into account on a 'received' basis; that is, reported by the destination carrier in the same manner as the interline forward business."

Q. "In view of the conditions you have just described, can a correct division of the amount of freight carried on through classes of trains for a given length of time, say the month of October, 1907, be obtained in the way the State's witnesses have attempted to obtain it in this case?

A. No, sir; I think not." (R. 1816-1820.)

"In arriving at the actual number of ton miles hauled on the through trains by deducting the tonnage actually hauled

on the local trains, from the company's figures, which were compiled without reference to the tons actually hauled, unless it should happen (and it would be a coincidence or accident), that those tons actually hauled should really agree with the tons taken into account as hauled on the local trains, the result left as to the tons on the through trains would be erroneous. It is scarcely conceivable that the number of tons actually hauled on the local trains in October, 1907, would be the same as the number of tons that were taken into account in October. I might add, that in my own experience on the Rock Island, we ran across this discrepancy several years ago in compiling operating statistics for our superintendents and general superintendents and operating men. We found that the so-called 'lapovers' from month to month did not equal each other—*in fact, they were entirely different, and were so very different as to distort our monthly averages.*

"Beginning with March, 1906, the Rock Island Railway has been computing the tons one mile used in connection with operating statistics for our operating men, from the conductor's wheel reports, thereby obtaining the tons actually hauled during the month over each division, because we were unable to obtain the tons actually hauled, from the waybill figures.

"We have made comparisons each month of the total tonnage one mile, ascertained from the conductor's wheel reports, and from the total tons one mile as compiled from the waybills, and they are quite different from month to month. *I think they will average a difference of ten per cent or more.*"

Q. "From your experience in the effort you made on the Rock Island, do you think that the inequalities and defects in this system would be remedied by any uniformity in the 'lapovers?'

A. No, sir; and certainly not for one month. The lapovers for one year when compared with the business for a whole year, have only one-twelfth of the effect they would have on the business for one month. Of course, it is evident to any one that the lapovers at the beginning of the

year will be the same as the lapovers for the first month of a year; and what I am trying to say is, that the effect of the lapovers when applied to the business of any one month, is very much greater than if applied to the business of a long period—say a year. That was the difficulty we had in our operating monthly statistics. In one month the tonnage that was omitted from our waybill account made the divisor into the expenses so small that the cost per ton mile was largely increased. Then the next month we would have tons in our account in excess of what was handled, and the reverse would be true—the expense would run away down.

"As those figures are used almost entirely for comparative purposes, *the comparisons were destroyed on account of these lapovers being so unequal.*"

Q. "And you found it so impracticable that you abandoned it, did you?

A. We abandoned it for our monthly operating statistics, by divisions, and ever since have been making those compilations, based on the tons actually hauled in the trains.

Q. What would you say of the month of October as compared with other months, as to its effect upon lapovers, considering the character of the business done in Arkansas in that month, and any changes made in the character of the commodities at that time from that which might have prevailed in the succeeding month?

A. I am familiar with traffic conditions on the Rock Island (in Arkansas), and presume in that period there was a similar condition as on the Iron Mountain.

Q. Are not the general conditions the same throughout the State as to the character of traffic affected by the change from the summer to the autumn business?

A. Yes, sir; I think that is true. I spent about 15 years on the Cotton Belt, and that was true on that road. And I know that on the Rock Island Road the October business is usually the heaviest of the entire twelve months.

Q. What effect would those conditions have upon the lapovers you speak of?

A. October being the heaviest month, there would be a greater congestion during that month, which would tend to emphasize these lapovers. I should say that no month is representative of any six months, or any twelve months, and, certainly, if I would choose a representative month, I would not choose the heaviest month in the year. An average month might be more nearly representative than either the heaviest or the lightest month, but I think where actual results are desired, no one month should be taken as representing the period." (R. 1820-1822.)

Mr. F. P. Johnson testified:

Q. "Will you state what you think of the correctness of the method adopted by the State for the purpose of ascertaining the tonnage carried on local and through trains in the month of October, 1907?

A. So far as the method used by the State is concerned in ascertaining the business handled by the local train, and then deducting those figures from the total figures shown by exhibit 26 (which was filed by the railroad), is concerned, I do not believe it is fair, and I do not believe it is a system which would be used by any railroad official. The figures compiled in exhibit 26, representing the total business for that month, are compiled from one source. The figures representing the movement of local trains are compiled from another source; the figures purporting to represent the local train movement are not figures that are included entirely in the total figures. I do not believe it is a fair assumption to make such deduction, or that correct information as to the relative tonnage carried on these trains could be ascertained in that way.

Q. It has been shown in that case that there is a large amount of tonnage moving in the month of October which is not included in the auditor's accounts for that month. Do you believe that omission could be accounted for or made up by any system of lapovers from month to month that might exist in the relation of auditor's accounts to the actual movement of the freight handled?

A. I have no idea how the lapovers from month to month will run. But in order to make this statement of any service we are compelled to assume that whatever business moved on the locals in the month of October, and did not get into our accounts, was offset exactly by the proportion of business that got into the accounts but did not move. That proportion must be exactly the same, *not only in volume as to ton miles, but as to commodities themselves.* It seems to me a violent assumption that the lapovers from September to October and October to November and November to December would be the same. To verify that would mean as much labor and time upon each of those months as was spent in compiling this exhibit I. It is a work which is practically impossible. I can not imagine how the lapovers could equalize mistakes of that sort, or rather the misleading effects of comparisons of that kind. (R. 1984.)

Q. Were you in any way connected with the Missouri Rate Case, and if so, state in what way?

A. I either compiled or was connected with the compilation of all of the exhibits that were furnished by the Missouri-Pacific Railway in that case. I attended all of the hearings before the master with the exception of one week at Chicago, and all of the hearings in the circuit court with the exception of one day.

Q. Mr. Wharton testified that the testimony in the Missouri case indicated that the main difference in the cost of state and interstate traffic was the cost of the local and the through trains. Is that your understanding of the testimony in that case, that the main difference was in the cost of local and through trains, to the exclusion of other elements of increased cost of state traffic?

A. No, sir; I think there were a number of reasons given for the extra cost of state freight as contributing very largely to that extra cost, in addition to the local train expense.

Q. Has the Iron Mountain Railroad ever made a practice of dividing expense of maintenance-of-way between local and through trains in such manner as has been adopted in this case?

A. No, sir; I do not remember any case where the Iron Mountain has ever had occasion or ever attempted to ascertain the cost of an individual freight train, whether it be local or a through train.

Q. What do you think of the State's method of dividing the expense of maintenance-of-way between local and through trains? If the separation had to be made, do you believe the manner adopted by them, the car mile basis, is proper from your standpoint as an accountant, and from your experience in railroad accounting?

A. I do not see that the basis adopted by the State, so far as the maintenance-of-way and structures is concerned, brings about any closer relation to the expense of those two classes than any other arbitrary method would, and I have no idea how the exact expense of either local or through trains or of one individual train, could possibly be ascertained with any degree of accuracy.

Q. You have heard the testimony in this case that a large proportion of the expense of maintenance-of-way and structures is not due to operation, but to other causes?

A. Yes, sir.

Q. In that view, do you think the method adopted by the State is a proper one?

A. No, sir; the larger the proportion of that class of expense that is due to the elements the less accurate would be any unit, either a car mile or a train mile, because, as has been stated by other witnesses, neither the train miles nor car miles would have any effect upon that class of expenses. It goes on regardless of the volume of business.

Q. It is more or less of an overhead expense than otherwise?

A. It seems so to me, and it is more of a general expense than any other item in the operating department. It is not a regular expense. By that I mean that the expense which is incurred this month is not taken into the account

this month or next month, or possibly not this year, and the traffic or the car movement has no bearing upon the amount of money which is taken into maintenance-of-way expense in the month in which the car movement is made." (R. 1986.)

Mr. W. B. Doddridge, an old railroad operating man, was examined by plaintiff during the production of their testimony in chief. Counsel for the State by way of anticipation (their method of division not having been developed at that time), tried very hard to force him into an approval of the method of division on the basis of train expense. Mr. Doddridge did not at the time understand the significance of the questions, but his views, as expressed in his answers, are in harmony with those of other operating men. The The following are his statements on cross examination:

Q. "Your analysis of the different classes of freight, interstate and intrastate, is based on your experience and knowledge of the operation of the different kinds of trains, local and through, and the proportion of intrastate traffic carried on each, isn't it?

A. Well, the local train is simply one of the incidents of the extra cost. It is not the whole reason. It is one of the circumstances and conditions of the handling of the short haul business of the railroad." (R. 484.)

At page 511, counsel asked him if, everything considered, a car mile basis would be fair between local and through trains, with reference to the expense of maintenance-and-equipment. He testified that a car mile basis, it seemed to him, would be very similar to the ton mile basis. (He had condemned as impracticable the ton mile basis.)

Q. "I don't suppose there would be any practical difference?

A. It would be an average, and it would not take into account the extra handling. It would simply measure the miles. The mile would be the unit the same as the ton mile.

Q. If you take the car mile as the basis, would you add anything, and if so, how much for the local?

A. Yes, I would have to add this element of handling.

Q. I want to know how much you would add to that?

A. I believe that it is demonstrated in these statistics to be about ten to one. Take the average haul, the difference between the miles.

Q. We are taking the difference now, as I understand it, between local and through.

A. Take the difference in the mile in state and interstate freight; those are the only statistics we have.

Q. You are getting away from the question. As I understand it, we are now discussing the question between local and through, and you derive your intrastate and interstate by dividing the proportion on those. But the primary division must be the division between a local and a through train.

A. Judge, I do not know how to figure that out from the way you put the question. To ascertain the relative difference you would have to take the lengths of the haul; that is, the state and interstate haul."

Being further pressed, he said:

"I do not want to make any wild statements on that point unless I have the number of the relative handlings that the cars receive; then my judgment would be predicated on that. (R. 511, 512.)

The foregoing testimony shows that no one month can be taken as reflecting the business for the six months' period; that it is impracticable and misleading to attempt to ascertain the tonnage of each class of traffic on local and through trains by taking the tonnage actually handled on one class of trains and deducting that from the total amount taken into the auditor's accounts in order to ascertain the tonnage on that class of trains; that there was a congestion of freight in the month of October, 1907, in this and other States, which materially affected the loading of the local and through trains, and caused a very much larger proportion of interstate freight to be handled on local trains than is usual and customary. We will later on in this argument call attention more in detail to the testimony as to the effect of that condition on the proportion of state and interstate freight carried on local trains during the month of October. It has so distorted the relation as to the quantity of state and interstate freight carried on the two classes of trains in the figures prepared by the State as to produce a result just the reverse of natural and normal conditions, thereby greatly increasing the ratio of state freight and diminishing that of interstate freight carried on local trains in that month, which error was carried into the six months' period by applying the per cents obtained from the figures in October, thereby multiplying and increasing the effect of their mistake in a degree that is startling. These matters will be discussed when we come to consider the question of the state and interstate tonnage on local trains.

An exhibit (E-1), filed by the State, shows that the percentages of freight taken into the books of the St. Louis Southwestern Railway Company during the month of October, 1908, corresponded with the movement of state and interstate freight during that month. It was filed by Mr. Hamilton for the purpose of showing that the lap-overs from month to month equalized and corrected any difference that might exist between the auditor's revenue accounts and the actual tonnage. In order that the exhibit should have any force or bearing on the accounts of the Iron Mountain railway it was necessary for the State to show that the conditions on the two lines of road were similar. They not only failed to do that, but Mr. Hamilton himself testified, at page 1597 of the record, that a different system of keeping the revenue account of freight handled obtains on the St. Louis Southwestern from that used on the St. Louis, Iron Mountain Railway. He was asked:

Q. Do you know what system (of keeping the auditor's accounts of freight moved) is in vogue on the Cotton Belt System?

A. No, sir; not in detail. They have abandoned the antiquated freight journal system, which is still in vogue on the Iron Mountain, and are checking one agent against the other.

And again, at page 1595, he was asked if the St. Louis Southwestern Railway's accounts were not all kept on the received basis, and in answer stated that it might develop; he was not prepared to say. The test on the St. Louis Southwestern Railway was made in October, 1908, when transportation conditions were normal. The test on the St.

Louis, Iron Mountain & Southern Railway, from which the State took its figures, was made at a time when transportation conditions were abnormal on account of the congestion of freight that existed in the month of October, 1907, which all of the witnesses who have had experience in handling trains and transporting freights testified would materially affect not only the tonnage of the local and through trains, but the movement of freight in the State. This congestion existed in other States, and would necessarily derange and interfere with the ordinary, normal movement of freights on the lines of all the roads in the territory where it existed. The evidence showed it existed in Chicago, Memphis, St. Louis, and in fact, all over the Southwest. Again, if conditions were normal and the same system of keeping accounts obtained on the two roads, there could still be no comparison between them because the one is a small, compact system operating in a comparatively limited territory, while the other is a large system operating in eight States.

Exhibits 9 and 24, which are omitted from the printed record, but copies of which are filed under the stipulation in the cases, are maps of the Missouri Pacific and St. Louis Southwestern or Cotton Belt systems, and show the extent of the territory in which each line operates. The total mileage of the St. Louis Southwestern railway is 773 miles, of which 452.2 is located in the State of Arkansas, and 259 miles in Missouri (exhibit 10). The total mileage of the St. Louis, Iron Mountain & Southern Railway proper is 2,599.15 miles, of which 1,355.09 is located in the State of Arkansas, and 1,244.06 in Missouri (exhibit 2).

The total mileage of the Missouri-Pacific-Iron Mountain system is 7,000 miles (R. 2076); of the Cotton Belt system, which includes the St. Louis Southwestern Railway, is 1,558 miles; but the lines of that company in Arkansas and Missouri are operated separately from the Texas lines, while the entire Missouri-Pacific system is operated together under one organization (R. 2077).

St. Louis is the chief station and the northern terminus of the St. Louis Southwestern Railway in Missouri. It is 202 miles from St. Louis to the Arkansas State line, and 349 thence to Texarkana in Arkansas, which is the southern terminus of the main line. The road crosses the Mississippi River into Illinois at Thebes, and its line terminates at East St. Louis. There is a short branch to a point on the west bank of the Mississippi River opposite Cairo. These are the principal initial points beyond the limits of the State of Arkansas, and it can readily be seen why the accounts kept by the auditor would correspond very closely with the actual movement of freight, and why any small amount of lapovers would be the same from month to month. There could in the nature of things be but little, if any, perceptible variance in the movement of freight on a line of that character.

The condition of the Chicago, Rock Island & Pacific and the St. Louis & San Francisco Railway systems are more nearly like those on the Missouri-Pacific-Iron Mountain. The former has a mileage of something over 8,000 miles, the latter over 7,000 miles. Like the Missouri-Pa-

cific-Iron Mountain system, they each cover a large extent of territory in different States. Mr. Nay, the comptroller of the Chicago, Rock Island & Pacific, and Mr. Gray, the vice president and general manager of the St. Louis & San Francisco Railway, testified that an effort had been made to keep an account of the tonnage on the system with which they were severally connected in the method followed by the State in these cases, and that they were forced to abandon it because the monthly accounts did not correctly reflect the actual movement of freight during the month. See extracts from their evidence, *supra*, 141, 149. Mr. Nay testified that there was a variance of 10 per cent or more between the accounts and the freight handled. He and Mr. Gray both testified that they had abandoned that method in order to obtain reliable satistics; that the lapovers were so unequal that the statistics so obtained could not be used for purposes of comparison.

## EXHIBIT K, PREPARED AND FILED BY THE STATE.

We will now take up exhibit K, which contains the formulas prepared by the State's accountants for making the division between local and through freight trains, and state and interstate freight traffic on the St. Louis, Iron Mountain & Southern Railway. The same method was followed in the St. Louis Southwestern Railway.

We must in the beginning crave the indulgence of the court if we go somewhat into detail in discussing this exhibit. It deals separately with every item of expense connected with the maintenance and operation of the railroad and equipment. The findings and rulings of the court can not be reviewed without discussing many of the details.

### MAINTENANCE OF WAY AND STRUCTURES.

This is the first division of expense contained in the exhibit. The exhibit divides the expense between local and through trains on the basis of the total engine and car miles of each class during the month of October. Fifty per cent is added to the engine mileage of local trains on account of additional mileage made by them in station switching, and it is assumed that each engine mile is equivalent to two and one-half car miles. After ascertaining the engine and car mileage of each class of trains and the ratio that each bears to the total, the percentages are used in dividing the expense, with the result that 16.98 per cent is charged to local trains, 83.02 per cent to through trains.

The expense incurred in the maintenance of way and structures is treated as an operating expense, and is carried in that way in the current accounts of the railroads. It is not, as a rule, incurred concurrently with the causes that necessitate it, and does not run evenly from year to year. It involves large expenditures, and for that reason is incurred as the revenues of the company will best enable the expenditures to be made. Unlike all other current repairs this class of expense is provided for by annual appropriations, the amount depending upon the business conditions and outlook at the time the appropriation is made; they are frequently cut down in case the business should fall short of that anticipated at the time the appropriation is made, without regard to the necessity to repair, beyond what may be actually required for safe operation.

If a good year is anticipated, an adequate appropriation in view of the business anticipated will be made. It may amount to several hundred thousand dollars per month. It is incurred for the purpose of conducting the business that is anticipated, consisting of state, interstate and trans-state. It is charged in the current accounts and should, in any division of expense as between the classes of traffic handled, be charged ratably to the several classes in proportion to the revenue realized from them. It is more nearly a revenue account than almost any other carried by the railroads under their system of accounting.

M. L. Byers, who is the Chief Engineer of Maintenance of Way and Structures of the Missouri-Pacific System, a

man of ability and probability as familiar with questions of that sort as any one, testified in substance as follows:

"The method adopted by the State in dividing maintenance of way expenses between local and through trains, and the traffic on those trains could be accurate only by accident; the plan does not take into consideration a number of the factors which affect the cost of operation of those two classes of trains, and it fails to consider that there is at least 75 per cent of the expense that does not vary with the changes in the amount or character of the traffic at all." (R. 1700.)

(The State's witnesses testified that 90 per cent of that expense was not affected by the traffic, but was caused by the elements, and matters of that kind. (C. W. Hillman, R. 1521; R. D. Parker, R. 1162, 1163.)

Mr. Byers further testified:

"Of the remaining 25 per cent, there is a very large proportion that, while it varies more or less with the traffic, yet, those expenses are not necessarily incurred at the time the traffic is handled; it may be incurred a great many years after that—so long after as to apparently destroy the value of the data obtained in the method proposed.

"Steel rail renewal is brought about by the wear and tear of passing trains. That steel stays in the track from five to twenty or thirty years before it is renewed, and the expense incident to the wear and tear in the rail today may not be actually incurred by the railroad company until a great many years afterwards. A division of this expense on a car and engine mile basis does not take into consideration the varying size of the locomotive, the varying amount of the lading of the car. Under this method, by changing the character of the service in one class of trains, the actual expense of that class of tonnage would be increased or decreased. For instance, a heavier locomotive on the through freight service would not change the mileage, yet, it would change the amount of expense for maintenance-of-way. The 25 per cent of expense affected by the traffic

would be influenced by the loading of cars and by the speed of trains. By far the greater proportion of the maintenance-of-way expense is not affected by the traffic and the small proportion that is affected is much of it affected in such a remote way that it would be much more accurate to consider the maintenance-of-way expense in the same way as the general expenses are considered and distributed. The repair of fences, one of the items of this account, bears no relation to the amount of traffic or to the character of the traffic. In certain portions of the maintenance-of-way expenses the weight of the engines has appreciable effect. If one class of service were equipped with heavy engines and the other with light engines, there would be a change in the relative expense brought about by the two classes of service. The general practice of railroads is to use their lighter engines in local service and the heavier in through service.

"The wear and tear produced in the items of maintenance-of-way that is brought about by the traffic is a matter of gross traffic or of the total weight on the rails rather than the amount of freight which happens to be in the car. The formula does not establish any relation between the amount of weight and the amount of revenue tonnage. It is not fair to divide the expenses of a train, either local or through, between the two classes of freight carried on it—state and interstate—on the basis of the number of tons carried on the train without discriminating as between the tonnage of the lighter loaded and the more heavily loaded cars.

"The proportion of maintenance expense not due to traffic varies with the conditions; it might be as high as 90 per cent, and is at least 75 per cent. The character of the maintenance expense is similar to that of general expense, and whatever method is proper and fair for the division of general expenses would also be fair and proper for the maintenance-of-way." (The State's witnesses placed it at 10 per cent. R. 1700-1703.)

That is the testimony of a civil engineer of recognized ability and large experience.

Mr. Carl Gray testified:

"Fifty per cent added to local engine mileage for station switching is not enough to compensate for the extra maintenance occasioned by switching. A proper allowance can not be determined. The car mile is so variable a quantity as to be of no service in any comparison or division. It makes no distinction between classes of loading, between weights or between the difference in tare to load. It assumes that the cost is equally proportioned for a car handled five miles or 500 miles." (R. 1897, 1898.)

The accountants, in referring to this proposition, cite contracts between railroad companies. Mr. Gray and some other witnesses were examined in regard to that. They testified that was a matter of convention. Sometimes the train miles were used and sometimes the car miles. There was no universal rule; it was always a matter of arrangement between the two companies interested.

Mr. Ward:

"No operating man could determine with accuracy whether 50 per cent added to local engine mileage for station switching is correct or not. Switching by local trains varies very much from day to day, in fact, with every trip."

(That is a fact developed from the testimony of the State's witnesses in a striking manner.)

"A local train as a part of a day's work, may be engaged almost exclusively in peddling out less than carload freight; on the other hand, it may have very little of that to do and may be engaged in doing the local switching, or it may be engaged in it in varying quantity.

"The assumption that 'each engine mile is equivalent to two and one-half car miles,' is one that has no proper basis in fact. The effect of a locomotive on the track is very much more than two and one-half times the effect of a

car. The effect can not be measured by the number of wheels. The blows which the roadbed receives from the improper balancing of the reciprocating parts of a locomotive might run 2, 3 or even 500 per cent as great as those of a car or train of cars. A strip of track has been known to have been enormously injured by a trip over it of one engine. A piece of soft track might be damaged to thousands of dollars by one trip of an engine, while that same engine could run over the same piece of track on a dry day and cause very little damage so that two and one-half times is entirely insufficient. (R. 1857.)

"Neither the ton mile or the car mile will afford a proper division of maintenance-of-way expenses; a large part of the expense is not caused by train or car movement."

Mr. Johnson:

"The basis adopted by the State in dividing maintenance-of-way and structures between local and through trains does not bring about any closer relation to the expense of those two classes of trains than any other arbitrary method would. The larger the proportion of expense that is not attributable to the movement of traffic, the less accurate would be the car mile or train mile because neither the train or car mile would have any effect on that class of expense. It goes on regardless of the volume of business." (R. 1986.)

Counsel say the car mile is the proper basis because it represents the use. If the Court please, keeping up the track is a matter that preparation is made for in advance, in anticipation of business that is to come, and with reference to the volume of the business that is to be conducted over it and the resultant earnings therefrom. The damage that causes the mischief to which the money expended is to be applied, does not occur concurrently with the period in which it is applied. It may be expended for renewing tracks that have been there for a great many years, as explained by Mr.

Byers. It is intimately connected with the revenue of the company, more closely than with the operation and use. You can not connect it with the operation because a large part of it is not brought about by that, but is the result of natural causes. You can connect it closely with the revenue, and that is done constantly in the manner in which it is treated in the ordinary administrative processes of the company. They make a monthly appropriation of $100,000, say, or $500,000, for the fiscal year for the maintenance and repair of way and structures. If they think the business is going to be good, if they anticipate a large business and a corresponding revenue, they make a larger appropriation than if good business is not anticipated. If their expectations are not realized, then they will cut it down and not use the full appropriation. That shows how intimately it is connected with the revenue and with the volume of business. It is not a question of the use, because much the greater part of it is caused by conditions independent of use, and it is very intimately connected with revenue in the ways pointed out by the witnesses.

Speaking on this subject in the Oklahoma case the Circuit Court of Appeals for the Eighth Circuit said this:

"But there was a large percentage of the cost of doing all the business of each of the companies in Oklahoma, like the cost of the maintenance of way and structures, which was incurred for the common benefit of its interstate business and its intrastate business, and there is no method of dividing these items of common cost between these classes of business which is sure to be methematically accurate. Many methods have been and still are suggested. The question was: Which was the most equitable, the most likely

to produce a fair and just division? And upon this subject there was much testimony of many witnesses, whose long experience in the practical operation of railroads, exceptional opportunities for extensive observation, and peculiar knowledge qualified them to form and express opinions. The Circuit Court examined all this evidence, considered the arguments of counsel, and adopted the revenue basis, and assigned these items of common cost to the classes of business in proportion to the gross earnings of these respective classes. * * * There is no basis of division that is free from objection and criticism. But the decisive preponderance of the evidence is that the revenue basis is the most likely to be just and fair. Much that has been said concerning the use of this basis for the apportionment of the value of the property is applicable to its employment for the division of items of common cost. No reasons for the use of either of the other bases that seem to us so cogent and persuasive as those given by Judge Hook, at pages 498, 499, of 177 Fed., for his adoption of the revenue basis have been called to our attention or occur to us. The use of that basis is sustained by many decisions, and it can not be held to be erroneous or mistaken."

Love v. A., T. & S. F. Ry. Co., 185 Fed. 330.

This is perhaps the largest separate item of train expense, amounting to $553,375.11 for the six months' period. The court below found that the overwhelming weight of testimony showed that but a small part of the expenditures was caused by the operation of trains, and that the attempt to apportion it on the ton, car or train mileage basis would be an injustice to the railroads; that the straight revenue basis would produce more accurate results and divided it on that basis. (Opinion 76.)

Part of this expense is in connection with repairs and maintenance of stations and other buildings used for the handling of freight, and the testimony of the State's ac-

countants shows that there were 2,224,437 ton miles of trans-state freight on local trains in the month of October, 1907, or about 23 per cent of the total interstate ton miles. This class of traffic makes little or no use of such buildings, nor will it cause any of the station switching, for which the State has allowed 50 per cent to the car mileage of local trains. And when it is remembered that after the cost of the local train is ascertained, that cost is divided between state and interstate traffic in proportion to the ton miles of each class of traffic on those trains, it will be readily seen that the trans-state and long haul interstate freight is charged with a full *pro rata* share of all of the expense assigned to the train, and the expense of intrastate freight reduced to that extent although no part of such expense was properly chargeable to the trans-state freight.

## MAINTENANCE OF EQUIPMENT.

### (a) Locomotives.

The expense under this head was divided between yard, local and through road locomotives on the basis of the locomotive mileage of each class within the month. 50 per cent is added to the mileage made by the yard locomotives to provide for extra maintenance due to yard service; 50 per cent to the mileage of road locomotives in local service to provide for extra switching mileage, 50 per cent to the switching mileage of the local train engines, thus ascertained, to provide for extra maintenance due the switching service (making 75 per cent added to the local engine mileage.)

On this basis the mileage of the locomotives engaged in the three classes of service, respectively, was ascertained and the ratio that each bore to the total mileage was used in apportioning the total expense. The amount charged to each class was as follows:

Yard locomotives.....$69,135.80=37.64%
Local locomotives ..... 43,733.35=23.81%
Through locomotives ..... 70,807.25=38.55%

The expense of maintenance of yard locomotives is again divided between local and through train service on the basis of the number of cars of each class of service handled by yard engines during the month, viz.: Local service $13,453.83; through service $55,681.97.

This method of division was approved and followed by the court. (Opinion 77, 108.)

Referring to the arbirtrary allowances in favor of locomotives engaged in yard and local service, Mr. Gray testified:

"There is nothing in my experience which justifies either of those assumptions. They are entirely arbitrary. They may be fair; they may be too large. One objection to it is the fact that the word 'mileage,' to begin with, is an assumption, and 50 per cent added to an assumption does not strengthen it." (R. 1899.)

Mr. Ward testified:

"This is another assumption. I do not know where they found the basis for adding 50 per cent; that may be too much or too little. The mileage of yard locomotives is not kept accurately. It is the custom of most roads to credit yard locomotives with mileage, but, as a matter of fact, the

basis of hours worked would be more accurate. It is customary to assume that the yard engine makes six miles an hour, but those mileage figures, when applied to yard locomotives are estimates only, and are made only for the purpose of comparison, to determine the comparative cost of maintenance, and to ascertain whether the engine is performing service enough to justify 'shopping.' They should not be used, in my opinion, in connection with the determination of anything so important as the rates which should be charged for carrying freight." (R. 1858.)

In the first place, to provide for possible extra switching mileage, they add 50 per cent, and then they add another 50 per cent for possible maintenance. He says:

"In my opinion, it is no more feasible to separate the cost of handling local and through business than for a general storekeeper to determine the cost of selling one article as compared to another. Those are assumptions for which I can find in my experience, no basis in fact. I could not determine accurately whether those things are right or whether they are not, and I do not believe any accountant can do so." (R. 1858.)

We will take up the apportionment made by the court of the expense of maintenance of yard locomotives when we come to discuss "Yard and Terminal" expense under the heading of "Transportation," as a similar question is involved in both charges.

**(b) Freight Cars.**

The total amount of expense involved in this item is $477,895.64. The method of division is described in the exhibit as follows:

"In dividing this expense between local and through service, we have taken into consideration the element of repairs due to the stopping and starting of trains at way

stations, and the repairs due to extra terminal handling of cars in local service. Mr. Wellington, in his work on railroad location, says starting and stopping at way stations is the cause of approximately 21½ per cent of the repair expense to freight cars, and that the terminal handling is the cause of practically 13.5 per cent of the repair expenses. Taking these elements into consideration, the maintenance expense may be divided as follows:

| | | | |
|---|---|---|---|
| Stopping and starting | 21.5% | $102,747.56 | |
| Terminal handling | 13.5% | 64,515.91 | $167,263.47 |
| Other expenses | 65. % | | 310,632.17 |
| Total | | | $477,895.64 |

Having separated this expense between the three elements "Stopping and Starting," "Terminal Handling," and "Other Expenses," the State next divided each class between through and local trains on the following basis:

"Assuming that each local train makes a stop, say each five miles, and each through train a stop, say each 20 miles, the local service should be charged with four times as much as the through service, in proportion to car mileage, for the expense due to *stopping and starting*. Assuming also that each car in local service receives two terminal handlings (including handling at local stations), to each terminal handling of a car in the through service, the local service should be charged with two times as much as the through service, in proportion to car mileage, for the expenses due to *terminal handling*.

"The balance of the expenses of freight car maintenance *(other expenses)* is divided between local and through service in proportion to the number of car miles made in each class of service."

The court approved and adopted the general scheme of division between "Stopping and Starting," "Terminal Handling" and "Other Expense."

There is a sharp conflict in the evidence as to the proportion of expense of maintenance properly chargeable to "Stopping and Starting," and "Terminal Handling." The witnesses on the part of the plaintiff were Mr. Ward, Mr. Gray and Mr. Rosing, who is the mechanical engineer of the Missouri-Pacific System, at the head of the mechanical work and shops of that system, and a man of very broad experience in that department. He deals intimately day by day with these problems. He, and the other witnesses named, testified that Mr. Wellington's formulas, which were prepared in 1877, had become antiquated on account of the great changes in machinery and mechanical devices used in coupling cars, and in the construction of cars and engines. He introduced a formula prepared by himself, in which he charged 32 per cent of repair expense to "Stopping and Starting," and 23 per cent to "Terminal Handling," which he testified was based upon his judgment from investigation and experience in supervising work of that character for a number of years. His testimony on this point is voluminous, but we will not discuss it, as the court found that 25 per cent was a proper charge for stopping and starting, and 13.5 per cent for terminal handling, practically adopting the table prepared by Mr. Wellington. The testimony was conflicting, and we concede that the finding of the court is binding at this hearing. (Opinion 77.)

The testimony of Mr. Rosing will be found at pp. 1727, and 1730-1732. Mr. Ward, at p. 1860, and Mr. Gray at p. 1900.

In dividing the expense of "Stopping and Starting," and "Other Train Expenses" (not including "Terminal Handling"), the court followed exhibit K, and used the same percentages, dividing these expenses on the car mileage basis.

It divided the expense of terminal handling between trans-state, interstate and intrastate freight on the basis of the ton mileage for the month of October, 1907.

A clear statement of the court's findings is contained in the following extract from the opinion:

"In making the calculations on these items the accountants for the State assume that while the local trains stop every five miles each through train stops every 20 miles, and therefore that the local service should be charged with four times as much as the through service in proportion to the car mileage for expenses due to stopping and starting; they also assume that each car in local service receives two terminal handlings to one terminal handling of a car in through service, and for that reason the local service should be charged with two times as much as through service in proportion to car mileage for expenses due to terminal handling. The court finds from the evidence that while local trains stop every five miles, the through trains stop only every 35 miles, and for that reason the local trains are chargeable with seven times as much for that item as the through trains. In charging the through trains with one terminal handling in the State, they include the trans-state freight, and charge that with one terminal handling. As the trans-state business of the roads constitutes a very large percentage of the business, over 51 per cent of the entire freight business in the State of Arkansas for the Iron Mountain and nearly 65 per cent of the Southwestern business, it is a matter of considerable importance to determine what should be properly charged to this item. The trans-state business, which merely passes through this State, both of the terminals, that of the starting and destination, being in other states, it will be seen that there should

be a difference in the charge of terminal expense in this State.

"A great deal of evidence has been introduced on the part of the State to show when through trains carrying this trans-state freight come into division yards, they are broken up and handled in the same manner as the interstate business, and for this reason it is very earnestly argued that it should be charged with one terminal. On the other hand, the evidence leaves no doubt in the mind of the court that while there are some yard expenses connected with the trans-state business, it is entirely free from the great expense caused by terminal handlings. It is true the handling of these trans-state cars at terminal points differs very materially from the 'crossing of a bridge,' a figure of speech indulged in by one of the witnesses for complainants, still, the evidence leaves no doubt in the mind of the court that the work connected with the trans-state cars is not of that nature, which should properly be called and charged as a terminal handling at any other place except that of starting and destination. The switching necessary for delivering and receiving the cars is saved. It is true there is considerable switching at every division point, but, as established by the evidence, in making up a through freight train, the trans-state cars are placed in such position in each train that all cars intended for a certain territory or for a certain branch road that they can be moved at one time and placed in a solid mass on the track from which they are to be finally moved. Besides, it is admitted that local freight originating at and destined for a point not a terminal, but which must pass an intermediate terminal yard, receives at such yards the same service as trans-state cars do. As the trans-state business is much heavier than either the interstate or local, the number of cars in these trains merely passing through the terminals is naturally larger. From the exhibits filed by Mr. Moore, who was night yardmaster at the Little Rock terminal in 1907, the trans-state freight in these trains would average from 60 per cent to 70 per cent; the cars would be moved in one body to tracks on which they were to be transported further; interstate business intended for that point would have to be taken to the different commercial tracks, and from there hauled to the industries to which they were consigned; they are handled by carrying

them in small lots of from one to three cars; they would be carried in some instances a distance of several miles, and after having been emptied, they would have to be sent for and switched back to the freight yards of the company. If intended for other points in the State, they would be handled like trans-state cars, being switched over to the track on which the trains for these localities would be made up. The same expense would be incurred and the same injury to the cars caused in receiving and handling as local freight passing through these terminals. Mr. Moore filed with his testimony (exhibit 53), what is called a 'consist' of the through freight trains handled during the month of October, 1907, which shows the movement of the cars after they reached the Little Rock division yards. He takes for illustration, the movement of one train and thus explains it in his own language:

" 'It is shown by this consist that the cars destined to Texas are in the train beginning from the caboose, including 42 cars destined to Texas, and ahead of that are the cars for the Valley Division and Little Rock proper, and local south on short points beyond Little Rock. The first car mentioned in the consist at the top is the car next to the caboose at the rear of the train. The last car on the list is the car which is next to the engine. Those 42 cars destined to Texas would remain on the train on which they were received, and the 16 cars (there were 58 cars in the train), would be taken off the head of the train and put on such tracks as are designated for that purpose. The 42 cars would remain on the track on which they were received, and there would be added to that train more tonnage and forwarded from the track on which we received it; they would not be switched; they would be sent out on the day they came in.'

"This consist shows that a very large percentage of the cars on all through freight trains and trans-state were moved as testified by Mr. Moore. Mr. Cannon, who, in 1907, was Superintendent of the Arkansas Division of the Iron Mountain, testified to the same facts, and also that at the Hoxie Division yards, the percentage of through freight is still greater and subject to less switching than at Little Rock. On the other hand a former yardman of the Iron Mountain testified that as a rule the number of cars intended

for trans-state transportation constituted a small percentage and are handled almost as much as those intended for local transportation.

"All agree that the injury to freight cars incident to delivering and hauling them back to the yards is not incurred for the trans-state cars. When cars are received from other lines for trans-state transportation, there are no terminal expenses except the yard charges, and that is so well known that all of the witnesses who testified on that subject, those for the railroads as well as those for the State, agree that when the transportation is over three or more lines, in the division of earnings, extra allowances are made to the terminal roads, receiving as well as delivering, while a smaller proportion is paid to intermediate carriers for the reason that there are no terminal expenses. Mr. Lincoln, one of the witnesses introduced by the State, who has had a great deal of experience as a railroad man, and although at present not connected with any railroad, occupies the position of manager of the St. Louis Freight Bureau, which necessarily requires that he keep himself fully informed in all matters of this nature, agreed with the witnesses of complainants on that subject that there should be no expenses charged in Arkansas for the terminal service of trans-state business.

"Mr. Parker, a witness introduced by the State, who is an expert engineer for the Texas State Railroad Commission, also testified that while trans-state business would have the same expense as interstate attached to it in the yard service, there is none at the terminals.

"But there are some items of the interstate business which are only charged with one terminal, which, in the opinion of the court, should be charged with two. The evidence shows that all the cotton handled in the State is credited to interstate earnings. While 30 per cent of that is transported uncompressed and therefore has only one terminal handling in the State, the other 70 per cent has two terminal handlings in this State. The evidence shows that cotton is brought to the concentrating points either on local trains or on what is called 'pick-up' trains, trains which during the cotton seasons are used exclusively for picking

up the cars loaded with cotton along the line, and before it is transported out of the State it is compressed. These cars are taken to the compress, there unloaded, the empty cars hauled to the yards, and after the cotton is compressed, empty cars are carried to the compress for reloading. That part of the interstate traffic has two terminal handlings as much as the local business, except that it is carried in train loads to the compress instead of being hauled in small lots, but that is fully made up by the additional expense caused by first delivering the cotton to the compress and then delivering the empty cars for the purpose of transporting it out of the State after having been compressed. The evidence shows that cotton constitutes about 7 per cent of the interstate business, or about 2.5 per cent of the interstate and intrastate business of the Iron Mountain. It is, therefore, proper that of the 34 per cent of the interstate business, 2.5 per cent should be charged with two terminal handlings instead of one, for this cotton.

"Another item of interstate traffic which receives, to a great extent, two terminal handlings in the State, is lumber and forest products. The evidence shows that a material part of forest materials, especially staves and headings, are brought in the rough to the mills and then, after having been finished as manufactured material, are reshipped on the interstate rate for the entire haul and the earnings credited to interstate traffic. Many of the larger mills have short roads which carry the rough material to the mills; these are called 'tap lines.' Allowances made to them for these hauls will be considered by the court and included in determining the difference in rates between interstate and intrastate business and for that reason need not be considered in determining this item.

"A small proportion of the grain brought in from other states is also handled twice. From all the evidence the conclusion reached by the court is that 2 per cent of the interstate business should be charged for the transportation of lumber and grain with two terminal handlings in the State.

"Another item of interstate business which should be charged with two terminals is the Memphis and Fort Smith freight for the State of Arkansas. As has been stated here-

inbefore, all of the Memphis business for points in Arkansas and most of the Fort Smith business destined to points in this State, is treated as interstate business, but the entire expense thereof charged to this State. It is hard to determine from the evidence how much this business amounts to, but a liberal estimate will make it 2 per cent, and this should also be charged with two terminals.

"This item of terminal expense should therefore be divided upon the following basis:

| | |
|---|---|
| Trans-state receiving no terminal handling..... | 51.16% |
| Interstate receiving one terminal handling..... | 34.19% |
| Interstate receiving two terminal handlings..... | 6.50% |
| Intrastate receiving two terminal handlings..... | 8.15% |
| | 100.00%" |

(Opinion, pp. 78-85.)

See table containing the division made by the court at pages 108-110 of the opinion.

And the evidence of B. W. Moore, R. 1773; John Cannon, R. 1796, 1801, 1802; H. V. Brown, R. 1804, 1805; J. C. Lincoln, R. 965, 991.

Appellants assign as error that the court erred, (1) in estimating that the through trains stopped every 35 miles, as against five miles to local trains; (2) in not charging trans-state and interstate traffic with the cost of stopping and starting freight cars, and (3), in making different allowances for interstate and intrastate traffic, when the evidence shows that this is an element of expense from the physical starting and stopping of freight cars unconnected with the class of traffic carried on said cars. (Assignment, 35.)

Counsel wholly misconceive the action of the court.

(1) It did not divide the expense of stopping and starting on the basis that through trains stop every 35 miles against five miles to local trains. Counsel were evidently misled by a statement at page 78 of the opinion, that the court finds that fact from the evidence. This statement was based on the testimony of conductors and brakemen introduced by appellees, and an exhibit filed by appellants as to the number of stops made by through trains. That and other testimony showed that the through trains only stopped for water and passing trains, making about three regular stops between divisional points, which would average a stop every 35 miles, while the local trains stop at every station, the average distance of the stations apart being five miles. For instance, A. Paulette, a witness for appellees, testified that a local train running from Argenta to Russellville would make 23 regular stops, a through train would make three stops for water; this without meeting other trains. Each class of trains would have to stop occasionally at sidings to allow other trains to pass. (R. 2212.) That the through train between Russellville and Van Buren made five regular stops, viz.: Mulberry, Coal Hill or Denning (depending upon which line the train follows), Clarksville, Hartman, and Mill Creek. (R. 2207.) The local trains make 30 regular stops, each of them stopping occasionally for passing trains. (R. 2210.) But it is unnecessary to go into the evidence on this point, as the court will see by a comparison of the division of expense

caused by stopping and starting trains, found in exhibit K, with that made by the court. In exhibit K, 41.81 per cent is charged to local and 58.19 per cent to through trains, and in the appendix (p. 108, of the court's opinion), the same percentages are used in dividing that class of expense. The difference in amount charged to local and through trains respectively, is as follows:

The court's figures increased the expense of the local trains $6,993.29, and of the through trains $9,733.06. This increase is accounted for by the action of the court in attributing 25 per cent of the expense of freight car maintenance to stopping and starting instead of 21.5 per cent, the percentage used in exhibit K. This was an increase of 4.5 per cent above the amount charged to that item in exhibit K, and makes a difference in the total expense resulting from stopping and starting of $16,726.35, which corresponds exactly with the sum of the differences charged by the court to through and local trains, respectively, thus demonstrating that the only change made by the court grows out of the per cent of increase of the expense of stopping and starting from 21.5 per cent to 25 per cent.

What we have just said is also true of the item designated as "Other Expenses." This is by far the largest item embraced in this class of expense, being $310,632.17. It will be seen by comparing the table at the bottom of page 109 of the court's opinion with the division as shown on exhibit K, that the same per cents are used, viz.: Local trains,

15.22, through trains 84.78; that the relations are the same in all respects, the only difference being in the total amount of the item which in exhibit K, is $310,632.17, and under the court's method of separating the elements of expense of freight car maintenance is $293,905.82, being, as in the case of "Stopping and Starting," the exact difference brought about by changing the per cent of this class of expense attributable to the stopping and starting from 21.5 per cent to 25 per cent, which amounted to the sum mentioned, $16,726.35, adding that amount to the expense of "Stopping and Starting," and deducting it from "Other Expenses."

(2) The expense of stopping and starting freight cars is included in and divided between local and through trains in the division of this item of "Starting and Stopping," in which we have shown that the court followed exhibit K. It assuredly does not lie in the mouths of appellants to object to the action of the court in following their own method of division, and yet, that is what they complain of.

(3) The different allowances for interstate and intrastate traffic referred to in the assignment of error, we take it, relate to the method of dividing the expense of "Terminal Handling," adopted by the court. This item amounts to $64,515.91. The court apportioned it, as we have seen, between the classes of freight and not on the basis of the car miles. The ground upon which it acted is explained in the extract from the opinion, and is supported by the evidence cited in the opinion and by us.

BEFORE LEAVING THIS BRANCH OF THE SUBJECT, WE WILL CALL THE ATTENTION OF THE COURT TO A VERY IMPORTANT ELEMENT OF EXPENSE CHARGEABLE TO THE LOCAL TRAIN SERVICE FOR WHICH NO ALLOWANCE WAS MADE BY THE STATE OR BY THE COURT. WE REFER TO THE EXPENSE OF REPAIRS TO FREIGHT CARS CAUSED BY WAY STATION SWITCHING.

The allowance of four to one, made in exhibit K, on the ground that local trains are chargeable with four times as much as through trains on account of more frequent stops and starts, does not cover it because it does not embrace the switching done by the local trains at way stations, which is a far more important element of expense than stopping and starting. Mr. Ward testified:

"I assume that these average distances (stops) as stated, are approximately correct. But that does not constitute a proper measure of the expense of handling local as against through service, because the through train in starting and stopping simply takes the siding, and after it has met the train, which has the right of the road, it then proceeds; or, in many cases its stop is only for the purpose of taking coal and water and it does not have to stop even while the man turns the switch. On the other hand the local train goes into the siding and after it is there it has its work to do by taking out the cars or placing in cars at various industries or on the house track at that station, and it must pick up other cars and place them in the train, to an extent that constitutes, for all practical purposes, a terminal handling for all of the cars in that train at practically every station along the line of its run. So the multiple of four to one for the through service. on account of the assumed difference of five miles and twenty miles would

not be correct. It would be more nearly eight times, although I don't know that eight is accurate. However, it is more nearly eight than it is four.

"For that reason the local, in my opinion, under this theory is not charged with nearly as large a proportion of the car repair expenses as it should be.

"Apparently the accountants who worked this plan up counted this handling at local stations as a service of the same character as the terminal handling, and this multiple of the two times for one is wrong. I think I covered that in a general way in my statement in regard to the stopping and starting each five miles instead of each twenty miles. They all come under the same class. The whole method, it seems to me, fails to take into account that feature that the handling of the cars in the local service is very much greater than in the through trains." (R. 1861, 1862.)

Speaking of terminal handling, Mr. Ward testified that there is a very great difference in handling and in the destructive effect on cars in through service from the local service, "a car in through service simply being put from one train into another, or having its engine and caboose changed, as comparatively little is done to it and in many cases nothing whatever.

"But a car switched in industrial switching has to be handled a number of times, depending upon the conditions. It has to be taken from one train and put on another track and sometimes there are a group of cars going into the same track or territory, and, depending upon conditions, they are perhaps rehandled again, to be placed at the proper end of the switch tracks. These run in all directions, and the cars have to be dropped from the head of the train to the rear of it; and there are many movements which go to increase the risk of injury and the cost of maintaining those cars, which do not apply to the cars passing through terminals in through service." (R. 1890, 1891.)

Mr. Ludlam criticized this testimony by saying that the extra work done by local trains is taken care of by the allowance of two to one for "terminal handling." He is mistaken. "Terminal handling" only includes such work as is done in making up trains at terminal stations.

Let us turn to Mr. Wellington's formula. His distribution between these items is "stopping and starting," "terminal; make up of trains." Learned counsel in the court below assumed that the terminal make up of trains was intended by Mr. Wellington to include way switching. His view was based on the punctuation, the presence of a semicolon after the word "terminal." We do not regard that as very material, because an examination of Mr. Wellington's formula makes it manifest that it was included in one or the other of these items. His total distribution, excluding the foregoing items, consists of "Effect of Time and Age," "Curves and Grades," and "Distance and Straight Track." Inasmuch as switching at way sations could not be included in any of thes items, it was of necessity included in the other two, unless Mr. Wellington committed the oversight of omitting it altogether. Mr. Ward, Mr. Gray and Mr. Nay included it in "stopping and starting," and we believe we are justified in assuming that the interpretation of these operating men is of greater weight than that of Mr. Ludlam, an accountant. At any rate all of the operating men testified that an additional charge of 8 to 1 should be made against the local train service on account of way switching. It is immaterial whether it is placed in the "terminal handling" or "stopping and starting;" it was not

allowed for by the court. At the time Mr. Wellington's book was written (1877) the method of operation was very different from what it is at present. Through train service was on a different basis. Railroads had not been organized into large systems providing continuous lines of interstate transportation, but interstate shipments were cut up into short hauls on separate and disconnected lines. The separation of the functions of the different classes of trains out of which the through and local train service as it now exists has grown, had not then been made, nor large terminal divisions and stations established, and under the conditions that prevailed at the time he wrote, Mr. Wellington was justified in making a smaller allowance for stopping and starting and terminal make-up of trains in his distribution of expense than would be required at this time.

Mr. Gray testified: "That the stopping of a through train is most frequently, for transportation or operating reasons, done to take a siding to meet a passenger train, and is not accompanied by any more work than the taking of a side track or the holding of the main line. The local train performs the greatest amount of its work in connection with the stops. The allowance should be several times four." (R. 1902.)

*Supervision and General*—Was apportioned by the State in exhibit K, between local and through service, on the basis of direct charges for maintenance and equipment as ascertained under the assumptions made by the State's accountants.

*Traffic Expense*—Was apportioned on a straight revenue basis. The court followed the State's basis of apportionment in both of these items.

## (4) TRANSPORTATION EXPENSES.

### (a) Station Expenses.

This class of expense is divided in exhibit K between intrastate and interstate business in proportion to the volume of traffic of each class handled in the State; that is to say, on the basis of the number of tons of each class of traffic, estimating that each intrastate ton was handled twice and each interstate ton once. The State later filed exhibit Y, in which they excluded the trans-state tons.

This division disregarded some most important elements of difference in the expense of handling state and interstate freight at stations. Mr. Gray on this subject testified:

"It assumes that the cost of handling forwarded business per ton is the same as the cost of handling received business per ton, while practically there is a great difference; a forwarded ton is billed by the agent; he is not responsible for the correctness of the bill or the rate used. Upon business received he is responsible for the correctness of the bill or the rate used. Upon business received he is responsible for the application of the correct rate and correct accounting.

"It assumes there is no difference in the expense of handling a ton of brick or coal, car loads, as contrasted with a ton of classified merchandise, the one involving a very minor amount of work, the other involving a very intricate knowledge of rates, accounting and handling." (R. 1903.)

Mr. McPherson, in speaking of terminal or station expense, testified that the terminal expense, referring to station expense, attaching to any shipment, either carload or less than carload, is as great for five miles as it is for five hundred miles, and the multiple between will show the increasing expense that attaches to short hauls.

He said:

"The terminal expense incident to shipping a ton of merchandise from Little Rock to Jacksonville, thirteen miles, is as great as shipping a ton of merchandise from Little Rock to Van Buren, 153 miles, and, as the terminal expense forms 18 per cent of the total operating cost, the ton mile basis of division of expense would eliminate just that percentage of the cost from consideration." (R. 315.)

When you come to consider the long and the short haul, is where that becomes important and material.

Mr. Ward testified that the terminal handling of short haul intrastate freight is much more expensive per ton mile than long haul interstate freight. Many more car miles are required to handle a given number of short haul intrastate ton miles than the same number of interstate long haul ton miles.

And yet it is divided according to the tonnage in these apportionments made by the State.

He said:

"A larger amount of property and facilities is required to handle a given number of short haul ton miles than of long haul ton miles. A ton of freight of a given kind, received at a given station, will not cost any more to unload from a car and deliver to a consignee if it had originated in

the State than if it had originated in another state, but when the cost of handling is divided by the ton mile applicable to it, it makes a much heavier charge to the short haul intrastate ton than to the long haul interstate ton.

"I might illustrate by comparing two shipments of the same class of merchandise, the one from Chicago to Benton, Ark., the other from Little Rock to the same destination. The station expense at Benton in each case is exactly the same; each operation is precisely the same as the other, but when you measure the expense by ton miles you have twenty-five miles to apply to that ton that comes from Little Rock and approximately 600 miles on the ton that came from Chicago, so that there is perhaps 24 times more chargeable to the state than to the interstate, of that station expense." (R. 1864.)

If the Court please, this statement by Mr. Ward shows how unreliable either one of the bases adopted by the State for dividing that class of expense is, either tons or ton miles. You can not divide it so as to apportion the relative expense by either method without disregarding the effect of the long and short haul. There is the advantage of dividing it on the revenue basis. The revenue represents every element that enters into and forms a part of the expense that is embraced in "station service."

The court below, recognizing the importance of the long and short haul in the division of that class of expense, apportioned it on the basis of the ton mileage of each class of traffic, charging each intrastate ton with six handlings, the interstate with one handling, and the trans-state with one-half handling, upon the view that the intrastate is chargeable with six station expenses to equalize the difference in the length of the haul, taking into consideration only the difference in this State, which on the Iron Mountain is three

times as long for interstate as for local. (Opinion p. 85.) The effect of the difference in length of haul on station as well as many other elements of expense is illustrated in the testimony of Mr. McPherson and Mr. Ward, infra 214 and 221, 224.

**(b) Yard and Terminal Expense.**

There are on the main line of the St. Louis, Iron Mountain and Southern Railway in Arkansas running north and south, three terminal stations at the end of operating divisions, viz., Hoxie, Argenta (Little Rock) and Texarkana. On its main line running east and west are Van Buren, Little Rock and McGehee, and Wynne on the Bald Knob branch between the cities of Little Rock and Memphis. (The yards at Little Rock are situated on the north bank of the Arkansas River, partly in Baring Cross and partly in Argenta, and are referred to in the testimony under those various names.) On the St. Louis Southwestern Railway Company's main line are Paragould, Pine Bluff and Texarkana. Cars are distributed and trains made up at these terminals.

Two classes of yard and terminal expense are provided for in exhibit K. One class consists of the expense of repairs to yard locomotives and freight cars in terminal service, and is provided for under the head of "maintenance of equipment;" the other under the head of "transportation expense."

This expense is "divided between local and through business on the basis of the number of cars handled at ter-

minals, as explained under the charge of maintenance of yard locomotives (2-a)," in exhibit K, and charged to local and through trains in the same proportions.

Exhibit I shows that 165,714 cars were handled in and out of terminals on the St. Louis, Iron Mountain & Southern railway in the month of October, 1907, of which 32,232, or 19.46 per cent of the total, were in local service and 133,482, or 80.54 per cent, were in through service. These percentages are used by the State in dividing the expense of maintenance of yard locomotives and yard and terminal handling. The court followed the method used in the exhibit. (See tables at the end of opinion, pages 108-111.)

The two items were properly treated alike, but the division on the basis of cars in and out of the terminal stations was erroneous.

We will cite the material evidence for the purpose of showing that the court manifestly erred in favor of the appellant.

The manner of handling and distributing cars at terminal stations is described in the extracts from the opinion copied at page 175 of this brief, which shows that there is very great inequality in the amount of the service rendered as between local and through business. On this subject Mr. Ward testified:

"If I understand this correctly, it means that the expense of maintaining yard locomotives is divided on the basis of an account of all cars passing through the yards where yard engines are employed.

"It is customarily the case, in counting cars handled through yards, that they are counted coming in and going out, that is, two counts for each car. If they counted each car passing through a yard twice, they give the local cars no more credit for the services of the yard engine than they do a car passing right through the yard on the through trains. Therefore, the proportion chargeable under this method to the through service would be very much greater than is actually the case.

"The opinion of myself, or any other operating official, as to the excess cost of handling state over interstate business is *on the basis of actual freight and not on the basis of the number of cars passing through the yards.* I might illustrate that position of mine by pointing to the fact that in practically—in fact, I might say in all railroad terminal yards, a very large percentage of the cars on through trains pass through without any handling. The trains run in on to a yard track, and if there is a change in the tonnage by reason of a difference in grade or a difference in motive power on the next division, a few cars will be taken off or a few cars put on that train. Or, there may be a few cars taken off that train, which are destined to that particular station, or to stations on the next local run. But the great majority of cars are not handled in those terminal yards.

"On the other hand, cars that run in local trains are all handled; they all have to be placed in their trains by the yard engine; and after they reach their destination or the distant terminal they are again handled and placed at industries, or on a house track, or in train yards, to go out on through trains going beyond. So that a method which would count the cars handled in local trains and in through trains on the same basis would be very inaccurate in determining the proper proportion of cost of maintaining yard locomotives to apply to one service as against the other." (R. 1859, 1860.)

Mr. Gray testified:

"It assumes to divide the expense of yard locomotives between local and through on the basis of the number of cars of each class. It is to be assumed that customary practices were followed in arriving at the cars handled at terminals, that is, a car in and out counts twice.

"The assumption that a car in local service requires no more switching than a car in through service, is not sound. It is a very frequent thing in practice for the through train to require one switch. That is, the caboose is taken off and a caboose put on the train. One cut is made to reduce, or one switch is made to add tonnage, where a reduction or increase in the train load is caused by physical conditions; while, on the contrary, a local train is the one which requires the most switching, and particularly in proportion to the haul. The local train will in ordinary practice be composed of cars that have been picked up at the local stations, which, when it reaches a terminal, will go in all the different directions; or at that point are switched together for the through trains.

"Another factor which this does not take into account is the fact that the car which passes through that yard, and is never touched individually by an engine, counts just the same in expense as a car which is switched to an industry, where it occasions a switch in some instances even of several miles; it may be handled by itself or handled in conjunction with several others, but it carries in proportion a great many times the expense of a car that would pass through that terminal in a through train. The difficulty about it is that it assumes that the cost of switching one car is the same as switching another car. It may be a good theory, but my experience does not justify me in the conclusion that it is." (R. 1899.)

See Mr. Nay's evidence, R. 1828.

The unsoundness of the State's basis is further illustrated by the fact that a car that passes through the yard and is never touched by a switch engine is counted as two cars, one car in and one car out, while a car that is destined to the station and switched to an industry, sometimes a distance of several miles, is counted as but one car.

Exhibit 52, prepared and filed by H. B. Aumocek, a clerk in the auditing department of the railroad company,

shows the movement at division terminals of the principal through trains on the main lines of the St. Louis, Iron Mountain & Southern Railway during the month of October, 1907. He prepared thirty-seven sheets, representing as many different trains, which he testified were representative of the movements of all trains. Six of the statements were filed, constituting the exhibit referred to; the others were not filed in order to avoid unduly swelling the record, but were submitted to the attorneys and accountants for the State for inspection.

The first sheet shows that the through freight train coming into Hoxie from the north, which is the first division terminal station south of St. Louis in Arkansas, on October 1, 1907, arrived at 3:35 p. m.; that there were 49 cars in the train, which was No. 2-71, that is the second section of train No. 71. The same train went south on the main line as No. 55 at 11:20 p. m. the same day with 42 of the 49 cars it brought into Hoxie, arrived at Argenta at 2:20 p. m., October 2, with 60 cars, and pulled out of Argenta at 6 p. m. with 50 of the same cars that it brought into the station. Similar conditions are shown on all of the sheets at the same and other division points. The manner in which this exhibit was prepared and what appears on the face of the several sheets is explained by Mr. Aumocek. (R. 1769.)

Exhibit 53 is made up of the consist of freight train No. 55, the principal through freight train from St. Louis south on the main line of the St. Louis, Iron Mountain &

Southern Railway, during each day in the month of October. It was filed by B. W. Moore, the trainmaster. He was night yardmaster at the Argenta terminal in October, 1907, and his duty was to make up, receive and handle all freight trains. An extract from his testimony describing the arrangement with reference to the order and grouping of the cars as shown by the consist will be found in the extract from the opinion of the court, *supra*, 175.

He also describes the service rendered to various classes of cars in switching. Those for city delivery "would be switched to an assigned track in the terminal yard and then transferred to the industrial tracks either at East Little Rock, Little Rock proper, or Argenta, according to the location of the industry. If one or more cars were assigned to one industry and they were to come in a cut or group, they would remain intact; otherwise there would be a switching movement for each car. Cars destined to Alexandria, McGehee, and Monroe, on the Valley Line (the east and west main line) would be switched to an assigned track in the receiving yard and transferred from there to the Valley yard, about three-eighths of a mile distant, where they would be made up in train order. Cars destined to East Little Rock are first cut out of the train and placed on a make-up track in East Little Rock. That involves two switching movements. They are then switched to an assigned track or the transfer engine gets hold of them —that is a third switching movement. They are then transferred to the track from which they are unloaded, making four switchings. Cars that come in on through

trains going to industries have four times as much switching as those transferred to trains going east and west on the Fort Smith and Valley Divisions (being the east and west main line) of the Iron Mountain Railway. For instance, an industrial engine will operate on 75 cars as against 300 to 450 cars handled by the train line engine in ten hours' service. The average will run 75 industrial cars against 300 train line cars, and it costs from $2.50 to $3.00 per car for industrial switching. The distance is much greater. We receive our trains on receiving tracks convenient to the intersection of main lines, and our trains are handled as they are received, cutting out the industrial cars lined for such assigned tracks as we assign them for, and then our transfer engines are used for the purpose of moving them from those tracks to the industrial tracks." (R. 1773.)

He also testified that grain usually came in in solid trains, and a good deal of cotton designed for compression was brought in in pick-up trains, that is, a train made up at Little Rock to go out and pick up all the cotton loaded on cars distributed for that purpose at way stations. The switching of these grain and cotton trains to the elevator and compress was made in one cut and one switching service would frequently move 20 or 30 cars.

H. V. Brown, terminal clerk of the Little Rock terminals in October, 1907, and now assistant yardmaster, referring to the through trains, testified:

"If they have sufficient tonnage into the Little Rock terminal and no deductions are to be made from the inbound train, there is nothing done to the train except to change the engines and caboose, provided there are no bad orders. Through cars are all en bloc. They are all switched in one operation of the train, to save switching at the various terminals. We receive the consist of these trains (at Little Rock) from a conductor frequently before they get very far out of Hoxie, by telegraph. If they have not sufficient tonnage into Little Rock, we arrange sufficient freight to fill out. That is usually done before the arrival of the train; the additional cars are either set on the hind end of the train or placed at the head end as the inbound engine is removed, as conditions will permit. In some instances it is handier to put them on the hind end of the train with the caboose and in other cases the cars might be so located that it would be quicker to put them on the front end of the train. The cars that come in on the train would be received and handled off the same track, and without any extra handling, barring bad orders, those cars going through to Texas." (R. 1804.)

John Cannon, who was superintendent of the Arkansas Division, testified:

"A through train starting out of St. Louis is made up of all the Texas loads switched together, all the Arkansas loads switched together, and all the Louisiana loads switched together. The short loads to be distributed to points out of St. Louis are arranged in station order. Those that are set out at Poplar Bluff are set out together.

"Train 55 out of St. Louis is a Texas train, filled out with Arkansas and Louisiana freight, which would be cut out at Little Rock." (R. 1801.)

In view of the statements of the witnesses, we submit that any division of yard and terminal expense on the basis of the number of cars handled at terminals in and out, putting all cars on an equality of service, is unwarranted.

The question as to how the division should be made seems to have been largely a matter of speculation among the State's experts. Mr. Willmering, one of these witnesses, testified that the expense of maintaining yard locomotives should be divided on the basis of yard engine mileage, repairs to freight cars on the car mile basis. Mr. Hillman, a public accountant and witness for the State, testified that the idea of dividing the maintenance of equipment expense between yard, local and through trains with certain percentages added "is a new one on me." The cost of yard service should be ascertained directly between state and interstate on the basis of the tons instead of dividing that item between local and through trains.

F. P. Johnson, chief accountant, St. Louis Iron Mountain & Southern Railway:

"If the total yard service, which amounts to $293,000, were divided between state and interstate business, it would then result in the same percentage of that total expense being charged to state business as was used in the case of station service; or practically one-third of all the yard expense upon that basis would be charged to intrastate freight. And that would assume that every ton of interstate and every ton of trans-state freight received a full yard service within the State of Arkansas. In an amended exhibit (exhibit Y) the State has changed this method of dividing station service by eliminating trans-state freight, and if this was done to yard service as well it would result in a charge of almost 50 per cent of the total terminal expense, or practically $140,000, being charged to state freight. The result would tend to very materially reduce the percentage of return upon the value of the property so far as the state freight is concerned.

"The yard and terminal expense is divided by the State in exhibit K first as between local and through trains, then

the expense apportioned to each class of trains is divided between state and interstate tonnage on the ton mile basis. The result of that is that $26,560.81 has been charged to state traffic on account of yard service. (This amount is incorrectly stated as $23,468.64 in the printed record. The figures quoted are those given by the witness in his deposition on file.) If we were to adopt the tonnage basis, Mr. Hillman's plan (Mr. Hillman was a witness for the State and testified that the cost of yard service should be ascertained directly between state and interstate traffic on the basis of the tons, instead of dividing it between local and through trains) and charge to interstate and trans-state freight one full terminal handling, then the proportion of the total expense that would be assigned to state freight would be $97,782." (R. 1990.)

These differences fairly illustrate the elasticity of the State's theories and how easily they may be moulded to accomplish a desired end.

Transportation expenses involved in yard and terminal handling are analogous to station expense. They both relate to traffic rather than train expense and should be apportioned on the same basis.

**(c) Fuel and Locomotive Expense:**

**(d) Road Enginemen and Trainmen Expense:**

The test made on the St. Louis Southwestern Railway for the month of October, 1908, which has heretofore been referred to, showed that the cost of fuel and enginemen on through trains was 34 mills per train mile and on local trains 50 mills. The result of this test appears in exhibit 20, on pages 2376, 2377 of the record. It will be observed that the two items are consolidated and the combined cost

as above stated shown on the latter page. In preparing exhibit K, the State's accountants adopted the result of the test referrred to, which showed that the local engines consumed 3½ per cent more fuel per engine mile than the through engines, and divided the fuel cost on that basis; they divided the wages of trainmen on the railway company's records for October, 1907. They pursued the same method with regard to the St. Louis Southwestern Railway, except that they used the October, 1908, test in dividing wages of trainmen.

The court, following the line pursued by the State in regard to fuel and wages, took the consolidated cost of the two items as shown on exhibit 20 as the basis of its division, and found that the cost of fuel and wages, combined, per train mile on local trains is 50 mills and on through trains, 34 mills, a difference of 47 per cent, and charged the local trains with 47 per cent greater cost for those items. (Op. 86.)

The difference is too small to be of much importance, but if the court erred it was in favor of appellants in the application of the ratios obtained from the St. Louis Southwestern Railway in the test made in October, 1908, to fuel and locomotive expense on the St. Louis, Iron Mountain & Southern Railway. If it were worth while we could show by reference to the evidence that there was not that similarity of condition which justified the view upon which the State and the court acted, but inasmuch as the amount involved is not large we will not consume time in

pointing out the evidence. The appellant at least can not complain of the court's action, for if it is fair for the State to use a ratio applicable to fuel and locomotive expense as ascertained by the test of October, 1908, on the St. Louis Southwestern Railway, why is it not proper to use the same method with reference to both items as was done by the court?

The fact is, no accurate division can be made for any period of six months on the basis of one month's operation, on account of the difference in operating conditions brought about by the difference in the traffic handled in different periods and during different months. The record is full of evidence on that subject, and even a casual reading will impress any one with the dissimilarity in the conditions affecting operation at different periods.

As to all the remaining items of transportation expense except Other Train Expense, viz., Engine House Expense, Loss and Damage to Freight, Supervision and General, and General Expenses, the court followed the plan of division contained in exhibit K.

*Engine House Expense*—Is divided on the basisof the engine miles of each class of service during the month of October, assuming that the local engines require 12 per cent more engine house service per engine mile than the through engines. All the operating men who were examined upon the subject testified that that basis was wrong, because the engine house expenses are not in proportion to the mileage made by the engines, and the addition of 12 per cent to local

engines was inadequate because those engines do the larger part of the switching, are subject to harder usage, are longer per mile on the road, and for those reasons there is a considerable excess cost incident to engines engaged in local service.

**Loss and Damage—Freight:**

Loss and damage is divided between intrastate and interstate business on the basis of the actual claims paid during the month. It is interesting and instructive to note that the actual allocation of loss and damage to freight results in a charge of 24.29 per cent of the entire expense to intrastate freight, which is a larger percentage than the revenue basis would show, even with 100 per cent added for extra cost.

*Supervision and General* and *General Expenses*—Are apportioned to local and through, intrastate and interstate business, on the basis of the direct charges of each class.

The greater portion of general expense consists of salaries and expenses of employes in the general auditor's office, and in turn the larger part of the duties of that office is the accounting for the revenues of the company. It also includes the freight claim department and the legal department. The cost of maintenance-of-way and maintenance-of-equipment has nothing to do with this expense. A large part of it is legal expense, and an increase or decrease in the expense of the law department bears no relation to the expenses of the several operating depart-

ments. (See the evidence of F. P. Johnson, R. 1992, and C. R. Gray, R. 1906-7.)

**Other Train Expenses:**

This item is divided in exhibit K in proportion to the train miles of each class of service during the month of October. It includes, and the greater part of it is made up, of such items as wrecks, injuries to persons, damage to stock on right of way, fires set out by sparks, and could have been allocated to the local or through trains with the same degree of exactness as the loss and damage to freight was. The train mileage obviously has nothing to do with that class of expense, and it was a mistake to apportion it on train mileage. The court divided it on the basis of the gross earnings of each class of traffic during the six months' period, which was a far better method than that adopted by the State.

## METHOD OF DIVIDING TRAIN COST BETWEEN INTRASTATE AND INTERSTATE BUSINESS.

In dividing train cost between intrastate and interstate business the State arpplied the ton mile theory.

They took the proportion of the ton miles of each class moved on local and through trains in the month of October, as shown in exhibit 1, as follows: On local trains 39.10 per cent of all intrastate and 8.70 per cent of all interstate; on through trains 60.90 per cent of all intrastate and 91.30 per cent of all interstate. Assuming that the same relative conditions would exist during the six months' period, the total ton miles of intrastate and interstate freight handled during that period was divided between local and through service in the proportions ascertained for the month of October, and in that way they determined the aggregate ton miles of each class of freight carried on local and through trains, and divided the train cost between intrastate business and interstate business in the proportions that the ton miles of each class bore to the total ton miles handled on local and through trains during the six months' period. The result was that they charged 26 per cent of the cost of local trains to intrastate business and 74 per cent to interstate business, and 4.96 per cent of the cost of through trains to intrastate business and 95.04 per cent to interstate business.

The percentages used by the State in dividing the cost of local and through trains are inconsistent with the scheme

of division as applied to detailed items, and work an injustice to the intrastate business.

In dividing the separate items of train cost between local and through trains for the six months' period, the factors obtained from the traffic in October were used. To illustrate: In dividing "Maintenance of way and structures" they found that 16.98 per cent of the engine and car miles of October was chargeable to local trains and 83.02 per cent to through trains, and they say "that month being considered representative of the business for the six months ended December 31, 1907," we will divide the total expense for the six months' period between the two classes of trains on that basis. In dividing the expense of locomotives under the head of "Maintenance-of-equipment" they ascertained the percentage of locomotive mileage chargeable to each class of service during October and divided the total expense for the six months on the same ratios as the mileage of each class bore to the total.

The average ton mileage of each class of trains expressed in percentages is shown on exhibit I, and is as follows: On local trains 28.51 per cent of intrastate and 71.49 per cent of interstate; through trains 5.59 per cent intrastate, 94.41 per cent interstate.

In the final division of train cost they change their factors by taking the proportions of the aggregate ton miles for the six months as the percentage upon which to divide train cost, thereby charging 26 per cent of local train cost to intrastate business and 74 per cent to interstate

business; to through trains 4.96 per cent to intrastate business and 95.04 per cent to interstate business. This results in a reduction of practically 2½ per cent in the total expense of intrastate business on local trains and two-thirds of 1 per cent on through trains, and applied to the large figures makes a material difference in the amounts.

But assuming, for the sake of argument, that the State's method in dividing the train cost is correct down to this point, it must next be determined if that cost was properly apportioned between intrastate and interstate freight carried on the two classes of trains.

## THIS QUESTION INVOLVES THE RELATIVE COST OF TRANSPORTING STATE AND INTERSTATE TRAFFIC.

It is conceded by all intelligent railroad officials and has been found and held in a number of decisions that there is a material difference in the expense of conducting the two classes of business. This was referred to in Ames v. Union Pacific Railway, *supra*, and C. M. & St. P. v. Tompkins, *supra*, where Mr. Justice Brewer said the testimony of experts familiar with railroad business is not to be disregarded simply because it can not demonstrate by figures the exact amount or per cent of extra cost. C. M. & St. P. Railway v. Keyes, *supra;* In re Arkansas Rates, *supra*, where Judge Vandevanter said that the extra cost of freight was at least one hundred per cent more and that of passengers at least fifteen per cent more.

Judge Hook, in M., K. & T. R. R. Co. v. Love, 177 Fed. 493, 499, said:

"Bearing on the division of expense is the much controverted question of extra cost of the local business as compared with the interstate. That the former costs much more than the latter is beyond doubt, but the difficulty is in applying the measure of difference. There is a general accord among practical railroad men of high standing and long experience that the cost of local freight traffic is from two to eight times as much as that of interstate traffic, and of local passenger traffic from twenty-five to fifty per cent more than the other. Though not altogether clear from the proofs here it is probable the difference mentioned in the freight traffic should not be fully applied in addition to a division on the revenue basis, for, as already seen, the difference finds expression, in a measure, in the relative revenue proportions themselves. A cogent reason for selecting the revenue basis in preference to the ton mile is that the former gives some effect to the known differences in cost."

Judge Trieber in the opinion in these cases said:

"That there is a material difference between the expense of state and interstate business is conceded by all.

"The lowest estimate made by any witness for complainants seems to be that it is at least 200 per cent greater, while some estimate it as much as 700 per cent. The witnesses for the railroads do not base their opinions upon itemized statements, as no records were kept by either of the roads for the purpose of dividing the expenses between the state and interstate business, but as all these witnesses are men who have been engaged in railroad work and connected with railroads from their earliest manhood, starting at the bottom of the ladder and now occupying most responsible positions, some as general managers, comptrollers, auditors, superintendents and other high positions, it is claimed that their testimony, based upon their great experience, should be controlling." (Opinion, pp. 69, 70.)

F. E. Ward, General Manager of the Chicago, Burlington & Quincy Railway, testified that the extra cost of intrastate freight service was more than five to one. (R. 729.) I. G. Rawn, President of the Chicago, Indianapolis & Louisville Railway, testified that the intrastate freight service cost at least three and a half times more than the interstate. (R. 676.) E. D. Sewall, Assistant to the President of the C., M. & St. P. Railway and Vice President of the Chicago, Milwaukee & Puget Sound Railway, testified that the extra cost of freight service was four to one. (R. 707.) W. M. Whitenton, the General Manager of the Chicago, Rock Island & Pacific Railway Company, in Oklahoma, Arkansas and Louisiana, said it cost from four to seven times more to conduct intrastate freight service. (R. 757.) W. J. McKee, General Superintendent of the Missouri-Pacific Railway Company, said that the intrastate freight service cost from four to five times as much as the interstate. (R. 694.) C. J. McPherson testified that the extra cost was five times as much. (R. 327.) W. B. Doddridge, four to six times as much. (R. 463-4.) Carl Gray, Vice President and General Manager of the St. Louis & San Francisco Railroad, three to five times as much. (R. 1908.)

These witnesses are all men of great practical experience in railroad operation. All of them rose from subordinate positions, and their experience covered all phases of railroad operation. No witness was produced on the part of the State who had had experience in operation that would qualify him to testify as an expert.

The State's witnesses were H. Wilmering, who was cashier and afterwards agent at a local station in Oklahoma, and was at the time of testifying auditor of the Oklahoma Corporation Commission since the latter part of 1907; C. S. Ludlam, an accountant connected with Haskins & Sells, public accountants representing the State in these cases, and who had never had any experience except in a limited way in the accounting department in railroad service; T. A. Hamilton, an accountant in the employment of Haskins & Sells; he was employed while quite young in the accounting department of a railroad, was afterwards employed by the Illinois Central Railroad and Louisville & Nashville as a bill clerk and for a time as chief clerk to the commercial agent of the latter road. G. W. Hillman, a public accountant. C. B. Bee, a young man about thirty years old; at the time he testified the rate clerk of the Oklahoma Corporation Commission. He had had some experience on Mexican railroads as stenographer, voucher and damage clerk, as handy man to the superintendent of the road, and was a short time commercial agent. He was engaged in this service from five to seven years, and testified that he was very familiar with all operating conditions. He came to Little Rock, the chief terminal division point in Arkansas, for the purpose of investigating operating conditions on the Iron Mountain Railroad in order to qualify himself as a witness in these cases. He spent a day and a half there, but testified that he did not visit the shops or yards where operations were conducted. W. E. Fitzgerald, the auditor and expert accountant of the Railroad Commission of the State

of Texas since 1909, and who previous to that time had been employed in the accounting department of the Texas railroads in the capacity of voucher clerk, general bookkeeper and chief clerk in charge of disbursement accounts; and R. D. Parker, a civil engineer by profession, and employed by the Texas Railroad Commission as expert engineer since 1909. He was thirty-two years old, had taken a course in the Texas University in engineering, and been engaged in railroad location and construction prior to the time he entered the service of the Texas Commission. He testified that he had for the last four years of his railroad service been engaged in directing the maintenance-of-way forces, and it was necessary for him to be practically two-thirds of his time on the road riding on passenger trains or freight trains and in and about yards and terminals.

These were the witnesses examined by the State on this point. We have taken some pains to call attention to their qualifications, as it was described by themselves, because they were introduced as experts upon a subject which of necessity required great familiarity with operating conditions, without which no one is qualified to testify in that capacity. We feel that the testimony introduced by plaintiffs on this subject is practically uncontradicted, because, without impeachment of the integrity of the State's witnesses, it may be fairly said that not one of them was qualified from experience and training to speak as an expert upon the subject.

Mr. F. E. Ward's testimony will be found at pages 725-729.

C. J. McPherson, pp. 321-327.

Mr. Sewall, pp. 703-709.

Mr. Rawn, pp. 672-678.

Mr. Whitenton, pp. 751-758.

Mr. Doddridge, pp. 457-466.

Mr. McKee, pp. 689-695.

Conditions affecting the relative cost are clearly and fully set forth by the plaintiffs' witnesses. We call attention particularly to the testimony of Mr. Ward and Mr. McPherson. Mr. Doddridge testified in regard to a test made under his direction on the St. Louis Southwestern Railway during the month of October, 1908, for the purpose of determining the relative cost. He describes the result as follows:

"The test shows on the basis of gross earnings the intrastate freight train expense for labor and fuel costs 5.5 times greater than the interstate. It shows that the cost of service and fuel for running the local train per mile to have been 47 per cent greater than the cost of running the through train per mile.

"It shows that the local train produces 129 ton miles of commercial freight for each mile run; and the through train produces 399 ton miles of commercial freight for each mile run.

"The average number of loaded cars per train mile in through trains was 23, or 72 per cent of the total train.

"And in the local trains 11, or 69 per cent of the total train.

"The average number of empty cars per mile in the through train was 9, or 28 per cent of the total train; in the local trains 5, or 31 per cent of the total trains.

"The average number of all cars per train mile in through trains was 32, and in local 16.

"Seventy-eight per cent of all intrastate business was handled on local trains. The remaining state freight, 22 per cent, was handled on through trains; 92 per cent of the total interstate business was handled on through trains, 8 per cent of the total interstate freight was handled on local trains. Of company freight, 49 tons to each mile run was carried on through trains; 21 tons for each mile run was carried on local trains.

"The average tons of all dead weight (that is non-revenue weight), which includes the weight of the locomotives, cabooses, company freight and all cars per train mile, was 734 tons on through trains and 397 tons on local trains.

"The through trains carried more than three times as much commercial business per mile run as the local trains, but required less than two times as much dead weight.

"The average tons of dead weight to a ton mile of commercial freight was:

"Less than carload, through trains, 4.50 tons.

"Local trains, 9.44 tons.

"Carload, through trains, 1.62 tons.

"Local trains, 1.90 tons.

"Both, through trains, 1.84 tons.

"Local trains, 4.09 tons.

"The per cent of dead weight to gross weight on through trains was 65 per cent.

"On local trains, 76 per cent.

"The per cent of overtime to total wages of train and enginemen was 5 per cent on through trains and 19 per cent on local trains." (R. 459, 460.)

IN APPORTIONING TRAIN COST BETWEEN INTRASTATE AND INTERSTATE FREIGHT CARRIED ON LOCAL AND THROUGH TRAINS ON A STRAIGHT TON MILE BASIS, WITHOUT ANY ALLOWANCE FOR EXTRA COST, THE STATE DISREGARDED MANY IMPORTANT ELEMENTS OF EXTRA COST THAT ARE INDEPENDENT OF TRAIN COST AND GROW OUT OF DIFFERENCES IN INTRASTATE AND INTERSTATE TRAFFIC, AND ARE NOT PROVIDED FOR IN THE STATE'S SCHEME OF DIVISION.

Learned counsel conceded that the ton mile was not a proper unit for dividing total expenses, and said that under no circumstances would he use the ton mile for dividing the total expenses, and yet that is what was done under this division of the exhibit. The entire train expense, both local and through, amounting to $2,592,298.35, or 84 per cent of the total operating expense, is thus divided.

Counsel further said that the objection to the ton mile basis, as to its inequalities and disregard of the character of the tonnage, has been met and provided for in the State's scheme of division.

No attempt was made in dividing train cost to provide for any element of extra expense except that growing out of the difference in the service for which the equipment is used in local and through service. The arbitrary allowances made under the several headings used in the exhibit in connection with train cost has no application, even the most

remote, to that difference in expense which grows out of the traffic and does not result from or depend upon the physical handling of trains. Mr. Wharton's attention was specially directed to this question while on the stand, and he was asked if, in the division of the expense, he had made and difference between state freight and interstate freight, and he testified that he had not; if there was any distinction it was not taken into consideration. (R. 1036.)

All the testimony in the record agrees that there is a difference in the cost of transporting different classes of commodities, growing out of the volume, space occupied, degree of care necessary for preservation, liability to damage, and various elements of that sort characteristic of different classes of commodities.

Witnesses were examined and a good deal of testimony taken on this proposition, to which we wish to call the court's attention. Mr. Ward's views were expressed as follows:

"The State has attempted to determine what is a proper method of distributing train and car costs between local and through trains. And when they have done that, according to the method adopted, they undertook, by taking into account the tonnage of state freight handled on local and through trains respectively, to ascertain the ton mile cost of handling such freight; and have assumed that the cost of handling a ton mile of state freight on a local and on a through train is the same as that of handling a ton mile of interstate freight on the same train. This assumption, in my opinion, is an erroneous one. It fails to recognize the fact, which I endeavored to point out in my previous testimony in this case, that the terminal handling of short-haul intrastate freight is more expensive per ton mile than of long-haul interstate freight. Many more car miles are re-

quired to handle a given number of intrastate, short-haul ton miles, than the same number of interstate, long-haul ton miles. A much larger amount of property and facilities is required to handle such a quantity of intrastate short-haul ton miles than of interstate long-haul ton miles.

"By this I mean that the station facilities at the local stations through any state, so far as my observations go, are, when measured by the ton miles, used to a very much greater extent than is the case with other business passing those stations, or even originating at or destined to those stations. In order to make myself clear on this point, I might explain that a ton of freight of a given kind received at a country station will not cost any more to unload from a car and deliver to a consignee if it has originated in the State than if it has originated in another state. But when the cost of handling that ton of freight is divided by the ton miles applicable to it, it makes a much heavier charge per ton to the short-haul intrastate ton than to the long-haul interstate ton.

"I might illustrate it by saying that I suppose the people of Arkansas, as in other states, buy a good deal of merchandise from mail-order houses like Sears, Roebuck & Co., and Montgomery Ward, of Chicago; let us imagine, if you like, the purchase by a man at a country station 25 miles south of Little Rock; say he buys a ton of merchandise of Sears, Roebuck & Co., and it is carried down to his station and is delivered to him from the same car and at the same time as is a ton of the same kind of freight which he needed in a hurry and purchased in Little Rock. The station expense at the delivering station, in such case, is exactly the same; each operation is precisely the same as the other. But when you measure it by the ton miles you have 25 miles to apply to that ton which came from Little Rock, and approximately 600 miles on the ton that came from Chicago; so there is, perhaps, 24 times more chargeable to the state ton than to the interstate ton in that station expense.

"Continuing in that statement of the matters that were overlooked in this assumption of the State's accountants, I would like to say that the various allowances made by the State's accountants, as shown in detail in exhibit K—such for instance, as extra mileage for engines on local trains on account of station switching, extra and excess cost of re-

pairs to yard engines, extra cost of repairing cars running in local trains, extra wear and tear on road-bed and structures through operation of local trains, etc., are to a large extent made necessary by the handling of this short-haul intrastate business.

"In fact, the assumptions made by the State's accountants omit some of the most essential factors, which, in my opinion, go to make up the large difference between the cost of handling the two classes of business.

"Referring to the long and short haul, I think that effect is illustrated by the example I gave of a ton of freight from Chicago compared with one from Little Rock, going to the station 25 miles south of Little Rock. The interstate long-haul ton has so many more miles to divide into that the expense per ton per mile is very, very much less.

"In the case in point, my recollection is that the average haul per ton of state business in Arkansas is 70 miles, and of the interstate per ton 224 miles. Both of those are the number of miles in the State of Arkansas, as I understand it. Whereas, as a matter of fact, the interstate and trans-state freight must move a very considerably greater number of miles than 224. So that the proportion of three to one does not actually hold good as applied to the whole situation.

Q. "Does the addition of 50 per cent to the car miles of local trains for switching at stations, as made under the head of "Maintenance of Way and Structures," provide for the actual expense of state over interstate business growing out of the fact that the larger part of the switching is chargeable to state freight?

A. It does not. It seems to undertake to determine the cost of handling cars in local trains as against the cost of handling cars in through trains, but does not touch at all the cost of handling the freight in those trains, as between state and interstate.

Q. Would the allowance made there as between the two classes of trains cover the extra cost of handling the state freight over the interstate?

A. No, sir; in my opinion it would come very far from doing it.

Q. There is a similar allowance made under the head of "Maintenance of Locomotives." They have added 50 per cent to the mileage of yard locomotives to provide for possible extra maintenance due to yard service, and 50 per cent to the mileage of road engines used in local service to provide for switching in local service. The same is true of that, I suppose, is it, Mr. Ward?

A. Yes, sir.

Q. Allowance is made for starting and stopping and terminal handling. Is there an added element of extra cost on state over interstate freight that is not provided for in that allowance between local and through trains?

A. It seems to me that one great difficulty about the State's plan is that an attempt has been made to determine the cost of handling a local train as against a through train. In determining that, and in trying to determine it, a great many assumptions have been made which I cannot accept as being correct. But, after that is done, there still remains a number of very important factors which are not taken into account at all.

"If the State's method of determining the cost of the local as against the through trains worked out right, there still remains to be determined the question of how much more it costs to handle the state or short-haul freight in that train than the interstate or long-haul freight in that train. In fact, there is practically another question.

Q. "You testified when you were on the stand formerly in this case, that in your opinion it cost five times as much to transport state freight as interstate freight?

A. I expressed that as my opinion as applied to this case.

Q. Are there any facts developed in this exhibit K (and the other exhibits filed in connection with it for the

purpose of developing the theory upon which the State is seeking to divide these expenses) which would change or affect your views in that regard, Mr. Ward?

A. I have given the subject a good deal of thought from time to time, because it has come up not only in this case, but in other states, in which I have been interested as a railroad man, and the more I think about it the more I am inclined to think that estimate was low and not high, as to the excess cost of state over interstate.

"The conditions, as they seem to me, point to the fact that I have stated it in quite low terms, and not at all too high. I certainly have not modified my opinion as to its being as much as that.

Q. "Mr. Ludlam, who is one of the State's accountants and whose firm prepared these exhibits we have been discussing, testified that the extra expense as developed by the method of division adopted by the State was 87 per cent; how do you account for the difference between the 87 per cent developed by the State under its method and the views expressed by you, and to which your attention was called a moment ago, that it costs five times as much?

A. It is due in part to the erroneous assumptions that have been made here, in undertaking to divide the cost of local train service and through train service, and in part to the omission of those other elements to which I have referred. My opinion is, as it was before, that this is not a matter which can be determined by any proper system of accounting. It is one very difficult of solution, and the closest approach to an accurate result in the matter can be secured, in my opinion, by getting the views of operating officials who are in contact with this kind of work every day of their lives, and who are watching it, and who have had every opportunity to see under what conditions the various classes of traffic are handled. (R. 1864-1867.)

Q. Assume a case in which the average haul of state freight is say 70 miles and of intrastate 224 miles; how many cars would be required to move a given tonnage of state freight over the length of haul (224 miles) of interstate freight of equal tonnage?

A. Bearing in mind the conditions under which railroad cars are moved, there would be a greater use of the cars necessary than the mere difference in the mileage would indicate on its face. In that case there would be practically eight times as many cars required to handle the same tonnage in state as in interstate business.

"I have in mind, in making that statement that on each one of the short hauls, comprising the total required to equalize the ton miles for the state and interstate, that there would be a free time allowance for both the loading and unloading of the freight; and in that case almost universally throughout the country that free time is 48 hours.

"So, there would be not only a difference in the mileage but a difference in the time, because of the necessity for getting additional cars, and the time the cars were delayed by reason of the free time allowance under ordinary railroad regulations.

Q. "You stated a moment ago it would require eight times as many cars for state freight to carry the tonnage that would be required for the interstate freight; does that cover the free time or does the free time you speak of, 48 hours for loading and unloading, have any effect in increasing that disparity?

A. I think that would just about double it, because without the free time there is the stoppage at each of the short-haul points and the 48 hours added in each case, would more than double it. It would need a pencil and paper calculation to know exactly what that means, but it would run a good deal more than double.

Q. I simply want to get at the facts in a general way. What difference is there in the terminal service as between state and interstate freight, and what effect does that difference have upon the relative cost of the handling of the two kinds of freight?

A. In state business there is necessarily two terminal handlings; the freight has to be loaded and unloaded twice; and all of the expense in connection with the billing and checking and expensing is double in case of the state freight.

"The interstate freight never has more than one handling and if it happens to be trans-state freight there is no handling in a given state. And then the difference in the length of haul would make a marked difference, because wiping out state lines altogether, the longer the haul the less the cost per ton per mile would be for station service, because you have a much greater figure into which to divide that cost." (R. 727, 728.)

Mr. McPherson, referring to a number of the elements of extra cost that can not be included in the method of dividing between local and through trains as proposed by the State, testified:

"First: There is a greater use of the railway facilities in proportion to tonnage by the intrastate freight traffic, a greater cost of maintenance, and a heavier terminal cost, than for interstate freight traffic. The railway secures less efficiency from its cars used in intrastate freight traffic, in proportion to the relative tonnage, than in the interstate freight traffic; a greater investment in cars is necessary, and there is a larger cost for maintenance of cars in intrastate traffic than in interstate traffic, in proportion to the respective tonnage.

"My opinion is formed from an application of the facts to the exhibits in this case, from years of personal observation, from reports made periodically in my office, which I study and compare.

"Exhibit No. 26 shows that 51.16 per cent of all the ton miles of freight traffic moved by this railway in the State of Arkansas, in the period named, consisted of trans-state traffic, traffic that originated outside of Arkansas and passed through that State into other states. This is more than one-half of the entire freight traffic on the ton mile basis, that the railway moved during the period." (R. 321.)

In discussing Mr. McPherson's testimony, counsel assumed that he disregarded almost entirely the use of the facilities in connection with trans-state freight; on the con-

trary he made a liberal allowance for the use of the state facilities by the trans-state business. He said:

"The trans-state traffic merely passes through the State and uses but a part of the facilities provided by the railway for handling its business. This trans-state traffic does not require or use the station organization, the agents, cashiers, collectors, bill clerks, check clerks, and the numerous other classes of station labor, except yard clerks, who record car numbers and make out car reports; and the callers, who call the men that man the trains.

"It makes no use of station buildings, except the portion assigned for telegraph purposes; nor of house tracks, where cars are loaded and unloaded; nor of team and public tracks, where car-load freight is received and delivered; nor of tracks to elevators and industries, such as mills, warehouses, coal and lumber yards, storage yards and manufacturing establishments; nor of many buildings and other facilities which are provided to care for traffic, either originating in or destined to points within the State.

"The trans-state traffic could be handled with equal dispatch without the facilities I have mentioned. It is attended with very small terminal cost. The traffic is gathered, weighed, loaded, and billed in another state through to destination and requires no accounting nor station labor in Arkansas, except yard and car record clerks, as previously explained. In the orderly handling of business there are no reasons for trans-state freight which simply passes through the State to incur but a minor expense at division yards and junctions; but in practical operation, both intrastate and interstate cars are added to trains in which this traffic is moved, to secure the full efficiency, as far as possible, of the locomotives.

"The making up of trains is but a part of the yard work, the engines engaged in such service in classification yards handling cars in large cuts, and without extended movements, while in the other yard work, that of switching to the house and team tracks, and the delivery of cars to and taking them from industries, mills and warehouses widely scattered, with but a few cars to a trip (sometimes only one)

consumes time in both the gathering and distributing of this traffic, which is wholly intrastate and interstate, and none of it trans-state.

"Assuming that such physical handling as is given in these yards to trans-state traffic should be a charge against such traffic (which is not, in my opinion, equitable or proper), 15 per cent of the yard service in Arkansas would be a liberal allowance therefor.

"That is to say, not more than 15 per cent of the entire cost for yard service and general yard expenses would attach to 51.16 per cent of the freight traffic.

"Eighty-five per cent of the entire yard cost and expense would attach to 48.84 per cent, which comprised the intrastate and interstate freight traffic.

"The yard expense amounts to 13 per cent of the total expense of operation in Arkansas, or $398,806 for the six months, July to December, 1907.

"Of the station expense, which forms 5 per cent of the entire expense of operation in Arkansas, or $165,258, in the six months, this 51.16 per cent of traffic would make use of only the yard clerks and car record clerks to the points where records of trans-state traffic were taken.

"The total expense for these clerks at such points amounts to 8.5 per cent of station expense, and but a part of these clerks perform duties incident to such traffic.

"The trans-state freight traffic forming more than one-half of the entire traffic of the State, as measured by ton miles, could, on the most liberal construction, make use of but 15 per cent of yard service, as against 48.84 per cent constituting the intra and interstate traffic making use of 85 per cent of yard service, and but a part of 8½ per cent of station expenses.

"Measured by ton miles, the freight traffic touching Arkansas in the month of October, 1907, the month analyzed, was: Trans-state, 51.16 per cent; interstate, 40.69 per cent; intrastate, 8.15 per cent.

"Eliminating the trans-state from consideration, the relation between the interstate and the intrastate traffic becomes 83.3 per cent interstate and 16.7 per cent intrastate. As 48.84 per cent of the traffic uses all of these facilities, the relation of the intrastate traffic to the 48.84 per cent (the interstate and intrastate combined) is 16.7 per cent. Let me explain here that the term or expression 'terminal expense' or 'terminal cost' is used in a broad sense, and means the station and yard expense not only at district and division terminals, but at all stations; it also embraces the cost of maintenance of switch engines and sidetracks other than passing tracks, as every station is a terminal for the traffic that it originates or receives.

"Every shipment of freight, big and little, regardless of the length of haul, must have two terminal expenses. Trans-state freight has no terminal expense within the State. The expense at the starting point and at the destination is a part of the expense of operation of other states, and in the exhibits of cost filed in this State none of those expenses are contained for trans-state freight.

"Strictly interstate freight, that which originates or terminates in the State of Arkansas, has but one of these terminal expenses. The other terminal expense is a charge to the operation of some other state.

"Every intrastate shipment in Arkansas has two terminal expenses within the State." (R. 321-3.)

The witness then (R. 324) illustrated the difference between the long and short haul represented in state and interstate traffic by examples which show that it will require eight cars to handle the same amount of freight in state traffic as would be handled by one car in interstate traffic, and proceeds:

"Exhibit 5 shows that for the six months ending December 31, 1907, the average length of haul of all intrastate freight was 70 miles; while the average length of haul of all interstate freight in Arkansas was 224 miles.

"This means that each shipment of interstate freight moves on an average of 224 miles with but one terminal expense, either that of forwarding or delivering. Each intrastate shipment moves on an average of but 70 miles and incurs two terminal costs for that distance. It follows that to attain the same average length of haul as the interstate that eight terminal costs must be incurred by intrastate freight. That is, eight times the use of the terminal facilities must be made by intrastate freight as compared with one use of the facilities by interstate freight.

"The interstate shipment goes 224 miles for one terminal expense. The intrastate shipment goes but 70 miles and has two terminal expenses.

"Therefore, say for example, ten tons of interstate freight is moved 224 miles with but one gathering or distributing cost; and ten tons of intrastate freight go but 70 miles with both the gathering and distributing expenses.

"The intrastate ten tons shipment goes 70 miles, with two terminal expenses, another ten tons goes 70 miles further, with two more terminal expenses; a third ten tons goes another 70 miles more with two more terminal expenses; and a fourth ten tons the balance of the distance with two more terminal costs to equal a single interstate shipment.

"Ten tons of freight had been loaded four times and unloaded four times, making eight handlings of the intrastate movement of ten tons, while it is going 224 miles; while ten tons of interstate freight has been loaded or unloaded but once in moving this same distance.

"For the purpose of further illustration, we will take the exact distance that we used before, as that represents the average length of haul of the interstate and the intrastate freight.

"The distance from Texarkana to Nuckles, Ark., is 224 miles, the same distance as the average miles moved by every interstate shipment, in Arkansas. (R. 323-4.)

"A car loaded with twenty tons of freight in Texas for Nuckles passes Texarkana and comes through to Nuckles,

where it is put on a sidetrack, unloaded, and charges collected by the agent and remitted, and the other accounting work incident to the transaction is completed. The car makes 4480 ton miles, that is 20 tons multiplied by the distance, 224 miles.

"The distance from Corning to Nuckles is 70 miles, the same distance as the average number of miles made by every intrastate shipment in Arkansas.

"Three cars containing 20 tons are loaded at Corning and moved to Nuckles, making 4200 ton miles. One car, containing 20 tons, is loaded at Tuckerman and moved to Nuckles (a distance of 14 miles, which, added to the mileage of the three cars, is equivalent to the interstate haul of 224 miles), making 280 ton miles. The four cars making 4480 ton miles, the equivalent in that respect to the interstate shipment of one car 224 miles. Four cars are required to take care of the average intrastate shipment as against one car for the average interstate shipment. Three cars must be set at Corning and one at Tuckerman, or a total of four cars for loading.

"These must be loaded, weighed, billed, and all of the accounting features observed at the loading station; and the same four cars must be set for unloading at Nuckles; unloaded, charges collected and remitted and all accounting features incident to the transaction at that end of the journey completed. Each of these four cars has borne a terminal expense at origin and at destination, making eight terminal expenses, as compared with a single terminal expense of the interstate shipment at Nuckles. The other terminal expenses on that shipment, the setting the car for loading, its billing, weighing, and the other steps incident to its preparation for movement, are borne by the station at which the car was loaded in Texas.

"The cost of handling business is dependent upon the number of times the terminal is used.

"The four intrastate shipments referred to require the services of the station and yard forces, and the use of facilities eight times, to move the twenty tons the same number of ton miles as the single interstate shipment which

made the use of station and yard forces and other facilities in the State but once.

"The terminal cost of a shipment five miles is as great as on a shipment of 50 miles or 150 miles or, in fact, any distance; and the terminal cost to the St. Louis, Iron Mountain & Southern Railway in Arkansas for the six months, July to December, 1907, inclusive, was 18 per cent of the entire cost of operation, or $564,064.

"In intrastate traffic a greater number of cars is required and a larger investment required in freight car equipment than is required in interstate traffic.

"Even assuming that the average tons loading per car in interstate and intrastate traffic is equal; that is, that each car loaded in each class of traffic contains the same number of tons, four cars to one are necessary to be employed in handling the intrastate over interstate traffic, to secure the same number of ton miles.

"This, however, as I have explained before, is not the true ratio. Under the railway practice, and under the laws of Arkansas, forty-eight hours are allowed the shipper for loading and forty-eight hours are allowed the consignee for unloading every car.

"This means, in going back to the illustration just made, that the interstate shipment to Nuckles would result in the company being deprived of the use of one car for forty-eight hours, while in the four intrastate shipments the company would be deprived of four cars ninety-six hours each, or 384 hours.

"Reducing this to days the railway company would lose the use of the car containing the interstate shipment two days; while it would be deprived of the use of the four cars in the intrastate shipment sixteen days. This makes the ratio eight to one.

"Eight cars for the use of intrastate freight as against one car in interstate freight.

"As I have explained before, even though the full forty-eight hours were not used in every case, that is to say if the average were lower, if it were one and one-half days or one and one-quarter days or one day, the ratio would remain the same, eight to one.

"The standard freight car of today costs $900, and the relative investment in freight cars in the illustration used for the intrastate and interstate traffic would be $7,200 for the intrastate cars and $900 for the interstate car. This investment is a part of the cost of road and equipment, and the larger investment places additional burdens upon the railway company to earn the interest necessary to carry it, in the ratio of eight to one for intrastate over interstate traffic.

"The cost of maintenance of cars is greater in the intrastate than in the interstate traffic. As I have illustrated it heretofore, eight cars must be provided to handle the same tonnage of intrastate traffic as can be handled with one car in interstate traffic. This naturally increases the proportion of cost of freight car maintenance in intrastate traffic over interstate traffic.

"Depreciation is also going on with eight cars as against one car equivalent in interstate traffic. The ratio would be eight to one. The maintenance of cars is a large item in the expense of operation, amounting to 12 per cent of the entire freight cost in Arkansas during the six months, July to December, 1907, inclusive.

"The depreciation would be eight times as great in the intrastate traffic as in the interstate traffic. And this depreciation on all cars for the purpose of complying with the requirements of classification prescribed by the Interstate Commerce Commission was established at three per cent per annum, or $27.00 per car per annum, on the standard car of today. The relative depreciation therefore would be $216 per annum for the eight cars in the intrastate traffic as against $27 per annum for the single car in the interstate traffic. The ratio would be eight to one. The repairs to freight cars averaged $63.20 each in 1907, and this is fairly representative. As the use of freight cars in intrastate traffic to reach the same ton mile equivalent is eight times

that of interstate traffic, the maintenance would be at the ratio of $505.84 for eight cars per annum, as against $63.23 for one car per annum for interstate traffic, in the ratio of eight to one.

"From my practical experience in railway operation and for the reasons I have given, and for other reasons, in my opinion, the cost of handling intrastate traffic is at least five times as great as that of handling interstate traffic, on the basis of quantity, or more than double the cost on the basis of revenue, as shown in these exhibits." (R. 323-327.)

Mr. Gray, referring to the ton mile division, said:

"It is very unsatisfactory because it does not satisfactorily take into account the increased elements of cost as between the handling of intrastate on one hand and inter or trans-state freight on the other hand. One of which, and a very potent one, is on account of the difference in haul and the difference in the expense of handling.

"My judgment for a long time, as the result of giving such study to this mooted question as I could, such intelligent study as I was capable of, has been that the cost of handling intrastate freight business as against the cost of handling interstate and trans-state freight business, under the conditions which prevail in the Southwest, in practically any of the states in the Southwest with which I am familiar, will run from three to five times as much. In the subsequent study I have given the matter I would be inclined, if I changed at all, to raise the range of that cost."

Referring to exhibit K, after pointing out other objections, he said: "But above all, remains the fact that a proper allowance has not been made for the relative cost of the two classes of business." (R. 1907, 1908, 1909.)

See the evidence of Mr. Nay, R. 1838; Mr. Doddridge, R. 454.

The State's accountants, in preparing exhibit K, seemed to labor under the impression that the question at issue in this case was not so much the cost of state and interstate freight, but rather the cost of operating local and through trains.

## THE FINDINGS OF THE COURT IN REGARD TO EXTRA COST OF INTRASTATE FREIGHT TRAFFIC.

The court found (page 69) that the actual difference between the expense of local and through trains per ton mile, as shown by the State's accountants in their exhibits and testified to by Mr. Hamilton, was 162.67 per cent. (R. 1591.) The extra cost of the intrastate freight, however, was greatly reduced by reason of the large amount of inter and trans-state freight placed upon the local trains as the result of the State's method of compiling exhibit "I," showing the tonnage carried upon each class of trains, the net result being that the cost of the intrastate freight carried on both classes of trains was 87 per cent more per ton per mile than the interstate freight.

After making various changes in the basis adopted by the State the court furnished the formula upon which the accountants for both sides were requested to compile the final statement, which appears as exhibit A to the court's opinion found at pages 106-116. The result of the compilation based upon these modified formulas shows that the average cost of intrastate freight per ton per mile was

201.5 per cent more than the cost per ton per mile of handling interstate freight.

Upon a careful investigation of the difference in the rates charged for intrastate and interstate freight the court found (pages 58-68) that the intrastate rates in force at the time of the institution of these actions and in 1907 were 50 per cent higher than the inter and trans-state rates per ton per mile. The result of this investigation made by the court would tend to reduce the proportion of the various items of operating expense chargeable to intrastate freight only on such accounts as the court instructed should be divided upon the revenue basis. This excess of 50 per cent in the intrastate rates would not affect the entire division of the operating expenses, as but a small proportion of the total expense was divided between state and interstate freight upon the gross revenue basis under the formulas adopted by the court. They cover the following items. Maintenance of way and structures, traffic expense, and miscellaneous or other train expense, and only those items are affected by the increase in the intrastate rates as compared with interstate rates.

The court also found from the evidence that in preparing the formulas or bases of division the accountants for the State disregarded elements of expense which add materially to the cost of the local as compared with the trough traffic, and which should be taken into consideration in determining the difference in cost. While it was impossible to express the result of these omissions in percentages, the court finds

that they were of enough importance to be considered. The omissions referred to include such items as the difference in dead weight on local and through trains, demurrage charged on cars in other states, which was not represented in the figures submitted in the case and which has a very important bearing upon the relative cost of the two classes of traffic, especially when the entire length of haul is taken into consideration. The percentage of freight in less than carload lots on local and through trains was an item of extra expense that could not be provided for by the formulas adopted. The reciprocal tonnage based upon the movement of interstate freight, such as the movement of lumber to the North being counterbalanced by the movement of grain to the South, was another item. After considering the various items mentioned above, and others, the court found that, taking into consideration the differences between the intrastate and interstate rates for like commodities and like hauls on the one hand, and the various items that were omitted as mentioned above on the other, there should be an additional charge of 8½ per cent added to the percentage of extra cost found by the accountants as the result of their calculations based upon the formulas submitted by the court, the result being that the extra cost of handling intrastate freight on the St. Louis, Iron Mountain & Southern Railway was found to be 210 per cent. (Opinion 90-92.)

The court found from the evidence that the conditions on the St. Louis Southwestern Railway Company were somewhat different from those existing upon the lines of the

St. Louis, Iron Mountain & Southern Railway; that the trans-state freight was almost 65 per cent of the total freight moved as compared with only 51 per cent on the St. Louis, Iron Mountain & Southern. It was also found that the average length of haul is shorter for the intrastate freight than it was upon the St. Louis, Iron Mountain & Southern, and the difference between the length of the intrastate and interstate haul was greater. There were other matters which added to the increased cost of local business, and taking into consideration all of these differences in conditions upon the two roads, the court found that an additional allowance of 40 per cent should be added to the percentage of extra cost, making that percentage 250 per cent. This was done after making necessary allowance for a reduction on account of a like difference of 50 per cent in the rates charged for the two classes of traffic. (Opinion 93-94.)

## THE STATE'S DIVISION IS BASED UPON A FALSE ASSUMPTION AS TO THE TON MILES OF INTRA AND INTER-STATE FREIGHT HANDLED ON THROUGH AND LOCAL TRAINS.

Every operating man who testified stated that much the larger part of the intrastate freight is carried on local trains.

C. J. Lincoln, a witness introduced by the State, testified that—

"The interstate traffic is very largely handled on through trains, state traffic is handled on local trains very largely." (R. 967.)

W. B. Doddridge:

"The great bulk of intrastate freight is carried on local or way trains, in common with such interstate freight as there may be for distribution or collection." (R. 457.)

I. G. Rawn:

"I would think that the local train would carry a great preponderance of state freight." (R. 680.)

F. E. Ward:

"State freight being short haul freight is usually carried on the way freights. Interstate freight being long haul is ordinarily handled on through freight trains that run through from one terminal to another. The way freight or local train is one which carries the short haul freight going to towns intermediate between the terminals, either carload or less than carload, and those trains 'peddle' as we call it; that is, load and unload the small lots of less than carload freight, and they spot the cars for the local station, do all the station switching, and are practically traveling

switching trains to do the miscellaneous work that has to be done between terminals. The through freights are trains which are made up as nearly as possible of a unit of size, based upon the cars on the line over which they run and the power that is used there, and on those trains freight destined to distant points is carried, so that in handling that freight is not disturbed. There is no switching or other expense put on to it. It is carried through from one terminal to another terminal ordinarily." (R. 723-5; also 734-5.)

W. M. Whittenton:

"The state business is largely a short haul business and for that reason it is naturally handled on the local freight trains. (R. 758.)

The test made on the St. Louis Southwestern Railway in October, 1908, showed from actual observation and count that 22 per cent of intrastate freight was carried on through trains and 78 per cent on local trains. The nature of the business itself would indicate that that is the case. Local trains are operated largely for the purpose of distributing local intrastate freights. The long haul traffic, which is composed almost entirely of interstate and trans-state freight, is most economically handled on the through trains to avoid the numerous stops made by local trains for switching at junction and terminal points and for distribution at all way stations. It is for that reason the local trains do a large amount of switching at way stations while through trains do scarcely any. Pretty much all the freight that originates in and is destined to points within the State is moved on local trains. It would naturally follow that a very large proportion of that class of freight would be carried on local trains, and yet it is assumed in exhibit "K"

that 61 per cent of intrastate ton mileage was moved on through trains and 39 per cent on local trains. Such a showing is so contrary to natural conditions that it requires explanation, and it is explained in the record by the peculiar abnormal condition in regard to the handling and movement of freights in the month of October, 1907, growing out of the congestion that existed at that time. We will use the language of the witnesses who handled or superintended the handling and movements of freights, in describing the condition that existed and its effect.

John Cannon, Superintendent of the Arkansas Division, testified:

"During the fall of 1907, on account of the very heavy movement of business, we departed from our usual practice in loading our local trains. The local trains during normal times handled nothing but less than carload freight and what we call 'short loads;' that is, loads destined to stations on the local train territory. During the fall of 1907, in addition to that class of loading the locals were filled up to nearly the maximum tonnage with through loads, loads that went an entire distance over the district the local was run on. That excess tonnage ran all the way from 300 to 800 tons per day.

"Most of it was interstate traffic. Of course, there was a lot of state traffic handled also. But the major part of it was interstate freight, through loads that were ordinarily handled in our through trains going to St. Louis or Memphis and to points in Texas or Louisiana." (R. 1797-8.)

H. V. Brown, the terminal clerk, testified that he handled the waybills every day, went over them and checked up the local condition in the yard and made detailed reports as to the movement of freight in and out of the yard. It gave

him a pretty good idea as to what they were handling. The congestion in October, 1907, increased the tonnage on the local freights. I think the local in normal times handled at least 70 per cent of the state freight and not to exceed 30 per cent of the interstate freight. The proportion of interstate freight carried on local trains was increased considerably at the time on account of the through loads that were being put on the locals in order to facilitate the movement of cars. I should estimate that upwards of 60 per cent of the freight carried on local trains was interstate. (R. 1805-6.)

B. W. Moore, the night yardmaster, testified that usually the through trains are loaded to the rated capacity of the engine, but that the local trains are not loaded to the full capacity; that in October, 1907, there was a congestion of freight in the yards of the railroads; that that condition was not peculiar to the Iron Mountain road, but existed on all the roads and in other states; that on account of the congested condition they utilized the power to all the advantage they could by adding to the local movement an added tonnage of probably 500 to 600 tons a day. The added tonnage came from trains from St. Louis, Kansas City, New Orleans, Alexandria and Memphis, going to local points in the local territory or division. Superintendent Cannon issued instructions to utilize the local power to the best advantage in the movement of business, and not to exceed on the local trains, which had light engines of 1,200 tons capacity, 1,000 tons on each local division. Those instructions were carried out to the letter, as I remember it. Ordinarily the local

train would handle only such local cars, less than carload, as originated on the local division. There was a large addition to the loading of local trains during the month of October, 1907, on account of the congested condition of the traffic. A great part of the additional loading came from trains from St. Louis, Memphis, New Orleans, and other points outside of the State of Arkansas. The local train would go in to the terminal with its full capacity of engine tonnage in nearly every case, both north and south; accumulated that tonnage from the White River Division at Newport and Memphis Division at Bald Knob. What they picked up at Newport came from Springfield, Mo., and Missouri Pacific territory. That from the Memphis Division would move from Memphis to Bald Knob on the Memphis territory. (R. 1777-8-9.)

The court found that the evidence was practically conclusive that from 500 to 800 tons gross of freight were added to each local train in order to relieve the congestion.

"When conditions are normal the evidence shows that practically the only through freight carried on local trains is that intended for or carried from points intermediate between division yards. The interstate business carried on local trains averages about 40 per cent of the entire freight carried, and the calculation should be made on that basis." (Opinion, p. 87.)

The correctness of the court's finding can not be questioned by appellants without doing violence to the evidence. Indeed the evidence would have better warranted the court in finding that the intrastate freight carried on local trains

when conditions are normal is 75 per cent and the interstate freight 25 per cent.

If the error as to the local and through freight carried on local trains is corrected, and the ratios of state and interstate freight carried on that class of trains made to conform to the evidence and findings of the court, that tonnage alone would reverse the result and show grossly inadequate earnings even under the method pursued by the State in dividing train and transportation cost.

Again, if the method pursued by the State in ascertaining the amount of interstate freight handled in the State of Arkansas in the month of October, 1907, by deducting the actual movement as ascertained from waybills and wheel reports from the revenue account kept by the auditor and reflected in exhibit 26 is erroneous, as we have heretofore endeavored to show, that error would utterly destroy and defeat the State's method of division.

## THE BASIS USED BY THE STATE IN ASCERTAINING THE COST OF TRANSPORTING INTRASTATE AND INTERSTATE PASSENGER, AND MAIL AND EXPRESS BUSINESS.

The basis of division of passenger expenses is contained in exhibits M and T filed by the State. The division is between "coach and Pullman service, and intrastate, interstate, mail and express business. In general the expenses are divided on a car mile basis, the mileage used being that of October, 1907."

The division is made in detail, following the same divisions of expense as are contained in exhibit K relating to freight. The bases used are wholly different. Maintenance of way and structures, maintenance of locomotives, yard and train expenses, are apportioned between coach, Pullman, mail and express service on a car mile basis. Maintenance of passenger train cars is divided between coach, mail and express service on a car mile basis; traffic expenses between intrastate, interstate, mail and express business on the basis of the gross earnings; station expenses between intrastate and interstate business on the basis of the number of passengers of each class, making an allowance of "about 10 cents per day" for the handling of mails at certain stations and assuming that each intrastate passenger makes use of two terminals and an interstate passenger of one; loss and damage to baggage between intrastate and interstate according to the gross earnings of each; supervision and

general and general expense are divided on the basis of the direct charges as apportioned to each class. The cost of coach and Pullman service is divided between intrastate and interstate business in proportion to the total passenger miles of each class of traffic and added to the other cost of intrastate and interstate business. Miscellaneous revenue and dining car deficit are divided between intrastate and interstate business in proportion to the gross earnings; taxes, rentals, hire of equipment and value of property are divided between intrastate, interstate, mail and express in proportion to the total earnings of each class.

It will be observed that the State did not pursue the same method in dividing the expense of passenger service as it did in the division of freight expense. It abandoned the division as between local and through trains. The reason is given in an explanatory statement on the first sheet of the exhibit, where it is stated that it was not considered necessary to make a division as between local and through service, as nearly all passenger trains on the St. Louis, Iron Mountain & Southern Railway do a local business, meaning that through trains carry local passengers. The same condition existed with reference to the freight traffic, and the reason given presents no distinction in the two cases.

The St. Louis, Iron Mountain & Southern Railway operated 48 local trains and eight through trains in the latter half of 1907. The average stop of the local trains was every 5.2 miles; of the through trains every 36 miles in the State. The average run of the local trains was 114 miles; of the

through trains 275 miles in the State. The average length of the local passenger haul was 30 miles; of the through passenger haul 118 miles. (Exhibits 5 and 46.)

If the method of dividing freight expense was practicable it was equally so with regard to passenger expense, as there is approximately the same relation between the local passenger train and the through passenger train as there is between the local and through freight trains. The local passenger train is used for doing short haul business just as the local freight train is with regard to freight. The incidents of each class of service are similar in many respects. For instance, the through passenger trains like the through freight trains run day and night; the local passenger, like a local freight train, only in daytime. The length of train run is very much shorter in the local passenger service than in the through, and, as in the case of the division of freight expense, they have overlooked many of the elements of increased expense of local passenger business in dividing on the car mile and other bases used by them and, while claiming to have reached a result that reflects the actual cost of each class of traffic, they have in reality assigned to mail and express traffic items of expense that are not in any way connected with either class of business.

## MAINTENANCE OF WAY AND STRUCTURES.

The same objection that has been urged to the division of maintenance of way and structures on the basis of locomotive mileage in exhibit K applies to the division on the basis of car miles in the passenger service. A very large proportion of that expense is not incident to and does not result from operation of either freight or passenger cars.

## MAINTENANCE OF EQUIPMFNT.

### Locomotive Expense:

The division of locomotive expense is made on the basis of the car miles of one month, without any allowance for the difference in the cars on different trains and the expense caused thereby, or for the additional strain put upon the engines by the more frequent stops and starts of the local train. A number of witnesses testified that the repairs to passenger locomotives should be proportioned to the work done by them, and unless all cars are exactly alike the division can not be made on a mileage basis. It is in evidence that an express car weighs 35 tons, coach 45 tons, chair car 50 tons, sleeper 60 to 70 tons, baggage car 35 tons. It would seem obvious that the cost of repairs to locomotives should be in proportion to the weight and mileage of the cars handled by them. This mode of dividing locomotive repairs assumes that the repairs of a locomotive hauling a train consisting of three cars are one-third those of a locomotive hauling a train of nine cars, which is manifestly incorrect, as shown by the testimony.

### Passenger Train Cars:

Mr. Rosing testified that a mail car costs from 15 to 20 per cent more to repair than an express car, and a coach 100 per cent more; that the cost of cleaning cars on a mileage basis is not correct; coaches and chair cars are cleaned at passenger terminals whenever a train arrives, without regard to where it came from or what its mileage

may have been, and the amount of work is not measured by the mileage the car has made. There is also a great difference in the expense of cleaning express and mail cars, it costing from 10 to 12 per cent more to clean the latter than the former. The average cost of cleaning a coach is $1.45. car 65 cents, express and baggage cars 55 cents. (R. 1733-4.)

Mr. Nay testified that the division on a car mile basis is not proper because the expense has little or no relation to the car miles. The car miles of local trains which carry no Pullman cars are treated in the exhibit the same as those in through trains which carry Pullmans, and the method of division is inaccurate because it does not assign a sufficient proportion of the expense of the traffic carried on local trains. (R. 1842.)

Mr. Ward testified that the local train is used for doing a short haul business, and there is a lot of expense attached to the handling of local passenger service which can not be measured by the car mile. The local train has in service for a given number of train miles a much larger number of cars, as local trains run practically in daylight only and tie up at night. (R. 1867.)

**Traffic Expense:**

This expense is divided on the basis of the gross earnings, and 19.33 per cent of the entire expense is charged to mail and express, viz: 11.63 to mail and 7.70 per cent to express. This item covers advertising and agencies main-

tained for the purpose of soliciting and building up business. None of that expense should be charged to those accounts. The mail is carried under contracts with the United States Government, and the railroad company has nothing to do in connection with the business conducted by the express companies. Their only function in connection with that class of business is to provide space in the cars and at stations for the business of the express company. There is no soliciting of either mail or express. The compensation that accrues to the railroads is by contract with the Government or the express company. Mr. Johnson testified that there is no official whose salary or expenses is charged to the traffic account who has anything to do with the making of these contracts. There is a cost incurred in the handling of the mail business, such as the manager of mail traffic and his office force, but it is charged to general expense in the accounts of the railroad company and also in exhibit M.

Mr. Wharton, on being asked why he charged mail and express with any part of traffic expense, stated that he did so because he had no other way to divide it; that it would have been necessary for him to have gone into the offices of the railroad company to see how mail and express were handled in the traffic department, that he could not answer the question without making such an examination, and that the division was made without investigation, and yet, when they come to divide the expense of loss and damage to baggage, miscellaneous revenue and dining car expenses between the various classes of traffic, on the same basis, they

experience no apparent difficulty in eliminating mail and express.

**Train Auditors:**

Under the heading, "5—General Expenses," items amounting to $160,767.19 are divided between coach, Pullman, intrastate, interstate, mail and express on the basis of the direct charges to each class. $44,872 of the amount represents expense of train auditors, $14,893.46 of which is charged to mail and express. The expense of train auditors is incurred in connection with the handling of passengers upon the train. They perform no duties in connection with operation, their only service being in connection with passengers for the purpose of collecting tickets and cash fares; that item of expense should be divided between intrastate and interstate on the basis of the number of passengers handled. Divided on that basis $38,074.03 would be chargeable to intrastate business and $6,798.13 to interstate business. (Exhibit 56, subdivision "B," Expense of Train Auditors, etc.) See also evidence of F. P. Johnson, R. 2008-9.)

**Station Expense:**

This expense is divided without regard to trans-state passengers, who make no use of local terminals, and on the assumption that a state passenger is only twice as expensive as an interstate passenger; that one traveling 118 miles, the average haul of the interstate passenger, has only twice the use of station facilities as four state passengers, each travel-

ing 30 miles, the average state passenger haul on the Iron Mountain Road and on the St. Louis Southwestern Road 23 miles as compared to 121 miles. Trans-state passengers make no appreciable use of station facilities. Interstate passengers use but one terminal, and that once in 118 miles, while the intrastate passenger uses two terminals on an average journey of 30 miles. A passenger going five miles will use every portion of the depot facilities—baggage, trucks, platform and scales—that a passenger going 300 miles will. The greatest part of the station expense is in connection with the short haul.

**Yard and Train Service:**

This item of expense includes among others—

| | |
|---|---|
| Yard service | $ 15,124 |
| Train and engine men | 182,772 |
| Fuel and train supplies | 135,712 |
| Care of passenger cars | 50,600 |
| Engine house expenses | 46,499 |
| Wrecks | 17,879 |
| Injuries to persons | 56,128 |
| Damage to stock | 39,264 |

The same expense is charged to all passengers on different classes of cars on local and through trains. It includes wages of crews and engine men, assuming that the wages of a train crew which runs a train of nine cars is as much as the wages of a crew on a train with three cars, while the evidence shows that the wages of the crew are not based on the cars handled but on the train mileage, and the wages of the local crew are greater per train mile than the through train crew. The cost of fuel and supplies is different, as a larger expense is incurred for ice, water and

lighting coaches than for mail and express cars. The consumption of fuel is affected by the stopping and starting and weight of trains. No account is taken of the difference between local and through trains in that respect.

Injuries to persons could probably have been actually divided between local and through trains and between state and interstate passengers. The attempt to divide it on a car mileage basis including all kinds of cars is erroneous, and charges too much of this account to through service and not enough to local service. The division is erroneous as affecting yard service, because one local train of four cars often receives more attention at the terminals in the way of switching than a through train of nine cars. The car mile is not a proper unit for dividing the expense occasioned by wrecks. The testimony shows that by far the greater per cent of derailments, the principal cause of wrecks, is due to the tender, which is a part of the locomotive, and is not taken into account in this division.

Under the head of "Supervision and General," $40,476.06 is divided between coach, Pullman, intrastate, interstate, mail and express business on the basis of the direct charges as apportioned in the preceding divisions. The correctness of this method of apportionment depends upon whether the direct charges upon which it is based are properly apportioned. If they are not, as we have endeavored to show, then the division of this item of expense would be affected to the extent that the different classes of expense are erroneously divided.

## DIVISION OF COST OF COACH AND PULLMAN SERVICE BETWEEN INTRASTATE AND INTERSTATE BUSINESS.

This large item is divided between intrastate and interstate business in proportion to the total passenger miles of each class of traffic during the six months. The intrastate miles were 43,355,000, the interstate 30,486,624; 58.71 per cent of the total charge of $896,378.78 is charged to intrastate and 41.29 per cent to interstate. Included in the above passenger mileage was the mileage of passengers carried in Pullman cars, representing $302,126.66 of the total cost of passenger service. This account is again divided separately as "Cost of Pullman Service" between intrastate and interstate business on the basis of 25 per cent intrastate and 75 per cent interstate. The result of this method is to charge the expense of Pullman service twice, once in the division of coach expense, where the expense is divided ratably on the basis of passnger miles of coach and Pullman passengers in the proportions stated above, and again in the division of Pullman service, on the arbitrary basis of 25 per cent intrastate and 75 per cent interstate, resulting in a large increase in the expense of interstate business by reason of their having practically used the Pullman passenger mileage twice. Or, if it was proper to divide and apportion the cost of coach and Pullman service separately, it is not right that the Pullman passenger miles should be used as a factor in dividing the coach expense, because to do so would effect a very large reduction in the cost of intrastate passenger service. Upon

that point Mr. F. P. Johnson testified that if not more than 25 per cent of the Pullman passengers are state passengers, that fact would indicate that 75 per cent of them were of much longer haul than the state business, "or, to put it differently, the interstate passengers are of much longer haul than the state passengers, and the result would be that by reducing the total passenger miles to the extent of the Pullman passengers the change in these percentages (of coach cost) would be very substantial, because you would reduce the interstate passenger miles in larger proportion that you would the state passenger miles. The elimination of the Pullman passenger miles from the general division would increase the cost of handling state business in coaches about 8 per cent."

(See evidence of Ward, R. 1867 to 1870; Gray, R. 1911-1917; Nay, R. 1849-1851; Johnson, R. 1995-2000; Rosing, R. 1733-4, and others.)

It is apparent that the State has wholly ignored the difference in conditions pointed out in the evidence we have reviewed in connection with the division of the cost of passenger service. Many of the differences are obvious and can not be disregarded, and to the extent that they have been ignored the conclusions are misleading.

The result of the division of expense of the passenger service on the various bases used in exhibit M is shown in net earnings on exhibit O, and is as follows: Intrastate earnings, 5.21 per cent; interstate loss, 3.44 per cent; mail,

.04 per cent earnings; express, 9.61 per cent loss. The result would seem remarkable in view of the evidence. It would be difficult to account for the fact that there should be a profit of 5.21 per cent on intrastate passenger business and a loss on interstate business, in view of the well-established fact that the rates are practically the same and that it costs more to transport an intrastate passenger than an interstate passenger per mile. A more remarkable result, however, is the loss on express and the small gain on mail business. It is a well known fact that the express business involves a minimum of expense to the railroad company. It has nothing to do with reference to express business but to assign space in the cars and in the station; the express company does all the rest. It renders no service in connection with the mail except to deliver it from the train to the post-office, where it is within 80 rods of the station. Mr. Gray's attention was called to the deficit in express earnings at the conclusion of his testimony in chief. In commenting on it he said:

"If there is any department of the railroad's income that represents the least expense to the dollar received it is the express business. The railroad determines the amount of space to be allotted to express; space at a station is allotted only when it can be spared. No railroad employee is required to handle a pound of express; yet the result of the State's basis indicates that it costs $172,475.77 to earn $133,-910.82 in express service." (R. 1916-17.)

Truly a most remarkable showing!

We have had the State's figures revised by dividing all of the traffic expenses and the expenses of Train Auditors

between intrastate and interstate traffic and dividing the cost of coach and Pullman service between intrastate and interstate traffic, separately, thereby avoiding the duplication of the Pullman passenger miles, also correcting errors in the mileage of each class of cars as reported in the State's exhibit, and conceded; with these changes, the result of the State's formula would be to show the returns upon the value of the property of the St. Louis, Iron Mountain and Southern Railway Company from each class of traffic, as follows:

Intrastate Passenger—A return of 1.39 per cent.
Interstate Passenger—A deficit of 1.34 per cent.
Mail Traffic—A return of 3.45 per cent.
Express—A return of 0.56 per cent.

On the St. Louis Southwestern Railway Company, the return upon each class of traffic would be as follows:

Intrastate Passenger—A return of 3.85 per cent.
Interstate Passenger—A return of 1.10 per cent.
Mail Traffic—A deficit of 9.03 per cent.
Express—A return of 3.81 per cent.

This does not include any other changes than the four mentioned above, nor does it make any provision for increase expense of intrastate traffic or for any increase in the cost of passenger traffic as compared with mail and express traffic not provided for by the State's basis.

Right here, it is well to call attention to the fact that the return upon the value of the property employed in the entire passenger service (including intrastate and interstate

passengers, mail and express) is .67 per cent on the St. Louis, Iron Mountain & Southern Railway and 2.01 per cent on the St. Louis Southwestern Railway. This is the result of the figures submitted by both sides and there is, consequently, no dispute as to the correctness of those returns.

It would seem incredible to assume such a difference in the cost of handling any one of the classes of service as to overcome the fact that the entire passenger traffic is non-compensatory and confiscatory, as shown by the result of the figures compiled by both sides. This is especially true from the fact that the average revenue per passenger per mile in both intrastate and interstate traffic is practically the same, by reason of the fact that the railroads are compelled to reduce the through rate to a parity with the local rates in all cases.

The difference in cost being in favor of the interstate traffic, by reason of the much longer haul and the fact that intrastate passengers incur two terminal handlings in the State as compared with one for the interstate, and none for the trans-state part, would also tend to show that the intrastate traffic will not yield any greater return than the total business as shown above.

## EXTRA EXPENSE OF PASSENGER TRAFFIC.

No allowance was made in exhibit M for the increased cost of transporting intrastate over interstate passengers. That there is a very material difference is abundantly established by the evidence. The causes contributing to the difference in expense are very clearly stated by Mr. McPherson. (See his testimony, R. 327-331.)

A number of operating men were examined as to the difference in expense of transporting the two classes of passengers, and gave their views as to the elements of difference and as to the per cent of extra cost. Mr. McPherson estimated it at 35 per cent increase; Mr. Doddridge from 20 per cent to 30 per cent; Mr. Sewall at 50 per cent; Mr. Ward at 40 per cent; Mr. Whittenton at 25 per cent.

The court divided the expense of the passenger service on the revenue basis, charging the intrastate passenger service on the St. Louis, Iron Mountain & Southern Railway with 10 per cent greater net cost than through, but made no allowance on the St. Louis Southwestern for extra cost, on the ground that the difference in fares between local and through passengers is greater than on the Iron Mountain Railway, and that the difference in cost between the two classes of passenger service was no greater than the higher fares that had been collected. (See opinion, 92, 94.)

## THE EFFECT OF THE COURT'S FINDINGS OF FACT.

The court adopted the method presented by the appellants for apportioning the expense of operation and transportation between intrastate and interstate freight.

Their method consisted of a great number of details requiring minute investigation and analysis of all the various elements of expense incident to the operation of through and local trains, and the transportation of state and interstate freight. The court followed their formulas in many of the details, and only departed from them when they were unsupported by evidence, or, if there was conflicting evidence, where it found that the weight of the evidence supported a different conclusion. In such cases it made such changes in the formulas as to make them conform to the evidence. After the court had determined what the basis of apportionment of expense should be, it referred it to the accountants of each side to figure out the result. This was done by T. A. Hamilton, the expert accountant for the State, and F. P. Johnson for the railroad companies. They agreed in the result and certified it to the court, and the court adopted it as the final result of the formulas adopted by it. (See exhibit A at the end of the opinion, page 106.)

Where the lower court has considered conflicting evidence and made its finding and decree thereon, all presumptions are in favor of the correctness of the finding, and it will not be disturbed unless clearly in conflict with the weight of the evidence.

Kimberley v. Arms, 129 U. S. 512, 525.

Snyder v. Dobson, 74 Fed. 757-8.

McKinley v. Williams, *Ib.* 94, 102.

Idaho Mining & Mill Company v. Davis, 123 Fed. 255.

## RETURN ON THE INVESTMENT.

Only the actual value of the property as agreed by the parties to the proceeding and free from any question of capitalization or bonded indebtedness or interest charges was considered. The court determined that six per cent upon the value of the property devoted to intrastate traffic would be just compensation, with an additional allowance of one and one-half per cent for a surplus fund to cover depreciation charges and provide against contingencies.

The views of the court on this question are stated at pages 96 to 105 of the opinion, and we do not feel that we can add anything to what is there said in support of its conclusions. The earnings as found by the court fall so far below any rate of compensation that would be considered reasonable that the question is not of any great practical importance at this time.

Respectfully submitted,

MARTIN L. CLARDY,

SAMUEL H. WEST.

JOHN M. MOORE,

*Solicitors for Appellees.*

## APPENDIX.

RESULTS obtained under the various bases submitted at the hearing, covering the period from July 1 to December 31, 1907.

.....

Basis submitted by the railroad companies, using the estimate of extra cost for intrastate traffic—freight, 50 per cent; passenger, 15 per cent. See exhibits 3 and 3-A and 33 and 34.

| | *St. L., I. M. & S. Ry.* | *St. L. S. W. Ry.* |
|---|---|---|
| Gross revenue from intrastate freight and passenger traffic | $1,476,790.37 | $ 419,165.78 |
| Operating expenses, taxes and rentals | 1,500,713.75 | 371,103.77 |
| Net earnings..... Def. | 23,923.38 | 48,062.01 |
| One-half the estimated value of the property..... | 4,424,048.46 | 1,285,157.97 |
| Estimated returns based on the per cent of net earnings to valuation.. Def. | 0.54% | 3.74% |

Freight, 100 per cent; passenger, 15 per cent.

| | | |
|---|---|---|
| Gross revenue from intrastate freight and passenger traffic | $1,476,790.37 | $ 419,165.78 |
| Operating expenses, taxes and rentals | 1,654,256.99 | 406,077.89 |
| Net earnings..... Def. | 177,466.62 | 13,087.89 |
| One-half the estimated value of the property..... | 4,424,048.46 | 1,285,157.97 |
| Estimated returns based on the per cent of net earnings to valuation... Def. | 4.01% | 1.02% |

The lowest estimate of the extra cost of handling intrastate freight testified to by any of the railroad operating men was three to one.

. . . . . .

Basis submitted by the State. See exhibits N and O and U and V.

| | *St. L., I. M. & S. Ry.* | *St. L. S. W. Ry.* |
|---|---|---|
| Gross revenue from intrastate freight, passenger and miscellaneous traffic | $1,515,430.65 | $ 426,698.38 |
| Operating expenses, taxes and rentals | 1,166,330.13 | 306,801.14 |
| Net earnings | $ 349,100.52 | $ 119,897.24 |
| One-half the estimated value of the property | 4,539,045.82 | 1,308,426.55 |
| Estimated returns based on the per cent of net earnings to valuation | 7.69% | 9.16% |

. . . . . .

Basis adopted by the Court in the decision rendered. (See opinion, Judge Trieber.)

| | *St. L., I. M. & S. Ry.* | *St. L. S. W. Ry.* |
|---|---|---|
| Gross revenue from intrastate freight, passenger and miscellaneous traffic | $1,726,578.86 | $ 466,476.19 |
| Operating expenses, taxes and rentals | 1,688,558.83 | 429,221.07 |
| Net earnings | $ 38,020.03 | $ 37,255.12 |
| One-half the estimated value of the property | 5,158,266.75 | 1,430,321.18 |
| Estimated returns based on the per cent of net earnings to valuation | 0.74% | 2.60% |

Office Supreme Court, U. S.
FILED.
APR 1 1912
JAMES H. McKENNEY,
CLERK.

# The Arkansas Rate Cases

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

V. No. 441.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, APPELLEE.

AND

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

V. No. 440.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, APPELLEE.

IN THE SUPREME COURT OF THE UNITED STATES.

SUPPLEMENTAL BRIEF IN BEHALF OF APPELLEE.

MARTIN L. CLARDY,
SAMUEL H. WEST,
JOHN M. MOORE,
*Solicitors for Appellees.*

IN THE

# Supreme Court of the United States

---

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

V. No. 814.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, APPELLEE.

AND

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

V. No. 813.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, APPELLEE.

---

## SUPPLEMENTAL BRIEF IN BEHALF OF APPELLEE.

---

## DIVISION OF COMMON EXPENSE BETWEEN FREIGHT AND PASSENGER TRAFFIC.

Statement 5 to exhibit 3 (R. 2310) contains the bases used in dividing operating expenses between states and common expense, incapable of allocation, between freight and passenger service. Wherever the expense was of such a

nature that it could be allocated to the one or the other it was done. Mr. Johnson testified that this method of keeping the accounts had been in use a great while on the Iron Mountain railroad, and it was a common method in use on most roads. The following classes of common expenses are divided between freight and passenger in the statement referred to on the basis of the number of train miles in each class of service, viz: Maintenance of Way and Structures; Repairs of Locomotives; Other items under Maintenance of Equipment not including Repairs, Renewals, Depreciation of freight and passenger cars and Cars Borrowed and Loaned; Roundhouse Expense; Water and other supplies for Locomotives, not including Fuel; Miscellaneous Employees of Transportation Department, such as Crossing Watchmen, Signalmen and Superintendence; Common items under General Expenses.

Paragraph B of exhibit 3 (R. 2293) contains the result of the division of expense made by the railroad company as between freight and passenger service, using the train mile as a factor for dividing the classes of common expense above enumerated. $3,253,034.86 is charged to freight service, and $1,678,189.89 to passenger service.

Counsel comment at some length in their brief on the use of the train mileage as a factor in dividing common expense. They single out the item of maintenance of way and attempt to show that dividing that particular item on the train mileage results in a large increase in the expense

of passenger service, although it would seem to be obviously fair that whatever basis of division is adopted should be applied to all of the common expense; and certainly there can be no merit, from an accounting standpoint, in dividing Maintenance of Way and Structures on the revenue basis and such items as General Expenses on the train mile basis. They have inserted a table on page 265 of the State's brief showing the effect of the apportionment of maintenance of way expense on the train mile basis as compared with the division of that class of expense on the revenue basis. This table is misleading as an illustration. The common expense, that is that portion of the expense of conducting freight and passenger service that can not be allocated to the two branches of service, consists of many other items than those embraced in maintenance of way, as we have shown.

Paragraph B of exhibit 3 (R. 2293) shows the division of expense made by the railroad company as between freight and passenger service, using the train mile as a factor for dividing the common expense, with the result as stated above.

The following table shows that if all of the common expense were treated uniformly and divided on the revenue basis, it would very materially increase the expense chargeable to the freight service, and would have resulted in a large deficit in the earnings accruing from that class of business.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

ARKANSAS RATE MATTER.

If the common expenses that have been divided between freight and passenger on the train mileage basis had been divided on the basis of gross earnings, the results as shown in the St. Louis, Iron Mountain & Southern Railway Company's Exhibit No. 3 would have been as follows:

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Maintenance of Way and Structures | $ 773,605.22 | $ 281,071,29 | $1,054,676.51 |
| Maintenance of Equipment | 824,835.60 | 210,730.47 | 1,035,566.07 |
| Traffic Expenses | 88,734.42 | 53,276.08 | 142,010.50 |
| Transportation Expenses | 1,663,207.01 | 563,437.86 | 2,226,644.87 |
| General Expenses | 182,364.40 | 110,621.03 | 292,985.43 |
| Hire of Equipment, Balance | 175,400.21 | 2,757.26 | 178,157.47 |
| Dining Car Service, Balance | ..... | 1,183.90 | 1,183.90 |
| | $3,708,146.86 | $1,223,077.89 | $4,931,224.75 |
| Taxes | 162,945.69 | 59,202.49 | 222,148.18 |
| Rentals | 16,084.56 | 5,843.95 | 21,928.51 |
| Grand Total | $3,887,177.11 | $1,288,124.33 | $5,175,301.44 |

*Recapitulation.*

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Gross Revenues | $4,896,272.91 | $1,778,803.88 | $6,675,076.79 |
| Operating Expenses | 3,708,146.86 | 1,223,077.89 | 4,931,224.75 |
| Net Operating Revenue | $1,188,126.05 | $ 555,725.99 | $1,743,852.04 |
| Less Taxes and Rentals | 179,030.25 | 65,046.44 | 244,076.69 |
| Balance | $1,009,095.80 | $ 490,679.55 | $1,499,775.35 |
| Assessed Value of Property (Ex. 3-A) | $14,665,072.35 | $5,328,209.65 | $19,993,282.00 |
| Percentage of Net Earnings to Valuation | 6.88% | 9.21% | 7.50% |

The Intrastate gross freight and passenger revenue, as shown in statement 1 of exhibit 3 is as follows:

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Gross Revenues | $ 640,248.17 | $ 836,542.20 | $1,476,790.37 |

The intrastate proportion of the total operating expenses, taxes and rentals divided on percents based on the gross earnings of each class, as shown in Exhibit 3 (Freight 13.08%, Passenger 47.03%), is as follows:

| | | | |
|---|---|---|---|
| Expenses, including Taxes and Rentals | $ 508,442.77 | $ 605,804.87 | $1,114,247.64 |
| Leaving | $ 131,805.40 | $ 230,737.33 | $ 362,542.73 |

The extra cost of handling intrastate freight, as shown under various percentages in statements Nos. 6 and 7 of Exhibit 3, is as follows:

| | Freight. | | Passenger. |
|---|---|---|---|
| Net earnings after dividing operating expenses, taxes and rentals on the straight revenue basis | $131,805.40 | | $230,737.33 |
| Extra cost at 50% | 197,644.23 | Extra cost 15% | 42,685.42 |
| Deficit | 65,838.83 | Surplus | 188,051.91 |
| Extra cost at 100% | 372,668.76 | Extra cost 25% | 68,125.44 |
| Deficit | 240,863.36 | Surplus | 162,611.89 |
| Extra cost at 150% | 528,781.74 | Extra cost 35% | 91,608.53 |
| Deficit | 396,976.34 | Surplus | 139,128.80 |
| Extra cost at 200% | 668,208.06 | Extra cost 50% | 123,286.25 |
| Deficit | 536,402.66 | Surplus | 107,451.08 |



PAGE BOUND VE

| | Freight. | Passenger. | Total. |
|---|---|---|---|
| Assessed value of the property employed in Intrastate Traffic as shown by Exhibit 3-A | $1,918,191.46 | $2,505,857.00 | $4,424,048.46 |
| Percentage of Net Earnings to valuation, at 50% extra cost of freight.. 15% extra cost of passenger. | Deficit 3.43% | 7.50% | 2.76% |
| Percentage of Net Earnings to valuation, at 100% extra cost of freight ..... 25% extra cost of passenger. | Deficit 12.56% | 6.49% | Deficit 1.77% |

If the basis outlined by Judge Trieber is applied to the figures as adjusted by dividing the common expenses between freight and passenger on the revenue basis, the result would be as follows:

| | | |
|---|---|---|
| Earnings from Intrastate Traffic..... | Freight | $ 656,717.58 |
| | Passenger | 1,069,861.28 |
| | Total | $1,726,578.86 |

| | | |
|---|---|---|
| Freight Operating Expenses divided on basis of 210% additional cost calculated on ton mile bases and taxes, rentals and hire of equipment on the revenue basis | $736,414.72 | |
| Passenger Operating Expenses divided on basis of 10% additional cost calculated on the revenue basis and taxes and rentals on the straight revenue basis | 794,713.09 | 1,531,127.81 |
| Net earnings | | $ 195,451.05 |
| Assessed value of the property | | 5,158,266.56 |
| Per cent of Net Earnings to valuation | | 3.79% |

No good reason can be possibly shown why any particular class of expense, such as maintenance of way, should be selected and treated differently from other classes of common expense in the matter of apportionment as between freight and passenger service, and a comparison of the results in the foregoing table with paragraphs B, D and E of Exhibit 3, demonstrates that the use of the revenue as a factor of division would have made no material difference in the results shown in the exhibits filed by the railroads. The reason for using the train miles is clearly shown by the evidence of the operating men, many of whom testified that while it was not by any means perfect it was the best factor that could be used for that purpose.

This objection was not raised during the taking of the testimony. Mr. Ludlam, a member of the firm of Haskins & Sells, public accountants, who prepared the accounts on the part of the State, testified on this point as follows:

"My firm has prepared a statement in this case that we think reflects pretty closely the two classes of business in the State of Arkansas."

Q. I believe you began this division by first taking the division between freight and passenger?

A. *We accepted the company's figures on the freight and passenger.* We have not gone back of the statements submitted by them in this case.

Q. Upon what basis did they divide that?

A. I understand they divided upon the revenue train mileage basis. (R. 1320-1.)

Mr. Wharton, who was in direct charge of the work of Haskins & Sells in connection with these cases, was asked:

Q. Statement No. 2 to Exhibit 5 filed by the plaintiffs in this case contains a statement of the basis upon which the division is made between freight and passenger traffic expenses. Is that the basis upon which you acted in dividing expense as between freight and passenger traffic?

A. We made no division between freight and passenger of our own, simply taking the division made by the railroad company itself.

Q. You simply adopted the division they had made?

A. We took their division.

Q. Why did you take that, Mr. Wharton?

A. We considered it was good enough for the purpose we cared to use it for.

Q. Both as to state assignment and as to division between freight and passenger?

A. Yes, sir.

After stating that the division was made largely on the train mile basis he was asked:

Q. Did you think that was a proper basis to divide it upon?

A. *As between freight and passenger it was probably good enough for the purpose of this case.* I would not care to pass a personal opinion on that, because I haven't studied it sufficiently to form an opinion as between freight and passenger. Having accepted the railroad company's division between the freight and passenger, the only study that was necessary was as to division of freight expense between local and through and the passenger expense of the various classes. (R. 1030-2.)

Mr. Hamilton, another representative of Haskins & Sells, who had a great deal to do with the statistics that were compiled by the State, testified:

"The expenses shown in statement 4 of Exhibit 3 for the Iron Mountain and State of Arkansas were verified by us to this extent, we had recourse to the company's expense distribution books, on which the department, at that time under Mr. Johnson's charge, distributed the various vouchers and expense reports, the superintendent's expense reports throughout the various accounts. In dividing these expenses between freight and passenger, or rather in checking and taking off the company's division of them from that record, we necessarily verified the total as set forth by Mr. Johnson; we didn't go back of his record; that is, we didn't go to the individual vouchers or to the superintendent's reports, except in a few minor instances, and I saw no objection to that as a basis, for the reason that it is made the basis of all the company's statistics."

Q. And you regard it as a correct and proper basis?

A. Yes, sir; we applied some broad tests to it also, to see whether this period averaged up with charges of like character on other periods; on track maintenance, for instance, we took the average cost per mile for several years back, and saw that they averaged up, and that this was fairly normal.

Q. You found, though, no objection to that as a proper basis, or as to the manner in which it had been worked up, as far as your verification went?

A. We have no doubt as to the accuracy of these figures; I don't think there is anything wrong with them.

Q. What was your view as to the revenue train mile as a basis for dividing common expenses between freight and passenger traffic?

A. My opinion on that subject, of course, must be based on just what thought I have been able to give it, and what I have heard people say; I have nothing to do with the operation of trains in an executive capacity. If you want that, I would be glad to give it to you.

Q. Yes; I would like to have that.

A. I should think it was a very fair basis, basing my opinion on what I have just stated, that the extra weight of the freight train would be offset by the extra speed of the passenger train, and that might make it a fair division.

Q. If that was a proper division between freight and passenger, why did you depart from it in dividing the expense of operating local and through trains?

A. It seems to me that where you are considering the freight train as one unit, and the passenger train as another unit, usual divisions between the two classes of service, and you have lumped all your freight trains, that that might be some justification in itself for the first division; that is, you have light local freights and heavy through trains, and they might average up with passenger trains, but when you come to the division between two freight trains, you have a common unit there, both hauling freight cars, and the number of car miles would be the better division.

Q. In making your divisions on the car mile basis, did you take into consideration the weight of the contents of the cars?

A. No, sir; a car mile was a car mile with us.

Q. You have treated an empty car in the same manner you did a loaded car?

A. Yes, sir. (R. 1525-6.)

Mr. Henry Wilmering, a witness for the State, who prepared a formula dividing expenses, testified:

Q. In looking over the paper you handed me in response to my request, where you prepared a formula showing your method of dividing operating expenses between state and interstate, I notice the first item is "Maintenance of Way."

A. That is the first general account; yes, sir.

Q. That you divided on the basis of car miles, straight?

A. Yes, sir; as between local and through trains?

Q. How are they divided between passenger and freight?

A. On the basis of the revenue train miles, it should be, except account No. 17, Docks and Wharves, which would be assigned to freight.

He further stated that the car mile ought to be accepted as the basis of division as between local and through trains, and was asked:

Q. If this is true, why should it not also be used as a basis of division between passenger and freight trains?

A. Well, we have made a concession to the railroad companies in that respect, and have accepted the theory advanced by the railroad officials themselves. One of the principal reasons why we have accepted the revenue train mileage basis for division between freight and passenger where the expenses can not be located is just a concession to the majority of the accounting officials. It is accepting the railroad's own theory.

Q. Who made that concession? You say "we." whom do you mean by "we?"

A. I mean we who represent the States in this litigation, especially in Oklahoma. (R. 1138-39.)

Mr. Hillman, who was introduced as an expert accountant, and who had no connection with the case otherwise than as an expert witness, gave it as his view that the expense of maintenance of way and structures should be divided on the basis of train weights instead of train mileage, both between passenger and freight service and local and through trains; and in that connection the State's accountants admitted that they disregarded the weight and put an empty car on the same basis as a loaded car, in preparing their formulas. (R. 1509-10.) He further testified that if he could not get the data upon which to make the division on the basis of weights, he would adopt the train mile as the next best method of division. (R. 1521.)

The above is practically all the testimony on the part of the State on this subject. It is plain that it does not develop any objection to the basis of dividing common expense on the train mileage adopted by the railroads in their exhibits.

The State's exhibit K used the car mile for the purpose of dividing the expense of maintenance of way between local and through trains. Mr. M. L. Byers, the chief engineer of maintenance of way of the Missouri Pacific System, and other operating men criticized and condemned its use, and counsel in cross examining them on that point endeavored to show that the objections urged by them against the car mile as a unit for dividing maintenance of way expense between

through and local trains would apply to the train mile as a factor for dividing between freight and passenger service.

Mr. Byers was asked on cross examination if all the reasons he had given in his testimony in chief against the car mile as a factor in dividing the expense of maintenance of way as between local and through trains would not be equally applicable to the train mile as a factor of dividing maintenance of way expense between freight and passenger service. He said it would not.

"I think the train mile as a general condition in making a division between freight and passenger of the maintenance of way expense is somewhat less in error than the use of the car mile statistics would be for the same purpose." (R. 1706.)

Mr. Nay was asked what factor the railroads used to divide maintenance of way expense between passenger and freight. He stated in answer:

"We have been using (I am speaking now of the formula we used for operating statistics which we furnished the Interstate Commerce Commission) we have been using the passenger and freight train mileage."

Q. You think that a fair approximation of maintenance of way expense as between freight and passenger?

A. It was as fair as we have been able to find at the time we compiled these operating figures. Our operating

men say that the greater speed of the passenger trains offsets the greater weight of the freight trains. So that it is fair to assume the passenger train mile may be considered the same as the freight train mile.

Q. Would a division of maintenance of way expense between freight and passenger on a train mileage basis be fairly accurate?

A. From the testimony I have heard from operating men I think it would be as accurate as anything that was available at the time these statements were compiled.

Q. Did you make your statement to the Interstate Commerce Commission in these various exhibits based on that formula?

A. Yes, sir. (R. 2034-35.)

Mr. F. P. Johnson testified that the railroad company kept regular statistics separating freight and passenger service and expense for the benefit of the operating department; that the division between freight and passenger on common accounts is made on the train mileage basis in those statistics. (R. 149-50.)

Mr. Carl Gray testified that he thought the use of the train mile in making the division between passenger and freight was fair on account of the fact that while one (freight service) subjects the right of way to much greater use, it does not require as high a degree of maintenance, and they come more nearly compensating. He was asked if that applied to the single track where both classes of traf-

fic are using it constantly, and stated that it did, because it means that while perhaps one uses it harder on account of the greater number of vehicles and the greater axle load, the other requires a higher degree of refinement. He was then asked if the train mile would be a satisfactory basis for dividing between State and interstate business, which is manifestly a wholly different proposition, and stated that it would not, because "in the one case the trains are entities and are representative of themselves, and in the other case not even the carriages themselves are representative." He further stated that for dividing maintenance of way expense as between passenger and freight the train mile presented the least objection, and was about the only method where the relation between the two branches of service had anything in common and was the only basis where the two departments came nearest to each other. (R. 1939-40.)

Mr. McPherson testified:

"The train mile measure being divided between freight and passenger service, may be followed in dividing the common expense as between freight and passenger traffic. But it must be discarded in any consideration and division between intrastate and interstate traffic for various reasons, among which are that it represents trains carrying both classes of traffic, also empty cars the ultimate assignment of which can not be determined and which in themselves yield no revenue." (R. 305.)

The train mile unit is used by most railroads in dividing common expense between freight and passenger for operating statements used in railroad operations; it was the basis authorized by the Interstate Commerce Commission and used by all railroads in compiling information called for by the Interstate Commerce Commission in the form of annual reports until recently. Common expenses such as maintenance of way and structures, repairs of locomotives, and other common joint service should not be divided between freight and passenger service on the revenue basis, as the revenue earned by the trains of each class of srvice has no bearing on the proportion of common expense chargeable to each train. Railroads are maintained in a higher state of efficiency for the benefit of the passenger traffic than they would be if they were exclusive freight roads. Many passenger trains are not run at a profit to the railroad companies, but under regulations of State commissions calling for a certain number of trains in certain localities daily. Many of these trains are operated at a heavy loss, some of them not even paying the cost of wages of the crew and supplies used by the train, and if the common expense incurred in the operation of a railroad, such as maintenance of way and structures, general expenses and other like items, were divided between the freight and passenger service in proportion to the gross earnings, when the earnings from passenger traffic are the result of operating such trains as those mentioned above, the result would not represent the actual cost or even a reasonable approximation, as it makes but little difference in the cost of oper-

ating a train whether that train is carrying ten or fifty passengers. On the other hand, being compelled to operate the train, frequently by State regulation, the only reasonable method by which to arrive at the cost of handling the passengers in the train, they being both State and interstate, is to use the revenue received from each.

In this connection the learned counsel refer to a statement contained in the opinion of Judge Trieber, that any attempt to apportion maintenance of way expense on a ton, car or train mileage would be an injustice to the railroads, and that the court was of the opinion that the straight revenue basis would get more accurate results.

Judge Trieber was not referring to the division of expense between freight and passenger service, but was discussing the division made by the State in exhibit K as between local and through trains. The State had made the division on the basis of car and engine mileage, and what the court intended to say was that neither the car nor the train mile was a proper unit of division between the local and through trains, both of which carry State and interstate traffic. The question as to the proper method of division as between passenger and freight traffic was not before the court, because, as we have heretofore shown, the question was not raised or insisted upon by counsel at the hearing before the lower court.

## RELATION OF REVENUE AND RATES.

They say that the railroad company statistics show that freight intrastate revenue is 98.18 per cent higher than interstate, and passenger 3.48 per cent higher; but that Judge Trieber, taking into account all the various elements of extra cost of intrastate freight, concluded that for the reasons given by him 50 per cent was the proper allowance to be made for the difference in intrastate freight revenues or rates. These figures were developed in two exhibits filed by Mr. Kimbell at the request of the State (Exhibits G and A). We have dealt with that subject and called attention to the testimony of Mr. Kimbell and Mr. Johnson to the effect that the revenue, while to a certain extent affected by the rates, does not reflect changes in rates alone, but is the result of many conditions, including among them the rates, the character of commodities handled, the length of haul, and various elements of that character. Appellee's brief, pp. 108-111.

This matter was fully explained by Mr. Kimbell in his testimony (R. 2078) and by Mr. Johnson (R. 2000-1 and 2011-12), and the fallacy of the State's position is demonstrated by exhibits 54 and 58 filed by those witnesses. (R. 2447-2476.)

The attention of Mr. J. D. Watson, the general freight agent of the St. Louis Southwestern Railway, one of the most efficient railroad officials in his line of work—

that is, rate making—in the country, was called to this exhibit. He was asked:

"One of the exhibits introduced in this case (filed, I think, by Mr. Kimbell) indicates an increase as between the last one-half of the year 1907 and January, 1909, of 96 per cent in the revenue per ton per mile. I wish you would state if, in your judgment, there was that increase in the revenues as compared with the business done in those two periods?"

"A. I don't believe it could possibly be. I might explain why I think that. The revenue per ton per mile does not necessarily indicate anything as to the rate one way or the other. The higher class of traffic that you handle the more your revenue per ton per mile would be, but if you can increase your tonnage and reduce the character of it—that is make it a lower character, your revenue per ton per mile would necessarily decrease, while the volume that you would handle at the decreased revenue per ton per mile would still increase your revenue very materially.

"Now, I don't believe it would be possible, on the Cotton Belt, for a difference of 96 per cent in the revenue to occur between any two months or between one month and the average for any period, because I don't believe it changes or shifts that much." (R. 1676.)

The fact that the statistics of the railroad company show that the intrastate freight revenue is 98 per cent greater than the interstate freight revenue does not mean

that the rates charged on State traffic are twice as high per ton per mile as on interstate traffic. The statistics of the St. Louis, Iron Mountain & Southern Railway show that the average revenue per ton per mile of the total interstate traffic is 6.901 mills and of insetstate traffic 12.826 mills. But when the trans-state traffic is shown separately the result is as follows:

| | | |
|---|---|---|
| Trans-state | average haul | 285 miles |
| | average revenue | 5.799 mills |
| Interstate | average haul | 168 miles |
| | average revenue | 8.286 mills |
| Intrastate | average haul | 72 miles |
| | average revenue | 12.826 mills |

In this case the State revenue is but 50 per cent greater than the interstate revenue, and that does not mean that the rate is 50 per cent greater, but rather that the average haul of interstate freight is more than twice as much as the average haul of State freight, and consequently the average revenue per ton mile is much lighter. If it were possible to separate the interstate traffic into blocks so as to gather together all of the freight the length of haul of which would approximate 72 miles, it is quite likely that the average revenue on that class of business would be as great or greater than the average revenue from State traffic. This is especially true of the results shown by the passenger statistics, wherein the average revenue per passenger per mile of intrastate passenger traffic is 3.48 per cent greater than the average revenue per passenger per mile from interstate passenger traffic. These rates, both

State and interstate, are made upon practically the same unit (two cents or three cents per mile), the lower revenue received from the interstate traffic being due entirely to the greater distance over which the passenger travels. A passenger moving thirty miles between the State of Missouri and Arkansas would pay practically the same rate as a passenger moving thirty miles wholly within the State of Arkansas, and the average revenue per passenger per mile upon each of these passengers would be exactly the same.

## FORT SMITH TERMINAL EXPENSE.

In discussing the propriety of charging the expense of Memphis and Fort Smith terminals to the State of Arkansas the counsel say at page 287 of their brief:

"Judge Trieber held it was proper to charge Memphis expense to Arkansas, but says:

" 'This also applies to Fort Smith terminals in so far as Arkansas business is concerned, Oklahoma business being charged to that State with its proportion of expense.' "

This statement is based on a misunderstanding of Judge Trieber's ruling. Mr. F. P. Johnson had testified that the expense of the Fort Smith terminals "was charged to the State of Arkansas. The train service that passes through Fort Smith and Van Buren is divided on a mileage basis, but the station and yard service is charged to the State of Arkansas at Fort Smith." (R. 858.)

Q. What disposition did you make of the Fort Smith terminals in the Oklahoma Rate Case?

A. We did not make any disposition of that in the Oklahoma case. They are not included there at all.

Q. What did you do with this expense growing out of the trackage between Van Buren and Fort Smith in the Oklahoma case?

A. Any expense that is incurred on the line that enters into the State of Oklahoma is charged to the State of Oklahoma, but the terminal expense at Fort Smith—this station and yard service—is all charged to the State of Arkansas. (R. 1611-12.)

What the court stated in full is as follows:

"Objections are also made to the expenses of the Memphis and Fort Smith terminals charged entirely to the Arkansas business, although all of the Memphis business being in the State of Tennessee is interstate, and a very considerable part of the Fort Smith traffic is of that nature and all the earnings are credited to interstate business. The uncontradicted evidence shows that the Memphis terminal, which is the terminal point of that branch of the Iron Mountain, is used exclusively for the Arkansas business and differs in no respect from what would be incurred if it were in this State on the west side of the Mississippi River instead of being in Memphis on the east side of that river. This also applies to the Fort Smith terminals in so far as the Arkansas business is concerned, the Okla-

homa business being charged to that State with its proportion of expense. These matters will be considered and allowance made therefor when considering the apportionment of the expenses betweeen the State and interstate businesss, and thus the injustice to the intrastate business rectified." (Opinion, p. 40-1.)

The court evidently intended to charge the station and yard expense at Memphis and Van Buren to the State of Arkansas, the former on the ground that the yards in Memphis are for all practical purposes the same as if situated in the State of Arkansas, and those at Fort Smith are in fact situated in that State; hence it was proper that the expense should be charged to that State; but that the train service at Van Buren should be divided on a mileage basis between Arkansas and Oklahoma, as was done. The reason for treating these station and yard expenses as was done by the court is fully explained in the evidence cited in our former brief at pages 78-82.

EXHIBIT 26.

Appellees contend in their brief that the statistics contained in this exhibit showing the proportions of intrastate freight carried on local and through trains in the month of October, 1907, should be used as the basis of dividing expenses between the two classes of freight without regard to whether they were correct or incorrect. They say at page 297 that the plaintiffs are morally and equitably estopped to question the force of the test month's statistics. They attempt to prove by one of appellee's witnesses, Mr.

Carl Gray, that the plaintiffs should be held to the statistics contained in that exhibit because it was filed by the plaintiff, and two of the plaintiff's witnesses, viz.: Mr. Doddridge and Mr. Kimbell, testified that for some purposes October was a fairly representative month. The circumstances under which the exhibit was filed have been explained, and it is not necessary to dwell upon that further than to say that it was filed after a request had been made for a direction by the court to have the statistics prepared for three months.

They say at page 308 the statistics contained in this exhibit were used and quoted by the plaintiff in dividing the different classes of traffic, such as trans-state, interstate and State, and in connection with the long and short haul. The length of haul of State and interstate freight and passengers on the Iron Mountain railroad is contained in exhibit 5 (R. 2327), and on the St. Louis Southwestern Railway in exhibit 14 (R. 2361.) The proportions of trans-state, interstate and State traffic were taken from exhibit 26, but the conditions which affected the loading of local and through trains did not affect the relation of the volume of trans-state freight to other classes of traffic, or impair the usefulness of the exhibit for that purpose; nor would the separation of carload and less than carload freight be affected. It was only the method of handling the freight in the local trains that was effected by the congestion.

The statistics contained in exhibits 5 and 26, the former covering a six months' period and the latter the month

of October, 1907, were compiled upon exactly the same basis as to these matters, the only difference being that exhibit 26 divides the freight between carload and less than carload and the interstate freight between that which is trans-state and that which is purely interstate. No attempt was made or could be made to show just what proportion of each class of traffic was handled upon through and local trains from the data which was used in compiling this exhibit, and our contention is that when the State undertook in exhibit I to determine the amount of freight actually handled on the local trains, and then subtracted that amount from the total traffic shown in exhibit 26, to arrive at the amount of freight carried upon through trains, their basis was wrong and the results obtained were entirely misleading. And this is especially true by reason of the fact that owing to the large amount of business and consequent congestion in that particular month the local train was used for the purpose of moving freight from division point to division point, regardless of the usual functions of the local train, and thereby loaded very largely with trans-state and interstate freights, which was contrary to the usual practice. Mr. Roth testified that he investigated sixteen of the local trains for the purpose of ascertaining whether there was any freight handled on those trains that was not included in the auditor's accounts and in the statements contained in exhibit 26, and found that 30.5 per cent of trans-state freight, 15.5 per cent of other interstate freight and

6 per cent of State freight carried on those trains was not included in the October account. These percentages showed that practically one-third of the trans-state freight carried on the sixteen local trains was not included in the October accounts, as shown by exhibit 26, and showed further that any attempt to determine the relative amount of tonnage carried on both classes of trains by taking the actual movement on the local train and the difference between that and the total amount of traffic taken into account as representing the movement on through trains, does not by any means represent the actual facts. But it does not impair the usefulness of exhibit 26 for the purpose of showing the percentage of trans-state freight that moved in the State of Arkansas during that period; nor does it conflict with the correctness of the statistics contained in exhibit 26 showing the relation of carload and less than carload.

Counsel in their brief make a comparison of the revenue per ton per mile as shown on exhibit 5 and exhibit 26, for the purpose of demonstrating that there could have been no abnormal handling of through freights on local trains in October, 1907. We are unable to see any possible relation between the revenue per ton per mile as shown in the accounts of the railroad company, and the question as to whether the freight that produced the revenue was handled on a local or a through train, but a comparison of the two exhibits does disclose a relation between the tons handled in the State of Arkansas in the month of October

as compared with the six months' period that is instructive, and which bears out our statement that the statistics contained in exhibit 26 correctly show the relation of the volume of the different classes of traffic handled in the State during the month of October. It of course could have no bearing as to the train upon which the freight moved, but it does, we submit, demonstrate very fully and conclusively that the volume and proportions of the freight handled are correctly stated in the exhibit.

Exhibit No. 26, covering the month of October, shows that 21.15 per cent of all tons handled in the State of Arkansas was intrastate traffic, that 14.16 per cent of all freight revenue was intrastate revenue, that 8.15 per cent of all ton miles handled was intrastate traffic; while exhibit No. 5, covering the six months ending December 31, 1907, shows that 19.98 per cent of all tons handled was intrastate traffic, 13.41 per cent of all freight revenue was intrastate, and 7.25 per cent of all ton miles was intrastate ton miles, the percentages being such as to show that there is but little difference between the month of October, 1907, and the entire six months' period.

These comparisons support the statement of Mr. Doddridge and Mr. Kimbell, that one month would be representative as to the relative proportions of the different kind of business, and useful for the purpose of determining the average relation that one class of business bore to the other, and demonstrate that while the statistics contained in exhibit 26 could not be used in any way for the purpose

of determining the distribution of State and interstate freight in loading local and through trains, those statistics were properly used for the purpose of showing the relative volume of trans-state, interstate and State, and the carload and less than carload business.

They seek to impeach the testimony of Cannon, Moore and Brown as to the effect of the congestion upon the loading of local trains. They say exhibit I shows the local trains average 16.6 cars and through trains 33.2 cars, and then assume that if 600 tons had been added to the local trains it would represent 17 cars. This is a very extraordinary view to take of the testimony. B. W. Moore testified that during the congested period the superintendent issued orders to utilize the local train power to the best advantage and load up to 1,000 tons on light engines of 1,200 tons capacity, "and we added to our local movements an added tonnage of probably 500 or 600 tons to the train." The superintendent, Mr. Cannon, testified that during the fall of 1907, on account of the heavy movement of business, the usual practice of loading local trains was changed. Local trains during normal times handle nothing but less than car load freight, and what is called short loads—loads destined to stations in the local train territory. During the fall of 1907 the locals were filled up to nearly the maximum tonnage with through loads, loads that went through the entire district that the local ran over. The excess tonnage ran from 300 to 800 gross tons per day. All the testimony shows that the average loading of merchandise

freight is five tons to the car at the starting point, which is reduced as the tonnage is distributed from station to station, and that the cars in local trains are loaded very much below the maximum capacity of the engine under ordinary conditions. The evidence of Superintendent Cannon and the other witnesses who testified on the subject is simply that the local trains were loaded up to their full capacity, and that the effect of the additional loading was to very materially increase the tonnage of the local trains.

Mr. Cannon testified that ordinarily the local train handles 75 per cent of the State freight, but that during the congestion the conditions were reversed and it did not carry over 25 per cent. Mr. Brown stated practically the same. It can be readily seen, in view of the make-up of local trains and the manner in which they are loaded and handled, that the tonnage might easily have been increased in the manner testified by these witnesses. We can perceive no inconsistency whatever between the conditions referred to by counsel and the testimony of these witnesses.

Respectfully submitted,

MARTIN L. CLARDY,

SAMUEL H. WEST,

JOHN M. MOORE,

*Solicitors for Appellees.*

# ALLEN ET AL., RAILROAD COMMISSIONERS OF THE STATE OF ARKANSAS, *v.* ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

# SAME *v.* ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.

APPEALS FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE EASTERN DISTRICT OF ARKANSAS.

Nos. 440, 441. Argued April 12, 15, 1912.—Decided June 16, 1913.

*Minnesota Rate Cases, ante,* p. 352, followed to effect that an intrastate rate fixed by State Railroad Commission is not an unconstitutional interference with interstate commerce.

A carrier has the right to contest the validity of rates prescribed by a body clothed by the legislature with power to establish rates on the ground they are confiscatory, and this right is not impaired by putting the rates into effect if they prove to be confiscatory.

*Minnesota Rate Cases, ante,* p. 352, also followed to effect that where the proofs submitted by a carrier attacking rates as confiscatory are

not sufficient to justify a finding that the rates are confiscatory, the bill should be dismissed.
187 Fed. Rep. 290, reversed.

THESE two suits were brought to restrain the enforcement of the act of the legislature passed February 9, 1907, fixing the maximum fare for passengers at two cents a mile, and also the orders of the Railroad Commission made June 4, 1908, prescribing maximum freight and passenger rates. The facts involved in both cases are stated in the opinion.

*Mr. Joseph M. Hill* for appellants.

*Mr. John M. Moore*, with whom *Mr. Martin S. Clardy* and *Mr. Samuel H. West* were on the brief, for appellees.

MR. JUSTICE HUGHES delivered the opinion of the court.

The legislature of Arkansas, on February 9, 1907, passed an act fixing the maximum passenger fare within the State, on railroads over eighty-five miles in length, at two cents a mile. On June 4, 1908, the Railroad Commission of the State adopted Standard Distance Tariff No. 3, which superseded the former freight tariff and established maximum intrastate freight rates for all classes and commodities. The requirement with respect to maximum passenger fares as provided by the legislature was also promulgated by the commission.

In July, 1908, the appellees, the St. Louis, Iron Mountain & Southern Railway Company and the St. Louis Southwestern Railway Company, respectively, filed their bills in the Circuit Court, alleging that the action of the legislature and the commission, in fixing these rates, was unreasonable and confiscatory, and also that it amounted

to an unconstitutional interference with interstate commerce. Answers were filed by the defendants, the members of the railroad commission, and voluminous evidence was taken. The court found the rates to be confiscatory and a decree was entered enjoining their enforcement. 187 Fed. Rep. 290. The railroad commissioners appeal.

The contention of the complainants based upon the asserted interference with interstate commerce was rightly overruled by the court below (*Minnesota Rate Cases*, *ante*, p. 352), and the only question which remains for our consideration is whether the proof was sufficient to sustain the finding of confiscation.

It is said on the part of the commissioners, that the freight tariff No. 3, adopted in 1908, was substantially similar to that which had been prescribed in 1904, and that the latter was in substance a repetition of the first tariff of the commission which had been put into effect in 1900; that is to say, that, while changes had been made from time to time to provide suitable adjustments, there were no substantial differences in the rates imposed by the last tariff, of which complaint was made, as compared with those of the earlier years when considered with respect to the effect upon the freight revenue in its entirety. It is urged, however, by the companies that there were reductions in fact and that, apart from this, there had been a continuous increase in the expenses incident to operation in the State and in the burdens imposed upon the companies; and also that the passenger fare act of 1907 (February 9, 1907, Acts 1907, Act No. 8, p. 9) had largely reduced the revenues of the roads. We deem it to be clear that the right of the complainants to contest the validity of the rates, if, as applied to changed conditions, they were found to be confiscatory, was not impaired by their action in putting them into effect. When these suits were brought, the passenger fare act had been in force for more than a year, but this gave opportunity to

ascertain the actual results, and, even if it were assumed that the new freight tariff of 1908 did not greatly reduce the former rates, the complainants were certainly not barred from presenting to the court their contention that the operation of the rates as a whole deprived them of a fair return from their entire intrastate business.

No question is presented as to the value of the properties within the State which were used by the companies in the public service. This was the subject of a formal stipulation by which it was conceded that the assessments made by the state tax commission, multiplied by two, should represent the value of these properties, respectively, for the purpose of these suits. Upon this basis, the value of the property of the St. Louis, Iron Mountain & Southern Railway Company was found to be $39,986,564; and that of the St. Louis Southwestern Railway Company, $14,029,634.

In the case of the Iron Mountain road, the period taken for the purpose of calculation was the six months ending December 31, 1907. According to the statement of the company, the total earnings from the business in Arkansas, interstate and intrastate, for this period, were $6,675,076.79. The total operating expenses, together with taxes and rentals, amounted, for the same period, to $5,175,301.44. The net earnings for the six months were thus $1,499,775.35; and this amount was equivalent to a return at the annual rate of 7.5 per cent upon the entire value of the property.

The statement submitted by the St. Louis Southwestern company for the six months ending December 31, 1907, showed operating revenues within the State, from both interstate and intrastate business, amounting to $2,288,173.40; and operating expenses, taxes and rentals, aggregating $1,388,075.94, leaving as net earnings for the six months, $900,097,46. We have also, in the case of this company, its statement for the entire fiscal year ending

June 30, 1908, which gives the total operating revenues within the State, interstate and intrastate, as $4,130,011.45, and operating expenses, together with taxes and rentals, amounting to $2,691,287.44, thus leaving net earnings of $1,438,724.01, or more than 10 per cent. upon the value of the property.

The showing thus made, of the returns from the combined business, makes it entirely clear that the ultimate conclusion must depend upon the certainty of the proof with respect to the segregation of the results of the intrastate operations. That is, the controlling questions concern the division of the expenses between interstate and intrastate transportation, and the determination of the share of the total value of the property which is assignable to the latter and upon which the rate of net return is to be computed.

As to the apportionment of value, it appears that the method adopted below was to divide the value of the entire property, as found, between the interstate and intrastate business according to the relation of gross revenue. In view of the fundamental objections to this method, which were considered in *Minnesota Rate Cases*, *ante*, p. 352, the results that have been obtained by resort to it in these cases cannot be accepted as affording a sufficient basis for the conclusion that the State has confiscated the property of the company.

In dividing the expenses of operation, the defendants undertook definitely to establish the cost of intrastate traffic as compared with that which was interstate. For this purpose, it was endeavored to attribute to the local and through train services, respectively, their proper shares of expense and in each case to divide the amount of the ascertained share according to the traffic carried. In the case of the Iron Mountain company, traffic statistics were taken for the month of October, 1907; these were analyzed and a division of expenses was made in accordance with

a plan devised by expert accountants. The computations, with respect to the St. Louis Southwestern company, were based upon the operations of October, 1908, as the company had compiled data for that month in making a test of comparative cost. According to these calculations of the defendants, the net return from the entire intrastate business was at the annual rate of 7.09 per cent. for the Iron Mountain road, and 9.16 per cent. for that of the St. Louis Southwestern.

It was objected, however, that the periods selected for these tests were not representative; that the month of October, 1907, in particular, was abnormal because of an unusual congestion of traffic, and that the use of the statistics for October, 1908, was also open to objection as they did not show such a fair average of the business as would enable the court to reach a correct conclusion. The court below took this view, but it was of the opinion that proper allowances might be made which would equalize these conditions. In this view, and for the purpose of correcting assumptions deemed to be erroneous, the court defined the basis of apportionment of the various items of outlay in accordance with which new computations were made. The effect of these calculations was to charge the intrastate freight traffic on the Iron Mountain road with an extra cost of 201.5 per cent. per ton mile. The court, concluding that certain items of the extra cost of local traffic had been omitted, decided that an additional charge of 8.5 per cent. would be reasonable, and that the total extra cost of the intrastate traffic should be placed at 210 per cent. In the case of the St Louis Southwestern company, the extra cost of the intrastate freight traffic was fixed at 250 per cent., this being, it is understood, per ton-mile. With respect to the passenger traffic, the court was of the opinion that the intrastate service should be charged with ten per cent. additional cost in the case of the Iron Mountain company, but that no allowance for extra cost was

necessary in that of the St. Louis Southwestern Company. From the computations on these bases the conclusion was derived that the net return from the entire intrastate business of the Iron Mountain company was at the annual rate of less than one per cent., and from that of the St. Louis Southwestern company, 2.6 per cent., upon the shares of the total property value assigned respectively to the intrastate business.

We shall not attempt to review in detail these calculations upon which the decree is based. While they represent a most serious effort to effect a reasonable apportionment, we are convinced, from our examination of the evidence, that they have the same infirmity which was found to exist in the computations in the *Minnesota* and *Missouri rate cases*. *Minnesota Rate Cases*, *ante*, p. 352; *Missouri Rate Cases*, *ante*, p. 474, decided this day, *ante*, p. 474. On finding, in the present cases, that the periods selected for the purposes of test could not be regarded as fairly representative, the court was left without sufficient data upon which to compute the extra cost of intrastate transportation with such a degree of certainty as would justify the annullment of the State's requirements. Controlling factors, used in the computations, represent general estimates of the conditions of transportation, which may or may not be accurate, and there was an absence of satisfactory evidence, to take the place of the rejected tests, giving with requisite particularity the actual movement of traffic at the times in question and affording a proper basis for the determination of relative cost. The wide variation in results obtained on the different hypotheses, each of which is earnestly supported in argument, illustrates the necessity for the keeping of suitable accounts, at least during typical periods, which will furnish correct statistical information bearing upon the cost of intrastate transportation as compared with interstate, instead of leaving a matter of such in-

tricacy to general expressions of judgment. It was not sufficient for the complainants to criticise the tests relied upon by the defendants, but in seeking to override the action of the State upon constitutional grounds it was incumbent upon them to establish the invalidating facts by definite and convincing proof.

We are of the opinion that the evidence failed to show confiscation.

*The decrees are reversed and the cases remanded with directions to dismiss the bills, respectively, without prejudice.*